

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEYS

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Report of Investigations 87-3
SUMMARY OF ALASKA EARTHQUAKES
FOR THE PERIOD
JULY, AUGUST, AND SEPTEMBER 1985

Compiled by
Hans Pulpan and J.N. Davies

STATE OF ALASKA
Department of Natural Resources
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS

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SUMMARY OF ALASKA EARTHQUAKES FOR THE PERIOD
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Hans Pulpan¹ and J.N. Davies¹

INTRODUCTION

This report lists the parameters of earthquakes that occur in and near areas encompassed by the network of seismograph stations operated or recorded by the University of Alaska Geophysical Institute (UAGI) (fig. 1; table 1). The goal of this report is to provide a convenient reference source for earthquake activity in the seismic-network area and quantitative information that researchers, administrators, planners, and other interested people can use. Therefore, this report contains hypocentral parameters and information about the quality of data and precision of the parameters. Because of the substantial quantity of data, this report is based on routine data processing. However, earthquakes are located as accurately and with as many useful data as possible. Additional data and more sophisticated methods of analysis might lead to more accurate locations.

DATA COLLECTION

The data used in this report are derived from two principal sources: seismic stations operated by UAGI and seismic stations operated by other agencies whose data are continuously recorded by UAGI under data-sharing or data-exchange agreements. For earthquakes of local magnitude (M_L) ≥ 3 , we receive records of earthquake arrival times at several stations of the Alaska Tsunami Warning System that is operated by the National Oceanic and Atmospheric Administration (NOAA).

Signals from various stations are transmitted by UAGI-operated VHF-radio links and leased commercial-telephone circuits to one of two recording centers in Homer and Fairbanks that are operated by the University of Alaska. Remote stations are serviced and calibrated annually; stations easily accessible by road are serviced more frequently if necessary. Difficult access to many stations can result in lengthy data losses if instruments have malfunctioned. Significant data losses result in lower detection thresholds and poorer solution qualities for earthquakes in the affected regions. To discern such conditions, a station-use record is provided in figure 2.

Data are recorded on 16-mm film on several Teledyne Geotech Develocorders that have a 20-channel capacity. Satellite-linked clocks provide time marks that are superimposed on the records. Figure 3 shows the typical response of the seismic-network system from transducer to recorder.

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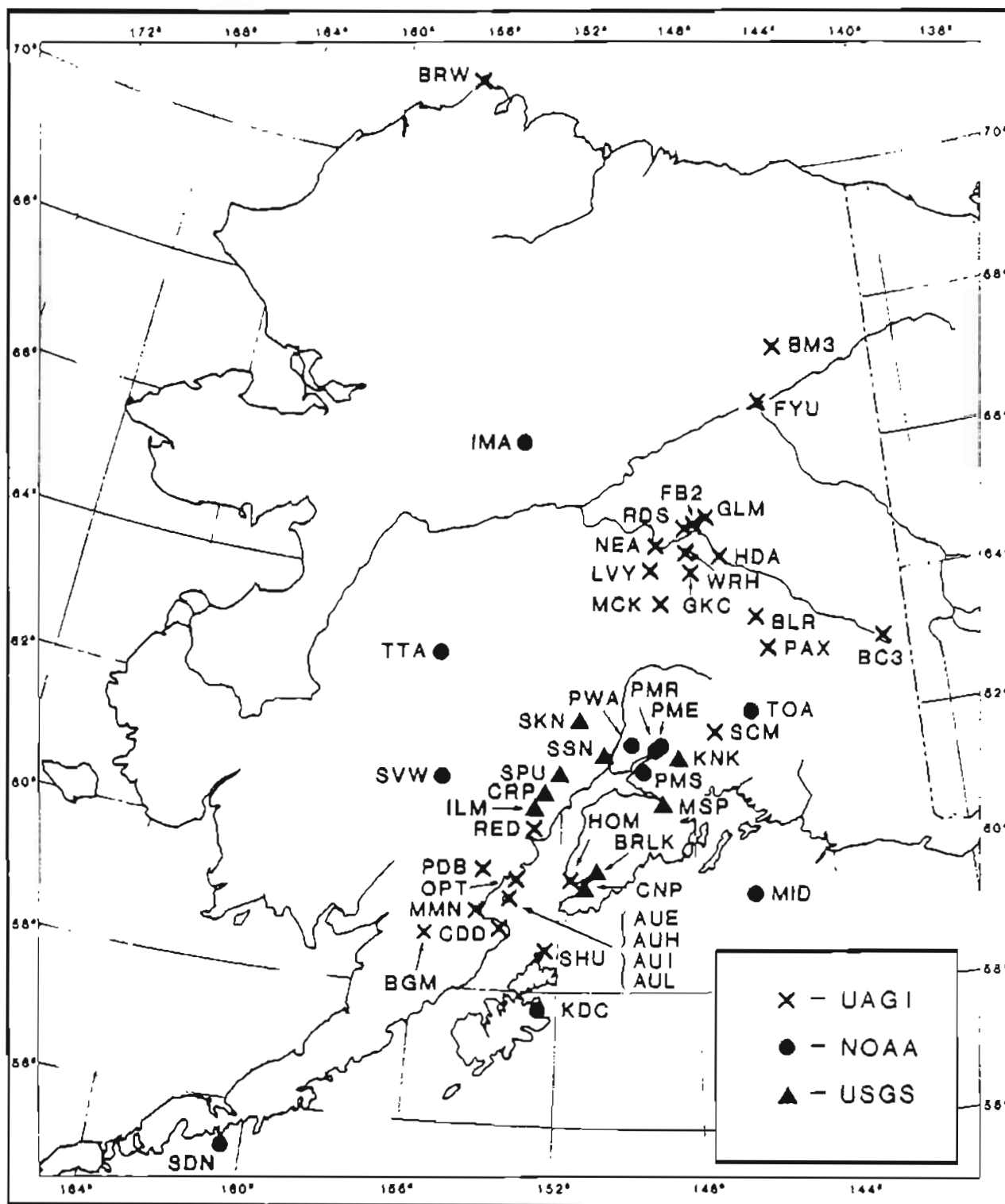


Figure 1. All seismic-network stations operated by the University of Alaska and by other organizations whose data were used in this report. See table 1 for station names.

Table 1. Names and parameters of seismic-network stations used to prepare this report.

Code	Station	Latitude (N.)	Longitude (W.)	Elevation (m)	Velocity model	Operator
AUE	Augustine East	59° 21.54	153° 22.33	172	2	UAGI
AUH	Augustine Hill	59° 21.83'	153° 26.61'	900	2	UAGI
AUI	Augustine Island	59° 20.11	153° 25.66	293	2	UAGI
AUL	Augustine Lava Flow	59° 22.93'	153° 26.07'	360	2	UAGI
BC3	Beaver Creek	63° 3.95'	141° 46.96'	848	1	UAGI
BGM	Big Mountain	59° 23.56	155° 13.76	625	2	UAGI/USGS
BLR	Black Rapids	63° 30.10'	145° 50.70'	810	1	UAGI
BM3	Burnt Mountain	67° 25.17'	144° 36.25'	500	1	UAGI
BRLK	Bradley Lake	59° 45.85'	150° 53.13'	631	2	USGS
BRW	Barrow	71° 18.20'	156° 44.90'	0	1	UAGI
CDD	Cape Douglas	58° 55.79'	153° 38.58'	622	2	UAGI
CNP	China Poot	59° 31.55'	151° 14.16'	564	2	USGS
CRP	Crater Peak	61° 16.02	152° 9.33	1622	2	UAGI
FB2	Fairbanks	64° 54.00'	147° 47.60'	320	1	UAGI
FYU	Fort Yukon	66° 33.96	145° 13.90	137	1	UAGI
GKC	Gold King Creek	64° 10.72'	147° 56.08'	490	1	UAGI
GLM	Gilmore Dome	64° 59.24'	147° 23.34'	820	1	UAGI
HDA	Harding Lake	64° 24.35'	146° 57.23'	450	1	UAGI
HOM	Homer	59° 39.50'	151° 38.60'	198	2	UAGI
ILM	Iliamna	60° 10.92'	152° 48.97'	550	1	USGS
IMA	Indian Mountain	66° 4.11'	153° 40.72'	1380	1	NOAA
KDC	Kodiak	57° 44.87'	152° 29.50'	13	3	NOAA
KNK	Knik Glacier	61° 24.75'	148° 27.34'	595	4	USGS
LVY	Levy	64° 13.00'	149° 15.20'	230	1	UAGI
MCK	McKinley Park	64° 43.94'	148° 56.10'	618	1	UAGI
MID	Middleton Island	59° 25.67'	146° 20.34'	37	4	NOAA
MMN	McNeil River	59° 11.11'	154° 20.20'	442	2	UAGI
MSP	Moose Pass	60° 29.35'	149° 21.64'	150	1	USGS
NEA	Nenana	64° 34.63'	149° 4.63'	364	1	UAGI
OPT	Oil Point	59° 39.16'	153° 13.78'	450	2	UAGI
PAX	Paxson	62° 58.25'	145° 28.12'	1130	1	UAGI
PDB	Pedro Bay	59° 47.27'	154° 11.55'	305	2	UAGI/USGS
PME	Palmer East	61° 37.90'	149° 1.70'	228	2	NOAA
PMR	Palmer Observatory	61° 35.33'	149° 7.85'	100	2	NOAA
PMS	Palmer - Arctic Valley	61° 14.68'	149° 33.63'	716	2	NOAA
PWA	Palmer West - Houston	61° 39.06'	149° 52.72'	137	2	UAGI
RDS	Richard D. Siegrist	64° 49.59'	148° 8.68'	930	1	UAGI
RED	Redoubt Volcano	60° 25.14'	152° 46.32'	1067	2	UAGI
SCM	Sheep Mountain	61° 50.00'	147° 19.66'	1020	4	UAGI
SDN	Sand Point	55° 20.48'	160° 29.83'	23	6	NOAA
SHU	Shuyak Island	58° 37.68'	152° 20.93'	10	3	UAGI
SKN	Skwentna	61° 58.82'	151° 31.78'	564	2	USGS
SPU	Mount Spurr	61° 10.90'	152° 3.26'	800	2	USGS
SVW	Sparrevohn	61° 6.49'	155° 37.30'	762	2	NOAA
TOA	Tolsona	62° 6.29'	146° 10.34'	909	4	NOAA
TTA	Tatalina	62° 55.81'	156° 1.32'	914	2	NOAA
WRH	Wood River Hill	64° 28.28'	148° 5.39'	314	1	UAGI

STATION
CODE

JULY

1985
AUGUST

SEPTEMBER

ADK
AUE
AUM
AUI
AUL
BC3
BCM
BLR
BM3
BRLX
BRW
CDD
CNP
CRP
FB2
FYU
CKC
CLM
HDA
HOM
ILM
IMA
KDC
KNK
LVY
MCK
MID
MMN
MSP
NEA
NKA
NNL
OPT
PAX
POB
PME
PMR
PMS
PNL
PRC
PWA
ROS
RQT
RED
SCM
SDN
SHU
SKL
SKN
SPU
SSN
SVW
TOA
TTA
WRH

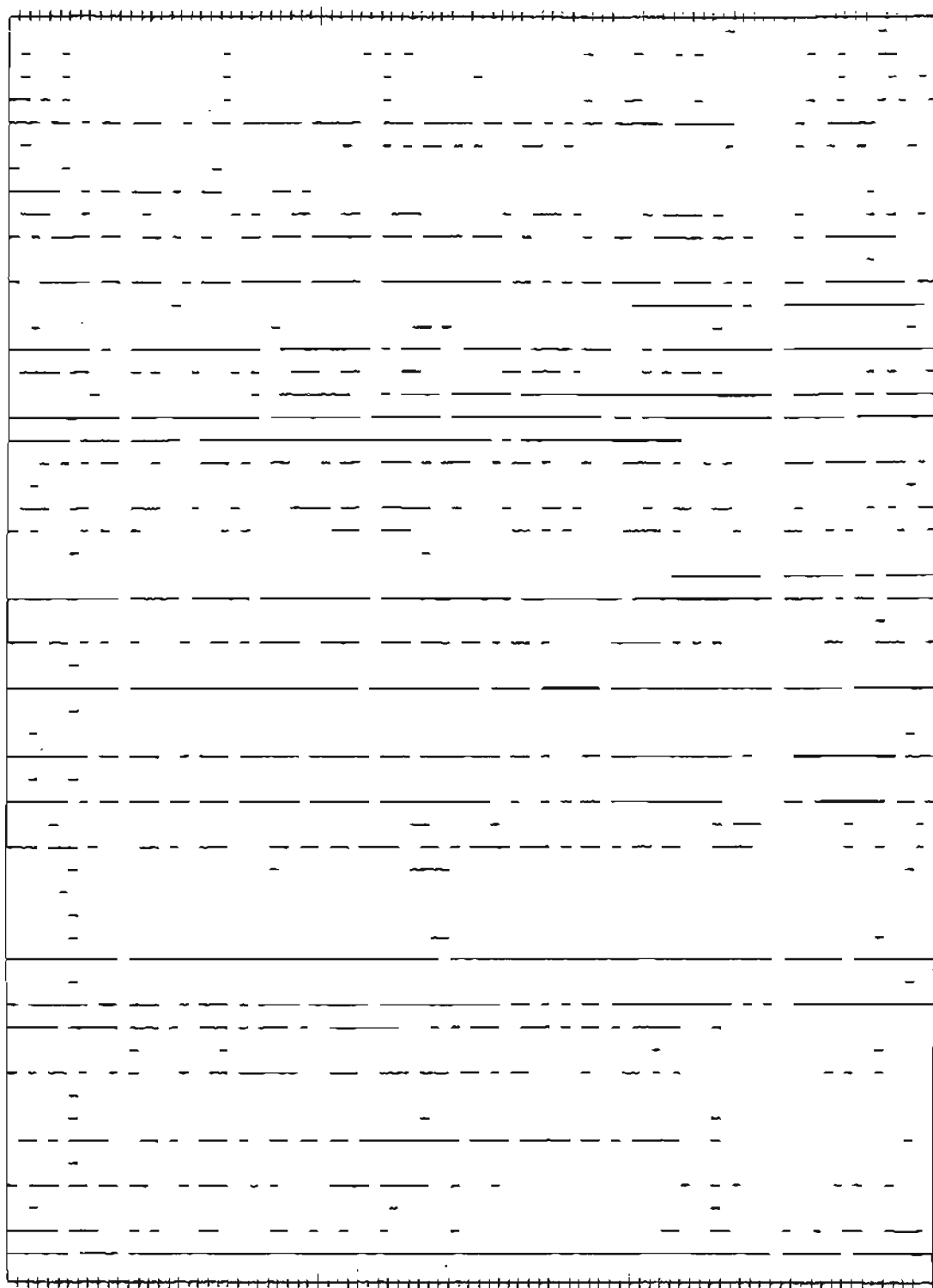


Figure 2. Station-use record. Lines indicate that at least one arrival-time was read from a specific station operating on a specific day. Nonuse does not imply that a station was malfunctioning, but rather that no data were required to locate earthquakes. See table 1 for station names.

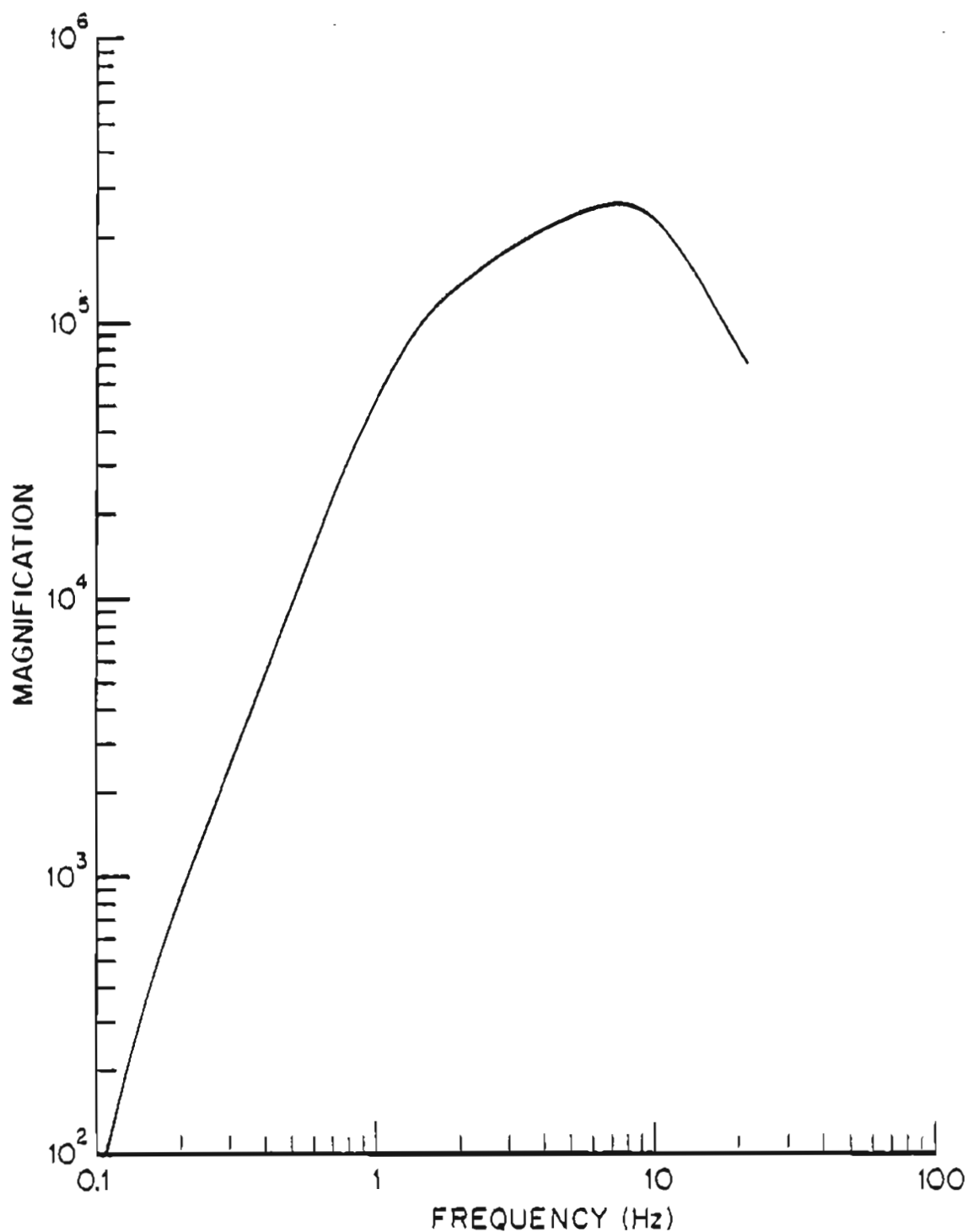


Figure 3. Typical response of a seismic-network station operated by the University of Alaska Geophysical Institute. Magnification is the ratio of the amplitude measured on the filmviewer to that of the actual ground motion recorded. Actual values vary with station.

DATA PROCESSING

Arrival times of body waves are read from the 16-mm film with Geotech filmviewers that provide a time resolution of 0.1 s/mm. Thus, the impulsive arrivals can be read to 0.05 s.

Earthquake locations are based on arrival times of P and S waves. As many S arrivals as possible are used to help determine hypocentral depth. Most S readings are obtained from vertical components because few three-component systems are recorded. When large earthquakes occur, traces overlap on multichannel-film recorders; consequently, S arrivals are difficult to identify.

After earthquakes are identified and arrival times are determined, phase data are processed with the HYPOELLIPSE computer program (Lahr, 1980) to obtain earthquake parameters. Each solution is checked for the root-mean-square (RMS) error of travel-time residuals and the spatial distribution of stations used. Solutions that have residuals 0.5 s or greater are reread. If the stations used are poorly distributed, additional data are sought from stations not recorded by UAGI. Events recorded by fewer than six stations receive less attention. Data for earthquakes of $M_L \geq 3.5$ are processed more carefully, sometimes by changing control parameters in the computer program.

VELOCITY MODELS

The tectonic regime and geologic setting vary greatly throughout the area covered by the UAGI seismic network. Although our knowledge of the seismic-velocity structure is limited, significant variations exist. To account for these variations, each UAGI station is associated with one of three velocity models (tables 1 through 4), depending on the station's location. The models vary only with depth; lateral variation of velocity is not considered. For stations outside the UAGI seismic network, we generally use models adopted by the station's operators (table 1). For all models, S velocity = $\frac{P \text{ velocity}}{\sqrt{3}}$.

Model 1 is used primarily in central and northern Alaska (figs. 4 and 5) and is based on unpublished data by Biswas (oral commun., 1978). The upper mantle structure is based on travel-time studies by Biswas and Bhattacharya (1974).

Table 2. Velocity model 1.

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/sec)</u>
1	0-24	5.9
2	24-40	7.4
3	40-76	7.9
4	76-300	8.3
5	301-545	10.4
6	>545	12.6

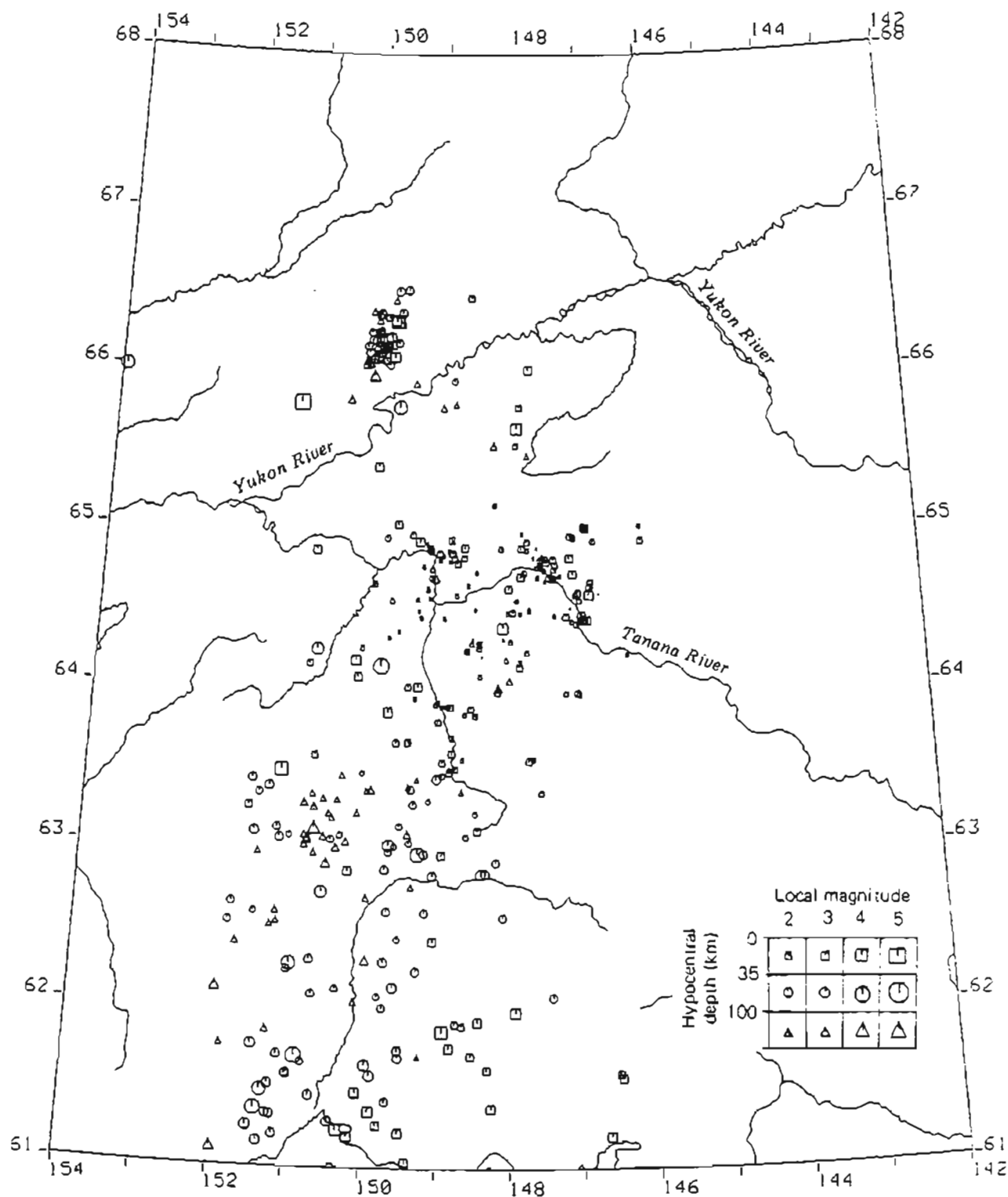


Figure 4. Epicenters of earthquakes that occurred in central and northern Alaska north of lat 61° N. during the third quarter of 1985. Symbol sizes are shown for local magnitudes 2 through 5. Symbols larger or smaller than those shown reflect local magnitudes that must be interpolated relative to the symbol sizes shown.

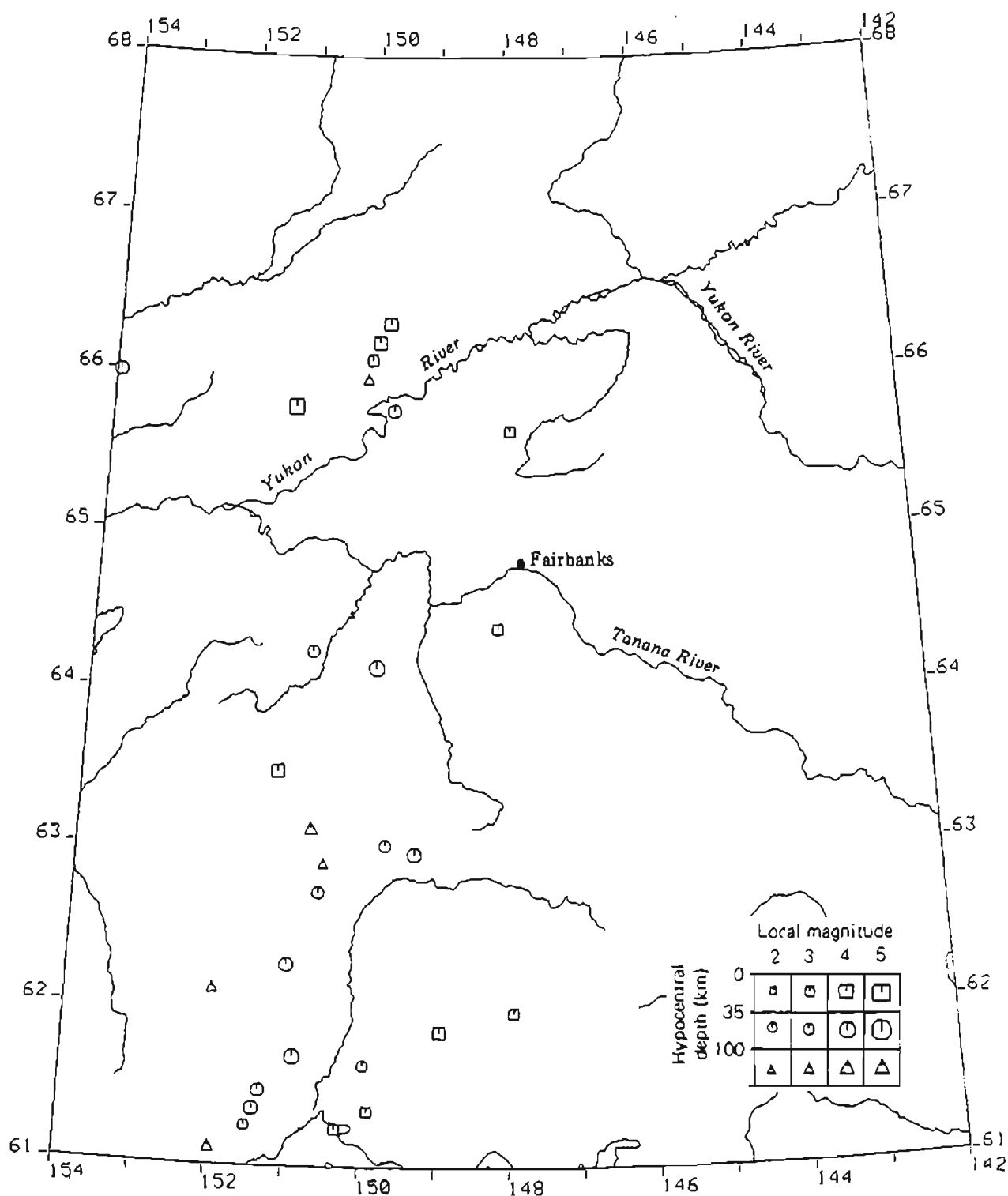


Figure 5. Epicenters of earthquakes with $M_L \geq 3$ that occurred in central and northern Alaska north of lat 61° N. during the third quarter of 1985. Symbol sizes are shown for local magnitudes 2 through 5. Symbols larger or smaller than those shown reflect local magnitudes that must be interpolated relative to the symbol sizes shown.

Table 3. Velocity model 2.

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/sec)</u>
1	0-2	2.75
2	2-4	5.3
3	4-10	5.6
4	10-15	6.2
5	15-20	6.9
6	20-25	7.4
7	25-33	7.7
8	33-47	7.9
9	47-65	8.1
10	>65	8.3

Model 2 is associated with stations located in the Cook Inlet - Kenai Peninsula area (figs. 6 and 7) and is used by the USGS for locating earthquakes in the same area. It is a modified version of the model determined by Matumoto and Page (1969) from travel-time studies of aftershocks of the 1964 Great Alaska earthquake.

Table 4. Velocity model 3.

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/sec)</u>
1	0-1.6	4.2
2	1.6-12	5.5
3	12-42	6.6
4	42-60	8.06
5	60-80	8.09
6	80-100	8.11
7	100-150	8.14
8	150-200	8.27
9	200-250	8.41
10	250-300	8.50
11	300-350	8.74
12	>350	9.02

Model 3 is used on Kodiak Island and the Alaska Peninsula. The depth and velocity of the first three layers are based on refraction experiments in the central Aleutian Islands (Engdahl and Tarr, 1970). The remaining layers are based on work by Herrin and others (1968).

EARTHQUAKE MAGNITUDE

Earthquake magnitudes are determined from the maximum amplitude of the body-wave trace. Because regional body-wave phases are used, we determine local magnitudes (M_L). The relationship we use was derived by Richter (1958) using earthquake data recorded on standard horizontal Wood-Anderson seismographs in California. Corrections were made for differences in response and magnification between the standard instruments used by Richter and the instruments we used. However, no corrections were made for differences in at-

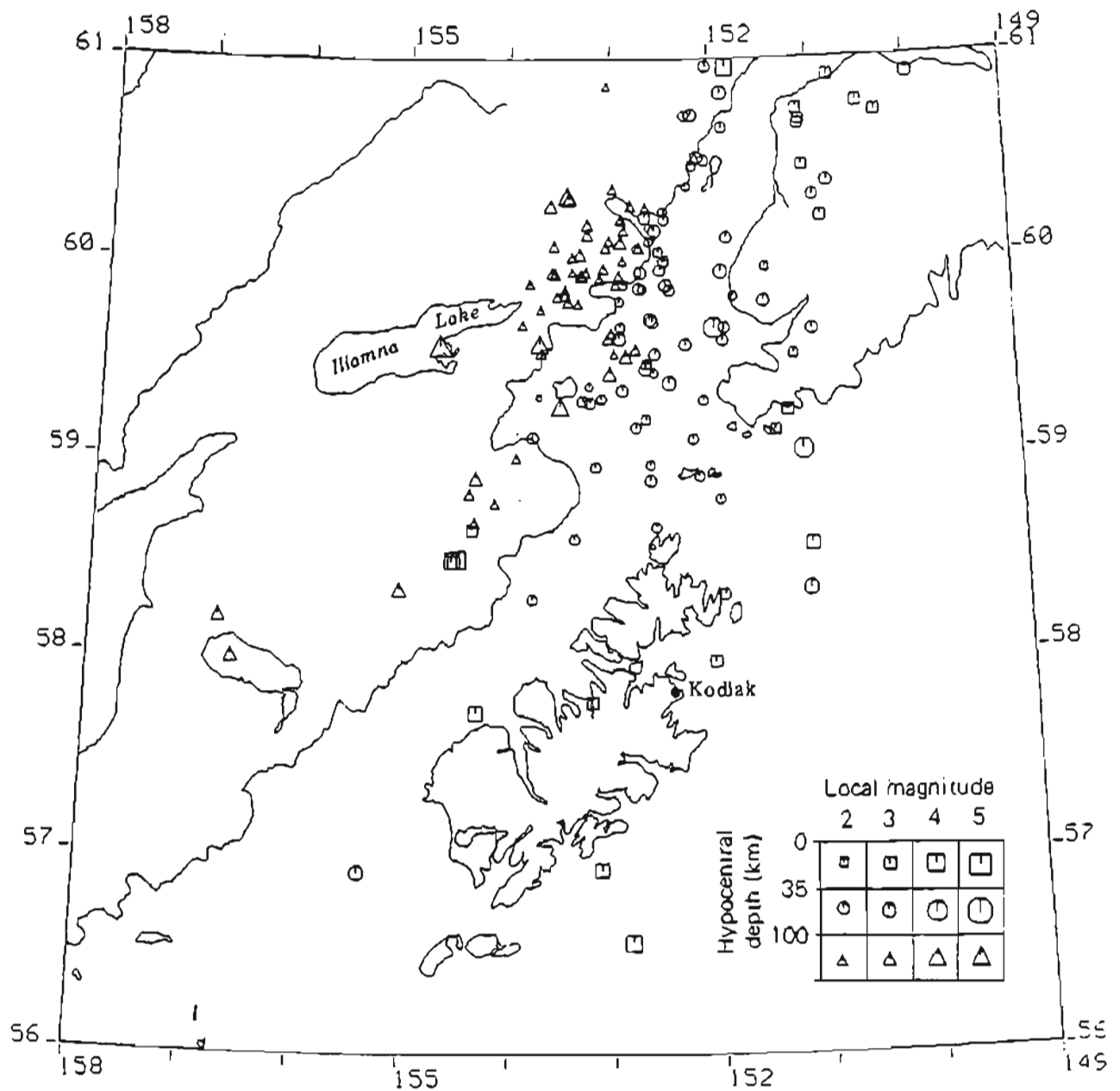


Figure 6. Epicenters of earthquakes that occurred in the Cook Inlet-Kenai Peninsula area south of lat 61° N. during the third quarter of 1985. Symbol sizes are shown for local magnitudes 2 through 5. Symbols larger or smaller than those shown reflect local magnitudes that must be interpolated relative to the symbol sizes shown.

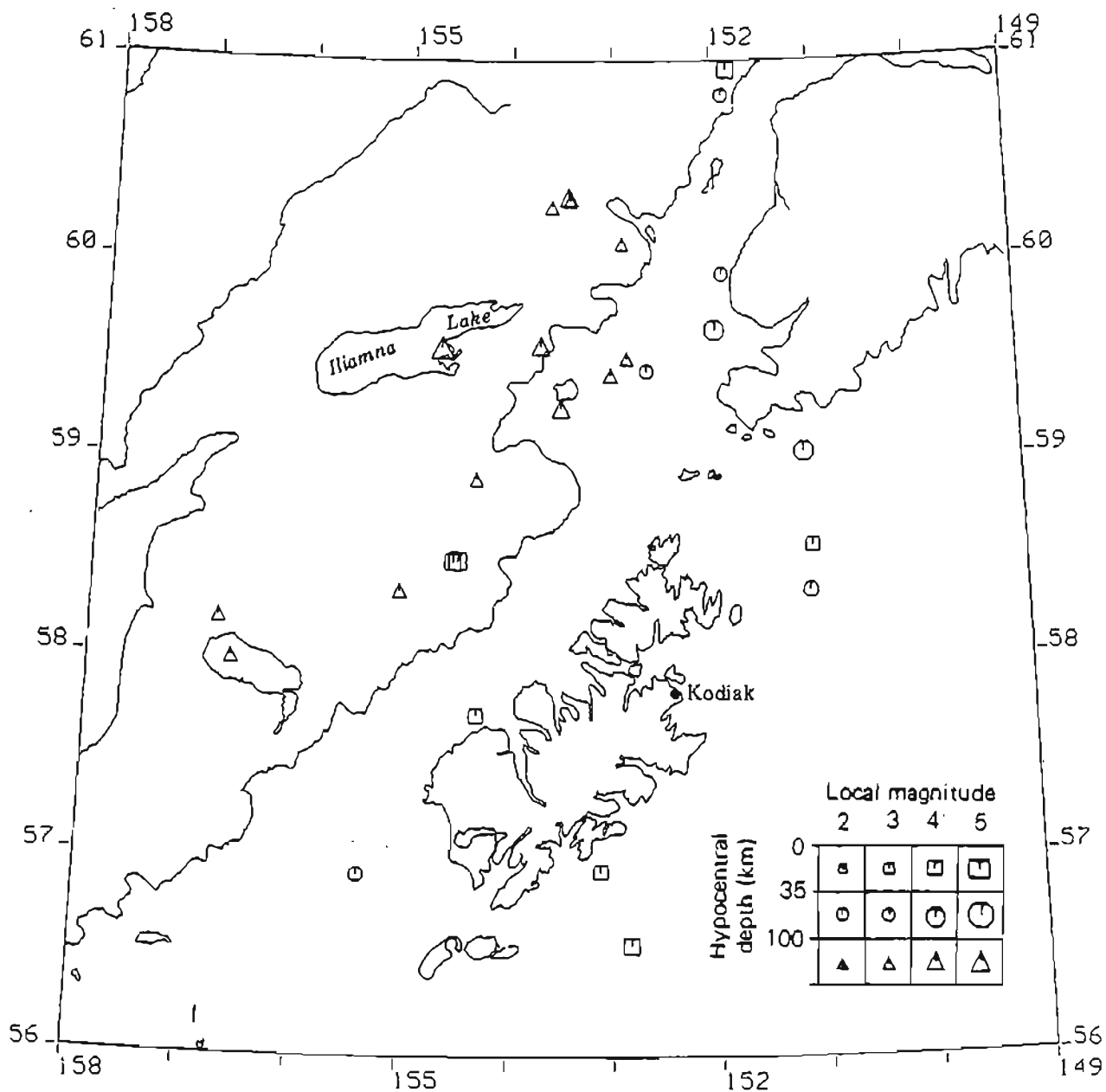


Figure 7. Epicenters of earthquakes with $M_L \geq 3$ that occurred in the Cook Inlet-Kenai Peninsula area south of lat 61° N. during the third quarter of 1985. Symbol sizes are shown for local magnitudes 2 through 5. Symbols larger or smaller than those shown reflect local magnitudes that must be interpolated relative to the symbol sizes shown.

tenuation properties between California and Alaska. Additionally, no corrections were made for measuring vertical ground motion rather than horizontal ground motion.

The magnitude of each earthquake is usually calculated at several seismic-network stations and then averaged. When large earthquakes occur, the instrument response saturates the maximum trace amplitude of the recorder at most of our stations. Therefore, we frequently list local magnitude determined by NOAA's Palmer Observatory. Felt reports and intensity observations based on the Modified Mercalli Intensity Scale (app. A; Richter, 1958) are also listed. The intensity levels are defined in appendix A.

RECORDED EARTHQUAKES

Appendix B lists hypocenter, magnitude, and quality parameters for each earthquake of $M_L \geq 3$ that was located during the first quarter of 1985 (see also figs. 5, 7, and 8). Appendix C lists the same parameters for all earthquakes that were located during the same period (see also figs. 4 and 6). Detection threshold and solution quality vary throughout the areas shown in figures 4, 6, and 8. Appendix B is probably complete for $M_L > 3$. As shown in figure 1, the distribution of stations varies significantly; thus detection-threshold levels also vary significantly.

The reliability of a hypocenter location can be assessed from two sets of information: the quality of the input data and the results of statistical tests. The number of P and S phases used to locate the earthquake (NP and NS), the largest azimuthal separation between stations as measured from the epicenter (GAP), and the distances from the epicenter to the closest and third closest station (D1, D3) are the most important parameters that control the reliability of the hypocenter location. A GAP of more than 180° means that the epicenter is located outside the seismic network; therefore, locations will generally be less reliable. Also, as D1 exceeds hypocentral depth, the reliability of hypocentral depth decreases. Magnitude threshold and location reliability vary throughout the state because of the uneven distribution of stations (fig. 1).

The RMS travel-time residual and the horizontal (ERH) and vertical (ERZ) projections of the maximum axes of the one-standard-deviation confidence ellipsoid reflect the precision of the solution. Because we use simplified velocity models, the RMS residuals probably measure the inaccuracy of these models with respect to the real crust and upper mantle; they only secondarily account for random reading errors and phase misidentifications. Although the precision of hypocentral locations is fairly well indicated by ERH and ERZ, their absolute accuracy is difficult to determine because adequate calibration studies with known sources, such as explosions, have not been performed in the region.

Seismicity south of lat 61° N. (fig. 6) dominantly reflects the subduction of the North Pacific plate beneath the North American plate. A well-defined Benioff zone dips about 45° NW. below Cook Inlet and the Alaska Peninsula. Near lat 60° N., high seismic activity at depths greater than 70 km is typical of the area. The Benioff zone terminates at about lat 64° N.

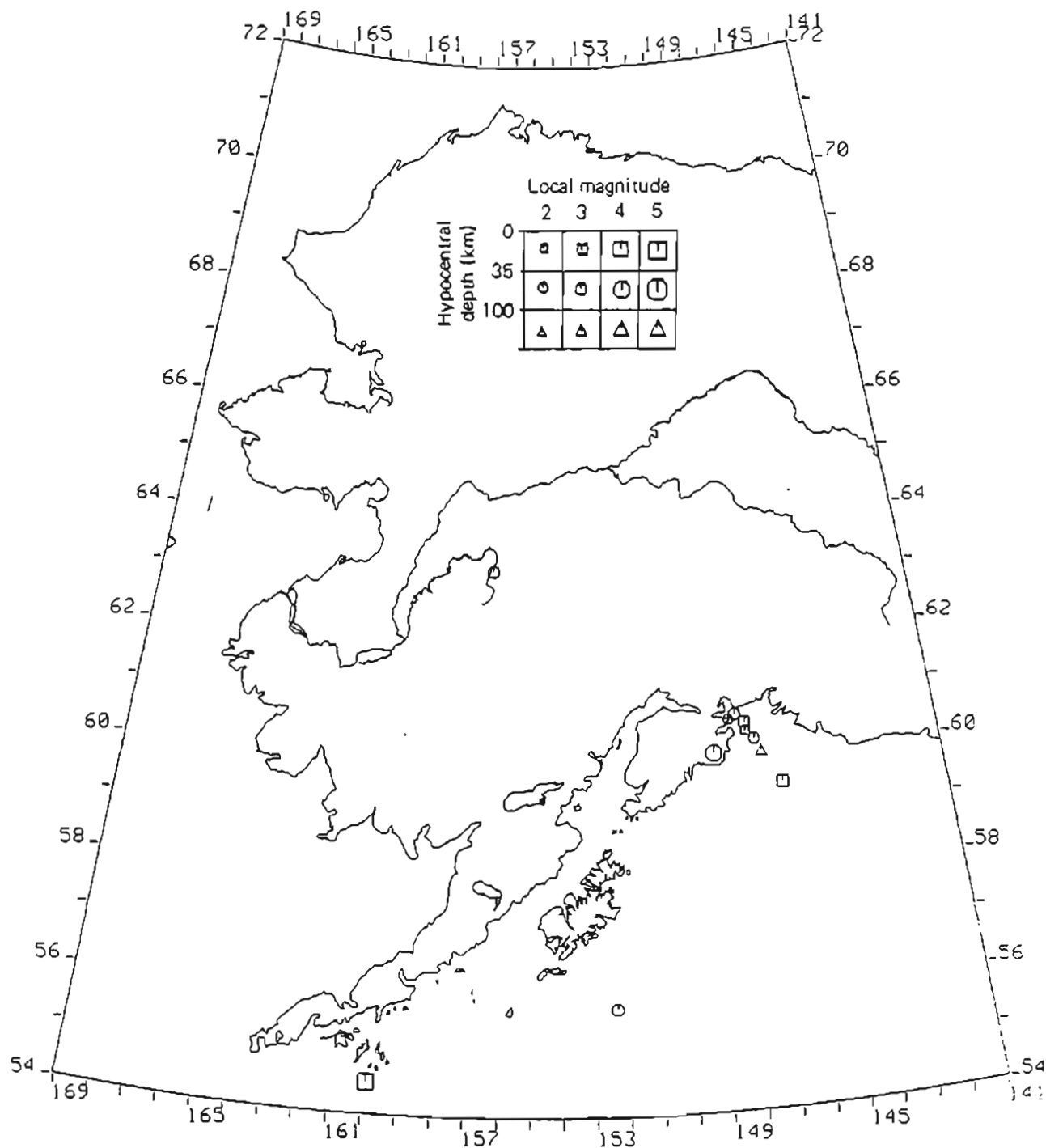


Figure 8. Epicenters of earthquakes that occurred in the third quarter of 1985 and are not shown in figures 4 or 5. Symbol sizes are shown for local magnitudes 2 through 5. Symbols larger or smaller than those shown reflect local magnitudes that must be interpolated relative to the symbol sizes shown.

A cluster of hypocenters at an intermediate depth (>50 km) near lat 63° N. (below Mt. McKinley) pinpoints where the strike of the Benioff zone changes from north-northeast to more northeast. The cluster of shallow hypocenters near Fairbanks is characteristic of the seismic activity in central Alaska. Although the seismic-station distribution near Fairbanks is dense and provides the lowest detection threshold throughout the network (with the exception of Augustine Volcano), the concentration of epicenters indicates a very active seismic zone.

ACKNOWLEDGMENTS

We thank Tom Sokolowski and the staff of the NOAA Tsunami Warning System in Palmer for helping us to record several of their station signals on a continuous basis. We also thank John Lahr of the USGS for sharing information with us and providing the HYPOELLIPSE computer program.

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APPENDIX A
Modified Mercalli scale, 1956 version.

- I. Not felt. Some very low frequency effects, such as seiching in lakes, may be observed resulting from large, distinct earthquakes.
- II. Felt by persons at rest, on upper floors, or favorably placed.
- III. Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
- IV. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV, wooden walls and frame creak.
- V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
- VI. Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle--CFR³).
- VII. Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments--CFR). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
- VIII. Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
- IX. General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations--CFR.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas, sand and mud ejected, earthquake fountains, sand craters.

³CFR refers to supplemental comments by Charles F. Richter.

- X. Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
- XI. Rails bent greatly. Underground pipelines completely out of service.
- XII. Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.

APPENDIX B

Data for Alaska earthquakes of $M_L \geq 3$ that were located during the third quarter 1985.^a

ALASKAN EARTHQUAKES MAGNITUDE 3.0 AND GREATER: JULY-SEPTEMBER, 1985																		
1985	ORIGIN		TIME	LAT N		LONG W		DEPTH	HAG	NP	NS	GAP	D1	D3	RMS	ERH	ER2 Q	
JUL	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM	
02	01	42	48.8	66	13.0	149	56.3	8.8	3.7*	8	0	171	170	177	0.18	4.8	99.0 D	
02	13	01	18.0	63	30.0	151	14.3	32.2	3.7*	10	0	143	117	188	0.26	5.1	6.6 D	
03	02	12	4.9	58	20.5	151	9.9	94.3	3.3	12	0	201	106	190	0.37	4.3	10.8 D	
09	18	33	8.6	68	58.8	153	56.8	83.9	3.7	10	0	239	276	310	0.19	22.1	26.6 D	
08	09	09	4.2	80	9.2	147	6.3	119.1	3.2*	6	0	286	194	318	0.33	69.8	71.8 D	
07	10	45	37.0	61	15.2	151	29.4	68.0	3.0	9	2	133	31	132	0.33	3.0	2.8 C	
08	03	04	1.2	60	18.4	153	35.7	188.8	3.3	10	0	99	48	73	0.28	5.4	12.0 C	
13	18	11	33.4	56	54.8	155	23.2	41.6	3.1	9	0	183	198	261	0.23	24.3	22.2 D	
14	19	07	14.8	85	48.5	181	12.2	10.0	4.3*	8	0	132	118	180	0.31	3.4	36.6 D	
18	12	37	32.8	63	8.8	150	48.0	136.1	3.9*	12	0	140	112	192	0.33	3.3	8.4 D	
FELT (III) IN ANCHORAGE																		
19	08	30	42.8	66	20.1	149	46.8	10.0	3.7*	7	0	178	178	184	0.24	2.5	99.0 D	
22	07	08	4.9	60	49.8	151	53.0	82.8	3.0	9	1	111	41	131	0.29	2.8	4.8 C	
22	09	18	33.3	58	20.7	155	3.0	113.7	3.4	9	0	127	102	149	0.12	8.7	8.5 C	
26	19	58	4.3	68	40.2	147	58.7	6.3	3.1*	8	0	191	80	95	0.18	4.0	2.8 D	
31	14	07	59.0	65	47.7	149	41.7	94.7	3.6*	9	0	143	130	139	0.13	2.6	25.1 D	
AUG	02	02	42	26.4	58	54.5	154	19.5	126.3	3.2	10	3	205	31	73	0.23	4.8	4.3 D
03	03	57	23.7	57	59.8	156	37.9	169.8	3.4	7	0	299	188	241	0.09	52.7	43.6 D	
03	07	38	32.8	62	58.9	149	17.8	88.8	4.0	23	0	91	86	155	0.37	2.3	3.3 C	
NEIS MB - 4.3; FELT (IV) AT BIG LAKE, CANTWELL, PALMER, DENALI NATIONAL PARK AND FELT (III) AT ANCHORAGE AND WILLOW																		
03	16	45	40.7	59	39.3	151	59.2	97.7	4.4	14	0	100	19	70	0.29	1.9	4.2 B	
04	08	12	49.3	59	31.0	152	51.3	111.3	3.1	11	2	87	28	70	0.29	1.9	4.1 B	
05	03	12	8.2	61	14.3	150	18.4	4.8	3.0	8	0	125	74	162	0.24	2.6	4.2 D	
07	03	54	30.9	61	51.8	148	58.0	3.8	3.5*	9	0	108	32	183	0.33	9.6	15.0 C	
FELT (II) AT CHICKALOON																		
07	12	42	30.0	59	18.2	153	30.1	133.9	4.3*	13	1	70	9	12	0.23	3.3	5.8 B	
07	16	55	13.5	61	6.9	151	56.8	168.0	3.5	10	0	252	9	259	0.21	31.1	41.2 D	
08	09	24	19.2	60	19.8	153	26.7	163.5	4.2*	8	1	127	38	76	0.23	3.3	7.6 C	
NEIS MB - 4.2; FELT AT HOMER																		
08	21	38	44.9	58	29.6	154	32.7	1.3	3.7*	9	0	244	71	118	0.82	4.9	4.4 D	
09	00	08	38.9	58	29.8	154	29.8	1.4	4.1	10	0	242	69	116	0.89	4.2	4.8 D	
11	17	24	4.2	60	5.4	152	54.0	114.3	3.0	9	3	113	37	80	0.34	2.4	3.8 C	
12	10	16	9.8	62	55.3	150	33.8	116.6	3.0	9	1	178	122	199	0.33	3.8	7.8 D	
13	21	29	43.8	59	34.3	146	29.6	5.8	3.2*	8	0	168	18	151	0.35	3.5	2.5 C	
14	10	36	27.6	61	29.0	151	19.6	68.8	3.6	14	0	90	91	142	0.28	2.2	3.8 B	
PALMER ML - 3.7; NEIS MB - 4.1																		
18	09	20	32.4	58	34.0	151	4.2	12.1	3.2	8	1	271	75	134	0.32	8.6	7.6 D	
21	11	37	14.6	57	43.3	154	18.2	13.3	3.3	7	0	272	108	153	0.34	15.1	11.9 D	
21	22	40	25.1	61	21.3	149	53.2	33.3	3.0	9	0	158	48	146	0.35	3.4	3.1 C	
23	02	16	4.0	60	57.0	151	49.4	27.2	3.8*	9	1	114	29	144	0.78	3.1	6.6 C	
NEIS MB - 3.9; FELT (III) AT CHUGIAK AND STERLING AND FELT (II) AT ANCHORAGE AND COOPER LANDING																		
25	20	54	15.4	55	51.8	152	19.9	54.1	3.2	5	0	349	210	398	0.27	99.0	99.0 D	
26	16	08	10.3	66	8.4	150	2.7	4.9	3.1	8	0	146	165	175	0.28	2.2	38.0 D	
27	06	40	7.2	59	26.9	152	39.6	96.6	3.0	10	3	99	39	45	0.23	1.9	4.5 B	
27	15	14	46.1	61	59.0	147	55.7	20.7	3.0*	9	1	118	36	202	0.29	11.0	13.3 C	
31	00	20	38.0	59	26.0	153	0.8	100.5	3.4	10	2	85	25	67	0.26	2.0	5.8 B	
31	08	59	34.7	60	10.2	148	44.3	73.8	4.3*	5	0	327	225	280	0.17	99.0	99.0 D	
03	14	00	28.7	56	33.8	152	50.1	0.1	3.8	10	0	327	134	305	0.27	99.0	23.5 D	
05	03	52	20.2	61	38.8	149	57.2	36.2	3.1*	7	0	149	44	140	0.30	2.8	3.1 C	
07	17	04	24.3	64	24.6	148	7.0	19.0	3.0*	8	0	133	7	46	0.07	1.5	1.6 B	
09	22	53	49.8	61	42.0	150	53.6	71.8	4.3	16	0	153	175	243	0.30	3.4	7.6 D	
FELT (III) AT ANCHORAGE, PALMER AND BIG LAKE																		
10	17	20	6.9	61	21.8	151	24.0	71.8	4.0*	18	0	106	129	191	0.23	3.9	11.7 C	
NEIS MB - 4.1; FELT (III) AT ANCHORAGE AND (II) AT PALMER AND BIG LAKE																		
10	17	21	41.2	64	9.8	149	52.4	90.0	4.3*	4	0	123	129	289	1.79	4.9	24.1 D	
NEIS MB - 4.4; FELT (III) AT FAIRBANKS AND (I) AT ANCHORAGE																		

^aSee explanation of column headings at end of appendix C.

APPENDIX B (con.)

	ORIGIN TIME			LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERR	ER2	Q	
1986	HR	MIN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM		
SEP	10	17	32	33.5	63 24.0	136 28.7	40.1	3.2	8	0	344	376	430	0.27	99.0	99.0	D
	17	01	02	20.8	65 59.7	150 6.2	180.1	3.2	6	1	140	159	162	0.25	5.0	9.7	D
	17	08	44	21.8	58 56.0	153 7.1	16.6	3.2	6	0	327	98	309	0.24	99.0	99.0	D
	17	19	52	45.6	63 2.2	149 42.4	95.3	3.2*	8	0	284	87	174	0.11	19.5	9.7	D
	22	05	42	59.4	59 2.1	151 7.8	53.7	4.4	10	0	200	55	82	0.20	3.6	7.7	D
	FELT (III) AT HOMER																
	24	01	36	46.0	62 44.1	150 37.0	83.3	3.3*	8	0	341	140	209	0.12	99.0	73.3	D
	24	02	13	37.9	67 32.1	157 30.0	26.6	3.9*	8	0	231	421	518	0.13	20.1	82.1	D
	25	16	29	19.6	54 32.9	159 83.1	22.8	4.4*	8	0	298	97	819	0.14	99.0	99.0	D
	NEIS MB = 4.8: FELT (II) AT SANDPOINT																
	25	20	50	50.0	59 34.2	154 40.9	220.3	5.3*	14	0	188	37	78	0.22	5.5	8.4	D
	NEIS MB = 4.6: FELT (IV) AT KENAI AND (III) AT HOMER, SOLDOTNA AND SUTTON AND (II) AT PALMER, ANCHORAGE, MOOSE PASS AND SEWARD																
	26	06	43	1.1	60 18.4	153 25.0	169.4	3.1*	11	0	105	38	105	0.37	3.0	10.1	C
	26	10	10	27.5	62 7.4	152 0.0	109.2	3.2*	15	0	127	194	237	0.32	3.3	20.6	C
	27	12	15	41.5	59 34.9	153 42.2	166.7	4.3*	8	0	91	32	57	0.26	5.2	13.1	C
	28	09	01	49.5	62 16.6	151 0.8	88.4	3.8*	13	0	107	193	234	0.28	3.6	24.0	D
	29	06	16	7.1	59 56.1	151 54.3	70.3	3.0	6	0	182	34	72	0.13	4.3	9.9	D
	29	17	22	45.7	64 15.9	150 47.9	84.8	3.4*	10	0	206	90	133	0.15	3.3	10.4	D
	30	09	45	58.2	68 12.0	156 46.1	178.8	3.4	7	0	299	179	231	0.04	70.9	51.8	D

APPENDIX C

Data for Alaska earthquakes of all magnitudes that were located during the third quarter 1985.^a

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1985															
1985	ORIGIN	TIME	LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ER2	Q
JUL	HR MN	SEC	DEG MIN	DEG MIN	KM				DEC	KM	KM	SEC	KM	KM	
01	06 18	22.3	57 58.7	132 1.5	21.3	2.7	9	1	210	38	142	0.26	4.7	3.9	D
01	06 44	7.0	63 6.8	131 34.7	83.0	2.5	8	0	129	149	212	0.29	4.2	17.4	C
01	07 49	59.6	63 34.8	147 44.4	0.1	1.9	9	0	113	62	100	0.39	1.3	2.7	D
01	19 04	5.6	63 17.7	149 22.5	94.1	2.2	8	0	120	53	172	0.24	3.6	6.2	C
01	19 08	37.8	64 58.9	147 5.1	14.3	1.4	5	1	262	14	53	0.15	3.1	5.0	D
01	20 12	12.9	60 7.7	153 13.9	137.0	2.8	8	2	125	41	66	0.23	3.9	5.8	C
02	01 42	48.8	66 13.0	149 56.3	6.6	3.7	8	0	171	170	177	0.18	4.8	99.0	D
02	01 47	1.7	66 21.3	149 54.3	20.0	1.8	6	2	159	173	189	0.23	3.7	8.0	D
02	01 49	50.4	68 22.0	150 2.3	41.8	1.8	7	1	161	167	204	0.39	2.2	99.0	D
02	03 57	4.1	68 22.0	150 2.9	44.0	1.9	6	1	161	167	197	0.34	2.6	99.0	D
02	05 42	58.3	59 18.8	133 42.5	18.0	1.4	7	1	168	18	17	0.14	8.8	11.9	D
02	06 10	49.8	64 48.7	147 48.5	15.3	1.6	6	1	98	13	32	0.15	1.6	3.5	B
02	12 54	25.1	63 21.5	130 47.3	122.7	2.0	8	0	178	101	181	0.13	8.5	9.3	D
02	13 01	18.0	63 30.0	151 14.3	32.2	3.7	10	0	143	117	188	0.26	5.1	6.6	D
02	16 44	56.3	66 11.1	149 50.4	4.0	2.4	6	0	149	171	174	0.38	7.4	99.0	D
03	02 12	4.9	58 20.5	151 5.9	94.3	3.3	12	0	201	106	190	0.37	4.3	10.8	D
03	06 34	17.7	64 42.4	147 30.4	14.0	1.0	6	1	131	25	33	0.18	1.3	8.0	C
03	09 01	32.4	63 4.7	150 50.1	146.9	2.6	10	0	189	120	188	0.21	6.0	10.7	D
03	09 16	4.8	64 45.1	147 5.8	1.1	2.2	6	0	148	30	39	0.12	2.2	14.8	C
03	09 49	8.2	63 6.1	150 53.2	131.6	1.9	8	0	120	120	206	0.17	8.0	13.3	C
03	11 08	34.8	62 56.0	148 12.2	75.9	2.2	8	1	179	96	134	0.30	3.1	2.5	D
03	13 36	58.3	59 16.8	153 12.4	89.7	2.4	7	3	135	17	83	0.25	2.8	3.7	C
03	18 12	21.4	68 20.2	149 47.7	88.9	2.8	9	0	179	177	188	0.17	2.7	66.7	D
03	19 42	12.7	65 22.8	150 1.0	39.6	2.3	7	1	162	168	194	0.27	2.2	13.8	D
03	22 26	25.0	62 31.8	151 18.5	119.4	2.0	8	0	195	154	180	0.26	4.0	17.5	D
04	01 31	26.0	63 2.4	160 52.5	131.8	2.2	9	1	262	124	211	0.26	9.9	6.8	D
04	07 10	40.7	64 48.8	147 21.6	13.6	1.6	6	2	161	20	37	0.36	1.8	4.6	C
04	09 32	53.3	66 10.4	150 4.9	133.0	2.3	8	0	190	163	177	0.27	4.8	38.4	D
04	13 37	19.6	61 17.5	150 25.2	36.6	2.7	8	1	147	161	239	0.76	3.7	10.1	D
04	15 24	29.3	59 38.4	151 54.1	68.9	2.5	6	4	172	16	91	0.21	3.5	6.1	C
05	02 13	24.6	61 13.3	149 29.6	6.8	2.6	7	2	171	48	180	0.27	3.2	7.8	C
05	12 19	13.2	69 58.9	153 33.0	132.8	2.4	6	2	152	36	62	0.29	5.5	4.5	D
05	18 33	5.6	65 58.8	153 56.6	53.5	3.7	10	0	239	278	310	0.19	22.1	26.6	D
05	18 33	10.3	59 49.5	153 27.1	123.4	2.4	7	2	125	42	76	0.33	2.6	7.8	C
05	23 46	1.2	62 3.4	150 42.1	74.0	2.2	10	2	89	100	179	0.30	2.7	5.6	C
06	03 28	7.4	59 50.7	152 25.2	74.5	2.5	8	4	112	48	67	0.28	2.1	3.7	B
06	06 07	43.9	60 9.0	152 52.2	104.1	2.4	6	3	128	31	84	0.32	3.2	4.9	C
06	08 02	26.7	59 17.4	153 17.0	97.8	2.4	11	2	131	9	12	0.14	3.1	6.0	C
06	09 09	4.2	60 9.2	147 6.3	115.1	3.2	6	0	286	194	315	0.33	69.8	71.8	D
06	14 28	55.7	64 47.9	149 16.9	10.7	1.0	5	2	264	27	68	0.35	2.0	6.2	D
06	16 31	8.1	64 51.4	148 41.1	11.4	1.6	6	2	225	26	43	0.27	1.6	5.9	D
06	17 32	42.8	58 39.4	152 34.2	51.2	2.2	6	1	192	13	95	0.17	5.5	4.4	D
07	04 34	52.8	60 54.4	149 57.2	38.6	2.9	17	3	53	43	51	0.33	0.9	1.5	C
07	05 11	55.9	66 10.4	150 13.1	74.0	2.0	6	0	169	157	181	0.30	24.2	99.0	D
07	10 45	37.0	61 15.2	151 29.4	65.0	3.0	9	2	133	31	132	0.33	3.0	2.6	C
08	03 04	1.2	60 16.6	153 35.7	188.5	3.3	10	0	99	48	73	0.26	5.4	12.0	C
08	06 00	40.4	64 57.5	148 5.4	29.0	1.8	6	0	301	61	81	0.17	53.5	85.7	D
08	08 11	25.9	58 58.2	152 37.0	64.1	2.1	6	3	182	41	66	0.23	4.1	7.7	D
08	12 00	8.8	64 37.2	147 3.8	15.8	1.8	8	0	178	24	47	0.32	1.9	1.6	C
08	15 27	10.1	60 29.5	152 3.4	95.0	2.4	9	1	242	40	104	0.21	5.7	3.8	D
08	17 21	13.9	66 5.1	149 55.6	1.0	2.1	7	0	144	163	170	0.22	2.7	98.3	D
08	21 34	26.3	62 4.7	147 24.8	91.5	2.2	4	1	144	28	266	0.30	12.2	7.4	D
09	01 04	27.4	62 51.4	148 25.3	63.8	2.7	11	0	131	101	149	0.22	5.9	8.8	C
09	23 36	2.7	63 54.8	148 54.6	0.3	1.2	6	0	170	20	75	0.16	2.4	99.0	C
10	04 48	54.2	59 51.0	152 41.0	84.1	1.9	6	3	125	38	67	0.18	2.8	4.8	C
10	06 36	21.3	61 55.3	148 26.6	0.3	2.5	6	2	149	60	209	0.34	4.8	3.0	D
10	12 01	43.9	64 28.4	149 18.5	14.3	1.2	8	3	238	16	88	0.32	1.7	1.6	D
10	20 20	32.7	60 8.6	152 33.3	92.2	2.9	10	2	135	33	74	0.26	2.2	4.3	C
10	21 33	35.0	64 19.0	148 26.6	19.5	1.0	5	2	119	24	89	0.32	1.3	5.5	C
10	23 13	28.3	63 52.0	148 39.8	20.1	1.2	7	1	169	20	82	0.24	8.8	10.0	C

^aSee explanation of column headings at end of appendix C.

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1983															
1985	ORIGIN		TIME	LAT N	LONG W	DEPTH	MAG	NP	N8	GAP	D1	D3	RMS	ERN	ERZ Q
JUL	HR	MM	SEC	DEC MIN	DEC MIN	KM				DEG	KM	KM	SEC	KM	KM
11	00	06	6.1	59 56.2	153 34.9	138.6	2.4	5	2	155	37	70	0.14	5.3	7.8 D
11	00	33	15.9	63 34.9	148 41.1	12.0	1.3	6	2	231	21	113	0.25	1.9	1.9 C
11	03	49	44.0	63 54.1	148 34.3	10.4	1.6	6	1	119	26	79	0.33	2.4	2.6 C
11	10	24	37.5	63 41.0	149 38.1	10.0	1.8	7	0	226	35	116	0.33	10.1	2.3 D
11	22	09	35.6	59 56.0	152 42.3	90.1	2.9	9	2	104	43	67	0.20	1.9	4.0 B
13	01	35	1.3	64 50.1	147 34.7	21.2	1.6	6	0	120	13	27	0.09	1.7	1.8 B
13	02	26	35.6	63 31.4	148 47.0	13.8	1.5	6	0	283	25	118	0.26	10.1	2.9 D
13	10	33	34.0	66 12.9	150 8.7	40.6	3.1	6	1	172	160	183	0.38	2.8	99.0 D
13	11	43	22.8	60 12.1	152 54.5	107.9	2.1	5	1	179	25	88	0.07	5.4	6.8 C
13	13	39	1.2	61 31.2	151 13.9	38.8	2.7	10	1	127	148	235	0.29	3.0	8.6 D
13	16	11	33.4	66 54.8	155 23.2	41.6	3.1	9	0	183	198	261	0.23	24.3	22.2 D
14	02	06	16.8	60 41.5	151 4.8	43.3	2.7	9	3	128	76	104	0.33	1.3	3.5 C
14	04	06	26.8	64 30.5	148 2.4	13.9	1.3	5	3	109	6	50	0.33	1.1	3.1 C
14	19	07	14.8	65 48.5	151 12.2	10.0	4.3*	8	0	132	116	160	0.31	3.4	36.6 D
14	21	02	4.1	62 59.7	149 42.4	90.8	2.0	10	0	201	91	179	0.35	4.5	7.2 D
15	02	48	53.3	59 56.7	152 30.7	94.8	2.5	5	2	138	52	58	0.17	3.0	6.0 D
15	03	59	48.1	59 47.2	151 29.1	49.0	2.7	7	5	139	17	101	0.21	3.0	3.3 C
15	10	22	23.7	63 4.2	180 30.6	97.2	2.0	7	0	193	108	197	0.22	9.1	9.1 D
15	11	33	11.2	64 57.6	146 48.0	13.6	1.4	7	1	166	28	62	0.11	2.8	2.2 C
15	12	37	32.8	63 8.6	150 45.0	136.1	3.9*	12	0	140	112	192	0.33	3.3	8.4 D
FELT (III) IN ANCHORAGE															
16	13	54	59.8	66 33.6	147 56.6	8.2	1.5	7	0	200	69	82	0.12	4.2	2.8 D
16	08	24	46.5	64 11.4	147 52.1	8.4	1.3	6	1	246	33	72	0.12	3.5	11.1 D
16	19	50	40.7	63 28.8	148 58.5	9.8	1.5	8	1	318	28	122	0.08	6.0	2.4 D
17	07	42	31.7	63 56.4	149 3.1	8.9	1.3	6	0	193	24	78	0.38	3.7	3.1 D
17	19	53	4.6	60 43.4	150 17.8	25.6	2.7	6	0	317	118	387	0.12	99.0	54.4 D
17	21	32	55.0	60 16.4	152 47.9	117.6	2.6	9	4	144	95	121	0.20	1.3	3.0 C
18	02	02	36.8	64 49.9	148 53.9	22.0	1.0	8	1	239	30	53	0.40	4.2	2.2 D
18	17	26	32.1	59 58.3	153 17.9	128.1	2.8	8	4	131	30	61	0.19	3.6	3.4 C
19	08	30	42.6	66 20.1	149 46.5	10.0	3.7*	7	0	178	178	184	0.24	2.8	99.0 D
19	18	19	39.1	66 18.7	150 2.2	34.2	2.4	6	0	175	166	184	0.10	2.9	99.0 D
20	01	44	15.1	62 58.7	148 58.1	3.2	2.2	10	0	175	84	172	0.34	4.9	3.2 D
20	13	54	17.8	65 47.9	147 53.4	2.7	1.6	6	0	321	93	109	0.28	38.6	13.7 D
20	14	02	35.9	60 46.4	150 29.3	25.0	2.8	10	0	138	98	117	0.22	2.0	10.4 D
20	16	04	28.8	61 38.3	151 0.8	67.1	2.3	11	0	89	72	161	0.36	2.1	4.5 C
21	00	11	59.8	60 10.8	153 13.9	142.8	2.8	9	2	120	37	69	0.24	3.3	4.8 C
21	07	45	12.2	64 25.9	147 2.8	8.5	1.5	7	0	138	6	63	0.32	1.8	1.8 C
21	10	58	35.9	60 43.1	152 10.6	86.6	2.7	10	3	103	47	122	0.35	2.8	3.5 C
21	15	26	14.7	62 36.9	149 42.8	77.5	2.3	11	0	114	118	152	0.19	2.9	10.2 C
22	00	38	38.5	63 3.2	149 25.4	87.5	1.8	6	1	225	80	171	0.21	7.6	3.6 D
22	01	24	27.1	59 22.7	152 25.8	78.5	3.0	11	3	122	54	95	0.32	1.7	3.2 C
22	07	08	4.9	60 49.5	151 53.0	82.8	3.0	9	1	111	41	131	0.29	2.8	4.8 C
22	09	18	33.3	58 20.7	153 3.0	113.7	3.4	9	0	127	102	149	0.12	8.7	6.5 C
22	11	06	32.8	64 50.5	149 2.3	18.2	1.1	6	1	254	30	59	0.26	4.7	1.9 D
23	04	55	33.7	66 16.3	150 1.8	76.0	1.9	6	0	155	166	185	0.15	24.3	99.0 D
23	22	28	13.7	66 5.3	150 14.3	104.8	2.3	8	0	146	155	174	0.40	5.5	34.3 D
23	23	00	16.1	63 54.8	148 51.9	4.2	1.8	6	0	162	20	75	0.08	2.3	3.2 C
24	03	29	55.8	60 18.8	150 57.8	54.0	2.6	9	1	128	61	100	0.26	2.8	8.1 C
24	03	41	19.3	64 52.1	148 59.7	1.3	1.0	5	2	252	33	57	0.18	3.9	58.3 D
24	04	09	38.2	58 17.8	153 46.4	73.5	2.3	9	2	214	71	97	0.25	3.9	6.7 D
24	08	33	36.0	64 50.7	147 23.0	14.2	1.7	8	2	158	18	38	0.23	1.9	4.0 C
24	08	42	14.9	64 26.9	147 6.8	24.2	1.2	8	0	151	9	60	0.01	12.2	8.4 D
24	13	32	28.9	63 43.1	148 50.5	23.8	1.4	8	0	263	8	97	0.40	83.6	39.0 D
24	13	53	4.2	60 12.4	150 63.5	9.4	2.5	8	3	209	49	107	0.12	3.1	4.5 D
26	02	10	23.5	64 30.7	147 58.2	7.5	1.6	6	2	101	38	50	0.35	1.5	18.0 C
26	11	21	45.6	59 40.5	153 52.3	153.7	2.3	7	1	134	22	41	0.30	4.8	4.8 C
26	19	55	4.3	65 40.2	147 55.7	8.5	3.1*	8	0	191	80	95	0.18	4.0	2.8 D
26	09	28	25.7	63 30.0	148 52.3	12.9	1.7	8	0	197	28	121	0.04	7.4	2.5 D
26	22	58	9.1	59 8.6	153 46.2	92.4	2.6	7	3	125	21	36	0.17	3.9	4.2 C
27	01	00	27.1	59 59.7	152 52.8	112.1	2.1	6	1	114	43	77	0.38	3.3	6.5 C
27	01	17	33.6	60 43.0	152 14.9	78.0	2.1	10	0	138	44	62	0.39	3.1	5.6 C
27	02	59	7.4	60 15.5	152 38.8	102.0	2.8	5	2	140	87	113	0.13	6.6	9.9 D
27	03	46	29.3	64 41.0	149 60.0	22.4	1.6	5	1	280	46	95	0.30	4.8	2.6 D
27	08	47	34.3	61 9.6	151 20.8	69.8	2.7	7	0	260	113	168	0.25	8.1	10.4 D
27	08	39	59.6	62 32.8	151 13.2	118.1	2.0	7	0	153	175	268	0.15	11.2	19.9 D

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1983																		
1983	ORIGIN	TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERN	ERZ	Q	
JUL	HR	MM	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM	
	27	11	18	49.3	60	3.8	153	2.9	113.3	2.8	6	3	136	43	71	0.22	2.7	2.5 C
	27	17	57	8.3	61	16.1	149	46.9	0.6	2.4	10	0	137	50	145	0.21	3.0	1.4 D
	28	00	27	43.0	59	36.2	152	54.7	97.0	2.7	9	3	79	19	72	0.27	1.9	3.0 B
	28	01	46	31.6	63	27.4	149	3.1	98.3	2.5	12	0	147	31	123	0.14	4.0	5.3 C
	28	12	06	57.6	63	23.8	151	23.7	72.2	2.6	9	0	140	128	202	0.11	4.6	6.3 D
	28	23	02	16.4	64	40.9	148	37.4	11.1	1.2	6	4	172	25	35	0.24	1.1	3.7 C
	29	10	08	36.6	63	23.0	148	41.8	108.8	1.6	6	0	307	41	128	0.16	22.9	26.2 D
	29	12	03	50.0	66	11.9	149	44.3	35.9	2.1	7	0	149	170	173	0.36	2.4	99.0 D
	29	14	24	28.7	64	53.5	150	82.1	34.3	2.3	6	0	301	92	141	0.16	43.1	13.6 D
	29	18	00	50.5	59	0.5	153	55.8	116.3	2.4	7	1	192	19	50	0.28	6.2	9.2 D
	29	22	38	59.9	59	32.1	153	41.3	126.1	2.8	7	1	91	22	40	0.22	4.2	7.6 C
	29	23	16	49.0	59	25.7	152	34.7	88.8	2.0	5	2	160	49	100	0.22	3.0	10.3 C
	30	00	38	37.0	66	16.6	150	10.1	48.8	1.9	6	0	179	160	187	0.20	6.0	99.0 D
	30	11	13	38.2	62	8.2	149	36.4	65.0	2.8	7	1	139	66	168	0.34	2.6	6.3 D
	30	14	16	34.1	66	3.9	149	52.2	97.1	2.1	6	0	142	159	196	0.38	3.2	25.2 D
	30	18	08	54.7	66	6.5	149	47.7	20.0	2.6	9	0	164	162	167	0.24	2.6	29.4 D
	30	19	18	29.3	64	20.2	148	33.2	2.9	1.0	5	2	197	27	37	0.08	1.7	16.5 D
	30	21	44	3.2	61	41.8	149	30.9	46.2	2.4	5	1	129	23	147	0.38	3.6	3.1 C
	30	23	58	52.1	63	54.8	148	59.1	3.8	0.9	6	0	184	20	74	0.20	2.5	3.9 D
	31	01	44	47.0	63	16.2	151	40.4	16.3	2.0	6	0	138	194	223	0.30	8.7	57.1 D
	31	14	07	59.0	65	47.7	149	41.7	54.7	3.6	9	0	143	130	139	0.13	2.8	26.1 D
	31	15	36	37.1	60	12.5	152	39.4	98.0	2.6	6	2	131	24	98	0.23	3.0	8.0 C
	31	19	57	3.7	66	10.1	149	58.8	2.3	2.3	8	0	168	170	172	0.13	2.7	35.1 D
	31	21	31	28.0	64	2.2	149	28.9	15.7	1.8	5	2	236	43	77	0.19	1.7	2.2 C
AUG	01	03	46	12.7	63	52.5	149	45.6	33.4	2.6	6	0	272	44	95	0.29	9.2	8.9 D
	01	03	56	11.1	63	57.7	149	22.4	24.4	1.1	5	2	232	33	74	0.13	2.0	99.0 D
	01	06	03	21.2	64	2.2	149	20.3	10.9	2.5	9	2	170	39	70	0.40	1.4	1.5 C
	01	09	27	58.1	59	31.0	151	12.1	18.6	2.1	8	2	213	30	116	0.13	3.5	3.4 D
	01	09	56	0.2	59	51.3	152	43.4	91.9	2.8	8	2	98	36	65	0.07	2.6	4.8 C
	01	12	57	32.1	64	28.8	147	11.8	3.8	1.9	4	2	134	14	49	0.21	2.7	18.2 C
	01	14	34	50.2	59	52.4	152	32.8	94.9	2.3	5	2	119	32	63	0.11	3.4	6.7 C
	01	17	38	17.3	60	12.1	152	33.6	116.6	2.8	6	1	137	25	86	0.05	5.4	6.8 C
	02	02	10	54.9	58	54.7	152	8.9	50.8	2.2	6	1	164	34	90	0.12	4.9	12.4 C
	02	02	42	26.4	58	54.5	154	19.5	126.3	3.2	10	3	205	31	73	0.23	4.8	4.3 D
	02	02	57	57.0	63	38.1	147	40.3	76.2	1.2	6	2	286	65	98	0.22	5.5	3.4 D
	02	03	06	52.4	61	39.8	150	48.4	73.1	2.1	7	3	150	86	188	0.30	8.0	8.4 D
	02	05	17	10.0	64	13.3	148	25.2	14.2	0.6	6	4	118	24	80	0.32	0.9	2.2 C
	02	05	48	48.9	64	2.2	148	11.1	114.7	2.4	6	1	173	20	90	0.12	6.3	3.0 D
	02	08	59	51.1	63	23.4	149	24.7	94.5	2.0	9	2	191	45	137	0.36	6.0	2.5 D
	02	06	51	23.6	58	19.1	151	55.7	43.3	2.6	8	2	188	42	121	0.20	4.8	4.2 D
	02	10	22	30.8	60	5.9	153	0.9	116.1	2.6	7	2	138	38	74	0.07	4.2	5.7 C
	02	16	49	52.9	63	54.4	148	59.9	9.4	0.8	6	0	186	20	75	0.21	6.2	30.9 D
	03	00	01	8.5	66	31.5	149	44.9	71.7	2.4	5	1	251	184	203	0.23	11.4	35.5 D
	03	00	04	35.0	66	13.4	150	2.2	74.0	2.0	6	3	172	166	180	0.37	3.1	11.2 D
	03	03	57	23.7	57	59.8	156	37.9	169.8	3.4	7	0	299	188	241	0.09	52.7	43.6 D
	03	05	47	52.8	64	20.6	149	46.2	20.0	1.0	4	2	283	42	82	0.28	6.6	2.7 D
	03	07	28	18.1	66	29.3	148	37.2	19.4	1.8	5	0	187	181	181	0.16	10.5	99.0 D
	03	07	38	52.8	62	58.9	149	17.8	86.6	4.0	23	0	91	86	155	0.37	2.3	5.3 C
	03	08	47	37.2	64	46.8	147	22.5	14.5	1.3	7	2	156	23	37	0.27	1.3	1.4 C
	03	15	35	26.9	62	59.1	149	12.7	86.8	2.3	12	0	144	84	158	0.26	3.0	3.9 D
	03	16	48	40.7	59	39.3	151	59.2	97.7	4.4	14	0	100	19	70	0.29	1.9	4.2 B
	03	18	54	53.5	64	32.3	147	8.4	4.2	0.6	5	2	162	17	51	0.11	2.2	17.8 C
	03	22	10	24.5	65	25.1	149	59.6	14.9	2.3	10	0	130	103	118	0.28	3.1	99.0 D
	03	23	13	53.4	64	43.2	147	23.5	8.1	1.8	10	0	96	28	41	0.28	1.3	2.7 C
	03	23	20	8.0	64	43.8	147	26.8	9.4	1.6	7	3	141	25	38	0.31	1.0	6.4 C
	04	00	00	23.7	66	23.8	150	8.6	134.5	2.0	7	1	184	163	199	0.40	3.3	11.9 D
	04	03	51	22.4	63	12.6	150	30.1	138.8	2.1	8	0	282	97	184	0.12	14.3	9.8 D
	04	05	34	53.4	60	3.1	152	44.9	99.7	2.0	5	2	109	41	84	0.13	4.1	7.1 C
	04	05	56	16.3	64	51.4	147	40.5	13.1	1.0	5	3	103	8	23	0.13	1.6	2.6 B
	04	09	12	49.3	59	31.0	152	51.3	111.3	3.1	11	2	87	26	70	0.29	1.9	4.1 B
	04	12	12	19.5	66	3.8	150	13.9	129.1	2.7	6	1	144	158	174	0.27	3.8	12.3 D
	05	03	12	8.2	61	14.3	150	18.4	4.8	3.0	8	0	125	74	162	0.24	2.6	4.2 D

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1985														
1985	ORIGIN	TIME	LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q
AUG	HR MN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM
08	07 47	31.6	60 5.4	152 36.7	84.8	2.0	8	1	123	38	92	0.06	3.0	5.9 C
08	21 32	49.3	60 30.5	147 35.0	5.7	2.4	8	2	242	147	254	0.18	11.5	8.3 D
08	09 16	11.2	62 7.6	150 23.0	45.9	2.0	8	0	152	89	164	0.37	3.5	22.7 D
07	03 24	7.5	63 59.8	147 12.3	13.4	1.3	7	5	237	41	88	0.34	1.6	0.9 D
07	03 54	30.9	61 51.6	148 56.0	3.8	3.5*	9	0	108	32	183	0.33	9.6	15.0 C
FELT (II) AT CHICKALOON														
07	03 39	55.7	64 34.8	149 44.2	11.7	1.3	8	8	270	32	81	0.37	1.3	1.2 D
07	08 30	2.4	64 16.6	150 9.3	16.0	1.3	8	2	282	62	102	0.26	2.9	1.3 D
07	07 00	10.0	64 29.4	147 22.2	10.2	1.2	5	4	116	22	44	0.27	0.8	4.3 C
07	09 02	19.3	64 57.4	148 51.6	11.4	0.7	4	1	253	37	65	0.07	4.3	10.5 D
07	12 42	30.0	59 16.2	153 30.1	133.9	4.3*	13	1	70	9	12	0.23	3.3	5.5 B
07	18 55	13.8	61 6.9	151 56.8	168.0	3.5	10	0	252	9	289	0.21	31.1	41.2 D
07	23 11	39.4	61 2.3	149 23.8	18.9	2.5	11	0	217	63	148	0.36	7.4	5.1 D
07	23 16	44.9	61 25.2	149 40.3	50.9	2.4	4	2	169	38	133	0.24	8.0	3.2 D
07	23 20	52.5	64 36.5	147 2.6	3.6	0.8	4	3	190	23	53	0.20	1.6	14.6 D
08	04 28	23.0	61 37.3	148 18.8	33.8	2.0	5	3	201	44	237	0.26	4.2	3.6 D
08	08 47	26.0	60 3.7	152 43.0	103.8	2.7	9	3	112	40	75	0.34	2.6	3.9 C
08	08 42	32.8	61 51.9	151 17.9	130.4	2.3	9	0	171	86	209	0.21	8.4	22.0 D
08	09 24	19.2	60 19.6	153 25.7	163.5	4.2*	8	1	127	38	76	0.23	3.3	7.6 C
NEIS MB = 4.2; FELT AT HOMER														
08	18 43	48.1	58 49.8	154 23.1	118.7	2.6	7	1	264	40	82	0.21	8.8	9.3 D
08	20 39	37.8	68 50.8	150 27.1	228.4	2.4	5	0	138	149	171	0.39	11.9	46.0 D
08	21 15	1.2	61 22.9	148 15.3	28.1	2.5	7	0	218	62	138	0.20	9.0	3.1 D
PALMER ML = 2.8; FELT AT CHICKALOON														
08	21 38	44.9	68 29.6	154 32.7	1.3	3.7*	9	0	244	71	118	0.82	4.9	4.4 D
08	22 20	50.0	60 43.4	148 8.4	96.5	2.6*	8	0	313	111	338	0.56	99.0	66.0 D
FELT AT CHICKALOON														
09	00 08	38.9	58 29.8	154 29.8	1.4	4.1	10	0	242	69	116	0.89	4.2	4.8 D
09	01 20	41.9	58 38.7	154 21.4	0.9	2.5	8	1	271	52	98	0.81	6.1	4.3 D
09	03 08	55.0	64 43.7	149 9.3	16.2	1.6	6	3	262	17	59	0.38	1.6	1.2 D
09	04 17	49.1	58 29.1	154 33.6	1.6	2.9	10	0	228	73	119	1.08	11.9	3.5 D
09	05 30	29.3	64 27.8	146 53.6	9.2	2.4	11	0	102	7	59	0.18	2.4	1.8 C
09	08 11	46.5	66 4.1	150 10.2	128.5	2.2	4	2	162	189	176	0.36	4.8	7.4 D
09	08 18	23.0	64 29.1	146 58.4	0.7	2.5	5	2	193	9	58	0.29	2.7	58.3 D
09	11 43	42.9	63 8.4	151 15.8	40.4	2.2	7	0	202	134	216	0.11	99.0	99.0 D
09	14 32	32.6	63 58.6	149 4.6	7.1	1.2	5	0	221	23	110	0.05	4.6	3.2 D
09	16 15	54.3	63 60.0	147 2.3	7.8	1.6	7	0	248	46	73	0.23	3.9	17.0 D
09	22 32	24.7	59 52.6	152 56.9	110.9	2.5	6	2	107	30	71	0.29	3.3	7.4 C
10	00 47	26.3	65 2.3	146 54.3	14.1	1.9	4	2	286	24	71	0.12	3.5	3.8 D
10	06 29	48.3	59 56.4	153 14.8	110.8	2.3	8	0	139	56	115	0.28	3.7	6.8 D
10	13 49	2.8	64 43.1	149 7.1	18.1	1.8	7	2	254	16	57	0.22	3.2	1.0 D
10	15 12	15.4	64 50.8	147 32.9	14.9	1.4	7	1	124	13	28	0.20	1.7	3.0 B
10	15 30	23.1	66 10.8	149 55.3	0.2	2.2	10	0	169	170	173	0.26	5.8	31.6 D
10	15 48	19.6	66 7.4	150 7.3	114.5	2.6	7	1	166	161	174	0.24	3.2	12.6 D
10	19 27	47.2	66 31.9	149 36.1	93.6	2.2	8	1	167	190	200	0.25	9.6	44.0 D
10	23 35	38.7	64 20.2	148 6.8	19.4	0.8	5	1	147	15	54	0.13	2.2	1.8 C
11	00 33	56.2	62 14.5	151 3.0	74.0	2.2	8	2	171	38	124	0.17	2.3	5.8 C
11	09 46	23.0	60 27.8	151 3.7	24.4	3.4	7	1	206	79	98	0.33	2.9	21.4 D
11	17 24	4.2	60 5.4	152 54.0	114.3	3.0	9	3	113	37	80	0.34	2.4	3.8 C
11	20 27	24.8	64 36.0	146 60.0	15.5	1.4	7	1	196	20	52	0.34	2.4	2.1 D
11	23 21	49.7	63 18.0	150 53.9	139.3	2.5	10	0	196	109	176	0.36	5.9	9.2 D
11	23 35	53.3	66 28.2	149 47.9	107.4	2.1	6	0	248	180	199	0.26	26.2	99.0 D
12	03 06	18.3	63 22.4	147 33.9	24.7	1.4	6	1	287	79	125	0.27	3.2	99.0 D
12	07 12	39.5	63 5.8	148 37.6	8.7	1.8	7	1	194	73	156	0.40	6.2	3.0 D
12	10 03	9.1	59 38.8	151 0.6	44.0	2.7	7	2	188	18	131	0.12	2.7	4.0 D
12	10 16	9.8	62 55.3	150 33.8	116.8	3.0	9	1	178	122	199	0.33	3.8	7.8 D
12	10 29	14.9	64 27.2	146 56.6	6.3	2.1	7	1	205	5	57	0.23	1.8	2.0 C
12	10 55	53.4	63 3.7	150 18.2	101.7	2.5	10	1	175	101	175	0.39	3.9	3.8 D
12	14 01	49.6	69 36.2	153 1.9	107.3	2.6	7	1	151	12	69	0.09	3.4	8.0 C
12	17 39	20.2	61 46.1	151 84.1	162.3	2.1	6	0	200	85	138	0.28	9.0	18.9 D
12	21 44	58.2	63 41.9	149 26.0	110.3	1.0	6	0	179	25	108	0.16	8.0	5.9 D
12	21 53	44.7	62 25.8	149 4.4	33.6	2.4	6	0	133	93	148	0.30	4.2	8.2 D
12	22 52	0.1	64 31.6	148 31.2	13.0	1.0	5	1	138	22	38	0.17	1.3	7.7 C
13	03 08	54.3	59 45.2	153 41.7	118.1	2.2	6	0	111	28	44	0.26	6.0	10.0 C
13	08 45	58.3	59 28.4	152 39.0	98.3	2.3	9	3	98	38	61	0.22	2.1	4.0 C
13	09 54	48.3	60 57.5	152 1.5	85.4	2.5	8	2	125	25	73	0.31	3.6	3.0 C
13	20 14	25.3	59 48.7	151 47.5	63.6	2.0	6	2	134	51	87	0.12	2.8	5.8 C

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1988																
1988	ORIGIN	TIME	LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERR	ERZ	Q	
	HR MN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM		
AUG	13	21	29	43.6	59 34.3	148 29.8	5.6	3.2	8	0	168	18	191	0.36	3.3	2.9 C
	13	23	34	18.2	63 41.4	149 28.0	25.0	1.8	4	1	291	27	110	0.14	6.2	7.3 D
	14	00	36	3.0	64 12.5	148 4.2	16.1	1.3	7	3	103	7	58	0.27	1.0	1.2 B
	14	02	18	0.9	61 53.8	148 39.3	0.2	1.8	5	3	122	42	198	0.34	2.3	1.9 C
	14	09	57	20.4	64 45.9	148 30.4	16.3	1.1	5	2	192	19	38	0.08	2.0	2.4 C
	14	10	00	5.3	60 23.0	150 49.0	30.7	2.8	9	4	135	69	108	0.25	2.2	7.5 D
	14	10	38	27.8	61 29.0	151 19.6	68.8	3.6	14	0	90	51	142	0.28	2.2	3.8 B
	14	12	08	32.3	64 47.3	147 30.8	7.8	0.4	4	1	133	23	45	0.10	2.5	16.3 D
	14	12	06	54.6	61 35.6	146 31.4	15.1	2.0	6	1	267	50	289	0.33	4.9	4.5 D
	14	15	47	30.2	62 0.4	149 44.0	98.4	2.2	6	1	132	56	153	0.39	2.8	5.4 C
	15	01	07	28.9	63 5.6	151 5.4	76.7	1.8	6	0	334	129	198	0.17	99.0	63.9 D
	15	06	39	12.6	59 33.0	152 45.3	104.8	2.8	8	1	88	29	84	0.33	2.2	6.0 B
	15	09	43	39.1	64 54.9	148 9.0	14.8	1.5	7	0	207	10	37	0.30	2.6	1.8 D
	16	02	47	50.4	57 46.4	153 12.0	11.7	2.8	6	1	310	108	171	0.34	22.6	18.9 D
	16	04	04	27.5	61 34.0	146 29.4	22.5	2.3	8	1	211	53	272	0.31	4.8	3.7 D
	16	07	11	36.0	64 43.5	147 22.9	8.5	1.5	5	1	180	28	38	0.10	2.1	12.3 C
	16	07	40	9.7	64 39.3	146 50.4	0.9	0.9	6	1	228	28	53	0.14	3.3	3.3 D
	16	17	18	54.0	61 44.3	149 31.4	13.1	2.3	7	0	132	27	224	0.40	25.9	34.0 C
	17	01	49	27.9	62 26.5	149 33.7	68.9	1.7	8	1	148	97	147	0.30	3.0	9.3 D
	17	18	08	4.4	60 27.9	152 10.9	92.6	2.2	6	1	235	33	108	0.21	6.8	6.3 D
	17	20	00	57.3	64 19.4	148 0.4	20.9	1.3	7	0	131	17	52	0.09	1.7	1.3 B
	18	01	41	11.4	64 38.5	149 21.8	20.9	1.0	7	2	558	14	64	0.12	1.9	0.9 C
	18	04	53	2.0	64 39.8	149 13.6	12.7	0.9	5	1	255	12	59	0.17	4.7	1.8 D
	18	06	07	29.4	64 42.6	149 3.7	2.6	0.7	4	1	245	15	54	0.36	4.6	23.4 D
	18	08	18	41.8	59 8.3	151 23.9	0.0	2.5	5	0	262	76	162	0.39	12.0	56.1 D
	18	07	13	40.2	60 48.6	147 54.3	66.8	3.0	6	0	221	109	202	0.02	8.4	21.4 D
	18	09	20	32.4	58 34.0	151 4.2	12.1	3.2	8	1	271	75	134	0.32	8.6	7.6 D
	18	15	27	5.1	61 28.4	150 4.1	14.8	2.7	7	0	119	52	188	0.23	7.8	71.1 D
	19	00	18	52.6	60 20.3	150 3.2	153.6	2.1	6	1	160	166	227	0.17	3.8	11.0 D
	19	07	38	33.3	64 40.0	148 51.2	2.7	1.9	7	1	226	30	82	0.13	3.0	3.0 D
	19	08	22	4.1	64 51.1	147 30.3	13.5	1.6	7	2	132	18	31	0.17	1.8	3.3 B
	19	13	49	39.3	64 31.0	149 20.8	13.9	0.8	5	1	251	15	87	0.08	4.8	1.8 D
	19	15	46	18.4	64 38.0	147 58.1	10.0	0.9	5	2	129	15	49	0.18	2.2	4.5 B
	19	21	39	20.7	63 4.4	150 51.3	133.2	2.7	7	0	190	121	189	0.19	6.7	13.5 D
	19	23	44	0.9	64 47.0	147 30.4	0.4	0.6	4	1	134	23	46	0.05	1.4	99.0 D
	20	00	19	21.9	58 53.8	152 37.1	61.4	2.5	9	3	119	33	72	0.26	1.8	4.5 B
	20	11	41	40.3	65 49.2	148 50.9	121.7	1.8	6	0	237	114	116	0.28	13.3	22.7 D
	21	02	23	21.6	60 39.3	147 34.8	13.1	2.9	11	0	261	132	250	0.26	17.5	5.9 D
	21	11	37	14.6	67 43.3	154 18.2	13.3	3.3	7	0	272	108	153	0.34	15.1	11.9 D
	21	12	26	41.1	63 16.6	150 46.6	105.7	2.3	8	1	199	104	187	0.39	6.5	5.3 D
	21	18	00	9.0	62 59.1	151 30.9	148.3	2.0	7	0	274	184	237	0.08	25.0	16.3 D
	21	21	11	19.2	63 21.4	151 32.0	62.7	2.1	8	0	214	138	210	0.20	5.0	16.1 D
	21	22	24	41.9	62 14.4	149 17.8	42.3	2.3	10	1	130	73	167	0.33	2.4	5.8 C
	21	22	40	25.1	61 21.3	149 53.2	33.3	3.0	9	0	158	48	146	0.35	3.4	3.1 C
	21	22	59	50.2	59 39.2	151 53.2	61.8	2.5	4	3	183	14	76	0.12	4.2	3.0 D
	22	04	50	31.8	62 50.8	149 5.4	77.9	2.5	7	0	150	99	189	0.33	8.3	7.1 D
	22	08	55	50.0	65 47.9	149 1.8	168.9	2.1	6	2	247	116	118	0.40	15.6	12.0 D
	22	18	28	19.7	61 42.4	148 32.3	1.3	2.2	8	1	171	34	197	0.37	8.4	4.4 D
	22	19	02	10.0	64 14.3	146 19.3	24.4	1.2	4	0	319	36	98	0.26	36.7	99.0 D
	22	21	59	15.2	65 3.1	146 6.4	26.6	1.1	4	0	308	61	100	0.02	47.3	99.0 D
	23	00	05	8.7	60 2.1	152 31.4	0.1	2.0	4	0	148	45	65	0.03	1.8	18.1 D
	23	02	16	4.0	60 57.0	151 49.4	27.2	3.8	9	1	114	29	144	0.78	3.1	8.6 C
																NEIS HB - 3.9; FELT (III) AT CHUGIAK AND STERLING AND FELT (II) AT ANCHORAGE AND COOPER LANDING
	23	16	14	40.3	63 5.4	150 37.1	119.2	2.3	9	1	184	110	182	0.22	4.4	4.3 D
	23	16	37	27.8	66 16.4	150 1.8	139.2	2.8	5	1	175	168	186	0.23	3.6	11.8 D
	23	18	08	17.2	66 18.8	149 41.3	5.6	1.7	6	0	247	181	196	0.40	13.0	84.6 D
	23	19	34	48.8	64 55.2	148 40.8	17.1	2.1	6	0	236	27	43	0.03	4.1	8.6 D
	23	22	19	57.8	61 42.3	149 15.1	100.0	1.7	4	0	169	103	314	0.40	47.8	90.1 D
	24	02	10	5.3	64 58.0	147 37.4	15.3	0.7	5	1	157	8	27	0.08	2.4	2.4 C
	24	04	41	40.3	68 33.7	148 16.1	227.6	2.3	6	0	197	78	82	0.10	17.8	25.8 D
	24	07	02	47.8	64 44.2	147 51.7	18.6	2.0	7	2	91	17	32	0.33	1.4	3.3 C
	24	07	32	19.3	63 19.4	150 26.4	114.8	1.8	7	0	185	88	156	0.10	9.9	10.9 D

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1983																	
1983 AUG	ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ER2 Q
	HR	MM	SEC	DEG	MIN	DEG	MIN	KM					DEG	KM	SEC	KM	KM
24	08	03	16.8	66	13.9	149	51.5	91.1	2.8	6	0	172	173	179	0.40	2.8	90.4 D
24	08	08	40.6	66	16.2	150	1.2	136.9	1.8	5	1	175	167	216	0.04	3.5	12.4 D
25	01	31	28.2	63	1.4	150	26.3	126.1	2.8	11	0	177	109	179	0.40	3.9	8.8 D
25	09	19	59.1	64	35.4	147	54.3	18.4	0.9	5	1	123	16	46	0.02	2.2	3.4 B
25	10	38	37.7	62	42.3	150	0.1	128.3	2.2	7	0	335	126	214	0.10	99.0	73.2 D
25	11	21	1.4	63	26.5	151	38.1	39.4	2.3	7	1	218	138	208	0.32	9.1	31.8 D
25	20	34	16.4	55	51.8	152	19.9	54.1	3.2	5	0	349	210	398	0.27	99.0	99.0 D
25	23	58	43.3	64	55.0	147	51.2	13.2	1.8	7	1	193	3	23	0.24	2.2	2.2 C
26	09	54	28.8	66	37.8	148	52.1	37.2	1.7	7	0	242	129	155	0.37	7.2	99.0 D
26	11	10	4.0	64	35.8	149	11.2	12.0	0.9	6	2	250	6	86	0.12	1.7	1.0 C
26	16	08	10.3	66	6.4	150	2.7	4.9	3.1	8	0	146	165	175	0.28	2.2	35.0 D
26	17	48	12.8	64	39.1	149	13.2	18.7	1.1	5	1	257	11	58	0.08	4.6	2.2 D
27	03	58	27.6	59	18.0	153	5.7	78.6	2.1	6	2	151	17	40	0.12	2.9	8.9 C
27	06	40	7.2	59	26.9	152	39.6	96.8	3.0	10	3	99	39	45	0.23	1.9	4.5 B
27	11	02	53.5	64	57.3	148	21.0	17.5	2.4	6	0	284	44	74	0.06	9.5	3.6 D
27	11	05	27.2	64	59.9	149	27.3	13.3	1.6	8	0	280	50	79	0.21	8.3	2.3 D
27	11	16	23.5	64	54.0	149	10.4	19.6	1.9	8	0	258	36	68	0.12	5.4	1.4 D
27	11	17	39.9	64	52.9	149	3.0	18.1	1.8	7	1	289	34	60	0.37	3.0	1.5 D
27	11	18	27.5	66	3.7	149	40.7	11.5	2.2	8	1	301	61	100	0.20	4.1	3.0 D
27	13	52	18.3	62	17.7	149	44.5	75.8	2.5	10	0	142	85	165	0.37	2.8	4.7 D
27	15	14	46.1	61	59.0	147	55.7	20.7	3.0*	9	1	118	36	202	0.29	11.0	13.3 C
27	17	26	43.8	64	54.8	149	12.1	18.6	1.8	8	0	269	38	67	0.26	6.7	1.5 D
27	18	16	48.3	59	49.1	153	32.1	133.4	2.3	6	2	127	25	49	0.12	4.7	7.5 C
27	18	39	16.8	59	51.3	153	27.3	131.4	2.1	5	1	131	26	53	0.13	5.2	8.9 C
27	23	40	9.8	62	38.9	151	14.4	148.8	2.2	8	0	195	159	170	0.37	4.3	15.8 D
28	00	22	0.8	62	53.0	149	46.0	90.0	2.5	9	0	166	103	170	0.15	3.4	8.3 D
28	01	00	14.4	61	34.9	149	52.9	40.5	3.0	6	0	162	40	138	0.10	3.7	6.2 C
28	06	42	47.7	63	33.9	148	58.8	15.6	1.6	6	0	312	19	110	0.17	12.0	1.7 D
28	08	57	3.8	63	14.5	148	30.1	80.3	1.4	5	0	309	59	151	0.01	40.6	29.5 D
28	09	57	27.0	64	31.5	147	44.4	8.7	1.3	8	0	91	18	40	0.07	1.1	8.4 C
28	13	24	56.9	64	31.3	147	8.9	19.4	2.3	7	0	207	19	47	0.07	2.7	1.6 D
28	19	21	42.2	61	45.5	148	50.0	3.1	2.8	5	0	137	24	183	0.15	17.4	19.1 D
28	20	42	10.3	64	31.1	147	43.5	0.7	0.8	7	2	92	18	39	0.10	0.8	82.3 C
28	21	27	10.7	61	12.4	151	8.8	58.3	2.4	9	1	140	49	125	0.34	4.3	5.0 C
29	23	54	13.0	62	38.0	148	8.8	72.7	2.1	6	0	327	138	211	0.28	54.6	23.8 D
30	01	11	3.1	61	12.2	148	39.0	26.9	2.7	9	0	263	79	291	0.35	28.1	10.8 D
30	05	28	55.7	64	37.5	146	43.8	17.5	0.4	4	1	242	27	68	0.24	4.2	6.0 D
30	06	17	44.3	63	28.8	150	22.9	184.8	2.1	6	0	319	77	144	0.07	46.5	86.2 D
30	09	00	38.8	64	38.8	149	13.1	14.7	0.6	5	0	253	10	57	0.00	4.9	1.9 D
30	10	04	15.7	59	58.2	153	16.8	132.8	2.2	6	1	132	30	61	0.11	5.1	10.7 C
30	11	08	19.9	59	53.0	153	48.1	165.3	2.3	6	0	159	24	80	0.03	7.6	18.8 D
30	11	53	45.7	59	46.9	153	19.5	123.7	2.1	5	2	112	15	49	0.13	4.1	8.7 C
30	18	16	54.9	59	31.8	152	58.1	104.6	2.0	7	1	134	20	75	0.30	2.9	7.5 C
30	21	27	40.1	60	39.3	151	52.4	76.7	2.4	5	3	268	56	135	0.24	5.7	4.5 D
30	22	59	38.2	61	54.5	148	45.4	33.0	1.8	6	1	114	41	193	0.27	5.7	7.5 C
30	23	08	56.0	60	14.2	152	28.2	98.2	2.0	6	1	189	26	103	0.08	3.8	5.7 C
31	00	20	38.0	59	26.0	153	0.8	100.5	3.4	10	2	85	25	67	0.26	2.0	5.6 B
31	06	59	34.7	60	10.2	148	44.3	73.8	4.3*	5	0	327	225	280	0.17	99.0	99.0 D
31	18	04	3.4	64	51.3	147	34.3	19.4	0.9	5	0	127	17	80	0.08	1.7	2.0 C
31	18	10	11.6	64	49.2	147	34.9	0.2	0.8	5	3	122	21	46	0.16	1.0	99.0 C
31	18	13	5.5	64	51.5	147	33.8	19.4	0.7	5	0	127	17	80	0.06	1.7	2.0 C
31	18	23	13.8	68	30.0	147	46.4	100.0	1.7	5	0	329	60	116	0.34	99.0	99.0 D
31	23	04	45.7	59	52.1	152	27.2	95.0	2.8	6	3	133	80	64	0.29	2.6	4.9 C
SEP	01	01	45	64	18.3	148	34.1	12.6	1.3	6	1	125	29	39	0.13	1.2	6.5 C
01	08	54	42.7	60	6.3	151	30.7	71.7	2.4	5	3	207	81	73	0.26	3.9	5.6 D
01	10	44	42.7	58	41.2	154	20.2	117.2	2.4	8	2	268	48	89	0.15	6.7	7.8 D
01	12	39	48.6	58	36.0	153	21.8	63.3	2.3	9	1	168	40	82	0.11	3.6	5.3 C
01	19	03	51.3	59	38.1	152	59.9	105.7	2.6	10	3	83	13	69	0.27	2.1	3.8 B
01	21	42	38.2	61	38.3	150	59.8	67.3	2.6	8	3	143	73	162	0.40	2.9	2.8 D
02	03	12	3.6	66	9.6	149	59.1	79.2	2.2	6	2	149	167	177	0.35	5.6	43.7 D
02	10	55	16.9	60	1.8	153	18.4	129.7	3.0	8	3	152	42	56	0.22	3.3	4.6 C
02	12	04	33.8	60	30.3	152	7.7	87.4	2.7	9	2	162	37	98	0.28	2.8	6.6 C
02	12	18	18.5	62	36.7	149	11.5	84.5	2.2	7	0	183	114	130	0.06	5.1	11.1 D
02	18	29	17.5	64	0.6	148	11.5	126.6	2.2	8	0	177	23	52	0.04	5.3	15.5 D
03	04	05	36.1	59	34.2	152	16.0	83.2	2.6	10	3	90	37	59	0.23	1.9	3.6 B
03	04	25	13.2	63	14.6	150	9.6	124.3	2.0	7	0	175	82	171	0.29	6.1	8.3 D
03	07	04	54.9	59	38.7	152	54.2	93.4	2.1	7	1	126	19	43	0.10	2.9	9.3 D

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1985																	
1985 SEP	ORIGIN TIME		LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ER2 Q			
	HR	HN	SEC	DEG MIN	DEG MIN	KM			DEG	KM	KM	SEC	KM	KM			
	03	10	58	13.9	63 19.8	150 38.0	128.6	2.1	7	0	190	96	183	0.08	10.7	12.1 D	
	03	11	58	19.1	84 23.0	149 37.6	12.4	1.1	6	1	256	34	80	0.17	4.1	2.3 D	
	03	14	00	26.7	56 33.8	132 50.1	0.1	3.8	10	0	327	134	308	0.27	99.0	23.5 D	
	03	15	34	22.8	63 49.0	149 2.7	15.3	1.7	5	0	209	11	88	0.21	3.2	2.4 D	
	04	07	40	12.0	61 27.2	150 41.1	45.8	2.6	7	1	151	162	189	0.38	5.1	97.9 D	
	04	14	06	33.7	61 20.2	151 14.8	63.4	2.3	10	2	99	47	132	0.23	1.9	2.1 B	
	04	14	09	34.2	61 19.8	151 11.1	57.1	2.3	6	0	182	50	133	0.10	13.3	17.7 D	
	04	14	10	42.7	63 59.4	147 0.3	19.7	1.4	6	0	292	47	75	0.28	11.8	2.0 D	
	04	17	49	32.3	63 9.8	149 33.8	98.4	1.8	8	0	227	71	160	0.15	10.7	8.7 D	
	04	21	53	46.9	66 2.0	147 44.9	3.4	2.4	8	0	199	118	128	0.24	6.3	3.5 D	
	04	23	23	51.1	63 35.9	160 46.7	15.8	1.9	5	0	202	93	184	0.07	18.0	99.0 D	
	05	03	32	20.2	81 38.8	149 57.2	38.2	3.1*	7	0	149	44	140	0.30	2.8	3.1 C	
	05	09	58	31.7	59 20.5	152 53.2	89.8	2.7	11	2	82	32	63	0.16	1.6	5.4 B	
	05	11	12	0.3	64 15.2	147 46.3	13.2	1.2	6	1	157	12	43	0.15	2.0	2.9 C	
	05	12	28	18.8	80 4.4	153 33.5	170.2	2.5	13	1	134	50	77	0.35	4.0	5.6 C	
	05	12	53	52.0	58 47.8	151 57.1	57.7	2.2	7	1	250	91	107	0.10	4.3	12.3 D	
	06	14	13	36.2	68 23.3	149 41.5	35.0	2.3	6	0	180	183	189	0.14	2.5	99.0 D	
	06	16	52	41.3	63 23.3	149 58.1	125.8	2.4	9	0	176	64	134	0.13	8.1	8.0 D	
	06	21	38	46.5	38 46.9	154 8.2	106.9	2.2	7	0	247	33	78	0.04	9.5	13.0 D	
	06	22	37	19.3	64 37.0	148 47.7	11.9	1.4	5	2	181	14	39	0.15	1.2	4.0 C	
	06	10	47	10.6	59 57.5	151 27.9	28.3	1.9	7	0	177	39	89	0.06	7.8	49.6 C	
	06	10	58	19.4	60 0.8	153 23.0	133.6	2.2	6	2	155	41	57	0.18	3.9	7.7 C	
	06	13	52	87.9	64 9.6	147 52.7	13.8	1.9	8	0	214	3	67	0.14	2.6	2.7 C	
	06	18	59	3.0	68 6.5	150 3.1	85.7	2.2	6	0	146	164	222	0.32	8.5	84.5 D	
	06	20	19	46.7	60 52.2	153 2.2	197.2	2.1	8	0	224	52	136	0.24	8.1	17.1 D	
	07	00	29	11.5	83 22.8	150 2.1	100.0	1.9	8	0	325	87	141	0.21	57.5	41.0 D	
	07	07	30	37.5	64 39.8	148 2.1	12.2	2.1	5	2	138	19	48	0.26	0.9	6.6 C	
	07	09	34	5.4	59 21.8	153 13.1	86.3	1.8	6	1	208	9	13	0.05	7.5	13.0 D	
	07	15	19	58.0	89 54.4	153 6.8	109.8	2.3	8	3	120	29	61	0.14	2.6	2.6 C	
	07	16	00	13.7	59 59.0	152 28.9	78.4	2.0	7	3	123	51	86	0.15	2.4	5.3 C	
	07	17	04	24.3	64 24.6	148 7.0	19.0	3.0*	8	0	133	7	46	0.07	1.8	1.6 B	
	07	17	13	83.4	63 5.9	150 23.3	74.4	1.7	5	0	336	101	190	0.04	42.0	6.8 D	
	07	21	38	25.1	89 9.4	152 46.3	96.4	2.3	8	0	180	42	46	0.06	6.8	8.3 D	
	07	22	21	46.2	59 47.4	152 54.9	91.6	2.1	8	2	97	23	71	0.15	2.3	2.6 B	
	07	22	38	28.1	65 56.8	149 27.4	126.5	2.2	6	0	237	139	144	0.39	41.4	99.0 D	
	08	06	22	7.2	64 56.9	149 14.4	18.4	0.7	6	0	277	42	69	0.10	8.3	3.4 D	
	08	07	02	4.8	59 59.5	152 27.8	70.8	2.4	7	2	148	51	89	0.32	2.7	7.3 D	
	08	18	36	56.5	62 39.7	151 50.4	75.2	2.1	6	0	217	189	275	0.05	31.6	13.2 D	
	08	19	37	3.9	64 11.8	150 14.4	25.9	2.7	5	0	284	48	82	0.13	10.7	37.6 D	
	09	03	24	16.0	66 16.7	150 10.1	37.1	2.0	5	0	156	160	195	0.34	2.5	99.0 D	
	09	04	31	18.4	59 55.3	152 55.3	110.0	2.4	6	3	110	38	67	0.15	2.8	4.9 C	
	09	20	36	59.4	61 42.6	151 7.8	74.6	2.5	8	3	124	37	77	0.11	1.9	2.4 B	
	09	22	53	49.9	61 42.0	150 53.6	71.8	4.3	16	0	153	178	243	0.30	3.4	7.6 D	
								FELT (III) AT ANCHORAGE, PALMER AND BIG LAKE									
	10	08	43	25.3	64 4.9	148 1.3	124.2	2.3	7	0	208	12	59	0.05	6.2	14.8 D	
	10	16	28	28.8	59 31.5	152 33.8	69.0	2.5	6	0	134	52	98	0.33	5.9	22.3 C	
	10	17	17	21.6	64 46.9	149 9.2	21.1	1.8	6	1	249	23	62	0.15	2.8	1.4 D	
	10	17	20	6.9	61 21.8	151 24.0	71.8	4.0*	18	0	106	129	191	0.23	3.9	11.7 C	
								NEIS HB = 4.1; FELT (III) AT ANCHORAGE AND (II) AT PALMER AND BIG LAKE									
	10	17	21	41.2	64 9.8	149 52.4	90.0	4.3*	4	0	123	129	289	1.79	4.9	24.1 D	
								NEIS HB = 4.4; FELT (III) AT FAIRBANKS AND (I) AT ANCHORAGE									
	10	17	32	53.8	63 24.0	156 28.7	40.1	3.2	5	0	344	376	430	0.27	99.0	99.0 D	
	11	04	09	44.0	64 28.3	148 55.1	16.8	1.1	7	4	130	13	42	0.23	0.8	1.2 B	
	11	04	40	42.6	63 37.2	148 50.4	15.3	1.9	5	2	308	14	102	0.32	3.5	1.6 D	
	11	08	20	47.0	63 31.1	148 52.3	47.3	1.4	8	1	313	24	87	0.28	6.3	2.2 D	
	11	08	46	29.6	59 57.5	153 4.4	100.9	2.4	4	1	142	190	282	0.15	5.8	59.4 D	
	11	10	44	56.7	63 24.5	149 27.2	108.2	1.8	5	0	331	44	132	0.13	42.0	40.3 D	
	11	13	46	32.2	64 27.8	146 55.3	7.7	1.8	7	0	252	56	63	0.12	4.6	3.9 D	
	11	19	14	37.6	64 59.5	147 8.0	14.3	1.7	5	2	296	12	51	0.11	4.8	2.3 D	

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1985														
1985	ORIGIN	TIME	LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q
SEP	HR MN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM
	12 06 19	26.2	65 1.9	146 52.8	11.3	0.8	5	2	325	25	64	0.10	2.8	2.3 D
	12 08 14	53.9	65 2.2	146 52.8	11.8	1.3	6	1	311	25	64	0.07	4.0	2.4 D
	12 13 34	52.2	60 21.8	152 14.2	86.0	1.7	9	1	209	30	101	0.18	7.9	13.2 D
	12 15 17	4.5	62 36.3	151 32.2	92.9	1.8	9	0	237	169	182	0.26	18.0	23.0 D
	12 17 12	54.0	65 2.3	146 55.9	12.3	1.9	6	1	312	22	62	0.07	3.6	2.2 D
	13 06 47	48.0	64 18.5	148 27.3	16.3	1.7	7	0	136	25	40	0.09	1.4	2.0 C
	13 12 27	37.8	63 8.1	148 27.9	7.2	2.1	7	1	327	71	127	0.21	4.2	1.9 D
	13 14 41	39.2	62 4.8	149 49.0	97.6	1.9	7	1	227	65	280	0.18	22.9	13.1 D
	14 09 02	49.0	64 30.2	147 52.1	6.3	0.9	6	0	162	11	38	0.04	1.8	6.3 C
	14 10 48	29.1	64 43.7	147 37.0	17.8	1.1	5	1	198	21	31	0.08	2.6	4.4 D
	14 14 30	36.8	62 2.8	150 8.1	105.8	2.0	6	0	198	198	287	0.03	29.3	37.8 D
	16 11 08	36.8	62 52.3	150 15.9	32.2	2.4	6	0	163	117	242	0.21	19.1	10.9 D
	16 12 29	33.9	64 57.4	147 46.3	21.7	1.6	5	3	203	6	23	0.35	6.3	1.0 D
	16 12 48	81.2	59 42.0	152 38.7	83.3	2.8	6	3	111	65	89	0.34	1.9	3.0 C
	16 14 20	42.7	62 18.4	150 45.0	81.0	2.4	7	0	166	184	279	0.07	4.0	32.9 D
	17 01 02	20.8	65 59.7	150 6.2	180.1	3.2	6	1	140	139	162	0.25	3.0	9.7 D
	17 03 33	48.8	60 11.9	152 27.6	91.4	2.3	7	1	172	30	76	0.17	5.1	11.1 C
	17 06 44	21.8	58 56.0	153 7.1	16.6	3.2	6	0	327	98	309	0.24	99.0	99.0 D
	17 12 36	24.4	64 53.8	148 54.9	2.3	0.9	4	3	249	37	62	0.13	1.9	27.0 D
	17 16 33	49.8	63 27.2	149 20.0	107.3	1.7	5	0	330	37	129	0.07	36.4	38.3 D
	17 19 52	45.6	63 2.2	149 42.4	95.3	3.2	8	0	284	87	174	0.11	19.5	9.7 D
	17 21 30	50.1	63 1.9	149 37.7	81.3	1.7	6	0	336	86	174	0.23	99.0	74.3 D
	18 04 04	42.1	64 53.0	148 51.6	10.3	1.7	7	2	243	35	51	0.27	3.0	8.5 D
	18 04 49	53.8	64 49.1	148 47.0	13.3	1.8	8	4	226	30	48	0.36	1.4	1.2 D
	18 22 42	7.9	59 41.3	152 35.4	90.4	2.9	6	1	128	36	58	0.11	2.9	4.3 C
	19 06 20	13.4	64 17.0	148 27.4	16.2	1.3	7	0	117	28	44	0.08	1.4	2.0 B
	19 06 53	21.6	61 48.0	151 28.7	78.9	3.0	12	0	148	166	254	0.31	3.6	24.4 D
	19 08 30	45.3	64 48.1	147 34.1	13.0	1.0	5	4	192	18	28	0.25	1.5	3.0 C
	19 09 54	20.0	64 51.2	148 49.8	21.1	1.6	7	2	236	33	49	0.31	1.4	1.0 D
	19 15 38	8.6	64 38.0	147 1.6	31.6	1.8	4	3	248	43	54	0.29	2.7	11.0 D
	19 17 58	39.0	62 51.7	148 20.9	98.2	2.3	8	0	333	102	156	0.21	73.5	36.7 D
	20 05 02	2.1	64 37.1	146 51.7	19.9	2.6	8	0	184	48	61	0.20	2.1	1.7 C
	20 11 19	42.8	64 46.3	147 31.4	19.7	1.0	5	4	204	19	30	0.18	1.3	1.3 C
	20 18 50	16.8	58 57.7	153 9.3	72.7	2.4	9	2	99	28	60	0.24	3.0	6.2 C
	20 19 41	0.2	59 14.0	151 16.6	12.2	2.6	10	0	184	33	63	0.23	3.4	3.1 D
	21 00 44	10.9	60 44.7	151 8.1	34.7	2.6	6	2	285	99	136	0.21	6.6	52.0 D
	21 01 29	16.4	65 0.4	147 50.6	17.1	0.9	8	2	234	12	25	0.29	4.0	2.7 D
	21 05 28	22.2	59 11.9	152 39.6	15.4	2.0	11	3	177	44	48	0.25	1.9	4.2 C
	21 05 59	15.1	59 47.4	153 25.5	118.0	2.6	9	3	117	19	46	0.25	3.0	3.8 C
	21 06 51	27.3	64 18.8	148 37.2	16.0	1.5	8	2	89	31	35	0.18	1.2	1.6 B
	21 08 47	12.6	63 14.2	150 33.2	152.1	2.0	7	0	330	98	166	0.15	70.3	65.7 D
	21 09 24	23.9	59 17.3	152 5.9	60.7	2.2	6	2	185	56	77	0.16	2.7	5.4 D
	21 18 17	13.4	59 5.7	152 12.4	57.8	2.3	8	3	209	73	77	0.14	2.4	7.2 D
	22 03 42	59.4	59 2.1	151 7.8	53.7	4.4	10	0	200	55	82	0.20	3.6	7.7 D
	22 19 07	2.6	61 11.8	150 9.9	4.1	FELT (III) AT HOMER PALMER HL - 3.1; FELT AT ANCHORAGE								
	23 02 29	27.3	63 4.6	151 13.3	60.3	2.4	5	2	335	136	198	0.32	12.7	36.8 D
	23 06 18	27.6	60 40.3	151 3.4	42.0	2.8	8	3	280	97	117	0.29	4.3	6.0 D
	23 10 06	25.7	60 21.9	147 18.4	70.5	2.9	10	0	207	210	301	0.39	20.9	78.2 D
	23 12 32	9.1	64 42.0	146 50.3	13.0	1.3	6	2	262	41	63	0.08	2.1	2.4 C
	23 14 41	29.5	64 44.9	147 24.8	1.5	0.8	5	2	199	27	45	0.20	1.6	44.0 D
	23 18 37	50.6	64 58.6	149 50.0	36.0	1.7	5	3	308	67	97	0.22	7.0	15.3 D
	23 19 43	2.8	59 56.5	153 22.8	128.8	2.0	7	3	142	33	62	0.17	3.7	6.2 C
	24 01 36	46.0	62 44.1	150 37.0	83.3	3.3	8	0	341	140	209	0.12	99.0	73.3 D
	24 02 13	57.9	67 32.1	157 30.0	26.6	3.9	8	0	231	421	518	0.13	20.1	82.1 D
	24 06 18	59.2	62 59.3	150 44.7	154.2	2.2	6	0	337	123	195	0.14	99.0	99.0 D
	24 08 34	24.0	66 9.8	149 55.9	112.7	2.4	7	2	149	170	172	0.35	7.1	8.9 D
	24 10 17	52.1	63 29.4	150 6.0	50.7	1.5	8	0	318	84	147	0.01	99.0	95.3 D
	24 15 21	9.8	60 54.3	150 46.6	22.0	2.6	7	1	298	122	156	0.36	23.4	36.8 D
	24 16 58	33.4	63 51.4	148 30.4	13.7	1.4	5	2	199	25	54	0.24	2.7	1.9 D
	24 18 08	54.5	64 15.7	148 38.9	15.6	1.2	7	0	136	36	41	0.12	1.5	2.1 C

APPENDIX C (con.)

ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1985																		
1985 SEP	ORIGIN TIME			LAT N DEG MIN	LONG W DEG MIN	DEPTH KM	MAG	NP	NS	GAP DEG	D1 KM	D3 KM	RMS SEC	ERH KM	ERZ	Q		
	HR	MM	SEC															
25	11	12	27.7	64 47.7	147 37.7	15.2	1.1	5	5	184	14	25	0.23	1.3	2.4	C		
25	16	29	19.8	54 32.9	139 53.1	22.8	4.4*	8	0	298	97	619	0.14	99.0	99.0	D		
NEIS MB - 4.8; FELT (II) AT SANDPOINT																		
28	20	50	50.0	59 34.2	154 40.9	220.3	5.3*	14	0	188	37	78	0.22	5.5	8.4	D		
NEIS MB - 4.6; FELT AT KENAI (IV) AND (III) AT MOHER, SOLDOTNA AND SUTTON AND (II) AT PALMER, ANCHORAGE, MOOSE PASS AND SEWARD																		
26	06	43	1.1	60 18.4	153 25.0	169.4	3.1*	11	0	106	38	103	0.37	3.0	10.1	C		
26	09	36	22.7	66 12.6	150 8.1	45.3	2.2	7	1	152	162	181	0.31	3.1	99.0	D		
26	10	10	27.3	62 7.4	152 0.0	109.2	3.2*	18	0	127	194	237	0.32	3.3	20.6	C		
26	10	56	31.2	63 6.8	149 26.9	108.3	2.4	6	0	333	74	140	0.08	71.9	52.0	D		
26	15	27	31.5	64 44.4	147 16.9	17.3	1.1	5	2	243	28	42	0.14	1.9	2.1	C		
26	18	50	27.2	62 24.7	151 48.7	100.4	2.1	7	0	194	206	237	0.16	12.6	25.7	D		
26	18	33	56.6	66 8.1	150 0.6	76.1	2.3	5	0	147	166	176	0.28	8.1	99.0	D		
28	17	49	6.0	62 48.6	149 23.2	108.8	1.9	6	0	338	109	172	0.20	99.0	99.0	D		
27	02	28	59.3	64 54.4	147 46.5	26.6	1.4	5	3	181	1	20	0.28	3.9	1.9	D		
27	12	18	41.3	59 34.9	153 42.2	166.7	4.3*	8	0	91	32	57	0.26	5.2	13.1	C		
27	17	41	51.6	64 5.7	150 12.0	12.8	2.3	8	0	282	48	76	0.36	9.8	2.2	D		
28	09	01	49.8	62 16.6	151 0.8	65.4	3.8*	13	0	107	193	234	0.28	3.6	24.0	D		
28	10	56	15.0	64 58.0	148 52.7	13.3	1.9	7	0	255	38	52	0.20	4.4	2.7	D		
28	23	03	32.2	60 21.6	152 58.6	124.7	2.4	8	2	186	22	93	0.31	3.4	2.9	C		
29	02	08	33.5	63 19.2	149 9.8	53.0	1.5	6	0	338	47	140	0.03	99.0	55.6	D		
29	08	16	7.1	59 56.1	151 54.3	70.3	3.0	6	0	182	34	72	0.13	4.3	9.9	D		
29	17	22	46.7	64 16.9	150 47.9	64.8	3.4*	10	0	205	90	133	0.16	3.3	10.4	D		
29	19	04	41.5	62 32.5	151 52.6	99.8	2.2	7	0	265	178	199	0.25	31.0	34.6	D		
29	22	17	46.6	65 3.2	146 56.9	21.8	1.5	5	3	316	22	62	0.10	8.4	3.0	D		
30	01	38	48.2	64 10.2	150 54.3	27.8	1.8	6	3	304	80	108	0.38	5.2	62.7	D		
30	06	46	52.3	64 52.3	147 32.8	14.1	0.6	5	4	160	12	29	0.18	1.8	2.7	C		
30	07	53	36.1	64 6.2	148 26.8	16.8	1.3	7	2	139	26	44	0.22	1.3	1.7	C		
30	09	24	30.4	64 49.8	147 28.9	20.9	1.8	6	1	183	17	32	0.24	1.9	1.4	D		
30	09	45	58.2	58 12.0	155 46.1	178.5	3.4	7	0	299	179	231	0.04	70.9	51.8	D		
30	12	46	43.4	63 11.3	148 14.9	20.3	1.2	5	6	268	39	46	0.37	3.1	1.9	D		
30	16	20	32.4	66 8.1	150 11.6	64.8	2.3	6	1	167	158	177	0.36	3.4	22.7	D		
30	20	09	2.5	62 18.7	149 59.3	100.0	2.8*	8	0	344	167	232	0.38	99.0	99.0	D		

Explanation for Appendixes B and C

Earthquakes are listed in chronological order. The following data are given for each earthquake.

1. ORIGIN TIME in Universal Time (UT): date, hour (HR), minute (MN), and second (SEC). To convert to Alaska Standard Time (AST), subtract 9 hr.
2. LAT N, LONG W: epicenter in degrees and minutes of north latitude and west longitude.
3. DEPTH: depth of focus (measured in kilometers).
4. MAG: local magnitude from maximum trace amplitude. An asterisk indicates that the value determined by the Alaska Tsunami Warning System (Palmer) was used. Sometimes the Palmer magnitude is given as an additional magnitude in a separate line following the parameter listings. If available, National Environmental Information Service (NEIS) body wave (MB) or surfacewave (MS) magnitudes, or both, are given in a separate line following the event parameter listings.
5. NP: number of P arrivals used to locate earthquake.
6. NS: number of S arrivals used to locate earthquake.
7. GAP: largest azimuthal separation between stations (measured in degrees).
8. D1: distance from the closest station to the epicenter (measured in kilometers).
9. D3: distance from the third closest station to the epicenter (measured in kilometers).
10. RMS: root-mean-square error of the travel-time residuals (measured in seconds).
11. ERH: largest horizontal deviation (measured in kilometers), from the hypocenter within the one-standard-deviation confidence ellipsoid. The quantity measures the epicentral precision for an earthquake. Values of ERH >99 km are listed as 99 km.
12. ERZ: largest vertical deviation (measured in kilometers), from the hypocenter within the one-standard deviation confidence ellipsoid. This quantity measures the precision of the hypocentral depth. Values of ERZ that >99 km are listed as 99 km.
13. Q: reliability of the hypocenter. This index measures precision of the hypocenter location and also reflects the quality of the data used to derive the hypocenter parameters.