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CATALOG OF ALASKAN EARTHQUAKES: JULY-SEPTEMBER, 1983

BY

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Catalog of Alaskan Earthquakes

July-September, 1983

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CATALOG OF EARTHQUAKES IN CENTRAL AND SOUTHCENTRAL ALASKA,
THE KODIAK ISLAND AND ALASKA PENINSULA AREAS

July-September, 1983

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TABLE OF CONTENTS

INTRODUCTION	1
DATA	1
DATA PROCESSING	7
VELOCITY MODELS	7
MAGNITUDE	10
DISCUSSION OF CATALOG	10
ACKNOWLEDGEMENTS	18
REFERENCES	19
APPENDIX	20
Catalog Format	20
Alaskan Earthquakes South of 61° North	22
Alaskan Earthquakes North of 61° North	32
Modified Mercalli Intensity Scale	47

INTRODUCTION

This catalog lists routinely determined parameters of earthquakes occurring within and adjacent to the areas encompassed by the network of seismograph stations operated and/or recorded by the Geophysical Institute of the University of Alaska (UAGI). Our goal in generating this catalog is to provide a convenient reference source for the earthquake activity in the areas covered and to provide a quantitative set of information on the basis of which interested researchers, administrators, planners, and others can judge to what extent related data files residing on the Geophysical Institute's computer system, might be useful for their various needs. We therefore not only provide hypocentral parameters but also information about the quality of input data and accuracy of the derived parameters, so that potential users of both raw and derived data can obtain some idea as to which type of further data analysis these data would lend themselves. While, on account of the number of events, the present catalog is the result of routine processing, reasonable care has been taken to locate earthquakes accurately and to use as many useful data as possible. This is especially true for events of magnitude 3 and larger. Additional data, primarily from networks operated by other agencies, and more sophisticated methods of analysis might, however, in many cases lead to more accurate locations.

DATA

The data used in preparing this catalog are derived from two principal sources: from seismic stations operated by the Geophysical Institute and from seismic stations operated by other agencies but continuously recorded by us under various data sharing or data exchange agreements. Also, for events of about magnitude 3 or larger, arrival times for many stations of NOAA's Tsunami

Warning System are made available to us in the form of copies of their daily TELEX message of arrival times sent to the National Environmental Information Service in Boulder.

Figure 1 shows all stations of the University of Alaska network, and all stations operated by various other agencies (with the exception of the NOAA station Nikolski which locates just outside the map area from which data have been used for the preparation of this catalog.

Geographic coordinates and other pertinent information about these stations are given in Table 1.

Signals from the various, usually remotely located, stations are transmitted by means of a combination of UAGI operated VHF radio links and leased commercial telephone circuits to one of the two recording centers of the University of Alaska network in Homer and Fairbanks. Remote stations are serviced and calibrated once a year, stations with year-round road access are serviced more often if necessary. In the case of malfunctioning, the difficulties of access associated with many stations can lead to lengthy data losses and, in turn, to lower detection thresholds and solution qualities for earthquakes located in the affected regions. In order to discern such conditions we provide a station use record in Figure 2. Stations with lengthy outages can be identified on this figure. It should be noted, however, that especially in the case of stations not operated by the University of Alaska non-use does not necessarily imply station outage but rather that no data were required for earthquake location purposes.

The data are recorded on 16 mm film on several Teledyne Geotech Velocorders, each of which has a maximum capacity of 20 channels. Satellite linked clocks provide timing marks which are superposed on the records. Figure 3 gives the typical response of the total system from transducer to recorder.

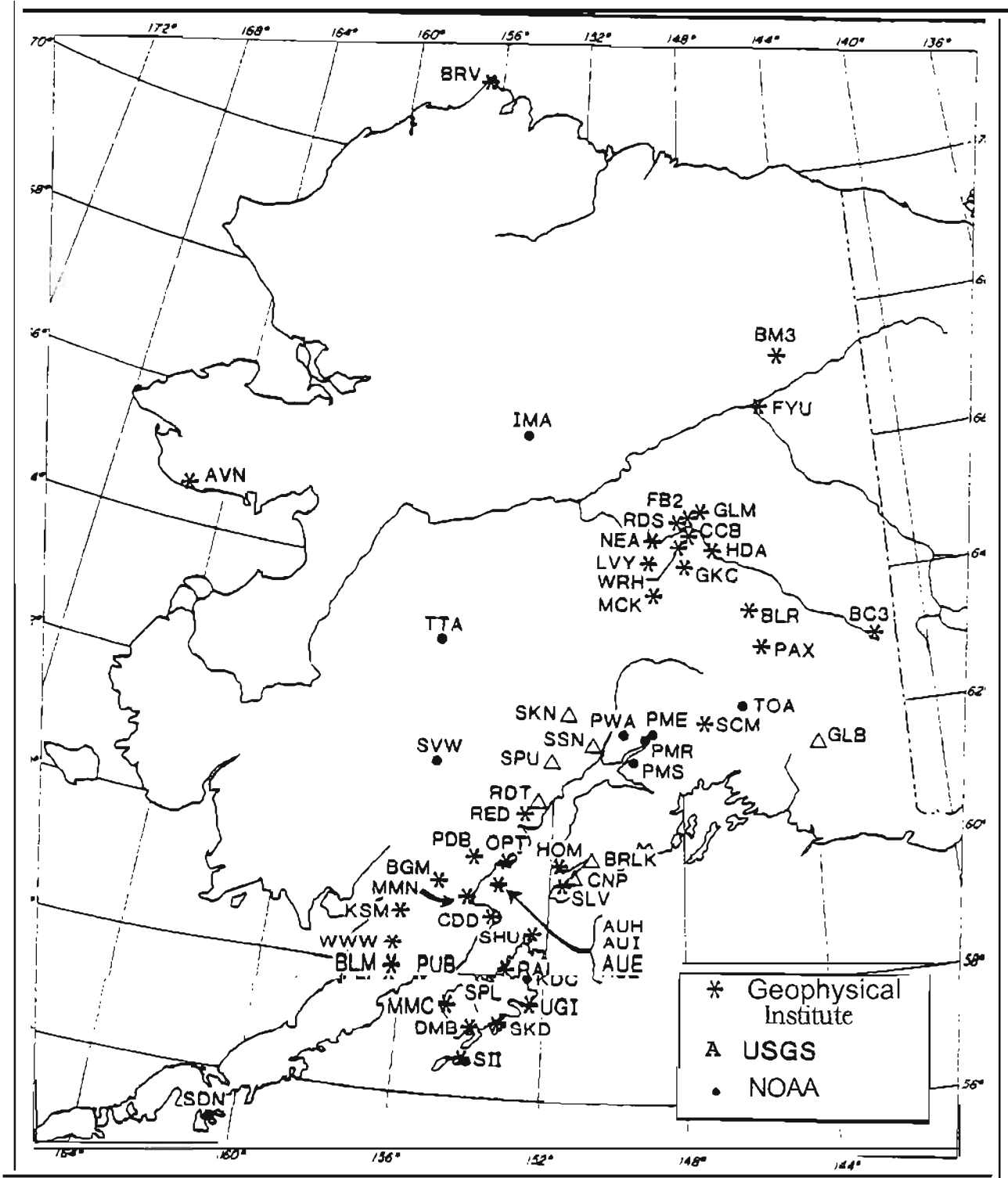


Figure 1: All seismograph stations operated by the University of Alaska and stations of other organizations from which data were used in preparing this bulletin. The stations BGM, PDB, and SLV were originally installed and operated by USGS and are presently maintained by the University of Alaska.

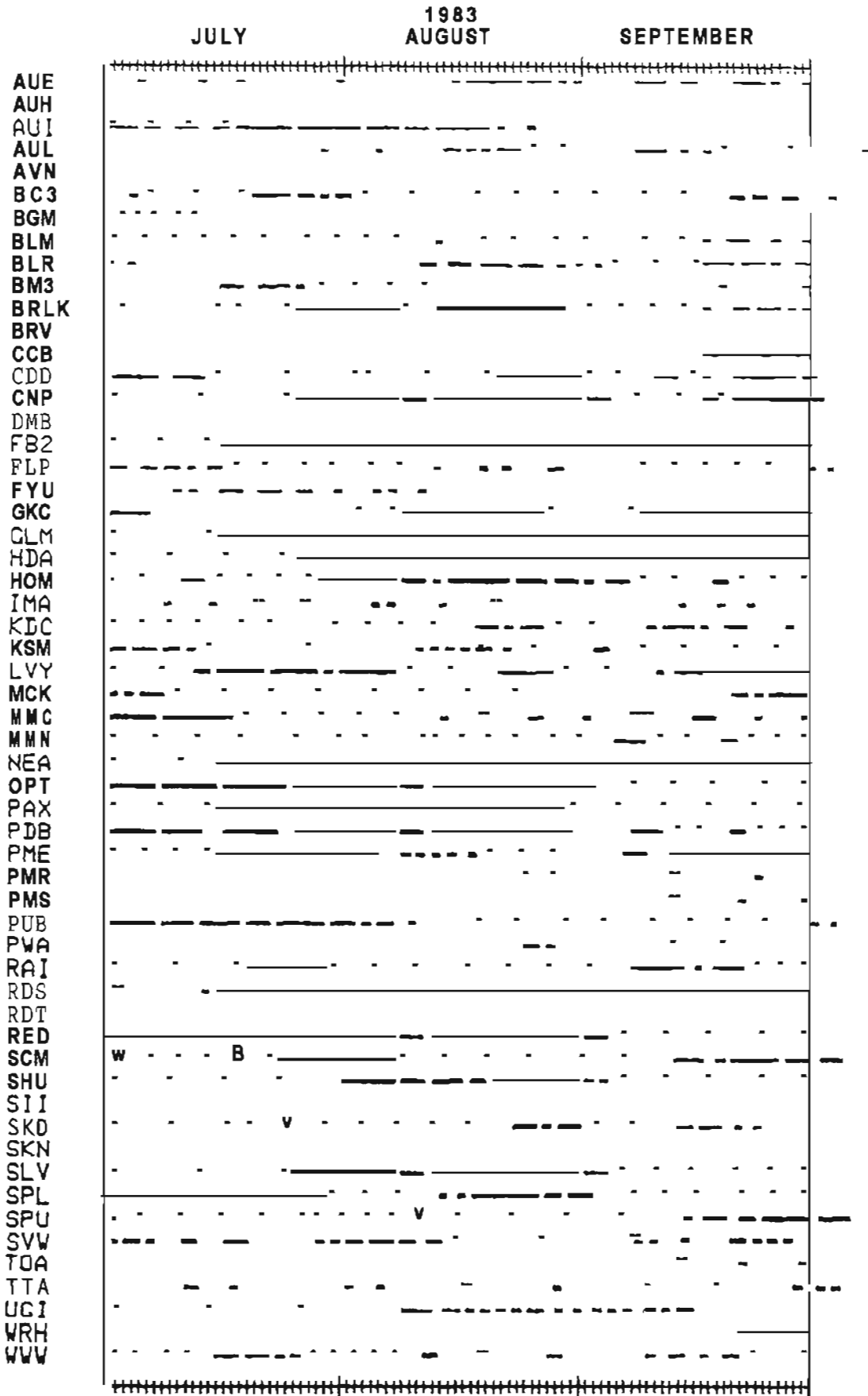


Figure 2: Station use record. A dash associated with a particular station on a particular date means that at least one arrival-time reading from that station was used on that date.

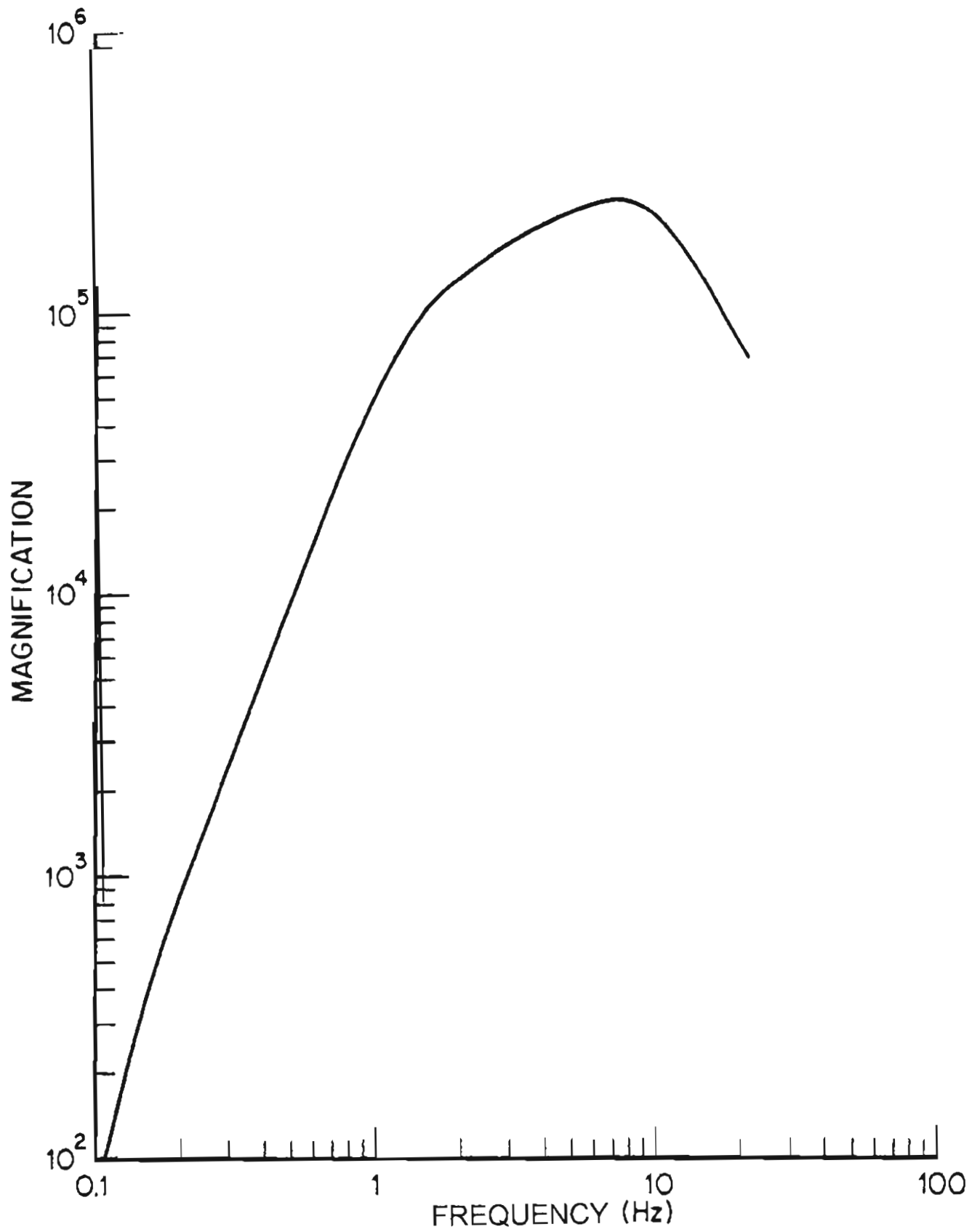


Figure 3: Typical system response curve for University of Alaska stations.

STATION NAME	CODE	LATITUDE (N)	LONGITUDE (W)	ELEV (M)	VELOCITY MODEL	OPERATOR
ANVIL MOUNTAIN	AVW	64 33.90	165 22.28	323	1	UA
AUGUSTINE EAST	AM	59 21.54	153 22.33	172	2	UA
AUGUSTINE HILL	AUB	59 21.83	153 26.61	900	2	UA
AUGUSTINE ISLAND	AUI	59 20.11	153 25.66	293	2	UA
AUGUSTINE LAVA FLOW	AUL	59 22.93	153 26.07	360	2	UA
BEAVER CREEK	BC3	63 4.00	141 45.50	762	1	UA
BIG MOUNTAIN	BGM	59 23.56	155 13.76	625	2	UA/USGS
BLUE MOUNTAIN	BLM	58 2.70	156 20.70	539	3	UA
BLACK RAPIDS	BLR	63 30.10	145 58.70	810	1	UA
BURNT MOUNTAIN	BM3	67 17.18	144 25.17	305	1	UA
BRADLEY LAKE	BRKX	59 45.85	150 53.13	631	2	USGS
BARROW	BRV	71 16.43	156 47.08	13	1	UA
CLEAR CREEK BUTTE	CCB	64 38.80	147 48.13	219	1	UA
CAPE DOUGLAS	CDD	58 55.79	153 38.68	622	2	UA
CHINA POOT	CNP	59 31.55	151 15.16	564	2	USGS
DEADMAN BAY	DUB	57 5.23	151 57.63	300	3	UA
FAIRBANKS	FBI	64 54.00	147 47.60	320	1	UA
FEATHERLY PASS	FLP	57 42.40	156 16.10	486	3	UA
FORT YUKON	FYU	66 33.96	145 13.90	137	1	UA
GOLD KING CREEK	GKC	64 10.72	147 56.00	490	1	UA
GILATINA BUTTE	GLB	61 26.51	143 48.63	845	5	USGS
GILMORE DOME	GLM	64 59.24	147 28.84	220	1	UA
HARDING LAKE	HDA	64 24.35	146 57.23	450	1	UA
HOMER	HOM	58 39.50	151 38.60	198	2	UA
INDIAN MOUNTAIN	IMA	60 6.70	153 40.72	1380	1	NOM
KODIAK	KOC	57 44.87	152 29.50	13	3	NOM
KING SALMON MOUNTAIN	KSM	58 51.80	156 10.50	560	3	UA
LEVY	LVY	64 13.00	149 15.20	230	1	UA
MCKINLEY PARK	MCK	63 63.94	148 56.10	618	1	UA
MIDDLE CAPE	MHC	57 20.00	154 38.10	340	3	UA
MCNEIL RIVER	MHN	59 11.11	154 20.20	442	2	UA
NENANA	NEA	64 86.68	149 4.63	364	1	UA
NIKOLSKI	NKI	58 56.56	168 51.44	a	2	NOM
OIL POINT	OPI	59 39.18	153 13.78	450	2	UA
PAXSON	PAX	62 58.25	145 28.12	1130	1	UA
PEDRO RAY	PDR	59 47.27	154 11.55	305	2	UA/USGS
PALMER EAST	PME	61 37.70	149 1.90	232	2	NOM
PALMER OBSERVATORY	PMO	61 35.58	149 7.85	100	2	NOAA
ARCTIC VALLEY - PALMER	PMS	61 15.68	149 33.63	716	2	NOAA
PUALE BAY	PUB	57 48.40	155 31.00	280	3	UA
HOUSTON - PALMER WEST	PWA	61 39.05	149 52.72	137	2	UA
RASPBERRY ISLAND	RAI	58 8.68	153 9.55	520	3	UA
RICHARD D. STEGRIST	RDS	64 19.59	148 8.68	930	1	UA
REDOUBT	RDT	60 34.43	152 24.57	930	1	USGS
REDOUBT VOLCANO	RED	60 25.14	152 66.32	1067	2	UA
SHEEP MOUNTAIN	SCH	61 50.00	147 19.66	1020	4	UA
SAND POINT	SDN	55 20.40	160 29.83	19	6	NOM
SHUTAK ISLAND	SHU	56 37.68	152 20.93	10	3	UA
SITKINAK ISLAND	SII	56 33.60	154 10.92	500	3	UA
SITKALIDAK ISLAND	SID	57 9.65	153 4.82	135	3	UA
SKWENTNA	SKN	61 58.86	151 31.78	564	1	USGS
SELDOVIA	SLV	59 28.28	151 84.88	91	2	UA/USGS
SPIRIDON LAKE	SPL	57 45.55	158 46.28	600	1	UA
MOUNT SPUR	SPU	61 10.90	152 3.26	800	2	USGS
SUSITNA MOUNTAIN	SSN	61 27.83	150 44.60	1297	1	USGS
SPARREVOHN	SPV	61 6.49	155 37.30	762	2	NOAA
TOLSONA	TOA	62 6.29	146 10.34	909	4	NOAA
TATALINA	TTA	62 55.80	156 1.32	915	2	NOM
UGAK ISLAND	UGI	81 23.67	152 16.90	213	3	UA
WOOD RIVER HILL	WRH	64 28.28	148 5.39	315	1	UA
WONDER WHY RIDGE	WWW	58 20.90	156 19.90	414	1	UA

Table 1. Names and pertinent parameters of seismic stations used in preparing this catalog. For description of velocity models see text.

DATA PROCESSING

Arrival times are read on Geotech filmviewers which provide a resolution of up to 3 lines per millimeter. Thus, the most impulsive arrivals can be read to .05 sec.

Earthquake locations are based on P and S arrivals. As many S arrivals as possible are used to help constrain hypocentral depth. The large majority of the S readings are obtained from vertical components since only few three component systems are recorded. Owing to the nature of the multichannel film recordings in the case of a large event, traces overlap each other making the identification of S arrivals very difficult. The gradual transition to a digital tape recording system, presently underway, will greatly improve this situation.

After identification of events and determination of arrival times, phase data are processed by computer to obtain the earthquake parameters using the computer program HYPOELLIPSE (Lahr, 1980). Each solution is checked for travel time residuals greater than or equal to 0.5 sec and for the spatial distribution of stations used. Events that produce large residuals are re-read and for shocks with poor station distribution readings are sought from additional stations, not recorded by the University of Alaska. Events recorded by only five stations or less receive little additional attention. Events of magnitude 3.5 and larger are processed very carefully, sometimes by changing various control parameters in the computer program.

VELOCITY MODELS

Since most computer algorithms for locating earthquakes are based upon some iterative scheme of minimizing the difference between calculated and observed travel times between hypocenter and the stations, a seismic velocity structure has to be provided.

The tectonic regime and geological setting vary greatly throughout the area covered by the University of Alaska network. Although our knowledge of the details of the seismic velocity structure is rather limited, considerable variation seems to exist. To take this variation into account each of the University of Alaska stations, depending on its location, is associated with one of three different velocity models. Regardless of the location of the hypocenter, that structure is used in calculating the travel time to that station. The models used are all one dimensional, varying only with depth, and lateral velocity variation (which is especially strong in the vicinity of the subduction zone) is not taken into account. For stations which are not part of the University of Alaska network we generally use models adopted by the operators of these stations. Column 6 of Table 1 indicates the particular velocity model with which each station is associated.

The University of Alaska presently uses the following models:

Model 1

Layer	Depth (km)	P Velocity (km/sec)
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	Below 545	12.6

This model is used primarily in central and northern Alaska. It was derived from travel-time studies to central Alaskan stations from teleseismic and regional earthquakes (Biswas and Bhattacharya, 1974).

Model 2

Layer	Depth (km)	P Velocity (km/sec)
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	below 65	8.3

This model is associated with stations located in the Cook Inlet-Kenai Peninsula area. It is based on the model of Matumoto and Page (1969) determined for the Kenai Peninsula from travel time studies of 1964 Alaska earthquake aftershocks. This model is used by USGS in this area for location purposes.

Model 3

Layer	Depth (km)	P Velocity (km/sec)
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	below 350	9.02

This model is used in connection with stations located on Kodiak Island and the Alaska Peninsula. This structure was obtained by Engdahl and Tarr (1970) from refraction experiments, in the central Aleutians.

For all models the S velocity is taken to be equal to the P velocity divided by the square root of three.

MAGNITUDE

Magnitudes are determined from the maximum amplitude of the body wave trace. The relationship derived by Richter (1954) for records of local California earthquakes from horizontal, standard Wood Anderson seismographs is used. Proper adjustments are made for differences in the response characteristics and magnification between the standard instrument and the system actually used. However, no corrections are made for any differences in attenuation properties between California and the various Alaskan regions or the fact that vertical rather than horizontal ground motion is measured.

For a given earthquake, its magnitude is usually calculated at several stations and then averaged.

In the case of large events, when the maximum trace amplitude saturates on most of our stations, we frequently list local magnitude as determined by NOAA's Palmer Observatory. When this is the case, it is indicated in the listings after the event. When available, we also list felt reports after the events and observations of the Modified Mercalli Intensity (Richter, 1958). The definitions of the various intensity levels are given in the Appendix.

DISCUSSION OF THE CATALOG

The Appendix lists hypocenter parameters, magnitude and quality parameters of earthquakes located during the third quarter of 1983. The listings are in two groups: one for events north of 61°N and one for events south of it.

Epicenters for the same time period are plotted in Figures 4 through 6. For the areas of Figures 4 and 5, the epicenters of events of $M_L > 3$ are shown in Figures 7 and 8 respectively. Figure 6 shows only events located outside the areas encompassed by Figures 4 and 5. These events are generally of poor quality and located either because our network appeared to be the only one

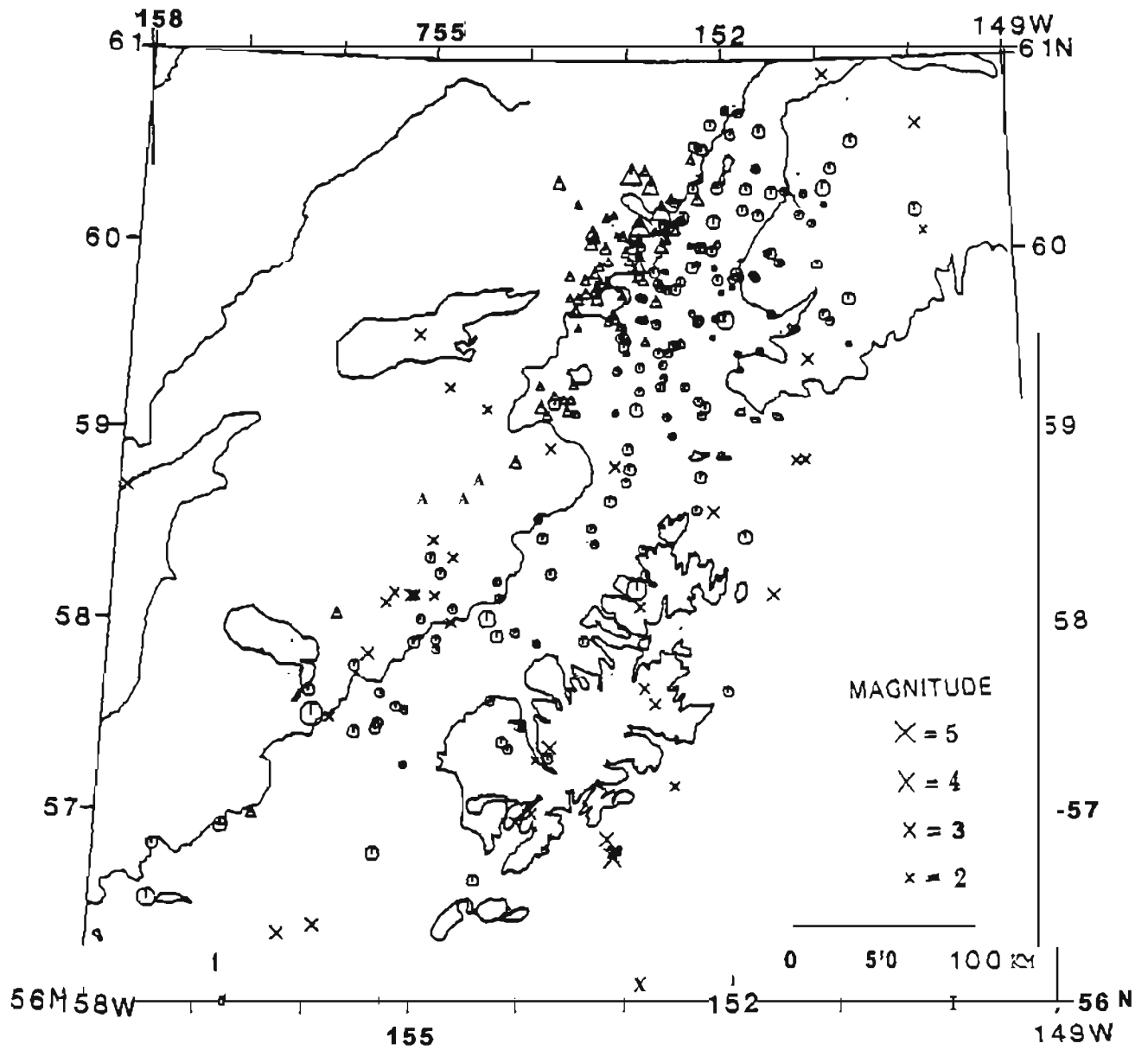


Figure 4: Epicenters of earthquakes south of 61°N located during the third quarter of 1983. Symbol size varies with magnitude as indicated. Different symbols are used for indicating depth range of earthquakes: x for 0 to 35 km, o for 36 to 100 km, A for deeper than 100 km.

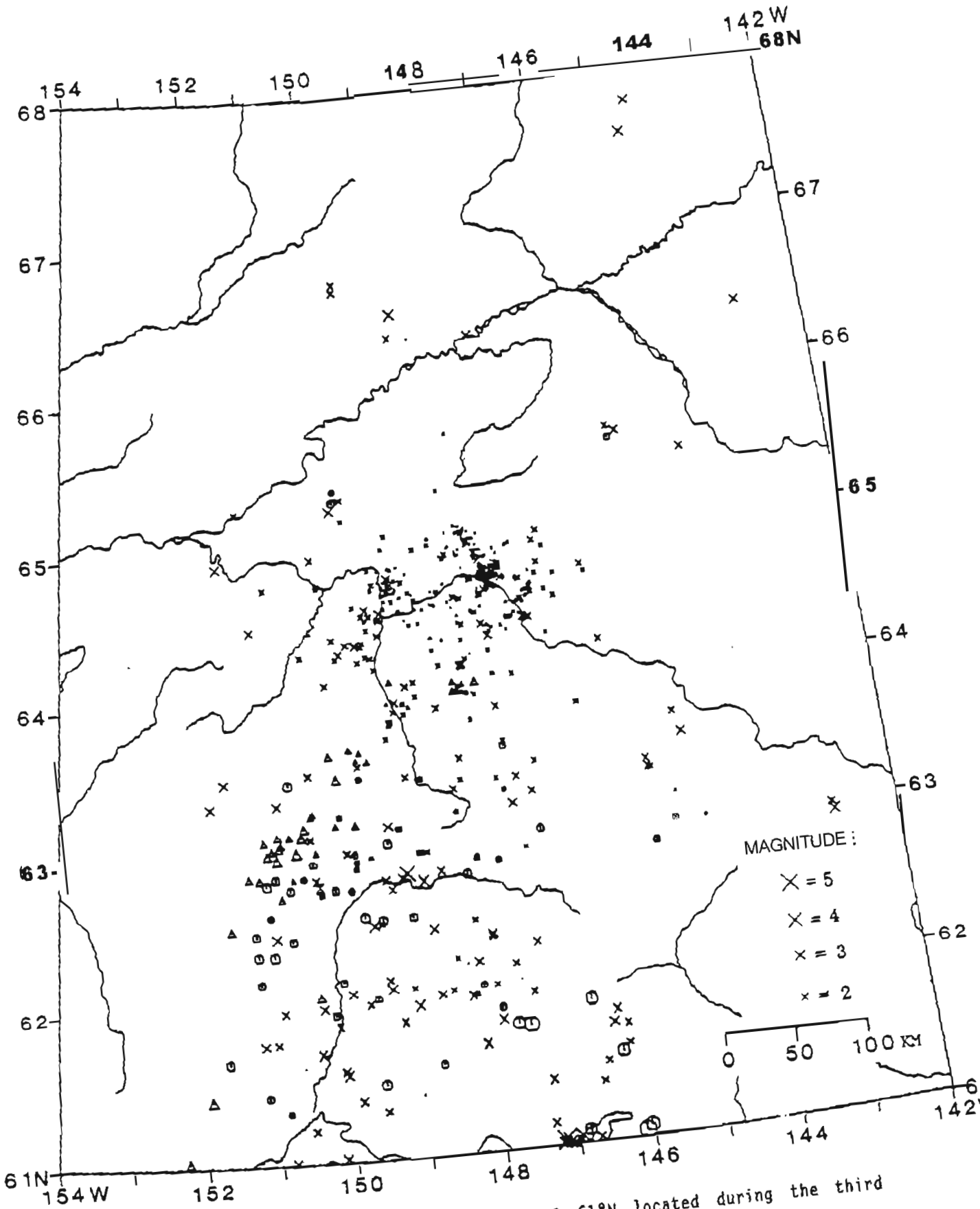


Figure 5: Epicenters of earthquakes north of 61°N located during the third quarter of 1983. Symbols as in Figure 4.

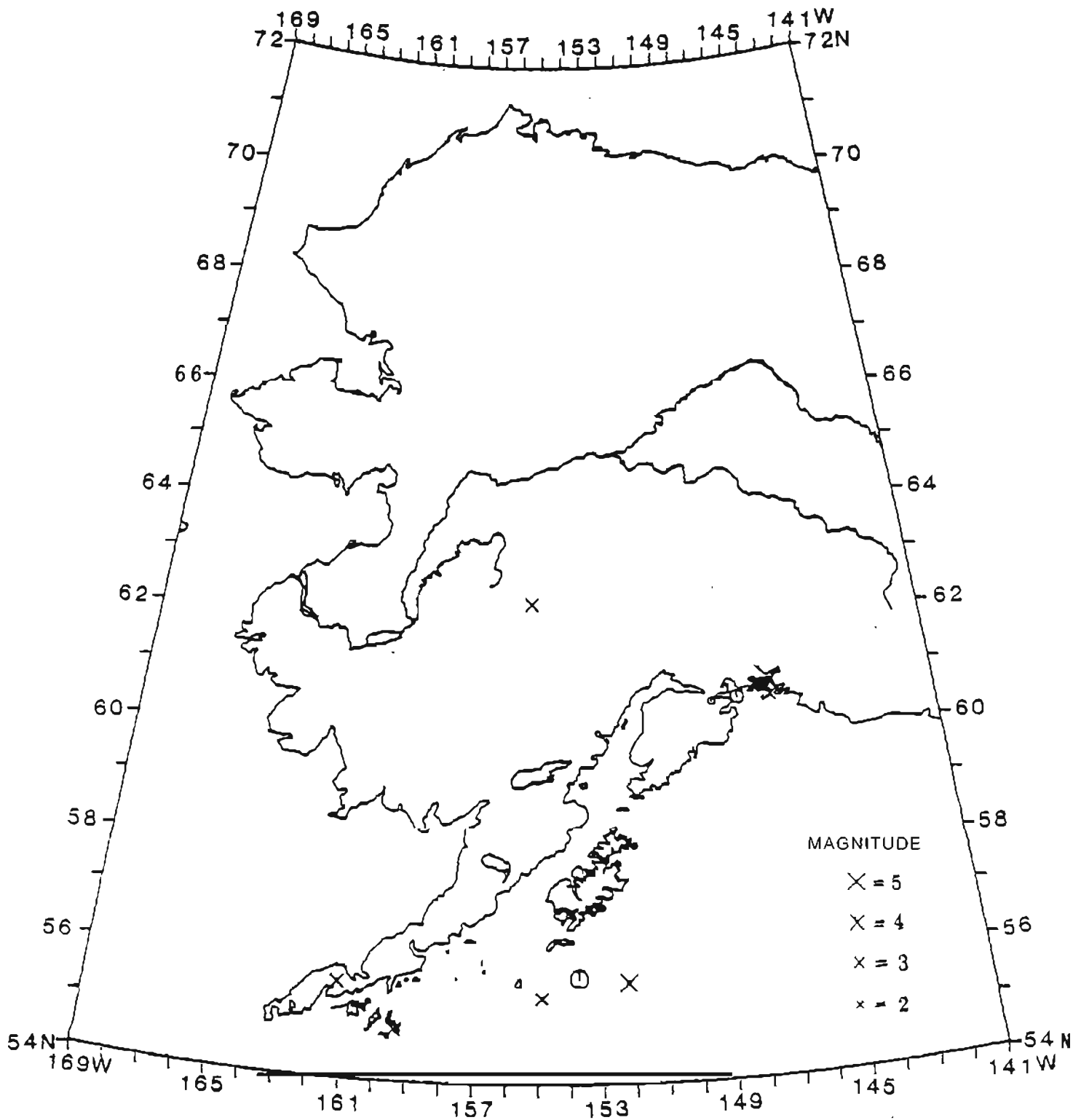


Figure 6: Epicenters of earthquakes located in the third quarter of 1983 and not *shown* in either Figure 4 or Figure 5. Symbols as in Figure 4.

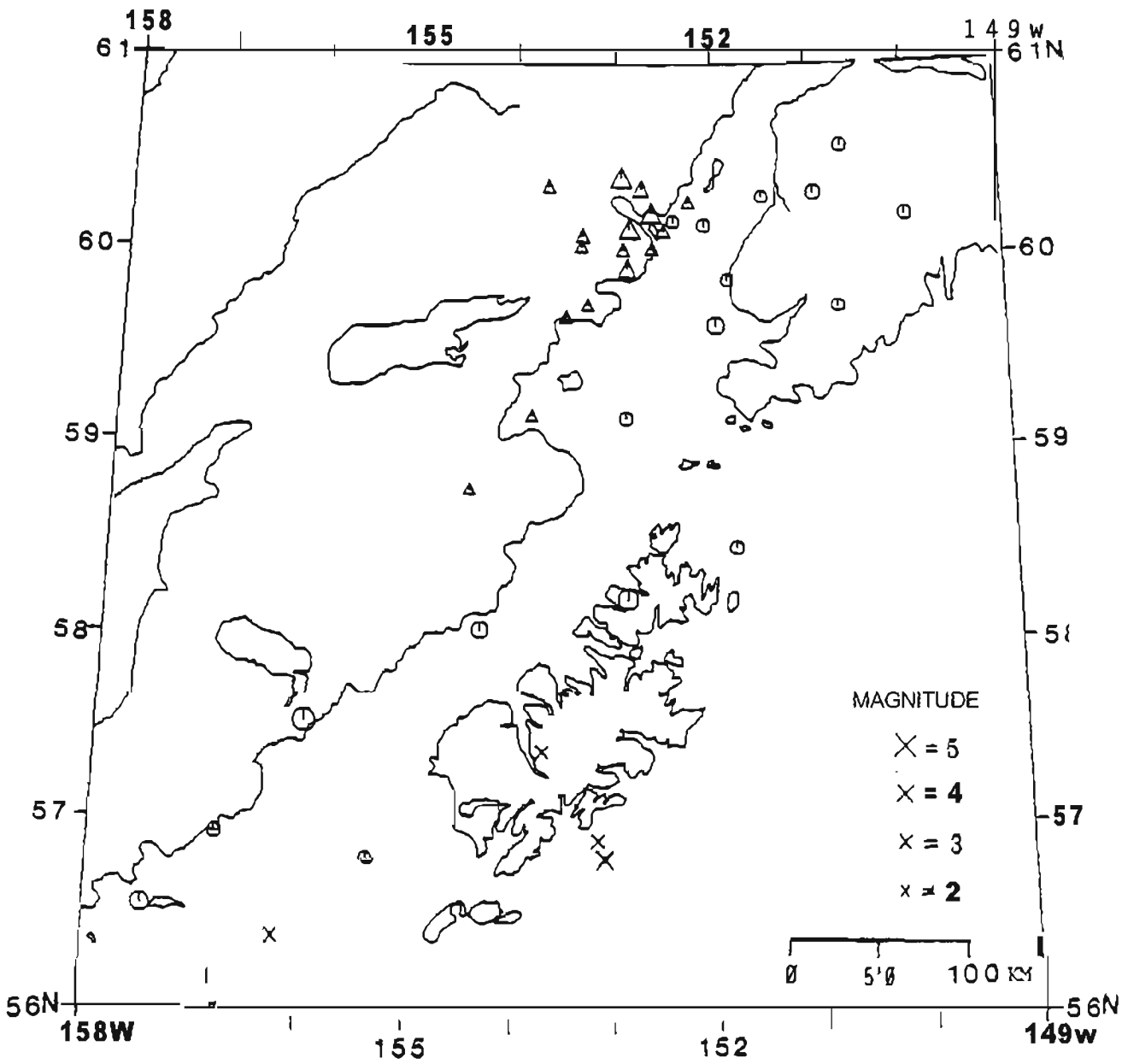


Figure 7: Epicenters of earthquakes of magnitude $M_l > 3$ south of 61°N located during the third quarter of 1983. Symbols as in Figure 4.

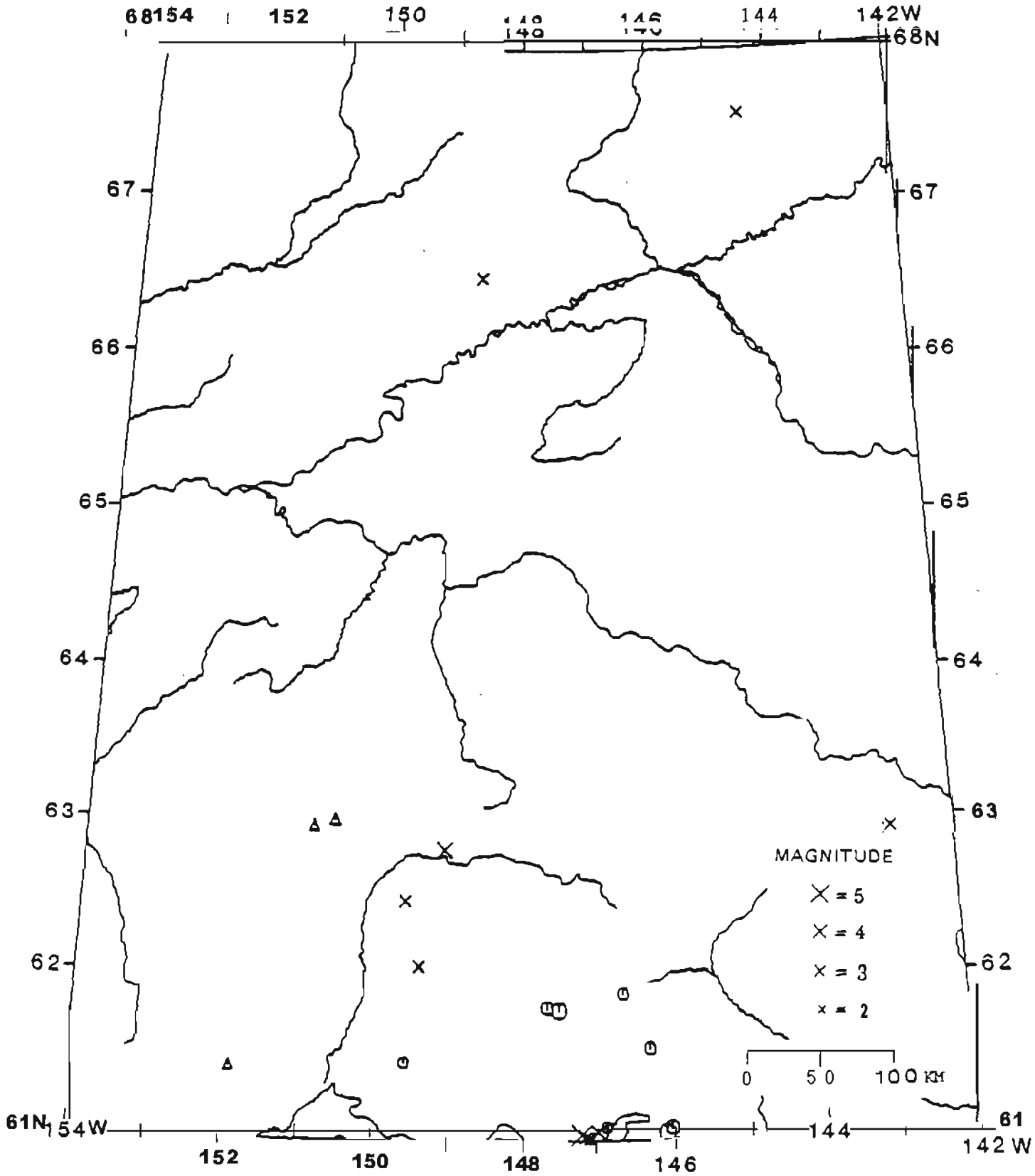


Figure 8: Epicenters of earthquakes of magnitude $M_L > 3$ north of 61°N located during the third quarter of 1983. Symbols as in Figure 4.

capable of locating them or because a large number of station readings was available, a fact we thought useful to disseminate by incorporation into the catalog.

Detection threshold and quality of solution vary throughout the areas shown in Figures 4 through 6. For the areas of Figures 4 and 5 the catalog is probably complete for magnitudes larger than 3.0 to 3.5 (see Figure 7 and 8, respectively). As is apparent from Figure 1, station density varies considerably throughout these areas, and with it detection threshold levels.

The quality (i.e., reliability) of a hypocenter can be assessed from two sets of information provided in the listings for each earthquake: from the quality of the input data and from the results of certain statistical tests.

The number of P and S phases used in locating the earthquake (NP and NS, respectively in the listings), 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 aspects of the input data that control the hypocenter quality. A GAP of more than 180° means that the event lies outside the network and locations will be less reliable. Also, the higher the ratio of D1 to hypocentral depth is above unity the less reliable will be the depth of the event. Considering the unevenness of station coverage indicated in Figure 1, it is clear that the potential for high quality solutions varies greatly throughout the area of the figure.

The root-mean-square travel-time residual (RMS) and the horizontal (ERH) and vertical (ERZ) projections of the maximum axes of the one-standard-deviation confidence ellipsoid reflect the relative accuracy of the solution.

Since we use fairly simplified velocity models, it is likely that the RMS residuals measure primarily the incompatibility of these models and only secondarily random reading errors and phase misidentifications. While ERH and ERZ measure, respectively, the precision of epicenter and depth fairly well, it

is difficult to say what the absolute accuracy of the locations is, since we lack the proper calibration events (explosions) to perform studies in that regard.

The seismicity south of 61°N (Figure 4) is dominated by the subduction of the North Pacific plate beneath the North American plate. A well-defined Benioff zone dips below Cook Inlet and the Alaska Peninsula in a generally north-westerly direction with a dip of approximately 45 degrees. The relatively high level of seismic activity near 60°N at depths larger than about 70 km is a persistent feature of the area. The Benioff zone also dominates the seismicity of the southern portion of Figure 5 and terminates at about 64°N . A cluster of intermediate depth (> 50 km) seismicity near 63°N , below Mt. McKinley (Denali), is also a static feature of the seismicity of the area and pinpoints the region where the strike of the Benioff zone changes from north-northeasterly towards a more northeasterly direction. It should be noted that because of the large station spacing, the depth resolution of the hypocenters is rather poor between 62°N and 63°N . The cluster of shallow-depth earthquakes near Fairbanks is a long-term feature of the central Alaskan seismicity. While the relatively great station density near Fairbanks provides the lowest detection threshold throughout the network (with the exception of Augustine Volcano) the concentration of epicenters is indicative of a seismically very active zone.

The largest events to occur during the period were two shallow depth earthquakes in the vicinity of Columbia Bay in Prince William Sound. The first of these took place on July 12 and had a magnitude $m_b = 6.1$. It was felt with intensity VI and caused slight damage in Valdez, 45 km to the east of the epicenter. The second event on September 7, had a magnitude $m_b = 6.0$ and its epicenter was within approximately 10 km of the first event. It too caused slight damage in Valdez. The two events triggered several strong

motion instruments in Anchorage and Valdez, the second event generated a peak acceleration of .32 g at 45 km distance from the epicenter. This is apparently the largest instrumentally recorded peak acceleration recorded in Alaska.

Numerous aftershocks were associated with these two events but we located only a few of these since the events lie outside our network. The USGS operates a regional seismic network in that area and is therefore capable of locating these events very well. Other events with magnitude $ML > 5$ that occurred during this period were two magnitude $ML = 5.2$ earthquakes of intermediate depth (149 km and 118 km) below Iliamna Volcano and two events ($ML = 5.2$ and $ML = 5.4$) off the southwest coast of Kodiak Island.

ACKNOWLEDGEMENTS

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

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APPENDIX

Catalog Format

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

- (1) ORIGIN TIME in Universal Time (UT): date, hour (HR), minute (MN), and second (SEC). To convert to Alaska Standard Time (AST) subtract nine hours.
- (2) LAT N, LONG W: epicenter in degrees and minutes of north latitude and west longitude.
- (3) DEPTH, depth of focus in kilometers.
- (4) MAG, magnitude from maximum trace amplitude.
- (5) NP, number of P arrivals used in locating earthquake.
- (6) NS, number of S arrivals used in locating earthquake.
- (7) GAP, largest azimuthal separation in degrees between stations.
- (8) Ø1, distance in kilometers to the closest station to the epicenter.
- (9) Ø3, distance in kilometers to the third closest station to the epicenter.
- (10) RMS, root-mean-square error in seconds of the travel time residuals:

$$RMS = \sqrt{\sum_i (R_{P_i}^2 + R_{S_i}^2) / (NP + NS)}$$

where R_{P_i} and R_{S_i} are the observed minus the computed arrival times of P- and S-waves respectively at the i-th station.

- (11) ERH, largest horizontal deviation in kilometers from the hypocenter within the one-standard-deviation confidence ellipsoid. The quantity is a measure of the epicentral precision for an event. Values of ERH that exceed 99 km are tabulated as 99 km.
- (12) ERZ, largest vertical deviation in kilometers from the hypocenter within the one-standard deviation confidence ellipsoid. This quantity is a measure of the depth precision of the event. Values of ERZ that exceed 99 km are listed as 99 km.
- (13) Q, Quality of the hypocenter. This index is a measure of the precision of the hypocenters and reflects both the quality of the input data and the solution. These qualities are determined as follows:

Solution	Quality	RMS	ERH	ERZ
A		< .15	< 1.0	< 2.0
B		< .30	< 2.5	< 5.0
C		< .50	< 5.0	
D		others		

Data	Quality	NP + NS	GAP	D1
A		> 6	< 90	< depth or 5 km
B		> 6	< 135	< 2*depth or 10 km
C		> 6	< 180	< 50 km
D		others		

Q in the average (rounded to the poorer quality) of the solution and the data qualities.

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q		
1983	HR	MIN	SEC	DEC	MIN	DEC	MIN	KM			DEC	KM	KM	SEC	KM	KM		
JUL	01	6	47	36.9	59 17.9	152 37.9	70.9	2.3	12	6	108	46	69	0.13	1.0	2.4 B		
	02	0	11	21.4	59 56.7	152 15.6	82.3	2.0	8	3	157	60	65	0.15	1.7	3.1 c		
	02	1	48	48.0	60 22.3	153 41.4	194.7	3.0	15	5	135	51	84	0.41	3.9	5.4 c		
	02	6	16	34.7	60 9.8	152 53.3	116.0	1.8	10	3	132	29	84	0.15	2.8	2.8 C		
	02	9	45	48.4	57 27.6	155 35.1	64.6	2.9	18	3	201	35	59	0.46	3.2	4.4 D		
	02	10	13	37.1	58 3.1	154 40.5	11.8	2.4	9	3	178	59	80	0.20	2.0	99 0 c		
	03	5	54	11.0	58 11.2	154 50.6	11.6	2.1	17	6	68	61	89	0.37	1.3	3.3 D		
	03	8	45	16.1	59 52.5	151 40.6	51.8	2.1	13	5	150	24	46	0.29	2.2	4.6 C		
	03	11	44	29.8	57 12.6	152 29.7	17.9	1.9	7	2	230	24	60	0.07	4.0	3.4 D		
	03	15	56	13.5	58 41.7	154 36.1	104.7	2.8	9	2	207	93	10	0.07	3.4	5.4 D		
	03	21	1	4.2	60 18.5	151 8.6	50.1	1.9	12	5	248	62	87	0.21	2.3	6.4 D		
	03	21	30	6.8	60 2.5	152 49.4	92.6	2.1	12	4	114	42	79	0.24	1.9	2.7 B		
	03	21	49	25.5	59 38.4	152 15.3	77.4	2.3	16	2	97	35	55	0.22	1.7	3.8 B		
	04	5	46	56.2	59 55.8	151 0.9	50.0	2.3	11	1	219	20	60	0.30	4.8	5.8 D		
	04	16	20	46.4	59 45.6	153 16.9	123.8	3.2	19	2	107	12	51	0.31	2.0	4.1 c		
	05	6	39	12.9	59 37.9	150 54.3	40.6	2.1	10	3	234	15	42	0.22	2.8	4.7 D		
	05	8	19	50.1	59 10.0	152 53.0	87.9	3.1	20	3	86	35	58	0.28	1.4	3.4 B		
	05	8	38	3.4	57 25.7	154 9.4	62.1	2.6	19	7	136	31	71	0.45	2.2	2.6 C		
	05	8	54	5.7	60 10.4	152 25.6	83.0	2.3	16	5	152	33	73	0.27	1.8	2.4 C		
	05	14	56	21.8	60 11.7	153 11.9	139.7	2.1	12	2	172	34	72	0.42	3.1	4.9 c		
	05	22	23	39.4	58 46.0	154 27.2	117.2	3.0	8	2	220	100	20	0.20	3.4	5.6 D		
	06	13	19	18.9	60 4.1	152 56.8	116.1	2.2	16	6	127	40	76	0.28	2.1	2.2 B		
	06	15	45	2.7	58 5.2	155 47.5	114.1	2.7	24	7	59	33	43	0.28	1.3	1.9 B		
	06	19	45	59.0	57 23.6	154 5.7	35.8	2.2	12	5	147	33	66	0.52	1.0	1.8 D		
	07	3	21	50.3	60 3.1	152 37.4	109.0	3.3	24	6	138	42	70	0.32	1.9	4.9 c		
	07	5	12	38.1	57 30.9	155 21.2	55.6	2.5	11	4	177	30	59	0.28	2.1	2.0 c		
	07	10	53	26.0	58 18.5	153 42.2	54.3	2.7	24	5	65	42	69	0.47	1.0	4.0 B		
	07	12	52	29.8	57 30.2	153 57.8	59.6	1.9	4	1	257	31	65	0.38	6.0	13.4 D		
	09	5	48	2.6	56 50.1	153 4.9	32.0	4.4	15	0	261	37	8	0.34	6.4	1.9 D		
								PALMER ML										
	09	6	1	36.3	56 50.6	153 5.0	32.0	3.0	9	0	260	36	7	0.15	6.3	2.1 D		
	09	6	28	28.1	60 47.5	150 38.9	40.0		6	1	295	15	45	0.40	5.4	15.0 D		
	10	1	1	9.1	57 1.0	154 0.3	22.1	2.3	9	4	240	52	84	0.33	1.8	5.4 D		
	10	4	36	36.2	59 41.8	153 30.3	125.1	3.1	24	9	101	16	40	0.48	1.7	2.1 c		
	10	6	11	26.0	57 59.0	154 13.3	57.6	2.8	16	2	56	37	76	0.35	1.1	4.6 B		
	10	7	36	42.6	56 56.1	153 8.5	31.4	3.1	8	1	251	26	99	0.19	5.7	2.4 D		

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

	ORIGIN TIME			LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q
1983	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM
JUL	10	12	36	0.4	59 28.6	152	39.2	85.1	2.4	15	6	79	38	61	0.29	1.2	2.1 B
	10	15	33	25.5	57 40.2	156	1.9	92.8	2.8	16	4	173	15	46	0.43	3.6	3.0 c
	10	16	41	38.1	57 52.8	155	28.4	8.3	2.8	8	0	101	12	55	0.11	1.6	2.1 B
	10	16	48	52.0	56 41.7	157	55.9	14.9	2.8	8	0	289	1	18	0.30	19.7	7.4 D
	10	20	47	45.1	59 30.4	153	0.5	90.8	2.5	17	6	68	21	74	0.32	1.1	3.8 B
	11	8	43	32.5	60 12.0	151	11.8	53.5	2.2	10	2	234	52	75	0.23	3.4	4.2 D
	11	13	47	32.4	59 37.6	152	40.4	81.3	2.1	17	1	84	32	58	0.35	1.0	2.2 B
	11	15	7	35.3	60 5.4	152	51.3	109.1	1.7	11	4	121	37	82	0.29	2.2	2.7 B
	11	16	17	50.6	57 18.2	155	6.2	40.6	1.9	4	0	252	28	95	0.08	99.0	40.1 D
	11	21	3	33.8	59 10.9	152	10.8	56.9	2.6	9	1	135	47	66	0.13	1.5	4.8 B
	12	4	10	1.1	59 32.3	152	47.0	101.0	2.2	17	7	76	28	69	0.26	1.2	2.3 B
	12	5	22	11.2	56 24.7	156	13.4	30.0	3.1	8	0	293	41	82	0.25	22.8	99.0 D
	12	14	32	53.4	58 28.1	153	76.7	62.4	1.9	20	7	100	46	57	0.41	1.0	2.1 c
	12	14	44	19.4	57 3.9	153	51.5	33.6		8	0	221	48	77	0.43	3.0	2.2 D
	12	15	42	53.6	60 59.1	147	16.2	19.4	2.9	13	2	120	95	21	0.23	2.7	3.1 D
	12	17	31	25.3	59 57.0	152	52.4	111.8	4.3	25	0	55	39	75	0.29	2.0	4.3 B
									PALMER ML			FELT INTENSITY II ANCHORAGE					
	12	19	2	3.8	60 46.6	146	56.8	6.1	2.1	6	1	248	20	57	0.26	6.1	4.4 D
	12	19	4	7.9	61 4.6	146	2.2	43.9	4.0	14	0	322	4	74	0.21	99.0	34.0 D
	12	20	21	29.8	60 58.0	147	15.6	18.5	2.9	12	2	176	97	22	0.17	3.0	2.8 D
	12	20	29	13.2	60 56.9	146	54.9	11.3	3.3	7	1	244	1	38	0.05	4.4	3.5 D
	13	3	42	23.5	60 9.2	153	8.1	125.2		10	2	158	36	72	0.37	3.2	4.9 c
	13	3	50	7.3	60 57.9	147	14.1	19.0	3.6	15	0	214	97	42	0.29	4.6	3.1 D
	13	4	43	3.5	60 56.1	147	0.4	11.6	3.0	14	1	177	2	36	0.32	2.9	2.6 D
									PALMER ML								
	13	11	33	49.2	61 0.8	147	4.8	17.5	3.0	12	0	227	92	28	0.17	7.3	4.3 D
									PALMER ML								
	13	17	15	44.8	57 37.9	152	40.8	0.2	2.5	9	1	97	17	57	0.39	1.1	1.9 c
	13	18	6	14.1	60 58.5	147	12.5	18.1	2.2	10	1	252	96	24	0.18	3.1	3.4 D
	14	4	57	39.3	60 3.2	152	3.0	67.9	1.7	8	3	160	57	73	0.14	2.8	4.0 c
	14	8	35	59.0	56 51.9	153	5.0	79.7	2.1	9	3	260	33	5	0.29	2.3	7.6 D
	14	22	30	37.1	55 33.0	154	54.2	4.3	3.1	8	1	306	99	50	0.13	17.0	8.4 D
	15	3	27	14.5	56 52.5	153	2.9	33.1	2.2	12	5	260	32	3	0.32	1.7	1.3 D
	15	3	58	2.5	55 44.3	161	15.9	30.0	3.7	8	0	338	95	45	0.39	99.0	99.0 D
	15	6	5	22.9	59 40.1	151	29.9	51.1	2.1	13	5	112	8	22	0.29	1.5	2.3 B
	16	9	30	50.4	56 50.5	157	26.3	41.4	2.6	8	3	310	20	56	0.47	22.2	30.5 D

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE. 1983

			ORIGIN TIME	LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q	
1983	HR	MN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM		
JUL	16	14	10	31.3	58 38.7	152 16.3	66.4	2.3	4	0	321	83	3.9	0.00	72.0	33.8	D
	16	22	59	54.3	57 36.1	155 11.4	79.0	2.4	14	6	149	27	65	0.46	2.3	2.2	c
	17	9	22	26.3	58 7.3	154 39.5	62.8	2.3	12	4	140	64	88	0.14	1.5	4.0	c
	17	15	43	41.9	57 56.7	155 1.9	68.4	2.6	13	4	115	35	78	0.38	1.5	4.0	c
	17	16	53	34.0	60 7.0	153 20.4	157.4	3.4	19	2	90	46	60	0.44	2.2	3.6	C
	18	6	9	11.0	60 17.4	152 14.5	105.6	3.2	13	1	191	33	90	0.29	4.8	8.2	D
	18	7	28	18.2	60 29.6	152 19.0	113.1	2.4	11	5	243	26	7	0.43	2.9	3.3	D
	18	16	0	52.3	59 45.3	153 28.6	136.7	2.5	14	4	112	18	45	0.34	1.9	3.5	c
	18	16	42	59.4	59 40.7	153 7.4	109.6	2.4	14	4	91	61	88	0.37	1.7	3.6	C
	18	19	12	57.5	60 10.1	152 4.9	77.8	3.2	17	0	177	47	81	0.23	4.3	8.1	C
	19	3	13	46.9	60 0.2	151 32.5	54.8	1.6	8	4	181	45	59	0.07	2.2	3.9	c
	19	12	23	8.8	60 33.3	152 16.6	86.3	2.5	18	5	208	31	14	0.43	1.8	3.6	D
	20	1	3	35.1	57 29.1	155 22.5	62.2	2.7	8	1	185	33	59	0.25	4.2	5.6	D
	20	8	3	12.8	56 42.8	154 24.2	73.5	2.8	5	0	265	71	23	0.29	11.1	9.6	D
	20	9	28	27.7	57 30.4	153 59.8	35.2	2.0	7	0	119	43	96	0.48	3.2	3.4	c
	20	16	7	50.9	60 40.0	152 6.5	64.3	2.7	9	0	286	46	36	0.58	27.5	22.4	D
	20	16	54	7.8	58 29.8	153 47.4	67.3	2.6	23	4	63	49	82	0.29	0.9	3.6	B
	20	20	11	36.8	60 46.7	147 56.3	42.5	3.6	12	2	312	49	45	0.58	13.9	26.3	D
	21	17	36	19.7	58 14.1	152 51.6	46.5	4.8	23	0	124	26	59	0.32	1.2	3.2	C
	22	6	2	5.0	61 5.5	146 51.6	42.4	3.3	5	0	260	86	31	0.53	12.1	83.2	D
	22	6	3	46.3	58 18.5	152 46.6	45.6	2.3	7	1	235	36	85	0.20	4.6	4.8	D
	22	6	24	49.1	60 6.3	152 42.0	99.2		8	3	143	35	95	0.32	2.8	3.6	C
	22	8	25	0.1	59 17.1	154 45.5	2.3	1.9	8	2	268	27	75	0.57	6.0	4.8	D
	22	9	10	46.7	58 8.6	152 49.4	31.6	2.3	8	1	293	61	37	0.22	5.9	4.4	D
	22	13	57	57.1	60 16.1	152 29.2	71.6	2.0	6	1	165	23	2	0.37	5.1	10.3	c
	22	14	48	46.9	59 45.5	152 48.8	87.0	2.0	9	2	118	26	74	0.20	2.0	4.3	B
	22	15	26	20.2	58 41.5	153 8.1	66.3	2.6	24	1	61	40	70	0.20	1.1	2.9	B
	22	16	14	36.2	59 51.5	151 39.5	55.3	1.9	13	6	147	22	44	0.20	1.4	3.0	c
	22	23	27	12.3	60 19.9	150 56.5	60.9	3.5	13	3	261	63	91	0.37	3.0	4.5	D
	23	1	33	34.8	59 51.9	151 49.6	50.2	2.2	12	3	142	25	50	0.35	1.9	3.7	c
	23	9	8	9.6	59 50.2	153 14.8	131.5	2.5	20	5	117	21	57	0.32	1.7	3.1	c
	24	0	41	16.7	60 U.2	151 29.3	54.8	2.7	10	2	184	39	55	0.32	2.3	3.2	D
	24	3	25	18.1	59 39.2	152 4.3	61.2	1.9	8	3	131	34	65	0.21	1.7	4.9	c
	24	16	32	34.7	56 27.4	155 54.0	29.5	2.8	8	0	287	24	49	0.35	20.0	7.5	D
	24	19	9	55.5	59 39.5	152 1.5	70.3	2.1	10	4	140	22	47	0.27	2.5	2.6	C

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAC	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q
1983 HR MN		SEC	DEG	MTN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM	
JUL	24 21 23	41.2	55	53.6	157	35.2	30.0		5	0	320	17	11	0.04	99.0	99.0	D
	24 21 45	19.3	60	6.2	149	54.9	24.0	1.8	8	2	306	66	17	0.25	17.5	53.5	D
	25 21 36	48.5	58	26.4	152	48.0	44.8	2.2	6	1	282	47	64	0.10	4.4	8.9	D
	26 8 21	9.8	58	8.8	155	18.9	33.7	2.0	10	4	125	62	94	0.35	1.7	2.0	c
	26 12 45	41.4	58	30.0	151	46.8	41.1	3.3	5	0	273	95	44	0.06	14.8	99.0	D
								PALMER		ML							
	26 13 2	15.6	58	54.2	151	11.3	31.1	2.3	11	3	248	67	74	0.24	3.6	5.3	D
	26 16 33	59.6	59	53.0	151	50.7	78.9	3.0	18	3	144	28	53	0.30	1.9	2.1	C
	27 5 56	44.9	59	48.4	153	4 1	95.7	1.2	7	2	105	19	70	0.29	2.6	4.1	c
	27 7 12	30.0	60	0.9	152	59.7	121.7	2.4	10	3	126	43	72	0.34	3.1	3.3	c
	27 8 26	37.5	60	44.6	151	57.3	84.6	1.9	13	4	280	58	24	0.44	3.5	3.0	D
	27 18 56	25.5	57	54.6	154	48.6	70.8	2.0	8	3	160	45	65	0.27	3.0	3.0	c
	27 20 24	4.8	58	12.2	151	30.9	30.9	2.8	13	2	196	68	1	0.60	2.6	2.3	D
	28 2 50	57.8	57	40.1	155	20.5	69.8	2.2	11	5	144	16	56	0.25	2.2	2.1	c
	28 10 45	57.4	60	24.6	151	11.3	15.0		6	1	255	74	99	0.37	9.4	27.6	D
	28 11 14	18.5	58	15.9	154	14.3	66.3	2.0	7	3	235	63	93	0.13	4.0	7.1	D
	28 18 29	54.7	59	47.3	153	24.3	139.2	2 8	23	7	116	18	50	0.46	2.0	2.2	c
	29 2 54	55.2	56	9 2	152	51.7	22.0	2.7	5	1	307	13	71	0.18	7.8	5.4	D
	29 4 36	17.6	60	21.6	152	43.9	125.6	4.1	19	0	141	7	99	0.32	3.1	6.4	C
								PALMER		ML							
	29 5 51	31.5	59	9.7	154	22.1	4.2	1.9	6	2	281	4	58	0.08	1.8	2.0	c
	29 7 33	37.7	60	2.4	152	12 8	72.4	2.5	16	6	148	52	71	0.29	1.7	2.9	c
	29 11 10	42.0	59	33.4	152	6 1	59.7	1.3	10	4	173	28	49	0.22	2.0	4.3	C
	29 18 35	34.7	59	8.2	152	13 8	67.4	2.1	19	9	135	53	71	0.26	1.3	2.5	B
	30 0 27	23.4	59	51.7	152	53.8	103.3	1.6	8	3	105	30	73	0.19	2.1	3.4	B
	30 4 2 3	2.7	59	2.0	152	31.3	80.9	1.8	14	5	115	46	66	0.43	1.7	4.8	C
	30 11 3	8.6	59	28.1	151	50 9	56 4	1.6	13	6	172	15	3 5	0.16	1.7	2.2	c
	30 14 29	37.6	59	18.2	153	51.0	129.3	2.2	11	4	96	31	5 3	0.24	2.9	3.0	c
	30 22 14	2.8	59	57.8	151	48.0	60.1	1.6	10	4	159	56	58	0.20	1.6	3.5	C
	31 2 24	6.8	56	50.3	155	21.4	41.4	3.2	15	0	256	70	11	0.33	7.3	8 7	D
	31 8 22	50.8	59	57.6	152	57.4	100.1	2.5	18	7	116	38	72	0.31	1.6	2.7	C
	31 11 36	19.8	58	28.5	154	52.3	12.3	2.2	15	6	113	87	87	eJ.45	2.2	4.4	D
	31 14 52	1 4	58	41.4	155	0.6	133.6	2.7	31	11	67	68	86	0.38	1.5	2.4	B
	31 20 51	24.6	58	47.5	152	59.0	62.9	2.3	27	8	66	41	66	0.31	0.9	1.5	B
	31 22 8	33.0	60	5.7	153	18 8	148.7	2.6	15	5	164	47	60	0.42	2.3	2.6	C
AUG	01 2 41	45.9	57	56.9	153	50.3	49.0	1.8	8	4	173	22	64	0.18	2.4	2.8	C

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

		ORIGIN TIME		LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q	
1983 HR MN		SEC	DEG	MIN	DEG	MIN	DEG	MIN	KM			DEG	KM	KM	SEC	KM	KM	
AUG	01	5	15	27.5	57	35.2	155	6.2	54.1	1.9	12	6	147	32	71	0.34	1.7	2.2 c
	01	8	24	51.1	59	34.9	151	24.3	4.5		5	2	196	11	36	0.26	7.3	79.8 D
	01	14	15	8.5	59	31.4	152	25.5	76.3	2.1	14	6	154	47	48	0.32	1.6	2.3 C
	01	14	30	33.5	60	12.5	149	59.5	50.7	3.2	13	3	289	70	21	0.35	6.3	6.5 D
	01	23	36	27.4	59	38.7	153	10.1	114.5	2.1	9	2	88	4	84	0.17	1.8	4.9 B
	02	0	36	34.5	60	9.3	152	38.1	102.3	2.6	10	4	128	30	96	0.20	1.8	2.4 B
	02	10	29	11.6	59	52.6	153	34.1	155.3	2.5	13	4	142	31	61	0.40	2.7	3.4 c
	02	11	31	22.3	60	3.8	153	21.0	137.2	3.2	25	4	85	46	56	0.49	2.0	3.4 B
	03	5	55	46.5	60	7.3	152	41.5	85.7	1.3	14	6	118	33	78	0.22	2.3	2.4 B
	04	4	8	12.9	58	2.1	152	25.7	34.5		5	0	273	32	85	0.54	7.5	2.9 D
	04	5	41	13.3	60	6.3	153	5.0	110.9	1.4	7	2	221	39	22	0.45	5.1	6.7 D
	04	12	34	56.7	60	14.7	150	55.9	59.6	1.4	8	4	256	54	94	0.12	2.9	4.1 D
	04	23	45	26.3	58	4.3	154	19.1	66.3	4.0	24	3	52	48	78	0.32	1.2	3.0 B
																		PALMER ML
	05	0	8	13.9	59	38.9	152	51.5	89.2	1.6	13	5	95	21	75	0.17	1.7	2.6 B
	05	2	51	27.4	59	38.9	152	14.3	72.3	2.2	19	9	107	34	56	0.31	1.1	2.4 C
	05	9	12	33.5	60	38.0	151	35.8	62.5	2.8	12	1	232	69	25	0.38	5.1	5.4 D
	06	16	33	58.2	60	25.1	152	56.1	149.2	5.2	22	1	119	9	99	0.38	3.2	7.1 c
																		PALMER ML
	07	11	46	1.5	57	5.9	153	54.7	36.7	2.2	9	4	220	51	74	0.20	1.6	1.1 c
	07	15	17	0.8	59	38.8	151	58.0	97.2	4.1	18	1	105	18	43	0.35	2.1	5.1 c
																		PALMER ML
	07	21	8	17.6	60	2.6	152	55.1	132.2	3.3	18	3	122	43	77	0.41	3.8	9.3 c
	09	4	36	49.3	60	13.7	151	46.8	68.4	2.5	15	3	199	59	72	0.24	1.9	3.4 c
	09	7	16	20.0	59	44.5	150	42.6	52.3	3.1	10	2	274	10	53	0.28	2.8	2.5 D
																		PALMER ML
	09	13	35	3.4	60	55.4	146	56.3	12.0	3.5	6	0	232	4	41	0.03	20.2	9.1 D
	10	0	55	46.0	55	49.1	152	11.4	10.4	4.8	15	0	309	60	16	0.45	35.4	32.3 D
	10	5	52	35.7	57	1.7	156	31.2	103.3	2.5	15	6	280	77	14	0.38	3.8	5.5 D
	10	7	14	42.8	59	39.7	150	57.4	31.2	2.6	10	2	197	12	39	0.71	2.3	2.1 D
	10	12	30	15.3	60	11.7	151	37.4	67.2	2.5	13	2	202	60	68	0.19	2.8	4.6 D
	10	16	20	19.6	58	23.3	154	40.5	14.1	2.2	15	5	72	85	88	0.82	1.3	2.8 D
	10	21	11	15.7	57	57.5	154	49.2	64.8	2.2	8	3	166	46	70	0.29	2.9	3.3 c
	11	1	53	39.3	59	56.8	151	24.3	53.7	2.7	14	3	179	35	48	0.28	1.8	2.4 C
	11	16	46	47.6	57	24.3	153	41.8	14.0	3.0	8	0	275	58	88	0.21	32.4	5.2 D
	11	18	28	20.0	58	38.2	152	6.2	15.9	2.7	8	3	240	14	98	0.33	4.7	3.9 D

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

1983	ORIGIN			TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q
	HR	MN	SEC		DEG	MIN	DEG	MIN										
AUG	13	15	0	46.2	59	48.1	152	34.3	83.1	1.8	11	4	101	41	67	0.43	2.0	2.9 c
	13	15	53	34.7	59	17.7	152	22.9	88.4	2.1	24	12	111	50	60	0.47	0.8	1.8 C
	13	17	33	11.9	59	33.5	155	4.4	11.0	2.6	12	5	216	59	5	0.47	1.0	2.6 D
	14	4	49	59.0	59	36.4	153	1.3	98.9	2.1	17	7	72	13	69	0.49	1.2	2.7 B
	14	8	41	50.3	59	46.0	152	51.0	89.3	1.8	6	1	210	25	95	0.08	5.6	4.9 D
	14	11	59	34.4	59	36.8	153	3.3	116.3	1.9	13	3	76	11	67	0.22	2.3	2.7 B
	14	17	13	59.6	59	55.8	153	15.3	137.7	2.3	16	5	132	31	61	0.39	2.0	3.5 c
	14	19	17	47.9	59	50.4	153	9.9	115.1	1.9	13	3	156	21	58	0.16	2.6	2.5 C
	14	20	31	41.3	60	12.4	153	7.0	133.9	1.7	6	1	207	30	19	0.19	4.1	6.7 D
	15	12	53	11.8	59	41.0	152	18.4	75.9	1.5	14	6	111	38	52	0.30	1.4	2.3 C
	15	19	48	24.7	59	36.4	153	28.2	119.8	1.8	13	4	109	15	45	0.27	1.8	2.4 B
	15	22	52	42.5	59	48.2	153	17.7	129.7	3.0	22	7	114	17	50	0.38	1.6	2.2 c
	16	0	48	17.3	56	52.4	153	4.5	28.0	2.5	6	1	298	32	4	0.10	3.2	5.4 D
	16	18	19	34.2	60	32.4	152	12.0	92.4	2.6	16	4	252	34	13	0.27	3.3	3.7 D
	17	3	33	19.7	59	59.1	152	50.4	105.7	2.6	18	3	97	43	75	0.39	1.6	5.0 c
	17	4	10	19.2	57	20.5	153	50.0	30.0	1.6	3	0	251	47	90	0.00	99.0	99.0 D
	18	4	39	33.0	59	14.8	153	41.9	110.3	2.6	14	5	160	18	35	0.33	2.6	2.2 c
	18	5	39	12.2	59	55.1	152	17.9	89.7	2.7	10	3	127	47	62	0.19	3.1	3.5 c
	18	8	53	27.2	59	48.9	151	53.7	59.5	1.5	7	3	169	42	57	0.15	3.0	4.4 c
	19	4	59	30.4	60	9.3	152	50.8	118.3	5.2	23	0	103	30	86	0.27	2.4	5.4 c
PALMER ML																		
	19	5	12	45.4	59	23.0	151	49.6	55.1	1.7	11	5	203	17	68	0.14	2.0	2.3 C
	19	6	49	53.0	59	8.6	153	29.9	89.4	2.6	16	6	77	22	48	0.32	1.3	2.0 B
	19	8	7	23.5	60	39.2	149	57.4	30.9	2.7	10	1	286	12	57	0.21	5.9	9.1 D
	20	6	27	50.0	60	23.4	152	13.3	76.6	2.0	11	5	216	31	2	0.24	2.0	2.4 c
	20	10	54	28.8	60	5.2	152	34.1	103.3	2.3	12	4	146	39	71	0.22	2.7	2.7 C
	21	0	22	8.6	59	44.7	152	40.6	100.8	2.8	22	2	103	33	59	0.36	1.7	2.5 C
	21	5	17	14.3	60	1.1	152	5.9	83.7	2.3	14	4	152	58	73	0.29	2.0	2.6 C
	21	12	46	19.9	58	54.0	151	16.9	12.4	2.4	10	3	258	66	87	0.23	5.7	5.3 D
	21	16	26	16.1	58	10.8	154	12.6	83.3	2.1	12	4	182	54	9	0.30	2.7	5.0 D
	21	20	47	44.2	60	18.9	151	26.5	67.1	3.0	15	1	218	70	74	0.27	2.9	3.6 D
	22	3	34	50.0	59	32.0	152	56.9	85.5	1.7	18	8	83	19	74	0.35	1.2	2.1 B
	22	8	48	21.8	59	18.6	153	30.7	112.3	2.3	20	9	71	10	43	0.46	1.4	2.1 B
	22	10	53	56.6	60	8.6	152	30.0	103.3	3.4	18	1	140	34	72	0.26	2.4	5.5 c
FELT HOMER																		
	22	12	11	8.1	58	53.0	154	5.4	106.9	2.8	24	5	91	26	66	0.35	1.1	2.4 C

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG N P			NS	CAP	D1	D3	RMS	ERH	ERZ	Q
1983	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM	
AUG	22	15	48	12.8	58 11.4	155 4.5	11.6	2.4	15	3	61	53	77	0.47	1.0	4.3	D	
	22	15	46	48.5	58 11.4	155 1.9	10.3	2.1	8	2	138	55	89	0.20	1.4	4.7	c	
	22	23	9	43.2	60 2.8	152 19.4	73.7	1.6	12	6	142	48	77	0.24	1.4	2.6	C	
	23	0	53	17.0	60 10.6	152 51.5	109.9	2.6	21	5	102	27	86	0.41	1.8	2.4	C	
	23	1	58	42.0	59 9.0	153 5.6	79.4	1.5	7	3	252	57	95	0.48	22.1	15.8	D	
	23	3	29	45.7	59 12.6	152 15.1	64.9	2.1	13	5	127	48	66	0.22	1.1	3.1	B	
	23	6	44	46.8	58 51.3	152 56.5	67.3	2.6	11	4	255	89	31	0.38	3.8	7.0	D	
	23	6	47	20.3	53 46.2	157 17.7	30.0	3.7	5	0	340	31	62	0.08	99.0	99.0	D	
	23	8	20	59.8	58 57.6	152 58.2	73.1	2.6	9	3	259	1	79	0.29	3.8	7.7	D	
	24	5	24	4.7	60 34.4	150 38.7	36.5	3.1	7	0	264	91	18	0.22	13.8	16.4	D	
	24	6	3	38.9	60 43.8	151 46.5	84.6	2.1	11	4	277	63	38	0.23	3.3	3.0	D	
	24	15	31	8.9	58 33.0	153 19.1	59.4	2.1	16	7	99	46	57	0.35	1.1	2.2	c	
	25	7	43	38.5	58 49.0	152 14.2	51.9	2.7	17	2	162	22	82	0.20	1.5	3.6	C	
	25	16	29	1.5	59 50.7	152 25.5	72.5	2.2	17	7	112	49	63	0.25	1.2	2.2	B	
	25	17	52	32.1	59 26.4	151 8.5	0.2	3.0	9	0	228	11	37	0.40	3.3	12.3	D	
	26	1	20	39.6	58 57.8	153 44.3	10.8	2.4	9	2	181	7	49	0.36	2.1	1.4	D	
	26	15	3	24.0	59 56.5	151 23.2	62.7	1.5	12	6	180	34	47	0.31	1.9	2.5	C	
	26	18	32	7.8	60 5.9	153 1.4	133.1	2.4	18	6	138	38	74	0.38	1.9	2.0	c	
	27	2	9	44.4	59 24.9	152 36.6	87.4	2.1	18	8	87	44	59	0.37	0.9	2.1	B	
	27	5	24	8.7	60 26.3	151 37.9	57.7	2.1	8	3	242	63	4	0.21	6.1	11.9	D	
	28	2	13	19.6	60 19.2	151 20.2	38.6	1.9	7	2	258	80	96	0.13	5.3	12.8	D	
	28	3	23	13.9	59 33.3	153 2.5	92.9	2.1	20	9	69	15	70	0.34	1.3	2.8	B	
	28	13	12	24.6	57 38.4	154 16.7	54.8	2.4	14	6	93	33	75	0.40	1.3	1.9	c	
	29	4	25	3.5	58 12.1	155 13.9	16.1	2.1	9	4	133	51	68	0.38	2.2	35.6	D	
	29	5	24	12.2	60 11.4	152 24.0	55.5	3.0	22	5	157	33	76	0.33	2.1	3.2	C	
	29	6	36	37.1	59 49.5	153 17.1	138.1	3.0	24	4	69	19	51	0.32	2.0	4.4	B	
	29	15	7	0.1	58 18.2	154 47.8	83.4	2.6	25	7	63	73	90	0.37	1.0	3.0	B	
	29	15	41	0.7	59 28.9	151 37.5	50.0	2.0	15	6	91	3	52	0.27	1.5	2.4	B	
	29	18	25	18.8	59 53.0	152 41.5	94.6	2.5	17	6	195	41	79	0.31	1.8	3.2	D	
	30	3	29	33.3	60 5.6	153 18.3	143.6	2.3	15	6	163	47	60	0.41	2.2	2.4	C	
	30	12	22	41.9	59 28.6	152 33.2	76.3	2.0	15	7	131	43	55	0.31	1.1	2.3	C	
	31	0	1	41.1	59 59.7	152 52.4	102.6	2.8	14	3	111	43	76	0.56	2.0	2.4	C	
SEP	01	7	19	34.3	57 21.0	153 42.5	37.2	2.3	13	5	150	43	56	0.27	0.9	1.1	c	
	02	5	36	11.4	59 35.0	152 48.0	81.3	2.0	14	6	90	24	72	0.30	1.3	2.1	B	
	02	6	13	30.0	59 20.8	152 36.6	66.9	1.9	10	5	156	49	64	0.15	2.0	3.3	c	

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q		
1983 HR M N		SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM		
SEP	02	17	51	13.9	59	16.4	152	50.7	84.2	2.2	17	8	86	48	75	0.39	1.0	2.4 B
	02	22	9	55.8	57	41.6	151	58.4	39.0	2.5	8	2	221	32	81	0.46	3.2	1.8 D
	03	0	10	47.3	60	55.3	150	55.1	19.7	2.5	6	2	297	16	57	0.23	35.3	63.6 D
	04	21	57	27.3	59	22.8	153	4.5	77.8	2.1	10	3	114	60	86	0.25	2.1	4.3 B
	07	19	22	5.1	60	56.3	147	15.4	17.9	6.2	16	0	182	100	124	0.19	3.5	3.8 D
NEIS MS=6.2 (BRK), NEIS MB=6.1 FELT INTENSITY VI VALDEZ, SLIGHT DAMAGE, FELT ANCHORAGE																		
	07	20	3	19.2	60	57.8	147	16.3	16.4	3.1	9	2	208	97	40	0.23	5.2	6.4 D
	07	21	13	35.6	60	56.9	147	18.5	17.2	3.3	14	3	215	99	38	0.37	3.1	3.4 D
	07	21	32	48.0	60	55.2	147	13.1	12.3	3.0	7	3	257	2	46	0.17	2.7	2.3 D
	08	0	28	28.6	59	48.4	152	28.4	73.1	2.7	13	4	123	46	63	0.26	1.5	2.7 B
	08	5	26	40.7	60	20.5	152	17.2	96.2	2.4	17	6	192	28	93	0.36	2.3	2.1 D
	08	10	43	27.8	59	7.9	152	34.7	65.0	1.8	13	6	143	58	69	0.29	1.0	2.6 C
	08	13	56	22.5	59	57.8	153	10.1	120.6	2.6	12	4	131	35	61	0.30	1.9	3.4 B
	08	15	57	40.0	60	56.5	147	15.5	14.4	2.7	10	3	216	99	39	0.37	5.0	2.5 D
	08	16	23	56.5	58	35.7	153	50.9	70.0	2.1	15	5	109	39	72	0.37	1.3	2.9 c
	08	17	30	16.2	59	28.4	152	59.1	94.7	1.6	16	7	69	24	77	0.46	1.2	2.0 B
	08	16	34	46.6	59	39.1	153	5.2	119.5	2.2	22	10	87	8	64	0.53	1.2	1.7 c
	08	20	58	10.3	59	50.3	152	39.8	83.4	2.1	14	4	114	38	65	0.35	1.4	4.2 C
	08	21	22	57.7	59	31.0	152	29.9	70.4	2.2	15	4	81	44	53	0.24	1.3	2.3 B
	09	0	20	51.4	59	51.4	152	48.6	105.1	2.5	19	6	97	33	64	0.37	1.4	3.1 c
	09	7	24	31.6	60	55.0	147	12.4	13.4	2.3	6	1	258	2	46	0.31	16.2	6.5 D
	09	12	17	42.1	59	54.8	152	53.6	105.1	2.2	16	5	141	35	67	0.36	1.5	3.3 c
	09	15	56	26.1	58	3.8	154	58.2	95.8	2.1	14	6	127	46	81	0.42	2.1	2.5 C
	10	14	7	12.1	59	11.1	153	50.5	137.7	3.1	23	0	66	28	32	0.28	1.7	4.1 B
	10	17	29	46.5	59	30.5	150	43.3	47.6	1.4	6	2	283	29	49	0.06	4.5	3.5 D
	10	20	19	30.8	59	51.3	152	2.9	85.8	2.5	18	7	131	32	59	0.48	1.3	2.1 c
	10	21	41	19.0	59	36.0	151	16.3	4.0	2.1	16	6	117	9	28	0.38	1.4	2.0 c
	10	21	44	6.9	59	35.5	151	18.0	3.0	1.8	11	3	132	8	30	0.42	2.0	3.3 c
	10	23	20	19.1	60	26.1	150	51.6	43.6	2.8	11	3	271	75	4	0.25	2.7	5.2 D
	11	1	15	59.5	59	47.3	152	0.6	72.3	1.5	11	5	123	43	63	0.20	1.6	2.9 B
	11	2	8	7.6	59	54.9	152	4.7	70.6	1.4	9	3	138	57	68	0.25	2.8	4.0 c
	11	23	2	23.8	60	15.6	153	29.6	172.2	2.0	9	2	209	44	69	0.32	4.7	5.7 D
	11	8	51	15.9	59	49.0	152	38.3	85.2	2.1	17	5	99	38	66	0.28	1.3	2.0 B
	11	9	17	42.4	59	54.0	152	34.8	89.5	1.5	10	3	109	46	74	0.22	1.8	3.4 B
	11	9	36	48.7	60	9.2	151	3.8	42.6	2.0	9	3	239	45	81	0.13	3.3	3.6 D

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN TIME			LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q
1963	HR	MN	SEC	DEG	MIN	DEG	MIN	KM			DEC	KM	KM	SEC	KM	KM	
SEP	11	13	12	58.4	60 3.7	152	53.3	111.6	1.6	11	4	121	40	79	0.24	2.2	2.7 B
	12	3	18	37.3	60 44.5	148	50.4	43.1	2.1	5	0	319	57	19	0.10	99.0	16.0 D
	12	15	0	47.7	57 57.8	153	22.7	42.3	2.5	11	2	136	17	58	0.27	2.1	3.1 c
	13	9	24	25.7	60 57.5	147	13.1	17.6	3.3	14	1	215	98	25	0.24	2.6	3.2 D
PALMER ML																	
	13	20	45	24.4	59 11.8	153	41.8	97.2	2.8	9	1	259	30	60	0.25	7.7	8 7 D
	14	0	32	0 9	54 55.6	159	23.5	30.0	4.0	9	0	330	95	99	0.30	99 0	99.0 D
	14	2	35	3.5	61 2.8	146	6.0	55.9	4.8	12	0	291	100	50	0.31	55.7	23.3 D
FELT ANCHORAGE, PALMER, AND VALDEZ																	
	14	11	25	11.1	60 26.3	152	47.7	126.3	2.5	13	2	202	3	6	0.41	3.3	4.6 D
FELT ANCHORAGE AND HOMER																	
	14	11	34	20.4	57 55.5	156	13.0	127.0		6	0	143	15	45	0 7 2	10.9	20.7 D
	15	2	31	43.1	57 42.8	152	47.0	26.5	2.3	9	5	162	18	47	0.37	1.5	3.1 c
	15	13	51	7.6	60 17.8	152	31.2	103.7	2.3	16	5	168	20	86	0.33	2.1	2.1 c
	17	5	10	59.9	56 57.2	156	48.3	89.0	3.2	10	1	288	90	25	0.36	13.3	10.3 D
	17	8	26	52.3	59 46.5	153	1.8	104.2	2.0	15	5	99	18	73	0.21	1.4	2.2 B
	17	9	42	15.3	60 9.7	152	27.7	85.8	1.7	11	4	147	33	92	0.21	2.3	3.8 C
	18	15	45	23.8	60 57.2	147	16.9	22.4	3.2	16	1	212	98	22	0.47	3.1	3.7 D
	20	7	12	42.3	57 32.3	155	49.0	26.0	2.1	6	0	197	33	75	0.72	4.9	4.5 D
	20	21	30	44.8	58 0.2	154	2.9	61.4	2.2	10	2	134	32	82	0.16	1.6	3.2 B
	21	3	28	43.7	59 34.5	152	59.7	107.2	2.3	12	4	72	16	77	0.30	1.7	3.1 B
	21	7	39	3.1	59 35.8	151	14.7	42.8	1.7	9	4	129	8	24	0.15	2.2	2.6 B
	21	10	47	17.0	60 1.5	152	13.3	78.0	2.1	10	4	169	52	70	0.30	1.7	3.0 c
	21	12	25	5.5	59 23.9	152	50.4	68.7	2.3	15	5	79	34	72	0.28	1.0	2.3 B
	21	19	28	31.5	59 9.8	153	34.5	103.0	2.5	25	4	60	25	26	0.35	1.4	3.1 B
	21	22	50	46 1	60 14.3	152	37.5	123.0	4.8	19	1	140	22	1	0.35	2.9	5.6 C
	22	0	38	14.8	58 23.0	154	53.8	95.2	2.5	16	4	127	77	95	0.26	1.8	4.2 B
	22	4	33	56.1	60 5.8	152	35.9	96.9	2.4	18	5	125	37	72	0.39	1.5	3.7 c
	22	16	21	41.6	55 54.8	153	44.4	47.3	5.2	15	0	307	67	18	0.38	41.1	99.0 D
PALMER ML																	
	22	23	25	50.6	59 51.7	151	53.0	52.4	2.2	10	4	139	47	57	0.19	1.9	5.0 c
	23	3	14	19.7	58 52.3	153	5.7	21.5	2.5	7	0	99	32	57	0.31	2.0	6.0 C
	24	13	59	40.6	59 53.8	153	18.4	145.5	2.9	8	2	265	28	10	0.13	6.6	3.0 D
	25	13	37	23.5	60 20.0	151	44.0	76.5	2.7	10	2	223	58	79	0.26	3.9	4.7 D
	25	16	20	1.0	59 32.2	152	56.5	101.5	4.9	9	2	128	21	77	0.15	2.0	4 8 B
PALMER ML																	

ALASKAN EARTHQUAKES SOUTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q				
1983	HR	MN	SEC	DEG	MIN	DEG	MIN	KM			DEG	KM	KM	SEC	KM	KM					
SEP	26	7	7	9.4	59 51.5	153	24.7	138.5	2.5	16	3	69	25	53	0.44	1.8	2.9	B			
	26	8	4	7.3	59 45.6	153	33.5	145.8	2.1	10	3	115	22	85	0.47	3.3	2.6	C			
	26	13	45	14.5	59 13.4	153	36.6	109.0	2.2	21	9	b1	20	33	0.38	1.1	1.6	B			
	26	20	51	6.3	60 37.2	151	54.1	76.8	2.5	14	4	264	53	11	0.38	3.7	2.5	D			
	26	20	55	25.0	60 20.7	152	2.7	90.4	2.7	16	6	213	41	91	0.46	1.9	2.2	D			
	26	23	52	59.0	57 32.8	155	59.8	66.7	5.4	18	1	184	24	59	0.57	3.2	3.9	D			
									NEIS MB												
	27	17	5	24.2	60 15.2	152	57.8	129.8		7	1	195	21	17	0.40	4.1	7.9	D			
	28	14	54	38.2	60 8.6	152	32.7	92.5	2.4	14	4	159	33	74	0.27	1.9	2.7	C			
	28	14	59	14.8	58 31.5	151	48.0	36.4		11	1	185	34	96	0.18	2.3	2.2	D			
	28	21	31	55.5	59 13.5	153	32.1	102.2	2.3	11	2	139	33	51	0.33	2.2	2.5	C			
	30	16	47	18.9	60 46.2	151	51.1	81.2		8	2	282	64	43	0.19	3.4	6.0	D			
	30	17	4	5.1	57 48.8	155	36.0	77.6	2.8	7	2	168	7	74	0.31	4.5	4.9	c			
	30	17	47	58.6	59 8.5	153	47.0	123.7	2.6	18	7	116	25	33	0.40	1.9	2.5	C			
	30	18	23	30.1	60 2.4	153	11.9	130.6	2.8	1b:	7	145	43	62	0.43	1.9	2.3	C			
	30	21	5	0.1	56 33.1	157	27.3	36.4	4.3	14	0	308	47	80	0.43	34.5	7.8	D			
									PALMER ML												

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

		ORIGINTIME		LAT N		LONCW		DE PTH ¹	MAG NP		NS	GAP	D1	D3	RMS	ERH	ERZ	Q
1983 HR MN		SEC	DEG	MIN	DEG	MIN	KM					DEG	KM	KM	SEC	KM	KM	
JUL.	01	5	2	33.3	64	25.0	146 58.3	0.1	0.6	5	1	194	9	60	0.06	3.0	99.0	D
	01	12	3	32.9	64	46.2	147 35.1	2.3	1.3	7	2	173	18	27	0.27	1.3	23.5	C
	01	15	37	46.6	65	28.1	144 17.1	2.5	2.1	8	2	247	30	73	0.46	52.6	72.5	D
	01	16	8	18.9	64	17.5	149 21.5	13.9	1.5	10	3	221	10	66	0.41	2.4	1.1	D
	01	19	50	43.2	64	29.2	146 55.3	1.8	2.4	10	1	175	9	60	0.39	1.6	2.2	c
	01	22	7	57.0	65	0.7	149 4.3	15.6	0.8	9	4	271	49	62	0.29	2.1	1.5	c
	02	1	0	46.6	63	52.0	149 8.5	0.1	1.8	9	3	207	18	79	0.28	2.7	3.3	D
	02	1	49	46.1	63	59.2	149 9.5	39.5	0.9	4	0	294	63	21	0.04	99.0	99.0	D
	02	5	34	20.5	62	36.2	149 41.0	57.4	2.8	11	3	204	14	50	0.39	3.0	12.7	D
	02	7	7	55.1	64	46.0	147 26.6	10.6	1.8	8	3	144	22	34	0.32	1.1	5.5	c
	02	11	2	45.3	64	7.9	150 3.3	17.8	2.0	9	2	275	40	71	0.36	5.7	1.5	D
	02	16	37	34.3	62	10.8	150 2.0	35.0	2.2	6	1	153	81	54	0.35	2.4	4.8	D
	02	20	11	47.5	62	48.9	150 18.2	0.6	2.4	10	3	182	48	93	0.53	2.9	1.4	D
	02	21	38	34.2	65	21.0	149 47.6	3.2	1.1	8	2	302	93	7	0.30	4.5	3.0	D
	03	5	37	27.1	64	45.0	147 29.0	2.5	1.1	8	3	137	22	33	0.31	1.5	34.4	c
	03	6	10	35.3	64	39.8	146 57.7	2.7	0.7	4	1	208	29	72	0.14	4.5	41.0	D
	03	9	34	60.0	64	42.5	148 21.7	19.8	0.3	10	5	151	17	37	0.31	2.0	3.5	c
	03	15	36	55.5	64	48.0	147 31.1	20.6	0.9	7	3	132	22	52	0.31	1.7	1.8	C
	03	19	2	24.4	64	48.1	147 49.7	11.7	1.0	8	2	91	11	29	0.33	1.8	3.7	c
	03	20	9	17.3	64	4.8	148 1.1	107.5	1.5	7	3	243	12	6	0.09	4.2	2.8	D
	03	23	15	40.4	64	47.4	146 51.0	11.9	0.5	4	1	236	34	86	0.00	2.6	15.2	D
	04	1	37	46.0	62	0.6	147 24.8	25.4	1.8	7	2	202	45	7	0.31	13.4	22.2	D
	04	8	8	27.4	63	18.1	150 20.6	122.0	1.7	5	1	300	85	37	0.27	9.5	4.1	D
	04	11	13	10.1	61	45.1	146 10.9	12.3	1.9	6	1	224	61	96	0.30	6.7	8.0	D
	05	4	49	35.3	64	28.8	147 0.1	0.8	0.5	7	3	182	9	60	0.20	2.4	33.8	D
	05	7	35	20.0	64	55.3	148 7.8	14.1	1.0	7	3	254	11	36	0.17	2.5	1.9	D
	05	8	15	10.8	64	39.6	148 37.5	2.3	1.2	10	4	164	24	48	0.36	1.2	22.2	c
	05	14	25	9.3	64	44.6	147 30.3	1.0	0.6	8	3	133	22	32	0.37	1.2	71.4	c
	05	14	57	0.6	64	35.3	147 37.5	6.5	0.5	6	3	184	36	48	0.18	3.8	18.2	D
	05	20	7	1.3	64	43.1	147 25.4	0.4	1.1	10	4	144	27	36	0.32	0.8	59.0	c
	06	1	37	17.5	64	28.0	147 56.3	18.4	1.4	9	3	135	34	47	0.35	1.1	2.1	c
	06	2	48	38.7	63	41.4	147 29.5	5.0	1.3	3	0	215	72	7	0.00	99.0	99.0	D
	06	12	16	39.8	64	22.9	147 33.2	16.4	2.3	7	0	139	29	59	0.11	1.5	2.8	C
	06	13	11	33.6	62	28.0	150 42.6	72.7	2.5	13	2	171	28	67	0.36	2.0	4.0	D
	06	13	17	17.8	64	50.8	147 24.5	18.1	0.9	6	1	153	16	35	0.14	1.8	1.7	c

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN TIME		LAT N	LONG W	DEPTH	MAG	NP	MS	GAP	D1	D3	RMS	ERH	ERZ Q	
1983 HR MN	SEC	DEG MIN	DEG MIN	KM				DEG	KM	KM	SEC	KM	KM	
JLJL	06 22 50	28.9	64 29.8 147 0 4	0.5	2.2	10	4	184	10	59	0.29	2.3	86.3 D	
	07 3 42	10.1	64 12.4 148 1.1	0.6	2.0	9	3	205	56	66	0.20	1.5	99.0 D	
	07 5 56	0.5	64 111.2 149 25.4	15.1	1.3	9	4	225	13	68	0.38	3.6	1.2 D	
	07 8 21	39.9	64 11.6 148 0.3	1.2	1.8	9	3	209	56	67	0.20	1.2	93.5 D	
	07 15 52	49.1	62 52.2 148 33.6	15.5	2.4	11	1	122	98	41	0.67	1.9	3.2 D	
	07 18 2	8.1	64 16.3 149 33.0	21.9	1.4	6	2	240	16	67	0.39	5.0	1.3 D	
	07 21 35	60.0	64 40.2 146 55.1	5.8	0.8	5	1	215	30	49	0.20	4.7	17.9 D	
	08 6 44	49.7	62 50.6 149 7.3	12.7	2.2	14	5	180	36	53	0.49	1.4	1.8 D	
	08 7 56	2.9	65 2.5 147 42.5	18.4	0.6	7	3	251	16	32	0.08	3.2	1.8 D	
	08 8 18	54.9	61 34.8 150 3.4	8.7	2.8	13	2	146	55	47	0.37	1.9	2.2 D	
	08 13 26	50.7	63 16.7 147 26.4	2.7	2.5	12	4	127	90	28	0.21	1.4	1.6 C	
	08 14 50	32.3	64 7.9 149 5.5	113.1	1.9	5	0	191	45	90	0.04	45.9	82.0 D	
	09 6 29	50.4	64 47.5 147 32.0	5.2	1.6	4	1	168	17	51	0.12	2.7	20.6 D	
	09 17 22	2.8	61 36.5 148 44.9	40.6	2.4	6	2	207	15	28	0.08	6.1	3.9 D	
	09 17 24	30.1	63 11.3 149 16.0	11.9	2.5	9	2	166	74	81	0.57	2.6	3.5 D	
	09 20 25	31.0	63 4.8 150 51.5	209.5	2.6	6	0	200	87	29	0.74	5.7	40.1 D	
	09 22 17	32.8	68 55.0 152 28.3	5.0	2.8	4	0	181	10	91	0.28	13.6	99.0 D	
	10 1 23	49.6	64 47.4 147 30.7	0.5	1.1	4	1	165	18	51	0.03	2.8	99.0 D	
	10 8 29	38.8	64 30.2 146 57.1	0.2		4	1	201	11	60	0.36	7.2	99.0 D	
	10 8 34	35.2	64 5.4 147 49.6	108.9	2.5	10	2	168	55	2	0.26	3.6	2.9 D	
	12 6 8	39.9	62 34.5 149 25.9	75.1	2.6	7	1	157	8	1	0.36	10.5	19.7 D	
	12 15 16	4.6	61 2.5 147 11.6	25.1	5.7	11	0	210	89	33	0.36	6.6	6.3 D	
			NEIS MB=6.1, NE II; MS=6.3 (BRK) PALMER ML					FELT	INTENSITY V VALDEZ,					
			SLIGHT DAMAGE, IV SEWARD, II I FAIRBANKS											
	12 17 56	48.2	61 3.5 146 51.3	18.2	3.4	9	1	212	88	27	0.25	3.0	2.6 D	
	12 19 4	14.1	60 57.1 147 8.6	18.2	3.8	20	0	175	99	42	0.51	3.7	3.4 D	
	13 1 57	46.7	61 51.8 147 52.1	26.2	2.5	4	1	157	29	75	0.24	30.7	30.6 D	
	13 10 27	36.9	62 29.3 150 56.2	2.8	2.9	10	1	178	38	2	0.51	1.9	2.2 D	
	13 11 33	45.2	61 0.9 145 5.0	18.0	3.0	12	0	227	92	27	0.25	6.3	3.9 D	
			PALMER ML											
	14 1 2	26.6	63 59.6 149 2.6	17.5	2.4	9	2	158	27	2	0.55	5.5	3.8 D	
	14 1 46	47.6	64 42.5 147 39.2	5.7	0.2	5	2	278	22	34	0.11	99.0	99.0 D	
	14 3 17	30.4	64 41.1 147 39.2	4.7	0.4	1	3	172	25	36	0.28	1.7	24.1 C	
	14 4 16	36.5	64 59.3 147 47.5	6.2	0.0	4	1	227	10	25	0.10	99.0	99.0 D	
	14 6 17	45.0	62 21.1 147 17.7	17.2	2.0	11	2	129	58	22	0.35	2.3	3.5 D	
	14 7 46	56.4	64 47.2 148 4K.5	15.4	1.2	6	1	222	27	50	0.14	10.2	3.7 D	

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

1983	ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q
	HR	MN		SEC	DEG	MTN	DEG											
JUL	14	9	25	28.5	64 30.5	148 35.0	0.6	0.7	6	2	242	25	58	0.20	12.2	99.0	D	
	14	11	36	5.6	61 3.5	147 10.4	19.9	2.3	7	1	254	87	31	0.27	8.0	3.7	D	
	14	16	34	14.1	64 38.6	149 34.0	0.6	1.2	4	0	266	71	10	0.18	7.9	99.0	D	
	14	20	11	49.1	63 2.3	151 2.1	131.9	2.6	7	1	270	30	34	0.27	4.9	10.1	D	
	16	2	53	22.1	64 47.7	147 26.5	0.8	0.7	6	2	139	19	32	0.11	2.2	99.0	c	
	16	3	14	4.5	61 38.1	146 11.2	16.1	1.9	6	2	218	64	54	0.26	4.1	2.6	D	
	16	5	5	32.8	62 52.2	150 31.2	91.5	1.8	6	0	176	59	2	0.39	3.1	18.1	D	
	16	13	14	15.8	64 41.9	148 39.1	7.6	0.3	6	2	182	24	47	0.11	43.0	8.7	D	
	16	13	48	9.1	61 2.3	146 43.3	10.0	2.3	7	2	283	94	25	0.27	3.5	3.0	D	
	16	14	2	35.4	62 5.7	149 55.0	13.8	2.5	11	2	139	70	52	0.33	1.5	2.5	D	
	16	15	12	20.5	62 2.8	149 34.3	36.3	2.2	9	2	137	55	35	0.16	2.7	5.1	D	
	16	21	50	28.9	61 49.8	147 39.9	35.8	3.7	16	1	142	18	70	0.33	3.9	3.1	c	
	17	3	26	49.3	64 59.9	148 1.9	8.1	0.4	5	2	256	16	30	0.12	99.0	99.0	D	
	17	3	46	46.5	63 27.0	147 38.6	9.4	1.3	6	1	216	22	55	0.07	6.5	7.6	D	
	17	4	33	26.4	64 26.8	147 0.5	0.1	0.9	6	2	180	9	60	0.04	4.0	99.0	D	
	17	5	9	52.2	62 49.9	151 3.1	92.9	2.7	9	2	189	46	78	0.27	5.0	11.6	D	
	17	15	46	19.1	64 30.1	146 59.2	0.5	1.6	8	2	191	11	59	0.32	1.9	67.9	D	
	17	16	30	58.0	66 22.0	143 1.8	7.1	2.5	9	0	200	1	53	0.26	5.3	7.1	D	
	17	23	58	38.2	65 35.7	145 22.8	76.6	2.0	9	2	198	8	37	0.34	6.3	7.2	D	
	18	2	46	9.0	65 7.7	147 55.6	1.9	0.6	5	2	285	26	35	0.09	99.0	99.0	D	
	18	5	23	35.4	64 59.2	146 44.8	15.8	1.8	6	1	278	30	66	0.06	5.1	2.2	D	
	18	5	28	18.6	64 41.7	147 32.7	14.2	2.1	10	2	126	26	33	0.36	1.6	1.8	C	
	18	11	45	33.2	64 42.0	147 29.7	4.4	1.0	6	2	154	27	34	0.10	1.5	18.3	C	
	18	13	26	35.8	62 5.0	147 54.5	30.8	1.8	8	2	115	41	60	0.17	11.5	18.0	c	
	18	16	44	31.2	63 3.0	150 36.5	114.5	3.3	16	0	75	13	66	0.35	2.1	7.0	B	
	18	17	15	22.9	64 46.9	147 30.3	0.7	1.3	6	2	134	19	31	0.13	2.1	99.0	c	
	18	17	40	18.9	64 45.9	147 22.5	7.3	0.8	7	3	157	21	37	0.09	1.2	8.0	C	
	19	9	2	59.4	63 41.2	149 37.3	118.3	1.8	8	1	294	34	3	0.13	5.3	5.9	D	
	19	13	24	29.8	64 12.8	146 20.6	27.1	1.4	5	1	296	69	81	0.22	3.5	84.7	D	
	19	14	39	55.5	63 45.0	144 59.3	2.5	1.8	5	0	235	90	80	0.44	10.9	4.3	D	
	19	19	14	45.7	64 30.7	151 14.9	1.0	2.2	4	0	307	100	48	0.07	33.8	11.8	D	
	19	23	26	43.1	63 21.7	151 49.3	0.7	2.5	5	0	221	49	41	0.55	6.2	3.1	D	
	20	5	47	29.6	61 31.9	146 30.0	18.4	1.9	6	1	223	55	69	0.18	5.2	2.4	D	
	20	9	28	17.7	62 22.4	151 12.4	75.9	2.8	12	1	181	40	90	0.25	5.0	10.6	D	
	20	10	29	38.0	65 4.1	147 35.1	13.7	0.3	4	1	270	13	38	0.00	99.0	99.0	D	

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

		ORIGINTIME			LAT N		LONG W		DEPTH	MAG NP		NS	GAP	D1	D3	RMS	ERH	ERZ Q
1983		HR	MN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM
JUL	20	10	36	25.3	62	11.6	151	11.0	93.7	2.2	12	2	17s	22	6	0.30	3.3	8.5 D
	20	13	52	18.7	63	37.6	149	30.9	104.8	1.9	10	3	263	31	8	0.27	3.0	2.2 D
	20	16	7	39.8	61	26.7	151	55.1	116.6	3.2	13	1	179	30	55	0.32	3.4	4.3 c
	21	1	19	28.8	63	24.4	145	23.9	6.9	1.5	5	2	177	49	87	0.02	4.0	7.4 D
	21	2	54	15.1	65	38.2	145	15.2	0.6	2.5	9	2	137	4	44	0.36	3.0	2.7 D
	21	6	17	19.4	64	40.1	146	55.5	1.5	0.8	4	1	214	29	49	0.22	6.3	71.7 D
	21	17	57	42.2	63	1.7	149	52.8	2.0	1.9	10	2	209	92	77	0.23	2.3	1.4 D
	21	18	19	32.3	64	43.9	147	31.4	0.1	0.9	6	2	147	23	31	0.22	1.0	99.0 c
	21	19	3	26.6	62	55.9	148	2.1	84.3	2.1	13	4	171	0	30	0.18	2.5	3.7 c
	21	22	4	57.2	64	3.5	148	5.1	104.4	2.3	13	4	98	55	67	0.37	1.6	3.4 c
	22	6	1	59.9	60	45.9	146	46.9	0.0	3.4	5	0	279	23	55	0.20	13.8	3.6 D
	22	8	18	20.9	64	1.3	147	57.2	66.6	1.2	5	1	305	82	98	0.31	99.0	99.0 D
	22	12	50	19.6	61	1.7	147	7.8	21.3	3.5	10	1	227	90	33	0.32	3.6	2.7 D
	22	15	19	36.8	62	37.8	151	1.3	89.6	1.9	9	1	184	62	12	0.42	3.5	15.3 D
	22	21	8	28.6	66	32.9	14s	37.4	10.7	3.1	11	1	238	51	88	0.30	7.4	11.1 D
	23	2	0	53.0	66	20.0	134	4.0	39.7		4	0	301	67	0	0.06	99.0	99.0 D
	23	2	39	37.3	61	27.1	151	6.6	56.8	2.3	7	1	139	57	45	0.27	3.8	6.3 D
	23	3	26	7.8	62	58.6	147	16.9	1.9	1.3	6	1	123	94	99	0.57	8.3	6.3 D
	23	6	19	16.8	64	23.6	148	25.6	35.2	1.0	7	3	267	37	64	0.37	99.0	99.0 D
	23	7	10	17.6	64	21.7	146	40.8	0.2	0.9	7	2	308	14	80	0.37	4.0	99.0 D
	23	8	1	15.1	64	16.8	148	25.2	2.5	0.9	9	3	174	42	59	0.23	1.1	32.3 C
	23	8	25	33.9	65	4.3	147	48.0	1.1	0.8	5	2	265	19	32	0.12	99.0	99.0 D
	23	9	8	43.2	61	57.3	150	10.3	36.0	2.0	5	0	307	56	97	0.14	70.3	99.0 D
	23	11	15	17.5	63	53.5	146	21.2	7.7	1.4	10	3	132	64	32	0.29	2.8	2.0 D
	23	11	54	21.9	64	57.5	147	21.4	17.2	0.6	5	1	269	4	40	0.09	35.9	4.8 D
	23	22	1	30.7	65	40.1	145	23.5	0.3	1.7	8	3	195	0	59	0.43	5.3	2.7 D
	23	22	21	35.1	62	35	148	31.5	12.9	1.7	b	3	153	55	11	0.22	2.2	4.1 c
	24	5	46	21.4	64	49.3	148	58.3	20.1	0.4	5	2	245	28	77	0.06	6.8	3.3 D
	24	6	10	47.2	62	52.3	151	9.3	114.5	2.5	13	3	193	77	54	0.45	2.2	10.8 D
	24	8	54	43.9	64	35.9	148	52.5	1.1	1.0	7	2	157	10	46	0.31	5.6	49.4 c
	24	11	5	7.4	61	59.8	150	19.7	33.2	2.5	11	2	146	80	59	0.33	1.7	4.8 D
	24	19	1	34.6	65	20.5	149	46.8	35.2	2.5	12	2	128	92	6	0.39	1.7	3.8 D
	24	19	23	9.3	65	12.7	149	39.5	10.0	0.9	6	2	304	76	95	0.18	94.9	99.0 D
	24	19	26	54.8	64	2.0	148	1.3	10.8	1.0	6	2	305	79	57	0.15	67.9	99.0 D
	24	23	32	24.8	64	19.7	149	49.3	16.5	2.0	10	3	265	30	79	0.39	3.5	1.5 D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

1983	ORIGIN TIME		LAT N	LONG W	DEPTH	MAG N P	NS	GAP	D1	D3	RMS	ERH	ERZ Q			
	HR	MN	SEC	DEG MIN	DEG MIN	KM		DEG	KM	KM	SEC	KM	KM			
JUL 25	19	45	9.3	61 43.0	150 22.9	13.9	2.4	9	1	140	72	6 2 0 24	1.9	2.9 c		
	25	21	12	0.6	63 38.2	149 40.6	127.6	1.6	7	1	270	38	5 2 0 09	6.7	2.7 D	
	26	8	38	36.6	62 22.2	150 58.7	76.7	3.0	15	1	140	31	100 0.22	4.4	1b.6 D	
	26	9	51	4 8	64 51.0	147 51.5	16.0	0.3	6	2	188	6	2 7 0 31	54.3	15.2 D	
	26	11	16	5 4	61 2.2	147 13.8	19.7	2.0	8	1	226	89	3 5 0 24	3.5	2.7 D	
	26	15	2	3 0	64 48.9	147 21.5	33.0	0.5	4	0	161	19	3 7 0 00	9.0	23.5 D	
	26	19	8	26.2	64 58.6	147 9.5	10.4	0.8	4	1	254	11	6 4 0 00	6.0	3.5 D	
	27	5	13	26.0	61 43.2	148 7.0	20.5	2.4	13	4	183	44	9 6 0 38	5.0	3.3 D	
	27	7	12	19.0	65 0.1	147 46.1	12.3	0.2	5	2	233	12	2 7 0 14	99.0	99.0 D	
	27	8	32	37.7	64 37.6	148 22.7	2 5	0.3	7	3	212	25	4 1 0 29	32.1	99.0 D	
	27	13	55	10.7	62 6.6	149 22.1	19.0	3.0	14	1	101	57	7 6 0 34	2.2	3.8 D	
	28	5	29	1.2	64 0.6	147 50.5	11.4	1.1	8	4	306	87	9 9 0 30	1.9	1.8 D	
	28	5	52	1.1	64 48.8	147 30.0	7.8	0.4	7	3	236	17	3 1 0 16	42.1	81.8 D	
	28	8	34	10.7	62 13.5	147 37.3	0 2	1.8	5	2	183	46	3 8 0 39	12.2	6.2 D	
	28	9	25	53.5	64 37.3	144 23.1	21.2	2.2	9	3	254	16	6 3 0 15	6.3	1.2 D	
	28	14	20	9 3	62 15.6	148 8.1	16.4	2.3	13	5	132	64	5 8 0 33	1.8	2.9 D	
	28	15	0	32.6	62 59.2	149 32.6	85.1	1.5	6	2	291	89	3 0 0 30	9.1	8.2 D	
	28	15	11	45.8	64 36.3	148 36.5	7.4	0.4	7	3	209	23	5 1 0 16	38.2	46.8 D	
	28	15	46	13.5	62 5.3	148 5.7	39.1	2.0	11	3	222	49	8 8 0 36	12.1	23.8 D	
	28	16	21	12.8	64 40.2	147 36.8	8.5	0.9	8	3	130	27	3 7 0 19	1.4	7.9 c	
	28	21	37	31.2	64 50.4	146 42.7	1.6	1.3	7	3	256	36	5 2 0 18	2.2	54.5 D	
	29	5	56	4 2.7	64 48.2	147 32.5	9.5	1.6	8	3	128	16	2 9 0 25	1.9	6.7 C	
	29	6	33	27.9	64 41.6	147 32.3	1.2	0.5	7	3	159	26	3 4 0 32	1.4	62.9 C	
	29	7	4	36.6	61 1.0	150 45.7	4 3	2.2	6	1	157	70	7 0.47	3.3	2.4 D	
	29	7	13	2.5	64 45.4	147 27.8	9.8	0.6	6	2	140	22	3 3 0 10	1.7	7.5 c	
	29	8	4	9.9	61 1.7	146 59.4	13.5	2.2	8	2	241	92	3 1 0 24	3.5	3.6 D	
	29	12	48	20.8	61 2.6	152 15.1	113.8	2.6	9	1	179	19	8 4 0 34	5.1	4.4 D	
	29	13	32	25.0	65 5.3	147 42.7	0.2	0.0	6	3	271	19	3 6 0 21	2.4	99.0 D	
	29	14	15	43.5	64 39.7	146 38.3	19.6	1.1	7	3	252	32	6 1 0 19	3.0	1.2 D	
	29	18	23	37.4	64 47.7	146 3.6	0.3	1.6	6	2	296	61	8 3 0 10	2.6	99.0 D	
	30	2	3	1	54.5	64 59.3	147 6.5	13.2	0.9	5	0	264	14	5 3 0 05	6.9	2.1 D
	30	5	1	22.8	63 27.1	147 26.9	23.2	2.0	10	3	133	8	2 7 0 23	2.1	6.3 D	
	30	14	58	16.9	64 44.1	147 28.9	19.5	1.2	6	3	136	24	3 3 0 26	2.1	2.2 c	
	30	18	49	27.4	64 45.4	148 9.8	12.3	0.5	7	3	191	8	4 5 0.35	36.6	20.5 D	
	30	19	7	22.2	65 4.9	147 54.4	0.8	0.3	5	2	271	21	3 1 0.08	99.0	99.0 D	

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

		CR JGTN		TIME	LAT N		LONG W		DEPTH	MAG NP		NS	GAP	D1	D3	RMS	ERH	ERZ Q
1983		HR	MN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM
JUL	30	21	17	52.7	61	13.3	150	31.6	2.7	2.1	9	2	152	82	51	0.63	3.6	1.7 D
	30	21	34	35.8	64	24.6	147	15.9	0.0	0.8	7	3	225	15	62	0.03	1.9	99.0 D
	31	0	5	33.2	61	55.9	146	38.4	35.1	3.3	19	1	164	38	31	0.33	3.2	2.5 C
	31	2	9	1.6	61	2.0	147	10.1	19.9	2.1	6	1	254	90	34	0.22	4.8	4.2 D
	31	4	5	47.5	65	6.0	149	0.9	25.3	1.0	6	2	276	51	62	0.26	10.2	99.0 D
	31	5	54	44.9	64	30.3	147	10.5	5.0	0.7	5	1	172	15	55	0.18	3.6	19.2 D
AUG	01	7	1	40.7	62	47.7	150	4.9	77.8	2.2	9	0	217	41	79	0.32	8.4	24.2 D
	01	15	26	15.1	63	56.5	148	26.0	15.3	1.9	9	3	212	77	too	0.13	1.4	1.3 c
	02	2	20	60.0	62	57.7	149	44.8	81.1	1.7	11	3	204	95	77	0.35	4.0	4.9 D
	02	7	9	28.3	64	50.5	147	23.9	4.1	1.4	6	1	155	16	36	0.31	3.2	27.0 C
	02	10	31	50.8	64	43.9	147	30.1	6.2	0.9	8	3	133	23	32	0.20	1.8	15.8 C
	02	13	35	5.9	62	6.2	149	3.5	3.4	1.6	4	0	183	53	82	0.00	4.0	6.4 D
	02	15	2	4b.3	64	26.9	149	13.4	13.0	1.7	10	3	203	16	67	0.28	3.0	1.2 D
	02	17	34	9.4	61	24.3	149	52.1	15.9	2.2	5	1	190	51	43	0.18	20.4	6.9 D
	02	20	19	54.6	64	44.0	147	27.4	1.5	1.0	8	3	140	25	34	0.32	1.0	34.8 C
	03	1	59	32.1	64	45.5	147	34.1	22.2	1.3	10	4	125	19	28	0.39	1.1	1.0 c
	03	5	32	38.8	64	39.8	146	57.9	5.5	1.0	6	2	214	11	62	0.21	50.0	52.0 D
	03	6	43	37.7	64	36.2	147	3.7	0.6	0.8	8	3	187	23	48	0.22	1.9	99.0 D
	03	8	32	48.7	64	39.9	147	38.2	4.0	1.3	7	2	132	27	38	0.37	1.7	30.6 C
	03	10	37	26.8	62	32.0	148	8.0	12.8	1.6	8	0	192	89	45	0.49	27.8	42.3 D
	03	10	50	49.6	64	45.4	146	29.0	16.0	1.0	7	3	269	45	64	0.08	2.4	5.8 D
	03	11	33	54.7	63	29.1	148	45.3	81.3	1.7	8	1	302	29	87	0.18	6.5	3.1 D
	03	17	8	6.5	64	47.9	147	34.4	9.2	1.1	12	6	123	15	27	0.31	0.8	3.4 c
	04	3	38	53.1	65	5.4	148	3.9	1.6	0.4	5	2	282	25	34	0.13	99.0	99.0 D
	04	11	24	3.0	64	54.3	147	39.8	10.2	0.3	6	3	195	6	24	0.30	99.0	28.8 D
	04	17	47	25.6	62	54.8	145	27.8	37.7	2.0	4	1	253	6	88	0.00	13.9	5.3 D
	04	22	14	36.1	62	52.4	150	55.2	76.1	2.4	11	2	187	71	11	0.35	2.8	23.9 D
	04	23	35	21.0	64	39.2	146	50.9	0.1	1.3	10	4	225	28	53	0.37	1.7	99.0 D
	04	23	37	42.1	64	35.8	147	13.9	8.9	0.6	5	2	174	25	44	0.03	4.6	10.2 D
	05	0	56	47.3	63	59.0	145	54.9	4.1	1.1	11	3	206	31	67	0.25	1.8	1.6 C
	05	3	10	45.5	66	56.0	154	46.2	2.5	3.3	9	2	327	8	82	0.27	19.7	10.5 D
	05	5	37	2.9	65	5.4	147	51.9	1.6	0.2	6	3	273	22	32	0.12	99.0	99.0 D
	05	12	50	52.0	66	22.2	147	23.7	0.2	2.5	6	0	209	99	66	0.14	10.4	8.6 D
	05	18	26	36.7	64	45.6	149	5.7	0.0	1.0	5	2	258	21	64	0.03	3.0	99.0 D
	05	20	5	48.5	63	31.0	151	36.6	2.9	2.6	6	2	307	40	95	0.37	9.6	11.5 D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983																			
ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q		
1983 HR	MN	SEC	DEG	MIN	DEG	MIN	KM				DEG	KM	KM	SEC	KM	KM			
AUG 05	21	23	38.2	61	48.9	147	30.2	47.6	4.5	19	0	145	10	27	0.38	2.8	3.3	c	
									PALMER	ML	FELT	SOUTH	CENTRAL	ALASKA					
	06	2	15	22.7	64	37.1	148	19.3	7.9	0.7	7	3	217	25	40	0.10	32.2	67.3	D
	06	8	34	42.4	62	47.1	149	50.9	85.7	1.9	11	2	242	15	68	0.33	3.5	8.3	D
	06	10	47	2.3	64	51.9	147	34.1	16.5	0.8	7	3	215	11	28	0.27	27.8	15.9	D
	07	1	15	0.6	64	42.6	146	50.5	0.3	0.8	6	2	229	34	50	0.18	4.1	99.0	D
	07	3	26	27.5	62	50.3	148	11.5	92.7	2.4	12	3	182	6	39	0.34	2.9	7.3	D
	07	6	18	23.3	63	24.9	145	26.7	9.6	1.7	4	1	215	49	49	0.34	28.1	41.7	D
	07	7	50	3.6	66	22.5	148	22.9	20.0		7	2	242	42	67	0.31	9.6	10.3	D
	07	9	12	43.4	61	47.2	151	10.2	5.0	2.6	3	0	208	82	23	0.00	99.0	99.0	D
	07	9	13	44.9	64	17.1	147	34.2	5.0	1.0	4	0	270	33	69	0.29	40.6	99.0	D
	07	11	54	30.0	63	42.7	149	46.1	136.1	2.0	15	4	270	41	2	0.28	2.5	2.3	D
	07	14	13	42.9	63	29.8	150	40.6	37.5	2.7	9	1	235	90	44	0.38	5.1	3.8	D
	07	14	53	47.5	64	47.2	147	15.7	0.6	1.1	7	2	164	23	46	0.15	1.4	96.9	C
	07	18	34	53.6	64	35.6	149	10.1	19.1	2.2	13	5	236	5	55	0.26	1.4	0.8	C
	07	21	11	6.4	64	59.6	147	36.6	14.5	0.5	6	3	220	11	31	0.13	99.0	51.6	D
	07	22	37	44.5	65	22.6	148	8.2	1.3	0.8	4	1	320	56	61	0.13	6.7	99.0	D
	08	1	41	10.7	66	47.3	149	32.8	5.0	1.7	3	0	350	24	28	0.02	99.0	99.0	D
	08	23	33	16.8	64	31.9	147	8.6	0.3	0.3	4	1	177	17	52	0.09	6.0	99.0	D
	09	2	40	23.1	64	44.8	146	1.1	5.0	1.0	3	0	297	59	86	0.00	99.0	99.0	D
	09	5	55	22.2	64	45.2	147	28.6	4.0	1.5	8	3	138	22	33	0.17	1.2	17.3	c
	09	10	0	0.3	65	7.3	147	51.0	2.2	0.0	5	2	281	25	36	0.04	99.0	99.0	D
	09	12	35	9.4	64	53.5	148	51.6	5.0	0.4	7	3	244	35	51	0.35	39.5	99.0	D
	09	15	21	41.0	63	51.2	149	8.9	111.7	1.5	6	0	246	70	19	0.02	9.3	9.7	D
	09	20	6	23.0	62	33.1	151	34.9	112.0	2.7	12	3	198	55	35	0.24	3.7	9.9	D
	10	5	23	8.7	64	56.1	147	55.3	14.5	0.3	6	3	216	7	26	0.12	99.0	66.4	D
	10	9	11	0.6	63	21.8	150	51.3	2.5	2.5	5	2	334	4	27	0.39	11.9	6.6	D
	10	13	49	58.1	65	1.1	148	20.9	13.3	1.0	7	2	238	23	45	0.31	3.8	6.2	D
	10	15	38	9.4	62	46.2	150	16.7	85.2	2.0	13	2	167	27	85	0.28	2.7	9.2	D
	10	22	31	7.7	64	47.4	147	26.5	3.7	0.3	6	2	145	21	34	0.19	2.1	23.9	c
	11	0	11	19.6	64	51.4	147	18.8	8.7	1.6	9	4	175	15	53	0.19	1.2	5.8	c
	11	3	20	24.3	63	6.2	150	49.6	132.1	2.3	8	1	296	47	87	0.17	10.5	11.8	D
	11	10	55	28.1	64	59.9	147	41.5	16.6	0.2	5	2	226	12	29	0.21	99.0	99.0	D
	11	11	19	10.8	67	34.3	144	28.3	9.1	3.0	9	0	326	32	17	0.50	57.5	8.4	D
	11	13	32	48.7	62	17.4	148	25.9	28.3	1.3	8	1	220	77	70	0.13	2.5	5.8	D
	11	13	37	8.6	67	46.6	144	11.1;	1.0	2.5	5	0	337	55	40	0.40	99.0	86.6	D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

1983	ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	N P	NS GAP	D1	D3	RMS	ERH	ERZ Q
	HR	MIN		SEC	DEC	MIN	DEG									
AUG	11	16	24	32.2	64 55.2	147 28.7	14.7	0.5	6	3 223	9	33	0.20	99.0	45.5	D
	11	23	29	4.2	61 26.8	147 16.4	22.8	2.3	7	2 237	43	94	0.29	5.4	1.9	D
	12	4	44	47.1	64 32.6	149 24.1	22.5	0.9	4	1 345	16	86	0.10	99.0	99.0	D
	12	7	34	24.5	64 12.5	147 58.8	8.4	1.9	13	3 76	4	62	0.30	0.9	1.3	B
	12	8	34	52.3	64 37.8	146 55.5	1.0	0.8	7	3 212	25	51	0.14	3.6	56.7	D
	12	19	29	15.6	64 16.7	145 55.4	1.6	1.7	8	2 218	52	98	0.37	2.1	3.5	D
	12	21	18	15.3	63 24.3	148 17.0	5.0	2.0	3	0 211	49	50	0.00	99.0	99.0	D
	13	8	2	47.9	64 44.7	147 32.4	2.0	1.6	8	3 128	21	30	0.27	1.2	34.3	C
	13	9	33	51.6	64 31.7	147 7.7	3.6	0.6	5	2 162	16	59	0.22	3.6	17.7	D
	13	12	56	55.2	64 56.8	148 6.2	18.6	1.6	7	2 213	14	34	0.24	4.4	2.0	D
	13	20	45	16.8	64 46.1	146 45.2	0.3	1.1	6	2 244	39	52	0.11	4.3	99.0	D
	13	22	1	42.6	64 48.7	147 34.3	20.1	1.1	5	1 123	21	54	0.33	2.0	2.1	D
	13	23	29	52.2	62 29.6	148 43.6	21.6	2.6	7	2 166	98	39	0.41	2.2	4.2	D
	14	3	50	47.8	65 16.9	149 49.6	14.9	2.5	11	2 167	86	5	0.36	1.7	1.5	D
	14	13	2	47.0	63 33.2	150 22.9	1.4	2.0	5	1 323	74	31	0.13	8.2	5.5	D
	14	19	27	57.0	61 56.2	147 52.3	51.7	2.1	8	2 234	31	7	0.18	6.0	10.3	D
	15	5	22	26.7	63 57.6	148 50.5	115.4	1.4	5	1 160	26	70	0.08	6.4	6.0	D
	15	5	49	40.8	61 53.8	149 13.5	11.0	1.9	7	2 203	32	5	0.20	3.4	4.9	D
	15	6	49	21.4	62 58.0	150 22.6	94.8	2.4	10	1 252	12	91	0.18	6.3	7.7	D
	15	10	32	48.5	64 35.7	148 30.2	0.4	0.6	6	2 216	28	48	0.06	7.0	99.0	D
	15	15	43	35.0	64 11.9	147 59.6	12.4	1.3	9	3 132	4	70	0.29	1.1	2.6	B
	16	6	36	12.3	61 36.5	150 4.6	2.5	2.4	5	1 168	16	44	0.09	6.1	9.9	D
	16	9	26	3.5	64 33.0	147 43.7	0.6	1.2	8	3 134	37	41	0.26	1.1	99.0	C
	16	10	16	52.3	64 53.7	147 36.4	4.3	1.8	11	4 130	9	27	0.37	1.0	2.4	C
	16	10	29	44.3	64 5E.5	147 52.7	14.1	0.3	4	1 229	9	23	0.17	99.0	99.0	D
	16	11	46	40.1	62 0.6	149 41.1	12.6	1.8	6	1 137	25	56	0.20	3.9	5.4	D
	16	13	26	10.7	64 32.7	146 55.3	0.1	0.5	5	2 212	25	51	0.26	5.6	99.0	D
	16	14	2	54.1	64 47.1	150 54.9	5.0	1.5	6	2 304	91	49	0.09	3.6	2.3	D
	16	20	58	30.3	65 4.6	147 5b.4	1.2	0.7	5	2 267	20	31	0.07	99.0	99.0	D
	16	22	28	41.0	64 7.1	147 15.8	12.6	1.2	5	1 305	90	5 7	0.20	99.0	99.0	D
	17	0	30	18.6	64 30.4	147 15.3	4.5	0.8	6	2 134	1b	51	0.24	4.4	42.2	C
	17	1	49	40.1	65 5.5	147 47.7	1.5	0.7	5	2 272	21	34	0.07	99.0	99.0	D
	17	5	54	27.7	64 37.1	149 6.1	10.9	1.2	9	2 233	5	51	0.24	3.1	2.7	D
	17	7	13	18.6	65 1.5	147 45.1	12.4	1.5	9	3 232	14	2 9	0.30	2.8	2.3	D
	17	9	11	1.8	64 25.8	147 11.0	1.1	0.5	7	2 143	15	54	0.10	3.1	61.6	C

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN		TIME	LAT N		LONG W		DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q				
1983	HR MN	SEC	DEG MIN	DEG MIN	DEG MIN	DEG MIN	KM				DEC	KM	KM	SEC	KM	KM				
AUG	17	13	41	19.5	64	37.1	147	1.0	4.8	1.2	7	2	196	24	49	0.35	2.8	19.0	D	
	17	17	38	37.2	64	34.8	149	26.8	16.3	1.3	8	2	259	18	86	0.28	5.2	2.1	D	
	17	17	56	32.9	64	2.7	148	10.0	107.0	2.0	13	5	133	19	71	0.35	1.6	1.9	c	
	17	21	41	59.0	64	32.1	148	47.6	0.0		5	1	114	14	90	0.15	1.3	99.0	D	
	17	23	1	19.9	64	51.0	147	19.7	1.1	0.6	5	2	277	16	39	0.03	99.0	99.0	D	
	17	23	34	0.8	64	50.7	147	18.1	6.6	1.1	7	2	176	17	40	0.21	2.4	11.0	c	
	18	1	45	14.9	64	33.8	147	46.4	2.5	0.6	7	2	169	34	44	0.20	1.6	43.1	c	
	18	2	39	31.6	63	3.1	145	9.4	24.1	1.6	5	2	153	18	72	0.21	99.0	99.0	D	
	18	8	37	2.1	62	32.9	155	16.9	7.1	3.5	6	0	132	57	28	1.23	6.8	37.6	D	
	18	20	1	34.7	64	49.2	147	32.1	9.5	1.0	7	2	128	15	29	0.27	2.4	8.8	c	
	19	7	8	4.4	64	36.6	146	30.9	20.4	1.4	5	2	332	59	81	0.30	8.4	3.3	D	
	19	7	34	7.3	62	30.6	151	13.7	99.1	2.4	12	2	101	54	14	0.26	2.3	10.6	C	
	19	12	45	29.8	64	22.2	149	29.5	16.0	1.6	7	2	242	31	78	0.38	3.0	1.8	D	
	19	14	29	38.7	64	44.6	149	5.4	1.6	0.7	5	2	256	19	64	0.15	90.5	99.0	D	
	19	19	5	20.8	62	52.0	149	2.1	5.6	4.3	12	0	109	38	51	0.56	2.0	3.6	D	
										PALMER ML		FELT INTENSITY II PALMER								
	20	5	44	28.3	63	55.9	149	4.0	14.4	1.6	11	3	180	23	62	0.29	1.2	1.2	c	
	20	7	57	23.2	61	58.6	150	52.5	8.7	2.2	7	1	161	9	19	0.36	5.2	5.7	D	
	20	13	53	36.0	64	41.4	148	50.6	11.5	0.7	4	0	202	17	55	0.01	99.0	64.7	D	
	21	0	11	47.3	64	58.4	147	52.4	0.0	0.2	5	2	228	9	23	0.36	3.5	99.0	D	
	21	1	3	48.5	61	51.3	146	18.3	5.0	2.3	3	0	249	54	49	0.00	99.0	99.0	D	
	21	2	13	48.5	63	27.5	148	9.9	5.0	1.4	3	0	198	49	46	0.00	99.0	99.0	D	
	21	14	43	6.8	65	3.1	146	40.0	7.5	1.6	7	2	292	35	73	0.08	4.9	16.2	D	
	21	17	59	15.6	64	47.5	147	33.6	8.3	1.0	6	2	133	16	28	0.11	2.4	13.9	C	
	21	20	48	10.6	6	2	5.0	150	21.8	114.1	2.9	5	0	340	98	85	0.23	99.0	99.0	D
	21	22	47	47.4	64	56.3	151	3e.1	4.7	2.6	6	0	189	28	58	0.39	3.9	3.6	D	
	21	23	11	42.0	62	48.3	150	42.9	98.3	2.3	10	2	180	37	7	0.25	10.0	11.3	D	
	22	0	49	11.4	63	0.7	150	53.7	128.5	3.2	13	2	169	27	96	0.39	4.0	4.2	D	
	22	1	6	40.5	65	21.4	145	39.5	0.1	2.6	8	2	308	91	1	0.29	3.3	1.9	D	
	22	2	11	46.1	64	47.8	147	34.5	16.0	1.8	8	2	123	16	27	0.11	1.6	5.5	c	
	22	7	41	44.9	62	6.1	147	34.1	5.0		3	0	183	33	95	0.00	99.0	99.0	D	
	22	11	35	23.8	64	29.1	149	23.0	18.4	1.1	6	0	247	18	70	0.12	3.8	1.4	D	
	23	0	42	34.9	61	25.3	149	2.6	5.0		3	0	216	64	58	0.00	99.0	99.0	D	
	23	2	1	47.2	62	32.5	144	33.7	8.9	3.2	12	1	143	6	87	0.46	2.5	3.6	D	
	23	6	37	10.9	64	45.1	147	28.3	7.4	1.4	9	3	138	23	33	0.11	1.1	8.7	C	
	23	9	29	31.6	64	5.7	148	52.0	19.9	1.8	10	3	121	23	46	0.35	1.2	1.0	c	

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

		ORIGIN TIME		LAT N		LONG W		DEPTH	MAG	NP	NS	CAP	D1	D3	RMS	ERH	ERZ Q			
1983 HR MN		SEC	DEG	MIN	DEG	MIN	DEG	KM				DEG	KM	KM	SEC	KM	KM			
AUG	23	9	44	31	0	63	36.7	144	54.0	6.9	2.5	8	2	147	49	34	0.29	3.7	4.4	c
	23	17	24	33	3	63	0 2	148	51.1	83.7	2.0	11	3	262	81	39	0.25	2.8	6.4	D
	23	18	23	50	2	64	2.4	148	6.3	107.3	1.7	12	2	99	18	59	0.22	1.9	3.1	B
	24	2	43	38.5		61	24.2	146	35.4	6.9	1.8	4	1	303	62	37	0.00	17.9	17.1	D
	24	11	0	2 8		64	24.8	147	32.3	0.1	1.2	6	2	131	28	56	0.18	1.4	99.0	c
	24	22	23	4 2		64	1.6	148	44.0	7.2	1.3	5	1	273	43	25	0.16	9.4	4.7	D
	25	1	41	23.8		61	40.7	151	39.9	88.5	2.4	6	1	183	59	30	0.10	7.4	7.6	D
	25	2	58	56.4		61	46.2	146	21.8	13.1	2.8	13	4	208	51	42	0.39	2.4	1.5	D
	25	3	22	13.5		64	45.9	147	13.9	1.1	0.8	5	2	178	26	42	0.49	3.8	99.0	D
	25	11	59	22.8'		61	30.2	149	32.6	39.1	3.0	10	2	184	24	31	0.25	3.9	1.8	D
FELT PALMER																				
	25	14	12	33.6		64	58.3	150	10.3	5.7	2.0	7	2	318	68	13	0.18	3.1	2.3	D
	25	17	12	49.7		64	46.1	147	28.5	1.1	1.1	9	3	139	21	33	0.28	1.3	61.3	C
	25	23	13	48.5		62	2.6	148	41.2	12.6	2.4	9	3	136	75	3	0.53	4.6	6.3	D
	26	0	40	9.2		64	47.1	149	15.0	16.6	1.2	10	5	275	25	70	0.21	2.0	0.8	C
	26	3	45	26.7		63	4.6	149	17.5	87.1	2.6	13	4	221	40	72	0.38	4.1	8.7	D
	26	4	6	52.8		64	27.0	147	20.6	11.8	0.9	6	2	119	19	55	0.06	2.4	7.5	c
	26	10	49	15.0		64	59.7	148	34.7	15.2	1.4	8	3	243	28	52	0.32	1.8	1.2	D
	26	22	22	25.1		60	59.0	147	5.3	15.2	3.3	17	1	181	96	36	0.38	3.0	3.4	D
	27	22	18	10.7		62	45.3	150	50.8	146.9	2.4	6	0	300	81	67	0.13	99.0	78.5	D
	27	23	21	11.9		64	48.1	148	54.2	8.1	0.6	6	2	235	26	54	0.21	41.4	89.0	D
	28	5	14	57.5		61	19.7	149	32.6	15.1	2.0	7	2	201	43	36	0.20	7.0	2.4	D
	28	12	28	55.3		64	52.6	147	18.9	9.4	0.4	4	1	278	13	40	0.04	99.0	99.0	D
	28	13	39	26.0		64	23.4	149	42.7	17.5	2.0	10	3	284	29	89	0.38	3.8	1.5	D
	28	17	1	27.3		62	49.2	148	49.0	30.7	2.8	12	6	208	34	58	0.51	3.0	4.8	D
	28	18	56	22.6		65	6.4	141	45.8	3.0	0.1	4	1	277	22	36	0.09	99.0	99.0	D
	28	21	47	11.2		62	46.7	149	16.2	7.3	2.0	12	4	166	29	32	0.43	1.4	1.6	D
	28	22	15	59.4		63	4.1	150	57.7	111.6	2.2	4	0	304	95	7.6	0.00	93.4	36.9	D
	28	23	22	27.0		61	47.7	150	59.2	3.5	2.2	9	3	156	89	81	0.95	2.4	1.6	D
	29	3	13	48.7		64	59.3	146	3.3	8.4	0.3	6	3	257	16	32	0.21	99.0	99.0	D
	29	9	40	18.9		63	22.4	147	32.8	81.4	1.5	11	3	207	86	14	0.25	4.5	5.7	D
	29	13	0	11.6		64	44.8	147	1.0	16.3	1.4	10	4	209	32	41	0.43	1.6	1.2	D
	29	23	23	21.5		64	27.6	147	33.0	0.1	0.7	4	1	245	29	59	0.09	3.1	99.0	D
	30	9	6	44.6		64	43.9	149	0.0	0.6	2.0	7	3	239	42	60	0.05	1.7	99.0	D
	30	13	15	17.5		63	5.3	147	4.6	79.1	2.4	11	2	232	77	47	0.36	5.5	5.3	D
	30	14	49	0.6		64	42.8	148	42.9	23.6	0.9	4	1	195	23	49	0.07	98.2	2.2	D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1953

	ORIGIN TIME		LAT N	LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q
1983	HR	MIN	SEC	DEG MIN	DEG MIN	KM			DEG	KM	KM	SEC	KM	KM
AUG 30	15	34	17.6	64 42.3	148 16.1	6.9	1.0	6	133	15	41	0.18	2.1	9.6 C
	31	1 58	11.2	64 28.5	146 59.1	2.6	0.7	5	187	8	61	0.17	4.1	20.5 D
	31	2 43	21.7	62 51.2	150 20.7	8.6	1.8	8	171	93	7	0.24	2.6	3.7 D
	31	4 12	11.0	64 34.6	149 19.9	18.7	1.6	8	300	12	81	0.15	3.1	1.1 D
	31	14 32	51.1	64 44.4	148 53.3	0.6	0.3	5	222	20	55	0.15	60.8	99.0 D
SEP 01	2 57	45.1	63 2.6	150 19.5	143.4	1.9	5	0	289	41	26	0.07	78.9	57.0 D
	01 12 55	40.4	64 57.6	147 56.6	12.2	0.2	5	2	230	10	26	0.12	99.0	99.0 D
	01 15 0	59.1	64 33.2	149 13.9	12.2	0.7	4	1	349	8	79	0.27	99.0	15.5 D
	01 17 0	50.4	64 50.6	147 32.3	13.7	0.9	6	1	126	14	29	0.22	2.9	6.7 C
	01 17 1	42.1	64 47.6	147 34.0	3.8	2.1	9	2	124	16	28	0.32	1.1	13.2 C
	01 17 14	25.5	64 49.1	147 32.6	4.7	0.7	6	2	127	15	29	0.31	2.5	18.3 C
	01 17 14	52.3	65 2.0	147 47.1	2.8	0.2	4	1	248	15	29	0.08	99.0	99.0 D
	01 17 15	34.4	65 2.8	147 48.6	0.0	0.6	5	2	256	17	29	0.10	3.6	99.0 D
	01 17 17	31.7	65 0.1	147 45.2	9.4	0.1	5	2	231	11	27	0.12	99.0	99.0 D
	02 3 8	51.5	63 55.3	147 32.8	0.3	1.9	6	2	312	4	10	0.29	4.0	99.0 D
	02 5 47	31.1	64 55.2	147 39.7	15.1	0.5	6	3	186	7	25	0.19	99.0	7.3 D
	02 18 52	30.0	64 49.8	147 17.7	4.7	1.4	8	2	175	18	40	0.17	1.2	13.6 C
	02 20 29	10.7	62 54.3	147 43.7	62.8	1.9	8	3	185	15	21	0.26	4.3	17.3 D
	03 5 27	30.0	64 7.8	147 32.5	8.3	1.0	6	2	243	20	83	0.11	2.8	7.3 D
	03 5 30	42.2	64 28.9	147 0.7	5.3		7	0	172	9	59	0.14	1.7	2.5 C
	03 9 47	16.8	64 39.8	147 37.0	8.6	1.4	8	2	115	28	38	0.15	1.3	11.8 C
	03 20 44	51.4	64 42.4	147 22.8	3.8	0.9	7	2	149	29	39	0.13	2.2	32.4 C
	04 0 14	35.8	64 46.4	148 58.4	16.8	2.0	8	2	239	23	58	0.16	1.8	2.0 C
	04 2 47	30.2	64 35.9	146 59.0	2.1	0.9	7	3	200	22	51	0.20	1.8	24.2 D
	05 9 31	27.8	64 29.5	147 59.5	0.8	0.9	5	1	254	38	53	0.14	5.5	99.0 D
	05 17 40	27.9	64 46.8	147 33.3	0.7	1.0	8	4	136	18	29	0.25	1.0	83.1 C
	06 1 25	53.5	63 9.9	149 6.8	88.1	1.9	16	6	213	27	68	0.40	2.6	8.1 D
	06 14 2	57.5	63 9.4	150 42.0	122.6	2.2	7	1	294	38	24	0.27	16.8	13.8 D
	06 16 43	19.4	64 32.3	147 59.2	2.2	0.5	6	2	246	33	53	0.14	47.9	99.0 D
	06 22 40	44.4	66 43.8	149 33.0	5.0	2.2	6	3	350	16	22	0.15	99.0	99.0 D
	07 1 17	39.3	64 50.3	146 44.0	0.4	0.4	6	2	231	28	45	0.17	3.1	99.0 D
	07 6 2 3	4.4	65 1.7	147 46.2	0.1	0.6	5	2	246	14	29	0.19	4.1	99.0 D
	07 22 28	34.6	62 1.2	148 15.9	5.0	2.3	3	0	189	54	79	0.00	99.0	99.0 D
	08 0 4 5	28.0	64 46.3	147 44.4	7.4	1.3	5	1	151	15	29	0.06	2.7	14.9 D
	08 2 3 1	15.6	61 1.9	150 7.7	6.3	2.7	8	1	188	89	60	0.45	5.2	3.8 D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

1983	ORIGIN HR MN	TIME SEC	LAT N DEC MIN	LONG W DEG MIN	DEPTH KM	MAC NP	NS	GAP DEG	D1 KM	D3 KM	RMS SEC	ERH KM	ERZ Q KM
SEP 08	5 30	53.3	62 2.1	148 14.5	5.0		3	0 190	53	77	0.00	99.0	99.0 D
08	5 31	25.5	63 51.0	147 55.9	5.0	1.1	3	0 289	78	17	0.00	19.7	99.0 D
09	0 30	34.4	62 14.9	148 17.7	5.0		3	0 210	69	66	0.00	99.0	99.0 D
09	1 1	7.3	63 13.7	145 5.7	10.1	0.7	4	1 145	34	69	0.25	17.0	28.8 D
09	2 2	46.6	62 25.0	147 54.8	18.5	2.1	15	5 128	72	40	0.34	2.3	3.3 D
09	4 1 9	29.1	64 57.1	147 56.5	1.3	0.2	5	2 226	9	26	0.18	99.0	99.0 D
09	4 1 9	59.4	62 1.7	148 12.1	5.0	1.5	3	0 187	51	76	0.00	99.0	99.0 D
09	4 50	55.5	64 46.0	147 16.9	17.0	2.0	10	4 170	25	42	0.40	1.5	1.6 C
09	5 3 9	19.0	64 52.9	147 23.7	11.7	0.2	4	1 259	12	36	0.05	99.0	99.0 D
09	8 36	50.2	64 56.3	148 10.8	1.3	0.1	4	1 269	13	38	0.07	99.0	99.0 D
09	19 34	43.5	64 47.0	150 6.0	38.6	1.7	7	3 295	54	93	0.39	5.0	3.3 D
10	9 44	44.7	64 49.1	147 25.4	8.2	2.5	9	3 149	19	34	0.27	1.2	8.8 c
10	12 4	48.7	64 56.5	147 38.5	14.4	1.7	8	2 184	9	27	0.20	2.3	3.0 c
10	14 8	26.3	64 6.9	148 44.6	5.0	1.5	3	0 275	27	84	0.00	99.0	99.0 D
11	14 24	55.1	64 36.8	147 56.1	12.0	1.5	8	2 85	22	46	0.18	1.2	8.0 C
11	23 39	27.2	63 40.7	150 4.1	147.6	2.4	9	2 324	72	19	0.26	5.6	4.8 D
12	2 12	19.8	63 32.5	147 3.9	4.5	1.5	9	2 193	83	2	0.35	3.2	2.2 D
12	9 6	21.6	64 45.5	149 0.5	2.5	0.5	6	2 242	20	60	0.11	62.4	99.0 D
12	11 48	40.5	64 46.8	147 46.2	13.6	0.9	6	1 114	14	29	0.07	2.0	4.1 B
12	13 31	11.7	64 42.5	149 6.6	19.8	1.0	11	5 241	15	55	0.34	2.0	0.7 D
12	15 44	48.0	64 54.7	147 30.8	14.8	0.2	6	3 218	10	31	0.16	99.0	45.7 D
12	16 57	33.5	63 16.3	144 57.7	92.7	1.7	5	0 280	11	95	0.19	45.5	33.2 D
12	20 51	18.6	65 2.3	147 39.6	20.0	0.9	5	2 249	14	33	0.17	99.0	99.0 D
12	22 21	46.5	64 26.0	149 54.7	28.0	1.9	9	1 295	40	95	0.12	8.4	5.2 D
13	5 1 5	11.9	64 48.2	147 25.1	15.8	0.9	6	1 149	21	35	0.13	2.0	5.4 c
13	16 21	29.9	64 47.0	147 35.4	9.4	1.6	6	1 121	16	27	0.24	2.2	10.3 c
14	6 54	1.9	63 7.7	150 23.6	2.5	1.8	8	2 289	74	22	0.41	14.4	13.3 D
14	22 32	36.5	63 12.6	150 28.7	129.4	2	8 20	3 70	28	67	0.45	1.9	5.6 B
15	2 24	2.1	62 50.3	149 21.2	13.7	2.3	12	3 143	36	54	0.40	1.5	2.9 D
15	15 46	33.8	63 35.7	149 39.2	3.4	1.8	12	4 268	72	13	0.49	2.9	1.6 D
15	15 49	11.5	63 0.1	146 44.6	6.6	1.7	8	3 260	37	66	0.52	6.4	8.2 D
15	16 13	48.4	64 30.1	146 43.8	1.1	1.0	5	2 252	19	63	0.08	88.7	99.0 D
16	2 59	11.4	61 35.0	146 17.5	44.1	3.5	14	1 206	59	46	0.40	4.4	5.3 D
16	4 5 0	5.6	63 13.1	150 1.5	109.7	2.0	5	0 284	18	2	0.14	38.6	32.5 D
16	8 24	37.2	64 49.4	147 17.3	6.0	0.5	6	2 239	19	41	0.05	3.5	16.7 D

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

	ORIGIN TIME			LAT N		LONG W	DEPTH	MAG	NP	NS	GAP	D1	D3	RMS	ERH	ERZ	Q
1983	HR	MN	SEC	DEG	MIN	DEG	MIN	KM			DEC	KM	KM	SEC	KM	KM	
SEP	16	8	53	64	57.3	147	38.8	13.6	0.5	6	2	194	9	28	0.17	2.3	3.7 c
	16	9	14	64	23.7	149	27.4	16.6	1.0	9	3	248	22	66	0.31	1.7	1.5 D
	16	12	48	64	46.3	149	1.3	2.3	0.4	6	2	249	22	56	0.09	3.8	24.6 D
	16	14	3	62	10.5	149	23.7	12.1	2.2	7	2	209	64	21	0.08	2.8	3.5 c
	17	0	37	63	31.3	149	58.6	131.6	2.8	17	0	202	85	26	0.36	3.9	9.1 D
	17	5	36	61	59.3	149	0.4	21.5	2.7	15	1	117	40	60	0.71	2.3	3.4 c
	17	7	8	60	59.8	146	52.9	13.9	2.5	6	2	259	96	32	0.18	6.7	3.0 D
	17	14	29	64	48.3	147	22.0	8.9	0.2	6	2	233	20	27	0.17	3.4	4.9 D
	17	16	56	64	55.7	147	18.5	10.2	0.4	8	2	247	8	39	0.15	3.3	3.2 D
	17	17	28	64	55.3	147	35.6	7.8	0.4	7	3	157	10	28	0.13	1.5	4.3 c
	17	18	38	62	26.0	147	54.3	32.5	2.7	15	4	107	73	38	0.37	2.6	4.6 D
	17	23	53	64	43.2	149	1.0	11.0	0.8	8	3	240	16	52	0.13	2.2	3.6 C
	18	3	12	64	32.6	149	12.1	14.8	1.4	13	4	233	7	54	0.20	1.1	1.0 c
	18	4	26	64	22.7	148	15.0	12.4	0.8	10	2	105	13	37	0.21	1.0	1.9 B
	18	5	4	64	44.7	147	27.1	9.8	0.1	5	1	219	20	27	0.09	4.3	8.9 D
	18	7	1	64	22.9	149	34.2	20.5	2.1	10	3	267	24	72	0.29	2.3	0.8 D
	18	7	36	64	16.2	147	50.7	8.6	0.3	6	1	200	11	42	0.08	4.5	5.7 D
	18	13	33	64	39.6	146	52.7	0.4	0.4	6	1	221	29	44	0.09	2.8	99.0 D
	18	17	4	63	20.9	147	8.7	14.8	1.8	11	3	198	67	1	0.32	3.9	7.0 D
	18	18	46	64	19.4	150	24.3	13.9	1.4	11	4	320	57	21	0.36	3.2	1.8 D
	18	19	17	64	46.4	147	45.8	13.6	0.4	8	3	151	14	19	0.12	1.5	4.1 c
	18	20	5	64	52.5	149	8.6	1.2	0.8	6	2	282	33	68	0.26	2.5	99.0 D
	19	2	3	64	12.9	149	18.0	12.4	1.5	5	0	282	2	67	0.03	4.4	2.3 D
	19	5	40	63	9.0	150	31.6	132.7	2.6	21	1	134	35	74	0.36	2.3	5.6 C
	19	14	27	63	9.6	150	52.3	143.4	2.4	13	0	192	43	85	0.42	3.9	12.4 D
	19	15	53	64	50.6	147	35.0	10.1	0.6	8	3	176	12	24	0.16	2.0	5.6 C
	19	17	35	62	53.2	151	18.2	127.5	2.4	8	1	271	80	21	0.41	11.6	18.4 D
	19	16	1	64	40.1	146	53.7	2.7	1.1	9	3	219	29	44	0.24	1.5	16.1 D
	20	2	54	64	56.3	147	53.8	6.6	0.1	5	1	214	7	25	0.12	3.3	4.0 D
	20	3	27	64	22.1	147	58.1	1.5	0.9	9	3	171	32	52	0.23	1.0	57.1 c
	20	3	31	63	2.9	144	42.3	40.5	1.3	6	3	170	40	49	0.19	6.5	13.4 c
	20	7	5	63	36.2	148	9.4	11.8	1.9	11	3	289	65	7	0.17	4.0	1.8 D
	20	7	8	64	6.0	148	9.4	109.9	1.8	10	1	165	14	63	0.08	3.0	2.6 C
	20	7	15	64	46.3	147	46.2	13.2	1.4	11	4	99	14	19	0.22	0.8	2.6 B
	20	15	34	64	29.7	147	13.9	3.8	1.0	11	3	134	17	49	0.20	1.7	15.3 c

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGINTIME		LAT N	LONG W	DE PTH	MAG NP	NS GAP	D1	D3	RMS	ERH	ERZ Q
1983 HR MN	SEC	DEC MIN	DEG MIN	KM	DEG	DEG	KM	KM	SEC	KM	KM
SEP 20	15 45	61 38.2	150 36.4	50.9	5	1 205	85	76	0.16	9.4	7.8 D
	21 0 46	64 49.2	149 1.1	9.7	2.3	2 250	27	59	0.12	2.3	6.6 D
	21 11 33	64 26.4	147 29.5	5.3	0.8	2 118	26	36	0.06	1.3	17.5 c
	21 12 17	62 51.9	150 40.2	104.2	1.7	0 180	30	66	0.11	5.0	11.2 D
	21 19 50	64 57.5	147 32.8	9.8	0.2	2 184	8	32	0.16	3.7	3.8 D
	22 2 15	63 39.6	147 30.0	84.2	2.0	2 180	62	95	0.27	4.0	3.0 D
	22 2 29	65 3.5	148 20.6	13.8	0.9	5 246	28	46	0.14	1.8	4.1 c
	22 5 2	64 43.2	148 55.4	7.4	0.6	2 222	18	49	0.14	3.1	5.3 D
	22 5 8	64 33.5	149 11.0	12.2	1.1	2 233	6	53	0.26	1.6	2.5 C
	22 5 14	61 53.5	150 7.4	14.8	1.9	2 143	65	47	0.25	1.5	2.4 C
	22 12 0	64 48.1	147 33.5	10.9	0.2	3 194	16	22	0.08	1.4	4 1 c
	22 23 11	65 24.9	149 45.1	58.1	1.8	4 311	99	8	0.16	5.3	16.0 D
	23 1 29	64 39.7	148 1.3	13.1	1.6	3 83	11	22	0.21	0.8	2.8 B
	23 3 5	62 56.0	142 52.9	1.4	3.1	1 169	59	61	0.39	2.7	2.7 D
	23 4 8	62 59.1	142 54.6	0.1	2.1	0 162	59	62	0.09	4.9	4.1 D
	23 9 50	62 51.6	140 28.9	13.0	2.7	0 314	73	77	0.00	68.9	20.2 D
	23 14 12	64 41.1	146 51.7	0.7	1.3	3 224	32	45	0.24	1.8	81.6 D
	23 15 54	65 17.5	151 17.8	27.8	1.8	2 169	32	54	0.42	4.3	99.0 D
	23 18 34	64 52.1	148 57.1	9.0	0.8	3 255	33	55	0.11	3.0	14.4 D
	23 18 35	64 53.1	148 55.3	0.4	0.7	3 254	35	57	0.19	2.0	99.0 D
	24 6 28	64 38.0	148 6.8	25.3	0.4	3 180	15	22	0.11	2.4	3.6 C
	24 8 51	64 40.0	149 4.6	8.2	0.6	3 246	10	52	0.12	2.3	3.4 c
	24 9 32	63 30.8	149 39.1	95.7	1.9	4 284	43	12	0.27	2.8	2.1 D
	24 11 55	63 55.0	148 55.0	20.6	1.0	1 152	21	74	0.09	4.9	3.2 D
	24 12 48	64 52.8	149 18.5	2.1	1.1	4 280	36	72	0.21	2.2	37.9 D
	24 19 37	64 47.1	147 30.3	6.5	0.2	2 210	21	31	0.02	1.8	10.7 D
	24 20 21	63 7.6	151 4.1	131.7	2.3	1 243	26	89	0.44	7.1	7.4 D
	24 22 53	63 13.0	149 44.6	101.6	2.2	2 105	70	39	0.38	1.9	4.6 C
	25 5 48	64 56.6	146 36.3	18.1	1.0	2 278	37	62	0.15	3.3	2.1 D
	25 8 43	64 45.8	147 30.1	10.1	0.3	3 209	19	26	0.14	1.5	4.0 c
	25 11 21	65 44.3	147 55.2	0.7	0.8	0 337	87	2	0.16	95.6	99.0 D
	25 14 43	64 43.3	149 2.0	0.9	0.7	3 243	16	53	0.13	1.6	40.5 D
	25 15 5	64 46.7	147 44.8	10.2	0.4	3 155	14	20	0.17	1.0	2.9 c
	25 18 56	64 45.4	147 3.2	11.4	0.9	4 205	30	39	(J.14	1.2	5.4 D
	25 21 6	64 44.8	149 16.5	13.4	(J.9	4 282	21	65	0.13	2.0	3.6 C

ALASKAN EARTHQUAKES NORTH OF 61 DEGREES NORTH LATITUDE, 1983

ORIGIN TIME			LAT N	LONG W		DEPTH	MAG NP	NS	GAP	D1	D3	RMS	ERH	ERZ Q			
1983	HR	MN	SEC	DEG MIN	DEG MIN	KM			DEG	KM	KM	SEC	KM	KM			
SEP	25	22	19	4.5	64 45.1	147 30.3	11.0	0.5	7	2	210	19	27	0.10	1.5	4.0	c
	26	5	30	36.3	63 15.2	148 16.2	70.1	1.5	8	2	227	63	45	0.18	4.0	4.2	D
	26	7	3	9.2	63 52.3	149 6.9	20.9	1.2	7	0	211	18	83	0.28	55.9	49.4	D
	26	7	16	25.2	61 9.3	147 18.2	0.4	2.2	6	1	276	6	72	0.22	11.0	4.2	D
	26	7	39	1.6	64 47.9	149 1.1	12.6	1.0	7	2	252	25	58	0.09	1.8	5.9	D
	26	8	27	42.9	64 35.6	148 3.8	1.8	0.2	6	2	166	14	26	0.08	2.9	22.8	C
	26	10	2	39.1	63 17.1	150 22.6	112.3	2.0	11	1	287	87	58	0.28	8.0	3.6	D
	26	12	21	26.6	62 35.1	149 0.1	36.5	2.4	10	3	178	7	90	0.40	10.2	40.6	D
	26	19	14	22.1	62 55.1	149 45.7	88.9	1.8	15	2	157	100	49	0.36	2.6	5.5	D
	27	3	19	8.8	64 35.3	147 6.7	7.4	0.6	5	1	202	22	48	0.08	2.8	13.1	D
	27	6	30	36.4	63 1.3	149 46.0	90.6	1.8	11	0	159	90	58	0.17	4.5	6.6	D
	27	15	25	36.5	64 47.1	147 26.7	3.1	1.2	11	4	144	21	23	0.15	0.9	18.0	C
	27	17	51	54.5	64 46.4	147 24.0	21.5	1.3	6	0	151	24	36	0.04	1.7	1.9	c
	28	4	23	18.8	64 50.0	147 28.9	8.6	0.5	9	3	137	17	26	0.15	1.4	5.6	C
	28	5	2	42.9	64 51.3	147 32.0	9.7	0.2	6	2	185	13	27	0.08	2.2	4.7	c
	28	8	55	1.9	64 31.8	147 7.4	1.1	0.5	7	2	163	16	47	0.09	1.6	59.0	c
	28	16	3	59.3	64 16.0	149 52.4	19.4	1.3	11	4	267	32	78	0.38	2.2	1.1	D
	28	16	40	43.9	61 20.6	150 51.9	38.0	1.9	5	1	183	66	96	0.10	16.7	3.3	D
	28	19	35	8.0	64 43.0	147 30.9	16.2	0.6	7	3	214	16	32	0.19	1.7	4.4	c
	29	0	25	22.8	62 32.9	149 27.5	15.8	1.6	8	0	151	5	5	0.26	3.2	5.7	D
	29	0	31	27.5	63 45.7	149 12.3	34.7	1.3	6	0	254	14	78	0.42	36.4	39.2	D
	29	2	48	7.2	64 48.9	147 32.2	11.7	0.6	8	3	195	16	23	0.15	1.3	3.2	C
	29	14	59	13.6	63 28.1	145 27.5	0.2	2.2	9	3	136	20	28	0.25	2.1	2.3	C
	29	16	19	6.8	63 30.4	148 57.9	13.5	1.9	11	4	256	25	16	0.27	2.8	1.6	D
	30	1	25	22.2	66 23.3	148 41.4	1.3	1.9	7	1	157	67	76	0.35	2.2	17.9	D
	30	6	4	32.8	64 14.6	147 56.2	3.5	1.1	9	2	164	7	45	0.16	1.5	7.3	c
	30	6	38	56.7	61 1.4	147 13.6	25.2	2.9	13	0	180	91	28	0.26	3.6	4.3	D
	30	18	2	16.9	64 26.2	147 38.6	9.0	2.1	12	3	111	21	34	0.20	1.1	2.7	C

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 θ cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle--CFR).
- VII. Difficult to stand. Jolted by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry θ , including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also ungraced 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 θ 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.
- 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.

Note: CFR in parentheses refers to supplemental comments by Charles F. Richter.