

DEPARTMENT OF THE INTERIOR

U. S. GEOLOGICAL SURVEY

Catalog Of Earthquakes In Southern Alaska For 1985

by

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OPEN-FILE REPORT 88-31

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1988

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INTRODUCTION

The U.S. Geological Survey (USGS) has operated a regional network of seismographs in southern Alaska since 1971. The principal purpose of this network has been to record seismic data to be used to precisely locate earthquakes in the seismic zones of southern Alaska, delineate seismically active faults, assess seismic risk, document potential premonitory earthquake phenomena, investigate current tectonic deformation, and study the structure and physical properties of the crust and upper mantle. A task fundamental to all of these goals is the routine cataloging of parameters for earthquakes located within and adjacent to the seismograph network.

The initial network of 10 stations, 7 around Cook Inlet and 3 near Valdez, was installed in 1971. In subsequent summers additions or modifications to the network were made. By the fall of 1973, 26 stations extended from western Cook Inlet to eastern Prince William Sound, and 4 stations were located to the east between Cordova and Yakutat. A year later 20 additional stations were installed. Thirteen of these were placed along the eastern Gulf of Alaska with support from the National Oceanic and Atmospheric Administration (NOAA) under the Outer Continental Shelf Environmental Assessment Program to investigate the seismicity of the outer continental shelf, a region of interest for oil exploration. During the subsequent years the region covered by the network has remained relatively fixed while effort has been made to make the stations more reliable through improved electronic instrumentation and strengthened antenna systems. The majority of the stations installed since 1980 have been operated only temporarily (from one to several years) for special studies in various areas within the network. Due to reduced funding the network was trimmed back substantially in the summer of 1985 with the closure of 15 stations, 13 of which were located in and around the Yakataga seismic gap. To further reduce costs, two telephone circuits were dropped and multiple radio relays were installed in their place. This economy reduced the reliability of these telemetry links.

This catalog presents origin times, focal coordinates and magnitudes for 3569 earthquakes that occurred in 1985 (Appendix A). Readings from a total of 95 stations were used to locate the shocks, including 15 stations operated by the NOAA Alaska Tsunami Warning Center (ATWC, formerly Palmer Observatory), 16 stations operated by the Geophysical Institute of the University of Alaska, Fairbanks (GIUA), 3 stations operated jointly by the USGS and the GIUA, 3 stations operated by the Earth Physics Branch of the Department of Energy, Mines and Resources, Canada (EMRC), and one station (TTV) operated cooperatively by the University of Washington (UOFW) and the USGS.

Earthquakes in south-central Alaska as small as magnitude 3.0 have been routinely located by the National Earthquake Information Center (NEIC, formerly National Earthquake Information Service) of the USGS and its predecessor since the great Alaska earthquake of 1964 and are published in "Preliminary Determination of Epicenters" (PDE) reports. In contrast, the shocks included in this catalog are as small as magnitude -0.9 and most are smaller than magnitude 3.0. Data for the larger historic earthquakes that occurred in south-central Alaska through 1975 have been tabulated by Meyers (1976). Maps of the seismicity of Alaska and the Aleutian Islands from 1960-1983 have been published by Espinosa (1984).

INSTRUMENTATION

The locations of the stations of the USGS seismograph network operating during 1985 are plotted in Figure 1 and listed in Table 1 along with the stations from other institutions from which readings were obtained. Each USGS station has a single vertical-component seismometer except for stations GLB, RDT, SKN, and VLZ, which also have two horizontal-component seismometers. Table 2 summarizes for each station the number of earthquakes per month for which readings were obtained.

A number of changes were made to the configuration of the network during 1985. Due to reduced funding, 13 stations located in and around the Yakataga seismic gap were no longer recorded after the summer field season. Four of the 13 stations were removed (CSG, TSI, SUK and YKG). Leased telemetry circuits could no longer be afforded for the remaining stations (AGA, BMR, CHX, CVA, HQN, KMP, PIN, PNL and RAG), although the stations remained operational. Stations AGA, CHX, CVA, PIN, PNL and RAG were placed on backup status. A backup station has the same channel frequency as another higher priority station on the same telemetry circuit. Data from a backup station will only be recorded if the higher priority station fails, thereby opening that frequency channel on the telemetry circuit. The station at Auke Bay, ABF, near Juneau, failed in July 1985 and has not been repaired since then due to insufficient funds. MSE was damaged (probably by a bear) in August 1985 and was removed the following month. SLV was damaged during road construction in October 1984, and was closed in the summer of 1985. TTV was operated cooperatively by the University of Washington and the USGS, and was closed in July 1985. The station on Montague Island was moved from the southeast to the northwest side of the island and the station code was changed from MTG to MTU. Three new seismic stations were installed in July: KNI and LOU on Knight Island in southwestern Prince William Sound and GBY on the eastern side of the Kenai Peninsula across from Knight Island.

The instrumentation used in the USGS seismograph network is illustrated in the block diagram in Figure 2. Data from each seismometer are telemetered to the NOAA Alaska Tsunami Warning Center in Palmer except for station ABF which is recorded locally in Juneau by a drum recorder. The standard equipment at each field site includes a vertical seismometer with a natural frequency of 1.0 Hz (Mark Products, Model L-4), an electronics package consisting of an amplifier, calibrator, and a voltage-controlled oscillator (A1VCO), and "air-cell" storage batteries (McGraw-Edison, Model ST-2-1000) or a solar panel and 80 amp-hr storage batteries.

The USGS-designed A1VCO amplifier-oscillator (Rogers and others, 1980) features crystal-referenced center frequency, digital channel selection, firmware-based calibration cycle, ultra-low noise synthesized FM output and automatic gain-ranging (Rogers, 1986). The crystal reference eliminates the problem of carrier drift experienced with previous VCO designs. In addition, by using digital techniques to synthesize and shape the carrier waveform, the A1VCO reduces channel noise, eliminates lengthy tuning procedures, and allows field selection of channel frequencies. The A1VCO automatically calibrates the seismograph system every 24 hours to provide information on electronic noise, geophone response, amplifier/VCO response, overall system response, station identification code, field gain setting, instrument temperature, and battery voltage. With this information the operational status of the station can be monitored, and equipment problems can be diagnosed prior to visiting the field installation. The A1VCO incorporates an automatic gain-ranging feature so that larger events are less likely to clip. Gain-ranging reduces

1985 SOUTHERN ALASKA SEISMOGRAPHS

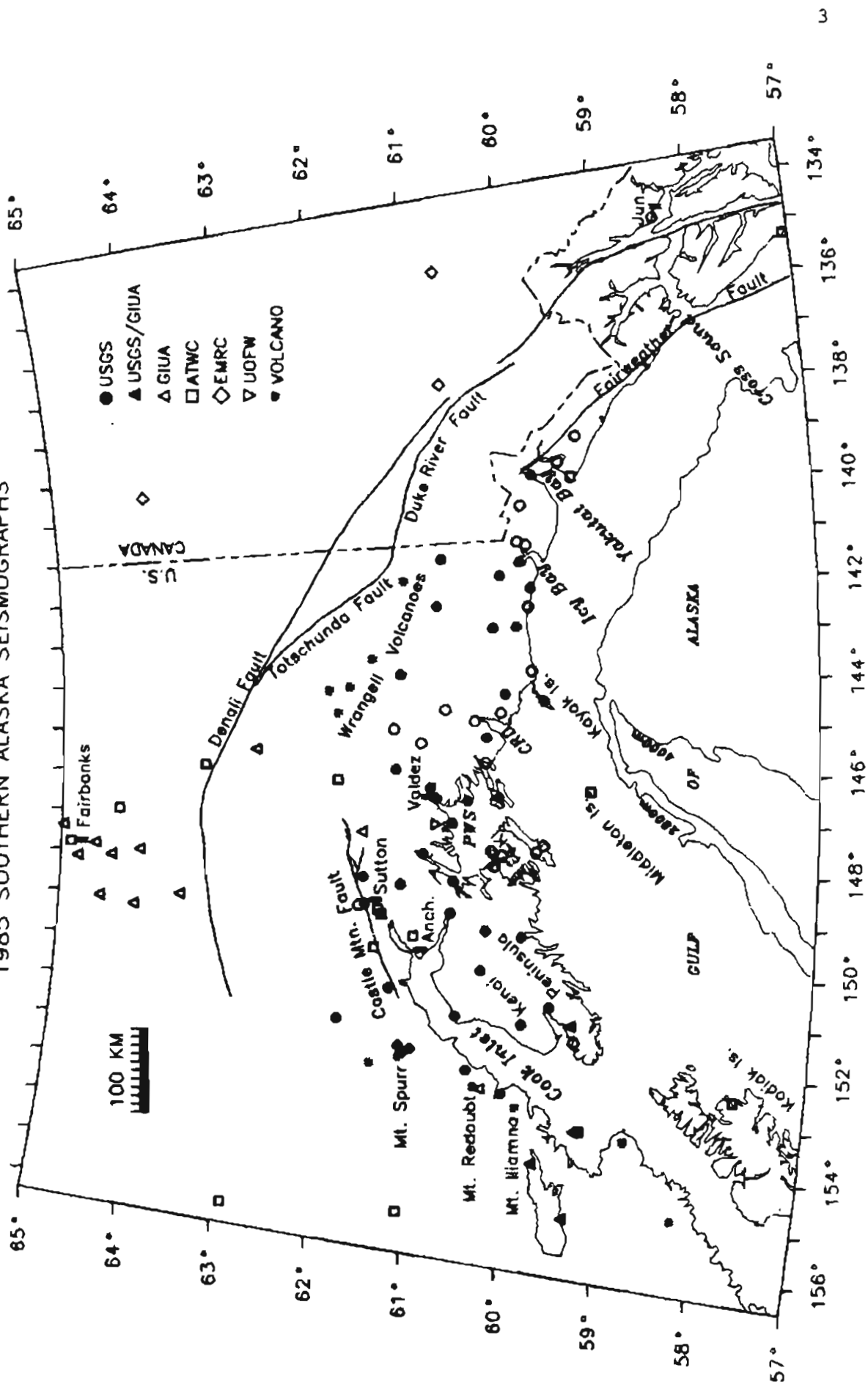


Figure 1: Map showing the locations of all USGS seismograph stations in southern Alaska and of other stations used in the preparation of this catalog. Symbols not listed in the key are as follows: open circles, USGS stations that opened or closed in 1985 (see Table 1); heavy lines, principal active faults in southern Alaska: Anch. = Anchorage; CRD = Copper River Delta; CB = Glacier Bay; Jun. = Juneau; KI = Knight Is.; PWS = Prince William Sound. Stations BRW, IMA, and SDN are located outside the map borders and are not plotted.

Table 1. Station parameters

STA CODE	STATION NAME	LATITUDE N	LONGITUDE W	ELEV M	P MOD	D KM	OLY1 SEC	OLY2 SEC	OLY3 SEC	TDLY SEC	MAG AT 1 HZ	INST	REMARKS
ABF	AUKE BAY	58 22.88	134 38.68	3	3	0.01	0.00	0.00	0.00	0.00	196400	USGS	
AGA	AGASSIZ LAKES	60 9.25	141 2.00	1824	3	0.01	0.00	0.00	0.00	-0.27	228000	USGS	BACKUP 8/25/85
AUH	AUGUSTINE DOME H	59 21.83	153 26.21	1868	1	0.01	0.00	0.00	0.00	0.00		GIUA	
AUI	AUGUSTINE ISLAND	59 20.05	153 26.62	282	1	0.01	0.00	0.00	0.00	0.00		GIUA	
AUL	AUGUSTINE LAVA FLOW	59 22.93	153 26.07	360	1	0.01	0.00	0.00	0.00	0.00		GIUA	
BAL	BALDY	61 2.17	142 20.67	1308	3	0.01	0.00	0.00	0.19	0.00	182400	USGS	
BCP	BANCAS POINT	59 57.20	139 38.10	396	3	0.01	0.00	0.00	0.00	-0.27	790000	USGS	
BGM	BIG MOUNTAIN	59 23.66	155 13.76	625	1	0.01	0.00	0.00	0.00	-0.27	638000	GSUA	
BLR	BLACK RAPIDS	63 30.10	145 50.70	809	2	0.01	0.00	0.00	0.00	0.00		ATWC	
BHR	BRENNER RIVER	58 50.09	144 36.10	823	2	0.01	0.00	0.00	0.37	-0.27	987000	USGS	CLOSED 7/15/85
BRK	BRADLEY LAKE	59 45.86	150 53.13	631	1	0.01	0.00	0.00	0.00	0.00	105400	USGS	
BRW	BARROW	71 16.43	156 47.00	13	1	0.01	0.00	0.00	0.00	0.00		GIUA	
CCB	CLEAR CREEK BUTTE	64 30.00	147 48.33	219	1	0.01	0.00	0.00	0.00	0.00		GIUA	
CFI	COLLEGE FORD	61 10.96	147 45.99	3	2	0.01	0.00	0.00	0.00	0.00	456000	USGS	
CGL	CAPPS GLACIER	61 18.46	152 0.40	1002	1	0.01	0.00	0.00	0.00	0.00	167200	USGS	
CHX	CHAIX HILLS	60 3.70	141 7.00	1067	3	0.01	0.00	0.00	0.00	-0.05	395000	USGS	BACKUP 8/24/85
CHP	CHINA POOT	59 31.55	151 14.16	564	1	0.01	0.00	0.00	0.00	0.00	380000	GSUA	
CRP	CRATER PEAK	61 16.02	152 9.33	1622	1	0.01	0.00	0.00	0.00	0.00	380000	USGS	
CSG	CHILDS GLACIER	60 39.66	144 51.38	678	2	0.01	0.00	0.00	0.00	-0.01	820000	USGS	CLOSED 8/10/85
CTG	CHITINA GLACIER	60 57.90	141 20.00	1554	3	0.01	0.00	0.00	0.53	0.00	790000	USGS	
CVA	CORDOVA	60 32.79	145 44.96	90	2	0.01	0.00	0.00	0.00	-0.01	289000	USGS	BACKUP 9/28/85
DWY	DAWSON CITY	64 3.20	139 25.90	346	3	0.01	0.00	0.00	0.00	0.00		EMRC	
FBA	COLLEGE OUTPOST	64 64.00	147 47.60	320	1	0.01	0.00	0.00	0.00	0.00		ATWC	
FID	FIDALGO	60 43.73	146 35.79	488	2	0.01	0.00	0.00	0.00	-0.27	805000	USGS	
GBY	GRANITE BAY	60 25.93	147 50.70	495	2	0.01	0.00	0.00	0.00	0.00	334400	USGS	OPENED 7/21/85
GHD	GLORYHOLE	61 46.33	148 55.45	1021	1	0.01	0.00	0.00	0.00	0.00	836000	USGS	
GKC	GOLD KING CREEK	64 10.72	147 56.00	490	1	0.00	0.00	0.00	0.00	0.00		GIUA	
GLB	GILAHINA BUTTE	61 26.51	143 40.63	845	3	0.01	0.00	0.00	1.50	0.00	1672000	USGS	
GLI	GLACIER ISLAND	60 52.70	147 5.65	429	2	0.01	0.00	0.00	0.00	-0.27	942000	USGS	
GLM	GILMORE DOME	64 59.23	147 23.33	820	2	0.01	0.00	0.00	0.00	0.00		GIUA	
GYO	GUYOT	60 0.70	141 20.29	103	3	0.01	0.00	0.00	0.00	-0.27	208000	USGS	
HDA	HARDING LAKE	64 24.35	146 57.23	450	1	0.01	0.00	0.00	0.00	0.00		ATWC	
HIN	HITCHINBROOK ISLAND	60 23.01	146 30.10	611	2	0.01	0.00	0.00	0.00	-0.01	425000	USGS	
HMT	HAMILTON	60 20.19	144 15.64	620	3	0.01	0.00	0.00	1.20	-0.27	820000	USGS	
HNT	HARLEQUIN	59 27.10	138 52.52	372	3	0.01	0.00	0.00	0.00	-0.27	987000	USGS	CLOSED 9/04/85
HYT	HAINES JUNCTION	60 49.56	137 30.24	1416	3	0.01	0.00	0.00	0.00	0.00		EMRC	
ILM	ILIAMA	60 10.92	152 40.97	560	1	0.01	0.00	0.00	0.00	0.00	760000	USGS	
INA	INDIAN MOUNTAIN	66 4.11	153 40.72	1380	1	0.01	0.00	0.00	0.00	-0.27		ATWC	
KAI	KAYAK ISLAND	59 55.61	144 24.90	311	2	0.01	0.00	0.00	1.50	-0.01	380000	USGS	
KOC	KODIAK	57 44.07	152 29.50	13	1	0.01	0.00	0.00	0.00	-0.27		ATWC	
KLU	KLUTINA	61 29.57	145 55.21	1021	2	0.01	0.00	0.00	0.00	0.00	316100	USGS	CLOSED 7/10/85
KNP	KIMBALL PASS	61 30.70	145 1.09	1143	2	0.01	0.00	0.00	0.00	-0.27	1732000	USGS	OPENED 7/21/85
KNI	KNIGHT ISLAND	60 20.92	147 44.16	434	2	0.01	0.00	0.00	0.00	0.00	418000	USGS	
KNK	KNIK GLACIER	61 24.76	140 27.34	595	2	0.01	0.00	0.00	0.00	0.00	957000	USGS	
LOU	LOUIS BAY	60 27.93	147 38.66	490	2	0.01	0.00	0.00	0.00	0.00	1732000	USGS	OPENED 7/16/85
LVY	LEVY	64 13.00	149 15.20	230	1	0.01	0.00	0.00	0.00	0.00		GIUA	
MCK	MCKINLEY PARK	63 43.94	148 56.10	610	1	0.01	0.00	0.00	0.00	0.00		GIUA	
MID	MIDDLETON ISLAND	59 26.67	146 20.34	37	2	0.01	0.00	0.00	0.00	-0.27		ATWC	
MSE	MOOSE CREEK	61 50.30	148 50.03	1310	1	0.01	0.00	0.00	0.00	0.00	017000	USGS	CLOSED 9/30/85
MSP	MOOSE PASS	60 29.35	149 21.64	150	1	0.01	0.00	0.00	0.00	0.00	912000	USGS	
MTG	MONTAGUE ISLAND	59 54.71	147 29.02	31	2	0.01	0.00	0.00	0.00	-0.01	104000	USGS	CLOSED 7/16/85
MTU	MONTAGUE ISLAND	59 55.27	147 39.02	434	2	0.01	0.00	0.00	0.00	0.00	448000	USGS	OPENED 7/21/85
NEA	NEWANA	64 34.63	149 4.63	365	1	0.01	0.00	0.00	0.00	0.00		GIUA	
NKA	NIKISHKA	60 44.50	151 14.20	100	1	0.00	1.36	0.00	0.00	0.00	57000	USGS	
NNL	NINILCHIK	60 2.53	151 17.70	366	1	4.00	0.57	0.00	0.00	0.00	209000	USGS	

Table 1 (continued). Station parameters

STA CODE	STATION NAME	LATITUDE N	LONGITUDE W	ELEV M	P MOD	D KM	DLY1 SEC	DLY2 SEC	DLY3 SEC	TDLY SEC	MAG AT 1 HZ	INST	REMARKS
PAX	PAXSON	62 58.25	145 28.11	1130	2	0.01	0.00	0.00	0.00	0.00		GIUA	
PDB	PEDRO BAY	59 47.27	154 11.55	305	1	0.01	0.00	0.00	0.00	-0.27	79000	GSUA	
PIN	PINNACLE	60 5.98	148 15.49	975	3	0.01	0.00	0.00	0.00	-0.27	83600	USGS	BACKUP 8/25/85
PLR	PALMER (USGS)	61 35.53	149 7.85	100	1	0.01	0.00	0.00	0.00	0.00	15900	USGS	
PME	PALMER EAST	61 37.90	149 1.70	232	1	0.01	0.00	0.00	0.00	0.00		ATWC	
PMR	PALMER OBSERVATORY	61 36.53	149 7.85	100	1	0.01	0.00	0.00	0.00	0.00		ATWC	
PMS	ARCTIC VALLEY	61 14.68	149 33.63	716	1	0.01	0.00	0.00	0.00	0.00		ATWC	
PNL	PENINSULA	59 48.86	139 23.82	585	3	0.01	0.00	0.00	-1.10	-0.27	77500	USGS	BACKUP 9/04/85
PRG	PORTAGE	60 51.87	149 1.21	55	1	0.01	0.00	0.00	0.00	0.00	80500	USGS	
PWA	HOUSTON	61 39.05	149 52.72	137	1	0.01	0.70	0.00	0.00	0.00		ATWC	
PWL	PORT WELLS	60 51.56	148 20.89	549	2	0.01	0.00	0.00	0.00	0.00	88100	USGS	
RAG	RAG	60 23.22	144 48.51	739	2	0.01	0.00	0.00	0.00	-0.81	47100	USGS	BACKUP 9/20/85
RDS	RICHARD D. SIEGRIST	64 49.69	148 8.68	510	2	0.01	0.00	0.00	0.00	0.00		GIUA	
RDT	REDOUBT	60 34.43	152 24.37	930	1	0.01	0.36	0.00	0.00	0.00	77500	USGS	
RED	REDOUBT VOLCANO	60 25.14	152 46.32	1067	1	0.01	0.00	0.00	0.00	0.00		GIUA	
SAW	SAWMILL	61 48.49	148 19.98	740	2	0.01	0.00	0.00	0.00	0.00	167200	USGS	
SCM	SHEEP MOUNTAIN	61 58.00	147 19.66	1020	2	0.01	0.00	0.00	0.00	0.00		GIUA	
SDM	SAND POINT	55 28.48	150 29.75	30	1	0.01	0.00	0.00	0.00	0.00		GIUA	
SGA	SHERMAN GLACIER	60 32.04	145 12.42	424	2	0.01	0.00	0.00	0.00	-0.81	74400	USGS	
SLV	SELDOVIA	59 26.20	151 34.83	91	1	0.01	0.00	0.00	0.00	0.00	36400	USGS	CLOSED 6/29/85
SIT	SITKA	57 3.42	135 19.47	19	3	0.01	0.00	0.00	0.00	-0.27		ATWC	
SKN	SKWENTNA	61 58.82	151 31.70	564	1	0.01	0.00	0.00	0.00	0.00	167200	USGS	
SLK	SKILAK	60 38.74	150 13.26	655	1	0.01	0.10	0.00	0.00	0.00	97200	USGS	
SPU	SPURR	61 18.90	152 3.26	800	1	0.01	0.39	0.00	0.00	0.00	182400	USGS	
SSN	SUSITNA	61 27.83	150 44.60	1297	1	0.01	0.67	0.00	0.00	0.00	47100	USGS	
SSP	SUNSHINE POINT	60 12.30	142 49.80	305	3	0.01	0.00	0.00	0.79	-0.27	20900	USGS	
SUK	SUCKLING HILLS	60 4.42	143 46.62	454	3	0.01	0.00	0.00	2.14	-0.81	22000	USGS	CLOSED 8/10/85
SVV	SPARREVOHN	61 6.49	155 37.30	762	1	0.01	0.00	0.00	0.00	-0.27		ATWC	
SWD	SEWARD	60 6.22	149 26.96	91	1	0.01	0.00	0.00	0.00	0.00	38000	USGS	
TOA	TOLSONA	62 6.29	146 18.34	989	2	0.01	0.00	0.00	0.00	0.00		ATWC	
TSI	TSINA	61 13.57	145 20.24	1113	2	0.01	0.00	0.00	0.00	-0.27	76500	USGS	CLOSED 7/17/85
TTA	TATALINA	62 55.88	156 1.32	914	1	0.01	0.00	0.00	0.00	-0.27		ATWC	
TYV	TERRENTIEV LAKE	61 3.29	147 7.29	533	2	0.01	0.00	0.00	0.00	-0.27		UOFW	CLOSED 7/14/85
VLZ	VALDEZ	61 7.89	146 19.92	10	2	0.01	0.00	0.10	0.00	-0.27	45600	USGS	
VZW	VALDEZ WEST	61 3.54	146 33.24	796	2	0.01	0.00	0.00	0.00	-0.27	86600	USGS	
WAX	WAXELL RIDGE	60 26.90	142 51.10	975	3	0.01	0.00	0.00	0.61	-0.27	79000	USGS	
WHC	WHITEHORSE	60 44.20	135 5.90	732	3	0.01	0.00	0.00	2.55	0.00		EMRC	
WRG	WHITE RIVER GLACIER	60 2.27	142 1.90	550	3	0.01	0.00	0.00	0.66	-0.27	19000	USGS	
WRH	WOOD RIVER HILL	64 28.20	148 5.39	314	1	0.01	0.00	0.00	0.00	0.00		GIUA	
YAH	YANTSE	60 21.51	141 44.70	2135	3	0.01	0.00	0.00	0.17	-0.27	197500	USGS	
YKG	YAKATAGA	60 4.20	142 25.33	46	3	0.01	0.00	0.00	0.00	-0.27	5500	USGS	CLOSED 9/03/85
YKU	YAKUTAT	59 32.72	139 43.73	15	3	0.01	0.00	0.00	0.35	-0.27		ATWC	

This table lists geographic coordinates and other pertinent information for seismograph stations operated by the USGS and other institutions and used in the preparation of this catalog. PMOD is the number of the preferred P-wave velocity model assigned to the station unless the earthquake occurs east of longitude 144.5° W and outside the Icy Bay region, in which case the eastern model (model 4) is assigned to all the stations (see Table 3). The numbers 1, 2, and 3 correspond to the western, central, and Icy Bay models. D is the thickness in kilometers of the low-velocity surficial sedimentary layer assigned in the calculation of traveltimes to a given station. DLY is the station P-phase traveltime delay correction in seconds. The station traveltime corrections for delay model 4 (eastern model) are all currently set to 0.00 s and are not listed. TDLY is the telemetry delay correction in seconds. The magnification (MAG) of the vertical seismograph component is given at 1 Hz. The institutions (INST) other than the USGS operating the stations are the Alaska Tsunami Warning Center (ATWC), the Geophysical Institute of the University of Alaska (GIUA), the University of Washington (UOFW) and the Department of Energy, Mines and Resources, Canada (EMRC). Stations operated jointly by the USGS and GIUA are listed as GSUA.

USGS STATIONS

[illegible]

	A U H	A U I	A U L	B R L	B R W	C B Y	C B W	F B A	F B C	G L M	H D A	H Y T	I M A	K D Y	L V C	M M I	N E A	P A X	P M R	P M S	P M S	P W A	R D S	R E C	S D M	S D T	S V W	T O A	T V A	T V V	W H C	W R H	Y K U	#EQ		
JAN	0	0	0	1	0	0	0	2	0	0	0	0	0	3	1	0	0	0	18	0	7	7	A	0	1	6	0	5	16	1	2	0	0	1	0	392
FEB	1	0	0	0	1	0	0	2	1	0	0	0	0	1	1	0	0	16	0	7	7	9	1	1	5	0	4	12	2	2	0	0	1	0	256	
MAR	1	0	0	0	0	0	0	2	1	0	0	0	0	3	1	0	0	19	0	0	C	9	1	7	0	0	6	17	3	5	0	0	1	0	318	
APR	1	1	0	0	0	0	0	2	1	0	0	0	0	3	1	0	0	19	0	0	8	9	1	7	0	0	6	17	2	6	0	0	1	0	265	
MAY	1	1	0	1	1	0	0	2	1	0	0	0	0	2	1	0	0	14	1	A	7	1	6	0	0	0	5	16	1	4	0	0	1	0	281	
JUN	1	0	0	1	1	0	0	0	1	0	0	0	0	2	1	0	0	14	0	B	7	1	6	0	0	0	3	15	1	4	0	0	1	0	282	
JUL	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	19	2	C	8	1	8	0	0	0	3	17	1	2	0	0	1	0	297	
AUG	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	10	5	F	9	1	A	A	0	0	3	17	0	0	0	0	1	0	409	
SEP	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	17	4	B	7	1	6	A	0	0	2	15	2	0	0	0	1	0	264	
OCT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	17	0	9	7	1	6	0	0	0	3	16	0	0	0	0	1	0	262	
NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	18	0	B	9	1	7	0	0	0	3	17	1	0	0	0	1	0	288	
DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	18	0	A	7	1	6	0	0	0	2	15	1	0	0	0	1	0	268	
STA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	5	2	7	0	2	1	1	3	1	1	1	1	1	6	1	1	1	2	1	2	4	6	1	1	5	2	9	5	7	9	8	2	1	5	5	

This table lists the number of earthquake readings that were obtained from each station per month. The number "0" corresponds to 1-9 readings, "1" to 10-19, etc. to "9" for 90-99 readings. The letter "A" corresponds to 100-109 readings, "B" to 110-119, etc. to "Z" for 350-359 readings. An asterik "*" indicates 360 or more earthquakes. The total number of earthquakes from which readings were taken for each station are given below the monthly tabulations. Stations 8GM and SLV were not operational during 1985 and are not included in this table.

A A A B B C D F G G H H I K L M M N P P P P P R R S S S S T Y T W W Y
U U U L R C W B K L D Y M D V C I E A M M M W D E C D I V O T T H R K U
H J L R W B Y A C M A T A C Y K D A X E R S A S D M N T W A A V C H U

the original gain by a factor of 10 within one millisecond after the input signal exceeds a preset threshold. A few of the stations now have an additional gain-range step which reduces the original gain by a total factor of 500. Another feature of the A1VCO permits precise times to be determined for the triggered operation of a remote strong-motion earthquake recorder co-located with the high-gain seismic station. When the strong-motion recorder triggers and when the recording ends, a distinctive signal is superimposed on the A1VCO output and recorded on film and magnetic tape. This signal can be accurately timed to determine the time of operation of the strong-motion recorder.

Data are telemetered via a combination of VHF (162-174 MHz) radio links and leased telephone circuits, some of which use satellite links having a 0.27 s transmission delay per hop. The radio equipment consists of low-power (100 mW) transmitters and receivers adapted from HT-200 Motorola handie-talkie transceivers, and either Yagi antennae with 9 db directional gain (Scala, Model CAS-150) or log-periodic antennae (Scala, Model CL-150). At the receive sites, where the seismic signals enter the telephone circuits, base-station radio receivers (G.E. Model R46AP66B) with greater sensitivity are used. The central recording facility incorporates a bank of discriminators (USGS-designed NCER J101 or Develco Model 6203), four 16 mm-film 20-channel oscillographs (Teledyne Geotech Develocorder, Model RF400 and 4000D), a 14-track FM magnetic tape recorder (Bell and Howell Model VR3700B), three 3-channel drum recorders (Teledyne Geotech Helicorder, Model RV301B), and a time-code generator (Datum, Model 9100).

The principle of operation is as follows: The seismometer translates ground velocity into an electrical voltage that is fed into the amplifier/VCO unit. There the amplified voltage causes the frequency of the VCO to fluctuate about its center frequency. The frequency-modulated (FM) tone from the amplifier/VCO unit is carried directly to the recording site by VHF radio links and/or voice-grade telephone circuits. Signals from nine seismograph stations can be transmitted on a single telemetry circuit using standard frequency division multiplexing techniques with a 340 Hz separation between carriers and a constant bandwidth of 250 Hz per channel. The channel center frequencies range from 340 to 3,060 Hz. At the recording site the FM seismic signal is demodulated by a discriminator. The demodulated signal, which is simply an amplified and filtered form of the initial signal from the seismometer, is recorded on the oscillograph and tape recorder together with time signals from the time-code generator. Twenty-four hours of data from 18 stations can be recorded on a single 43 m-long roll of 16-mm film, while data from nine stations can be recorded on a single track of a 2,195 m-long, 14-track tape. Several stations are also recorded on Helicorder records for monitoring purposes.

Figure 3 illustrates the response characteristics of the entire seismic system from seismometer to film viewer. The response level at each station is adjusted in steps of 6 decibels so that the ambient seismic noise produces a small deflection of the trace on the film. As a result, the actual response for an individual station may differ from that of the typical station by a factor of 2, 4, 8, etc. The magnification of the typical station is about 6×10^4 at 1 Hz and 10^6 at 10 Hz.

DATA PROCESSING

The 16-mm films (four per day), magnetic tapes (one per day), and Helicorder records (three per day), are mailed weekly from Palmer to Menlo Park where the seismic data are processed by the following multi-step routine:

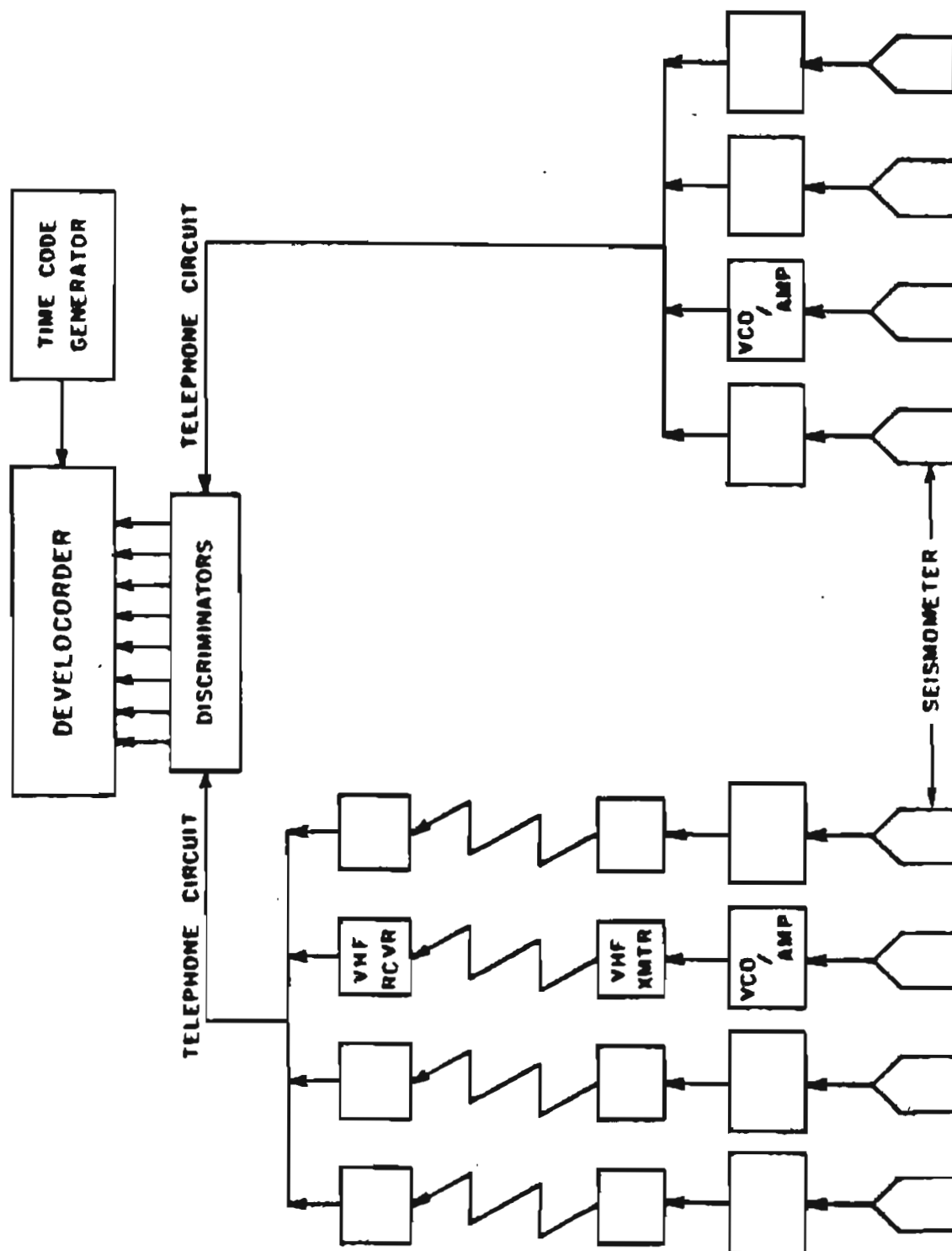


Figure 2. Block diagram of telemetered seismograph system in the USGS Alaska seismic network.

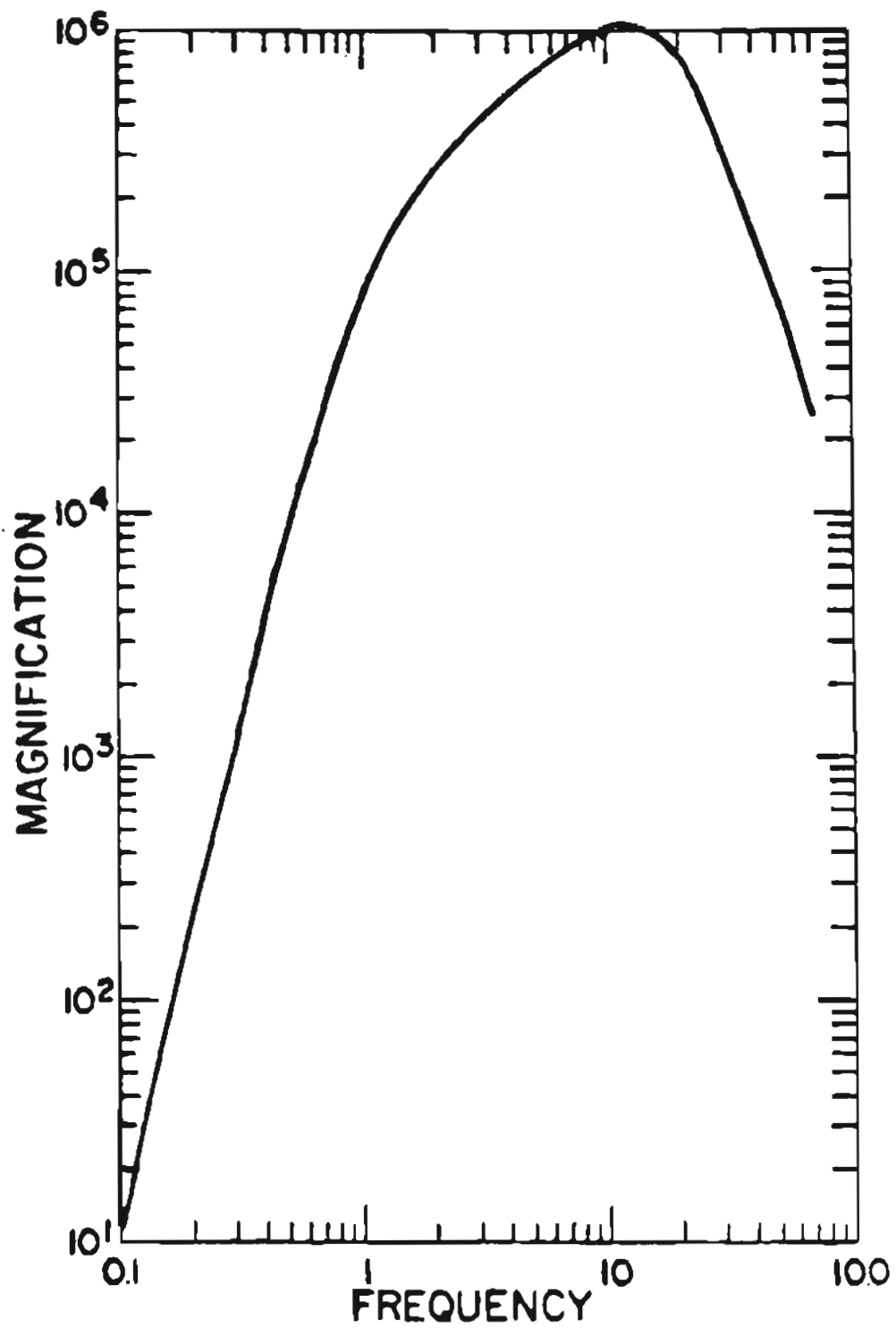


Figure 3. System response curve for typical USGS Alaska seismographs that incorporate the A1VCO unit.

1. Scanning. The scan film, which records data from 18 stations distributed throughout the network, is scanned to identify all seismic events including those of local, regional, and teleseismic origin, and to note the earliest P-arrival time of the event as well as the S-phase minus P-phase (S-P) time arrival and the duration of the signal (see section on Magnitude) for the first 3 stations.

2. Timing. For the "well-recorded" local earthquakes identified in the scanning process, the following data are read from each station: P- and S-wave arrival times, direction of first motion, duration of signal in excess of a given threshold amplitude, and period and peak-to-peak amplitude of maximum recorded signal. The P and S times read are assigned weights according to the reader's confidence of the accuracy of the picks which are influenced by the quality of the phase arrivals and records. Weights range from a full weight (coded 0) for the highest quality readings to no weight (coded 4) for times too poor to be used for hypocenter determination.

The criterion for choosing earthquakes to be timed is based on the signal duration. The area within which earthquake locations are routinely determined is bounded approximately by longitudes 156° and 134° W. and by latitudes 58° and 62.5° N. Starting in September 1985, the eastern border of the study area was moved westward from longitude 134° W to 138° W because all but one of the USGS stations east of approximately longitude 141° W were closed. The study area is subdivided into western and eastern regions at longitude 145° W. In the western region, only events with average signal durations longer than 30s are routinely timed. In the eastern region, all earthquakes that are recorded by at least three stations and that produce at least four clear arrivals are timed. These criteria were established to select from the large number of earthquakes recorded by the network those shocks that are of greatest interest to current research objectives.

In areas where special studies are being conducted, exceptions to the standard criteria may be made in order to locate more events. To investigate the distribution of shallow crustal earthquakes near the city of Anchorage and around the active volcanoes, Mt. Spurr and Mt. Redoubt, events recorded at a minimum of three stations were located provided the S-P time interval was less than or equal to 5 seconds at one of the stations PMS, SSN, SPU, and RDT. After the 1984 Sutton earthquake, special criteria were established to study the aftershock sequence. Since September 9, 1984, any earthquake with an S-P time interval of less than or equal to 4 seconds at GHO and with a signal duration greater than or equal to 8 seconds at KNK was timed. Starting on March 1, 1985, all earthquakes with a S-P time interval of less than or equal to 3.5 seconds at station BRLK were timed. Several different criteria were used in southwestern Prince William Sound following the installation of three new seismographs on and near Knight Island in July of 1985. These criteria have reduced the magnitude threshold for processing events in this area.

The bulk of the timing is done by projecting the seismic traces from the film onto a one-film wire-grid or four-film sonic (Astrue and others, 1983) computer-based digitizing table, where the P- and S-phases, maximum amplitude, and coda duration are input as x-y coordinates into a computer and reformatted for input into a hypocentral location program. Since the fall of 1983, some of the timing has utilized digital waveform data obtained by digitizing the daily FM magnetic tapes at 100 samples per second. An interactive, computer-based processing system (Stevenson, 1978) is used to display the waveforms and to pick the phase data.

3. Initial computer processing. The phase data for the timed events are batch processed by computer using the program HYPOELLIPSE (Lahr, 1984) to obtain origin times, hypocenters, magnitudes and, if desired, first-motion plots for fault-plane solutions. The HYPOELLIPSE computer program determines hypocenters by minimizing differences between observed and computed traveltimes through an iterative least-squares scheme. In many respects the program is similar to HYP071 (Lee and Lahr, 1972), from which it was derived. Important features available in HYPOELLIPSE, but not in HYP071, include multiple crustal and delay models, calculation of confidence ellipsoids, and incorporation of a station-history data base to keep the station gains updated.

4. Analysis of initial computer results. Each hypocentral solution is checked for traveltime residuals greater than or equal to 1 s and for a poor spatial distribution of stations. Arrival times that produce large residuals are re-read. For shocks with a poor distribution of stations, readings from additional stations, including those outside the USGS network, are sought.

5. Final computer processing. Poor hypocentral solutions are rerun with corrected and/or additional data, and the new solutions are checked for large residuals that might be due to remaining errors. Corrections are made as required before the final computer run.

The earthquake locations are based on P- and S- arrivals. S-arrivals provide important constraints on epicenters of shocks outside the network and depths of events in the Benioff zone beneath the network in Cook Inlet. For some large events timed from the films S-arrivals cannot be read at any station because the traces on the film overlap each other or are too faint to read. However, S-arrivals not readable from the films can often be picked on ink-squirt paper playbacks made from the magnetic tape.

VELOCITY MODELS

Our experience with locating earthquakes in southern Alaska suggests that significant lateral variations are present in the velocity structure across the network. Such variations might be expected from the complex geology and tectonics of the region (e.g., Plafker, 1967; Page and others, 1986). Four velocity models were used in locating the 1985 earthquakes, as described below and summarized in Table 3.

1. Western Model

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/s)</u>
1	0 - D	2.75
2	D - 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 based on a study of earthquakes below the Kenai Peninsula (Model A, Matumoto and Page, 1969). The thickness, D , of the first layer is allowed to vary between stations to account for the presence of thick sections of low-velocity sediments beneath the stations NKA and>NNL, which are located in the Cook Inlet basin. For these stations, D is 4 km; for all other stations, D is 0.01 km. It is recognized that a model comprised of uniform horizontal layers is a poor representation of the actual velocity structure in the vicinity of a subduction zone (Mitronovas and Isacks, 1971; Jacob, 1972, McLaren and Frohlich, 1985), however such a model does have the advantage of simplifying the computation of traveltimes. In order to determine any bias that might result from the approximation, a set of events in the Benioff zone below Cook Inlet was relocated using a ray-tracing program of E. R. Engdahl and incorporating a more realistic, three-dimensional velocity model (Lahr, 1975). Hypocenter shifts, apparently due to the oversimplified flat-layer model, ranged from near zero at a depth of 60 km to as great as 25 km at the 160 km depth. The offsets were oriented in such a way that the dip of the Benioff zone would appear to be too great for locations based on a flat-layered model.

2. Central Model

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/s)</u>
1	0.0	2.75
2	0.01	6.4
3	below 39	8.0

This model was developed empirically by minimizing the RMS traveltime residuals for a set of selected earthquakes in the Valdez region.

3. Icy Bay Model

The Icy Bay model consists of a layer of linearly increasing velocity with depth over a constant-velocity half space and was developed for aftershocks of the 1979 St. Elias earthquake by Stephens and others (1980). The P-wave velocity of the first layer increases from 5.0 km/s at the surface to 7.8 km/s at 32 km depth, while the half-space has a velocity of 8.2 km/s.

4. Eastern Model (exclusive of Icy Bay)

<u>Layer</u>	<u>Depth (km)</u>	<u>P velocity (km/s)</u>
1	0.0	2.75
2	0.01	6.25
3	below 30.0	7.5

This model is based on a study of earthquakes below the Wrangell volcanoes (Stephens and others, 1984).

The choice of which velocity model to use in calculating the traveltime from an earthquake to a given station is based on the location of both the earthquake and the station. This particular method of assigning velocity models was chosen to minimize possible spurious offsets between hypocenters on opposite sides of a model boundary. Table 3 summarizes the assignment of velocity models. The numbers 1-4 correspond to the western, central, Icy Bay, and eastern models, respectively. Work continues on improving our modeling of the first-order velocity features of southern coastal Alaska.

Table 3. Geographical boundaries used to assign velocity model, starting depth, and delay models

EARTHQUAKE LOCATION	VELOCITY MODEL			TRIAL DEPTH KM	DELAY MODEL
	station location				
	Western West of 148.75°W	Central Between 148.75°W and 144.5°W	Eastern East of 144.5°W		
Western (West of 148°W)	1	2	3	75.	1
Central (148°-144.5°W)	1	2	3	30.	2
Icy Bay (59.25°-61.0°N, 138°-142.25°W)	1	2	3	15.	3
Eastern (East of 144.5°W, but exclusive of Icy Bay)	4	4	4	15.	4

TRAVELTIME DELAY MODELS AND TRIAL FOCAL DEPTHS

Corrections for P-phase traveltime delays are applied at stations in the network that have consistent large residuals for large groups of earthquakes. Corresponding corrections for S-phase traveltimes are determined by adding two components: the P-delay multiplied by 1.78 (the average P- to S-velocity ratio) plus the S-phase delay. Each station has four P-delay corrections assigned to it (see Table 1). The particular correction that is used to locate an earthquake is determined by the region in which the earthquake occurs (see Table 3). For example, a station near Icy Bay that is used to locate an earthquake beneath Cook Inlet will be assigned a correction DLY1, but the same station will use DLY3 to locate an earthquake that occurs beneath Icy Bay.

Additional corrections are applied at several stations to correct for telemetry delays associated with one or more satellite links used in the telephone relay of the signal (Table 1).

The initial or trial focal depths for earthquakes which occur in the western, central, and eastern parts of the network are 75, 30, and 15 km, respectively, and reflect a progressive decrease in the range of depths of earthquakes from the west to east (see Table 3).

MAGNITUDE

Magnitudes are determined from either the coda duration or the maximum trace amplitude. Eaton and others (1970) approximated the local Richter magnitude, the definition of which is tied to maximum trace amplitudes recorded on standard Wood-Anderson horizontal torsion seismographs, by magnitude based on maximum trace amplitudes recorded on high-gain, high-frequency vertical seismographs, such as those operated in the Alaskan network. The amplitude magnitude, XMAG, used in this catalog is based on the work of Eaton and his co-workers and is given by the expression (Lee and Lahr, 1972):

$$\text{XMAG} = \log_{10} A - B_1 + B_2 \log_{10} D^2 \quad (1)$$

where A is the equivalent maximum trace amplitude in millimeters on a standard Wood-Anderson seismograph, D is the hypocentral distance in kilometers, and B₁ and B₂ are constants. Differences in the frequency response of the two seismograph systems are accounted for in A. It is assumed, however, that there is no systematic difference between the maximum horizontal ground motion and the maximum vertical motion. The terms $-B_1 + B_2 \log_{10} D^2$ approximate Richter's $-\log_{10} A_0$ function (Richter, 1958, p. 342), where A₀ is the trace amplitude for an earthquake of magnitude zero as a function of epicentral distance as observed for earthquakes in southern California. The constants used are B₁ = 0.15 and B₂ = 0.08 for D = 1-200 km, and B₁ = 3.38 and B₂ = 1.50 for D = 200-600 km. The constants in the attenuation function have not been calibrated for southern coastal Alaska.

Coda durations are also used for determining magnitude because the maximum trace amplitude is often off scale due to the limited dynamic range of the film recording. For small, shallow earthquakes in central California, Lee and others (1972) express the duration magnitude, M_D, at a given station by the relation:

$$M_D = -0.87 + 2.00 \log_{10} T + 0.0035 D \quad (2)$$

where T is the signal duration in seconds from the P-wave onset to the point on the Develocorder film where the peak-to-peak trace amplitude of the coda envelope measured on a film viewer with 20X magnification falls below 1 cm and D is the epicentral distance in kilometers.

Comparison of XMAG and M_D estimates from equations (1) and (2) for 77 southern Alaskan shocks in the depth range 0 to 150 km and in the magnitude range 1.5 to 3.5 reveals a systematic linear decrease of M_D relative to XMAG with increasing focal depth. However, no systematic dependence of T on D has been found. The following equation, including a linear depth-dependence term but not a distance term, is therefore used for Alaska:

$$M_D = -1.15 + 2.00 \log_{10} T + 0.007 Z \quad (3)$$

where Z is the focal depth in kilometers.

The coda duration magnitudes calculated from the network data are systematically less than the magnitudes reported in the Earthquake Data File (EDF) of NOAA (Lahr and Stephens, 1983). Based on a preliminary analysis

(John Lahr, unpublished data), the empirical relationship between body-wave magnitude m_b and duration magnitude, M_D , is:

$$m_b = 1.4 M_D - 0.39 \quad (4)$$

The magnitude preferentially assigned to each earthquake in this catalog is the mean of the M_D (equation 3) estimates obtained for USGS stations. When no M_D can be determined, the mean of the X_{MAG} (equation 1) estimates for USGS stations is reported.

ANALYSIS OF HYPOCENTRAL QUALITY

Two types of errors enter into the determination of hypocenters: systematic errors limiting the accuracy and random errors limiting the precision. Systematic errors result mainly from incorrect modeling of the seismic velocity structure in the earth and from incorrect phase identification. Random errors arise primarily from timing errors; their effect on the solution for each earthquake can be estimated through the use of standard statistical techniques.

The HYPOELLIPSE computer program determines hypocenters by minimizing differences between observed and computed traveltimes through an iterative least-squares process. For each earthquake, HYPOELLIPSE calculates the lengths and orientations of the principal axes of the joint confidence ellipsoid. The one-standard-deviation confidence ellipsoid describes the region of space within which one is 68 percent confident that the hypocenter lies, assuming that the only source of error is random reading errors. The confidence ellipsoid is a function of the geometry of the stations recording a particular event, the velocity model assumed, and the standard error of the arrival times; it is a measure of the precision of the hypocentral solution (see descriptions of SEH and SEZ in Appendix A). Repeated readings of the same phases by four seismologists have established that the standard deviation is as small as 0.01 to 0.02 s for the most impulsive arrivals and as large as 0.10 to 0.20 s for emergent arrivals. The confidence ellipsoids are computed for a standard deviation of 0.16 s and therefore likely overestimate the 68 percent confidence regions. The standard deviation of the residuals for an individual solution is not used to calculate the confidence ellipsoid because it contains information not only about random reading errors but also about the incompatibility of the velocity model to the data.

In a few extreme cases the value calculated for one of the ellipsoid axes becomes very large corresponding to a spatial direction with very great uncertainty. In these cases an upperbound length of 25 km is tabulated. In most hypocentral solutions, the epicentral precision (SEH) is better determined than the focal depth precision (SEZ) so that SEH is generally smaller than SEZ.

To fully evaluate the quality of a hypocenter one must consider both the size and orientation of the confidence ellipsoid and the root-mean-square (RMS) residual (see description of RMS in Appendix A). In addition to reflecting random errors, the RMS residual can be large due to the misfit of the velocity model to the actual velocities within the earth, misinterpretation of phases, and systematic timing errors. In areas where the velocity structure is accurately known, a large RMS residual would probably indicate errors in the phase data. If the assumed velocity model does not represent the true seismic velocity structure within the earth, the RMS

residuals could be large and reflect the incompatibility; alternatively, the RMS residuals could be small and not indicate the actual error in a mislocated hypocenter.

Other parameters provided by HYPOELLIPSE that are helpful in evaluating the quality of a hypocentral solution are: 1) GAP, the largest azimuthal separation between stations measured in degrees at the epicenter. If GAP exceeds 180° , the earthquake lies outside the network of stations used to locate the shock, and the solution is generally less reliable than that for an event occurring inside the network. 2) D1, the epicentral distance in kilometers of the closest station used in the solution. Solutions where the calculated depth is greater than D1 generally have smaller SEZ values (better depth precision) than events that have calculated depths less than the epicentral distance to the closest station. 3) NP and NS, the number of P- and S-arrivals, respectively, used in the solution. The accuracy of the solutions generally improves with an increase in the number of P- and S-arrivals. The RMS residual may actually increase, however, if distant stations are included in locating an event, because the differences between the observed and calculated traveltimes commonly increase with increasing epicentral distance due to the errors in the assumed velocity model.

FOCAL DEPTHS

Previous studies (e.g., Francis and others, 1978; Lilwall and Francis, 1978; Uhrhammer, 1980; and McLaren and Frohlich, 1985) have shown that the accuracy of focal depths for shocks occurring in the vicinity of a seismic network is primarily a function of the geometry of the network, the number of P- and S-phase arrivals read, and the adequacy of the assumed velocity model. Depths are generally more accurate for earthquakes where the distance from the epicenter to the closest station (D1) is less than the calculated focal depth and for events located within the network or on its periphery. The accuracy of focal depths usually increases as the number of S-phase arrivals increases.

Focal depths for shallow (depth less than about 20-30 km) shocks within the southern Alaska network generally are not well constrained due to the relatively large distances between stations and to a lack of knowledge about the velocity structure. Calculated depths for the same event can vary by several kilometers depending on the number of P- and S-phase arrivals used in the location, the trial focal depth, the velocity model, and the P-phase traveltime corrections used to locate the earthquake. Ambiguity in the calculated depth occasionally arises in cases where the traveltimes to receiving stations are similar for upward-leaving rays from a deep source and for downward-leaving rays from a shallow source; this situation leads to double minima in the variation of RMS residuals with depth.

COMPLETENESS OF CATALOG

The magnitude threshold at which this catalog is complete varies geographically as a function of the density of stations and the criteria for timing earthquakes (see section on Data Processing). East of longitude 145°W , we estimate that the magnitude level for completeness is about coda magnitude 1.8 for an approximately 100-km wide zone extending inland from the coast, but is

about 2.4 for areas north and south of the 100-km wide coastal zone. West of longitude 145°W, this catalog is reasonably complete within the boundaries of the network for shallow events (0-40 km) of about coda magnitude 2.0 and larger. The completeness level increases with increasing depth for the events in the Benioff zone; for earthquakes deeper than 100 km the catalog is complete above about magnitude 2.8.

DISCUSSION OF CATALOG

Hypocenters have been determined for 3566 earthquakes recorded by the USGS seismograph network in southern Alaska for 1985 (see Appendix A). The precision of the hypocenters, or the relative location accuracy of neighboring events, is represented by the confidence ellipsoids. The precision of epicenters, expressed in terms of the maximum semi-axis of the projected one-standard-deviation confidence ellipsoid (SEH), averages 2.5, 1.2, and 1.9 km, respectively, in the eastern (east of longitude 145°W.), central (between longitudes 145° and 150°W.) and western (west of longitude 150°W.) parts of the network. Similarly, the precision of focal depth (SEZ) averages about 4.0, 1.6 and 2.7 km, respectively. The variation in the precision of hypocenter determination across the network is strongly influenced by differences in the station density in the different regions. Hypocenter biases equal to and larger than the dimensions of the confidence ellipsoids are not unlikely as a consequence of the over-simplified velocity models assumed in the preparation of this catalog.

The epicenters of 209 shocks during 1985 with magnitudes of 3 and larger are shown in Figure 4. The pattern of seismicity is dominated by activity within the Aleutian Benioff zone west and north of Cook Inlet as is typical of previous years. However, two of the five earthquakes during 1985 with body-wave magnitudes of 5.0 or larger were shallow shocks (less than 30 km) and both occurred east of longitude 142°W: a shallow magnitude 5.7 m_b (5.1 M_s , 4.3 M_D) earthquake on January 9, 50 km northeast of Icy Bay within the aftershock zone of the 1979 St. Elias earthquake (7.1 M_s); and a magnitude 5.4 m_b (5.9 M_s , 4.1 M_D) shock on September 15 north of Glacier Bay near the U.S.-Canada border. The latter was felt at distances ranging up to 200 km from the epicenter. Because this event was located well outside the network, only four aftershocks, all smaller than M_D 2.5, were detected within 24 hours of the mainshock. Prior to this shock, the largest event located in this area was a magnitude 6.0 shock in 1952. On November 16 a 4.2 m_b (3.3 M_D) earthquake occurred in the same location as the September shock.

The other three events exceeding magnitude 5 m_b were all located in the Aleutian Benioff zone: a 5.4 m_b (4.4 M_D) shock, on October 27, at 81 km depth west of the northern tip of Kodiak Island; a 5.1 m_b (4.4 M_D) earthquake on November 5, at 89 km depth around 150 km north-northwest of Anchorage; and a 5.5 m_b (4.4 M_D) shock, on December 30, at 51 km depth, approximately 40 km northwest of Anchorage. Most of the moderate-sized earthquakes that have been located in the Cook Inlet segment of the Aleutian Benioff zone by the regional network have had few if any aftershocks, but the December 30 shock was unusual in that it was followed within 16 hours by a sequence that included 12 events with magnitudes ranging from 1.1 to 3.1 M_D .

Below 30 km depth the distribution of earthquakes is dominated by activity within the northwestward-dipping Aleutian Benioff zone west and north of the Cook Inlet region (Figure 5 and Figure 8, sections C-E). The depth to the top

of this zone varies from about 50 km beneath the western Kenai Peninsula to about 115 km beneath the active volcanoes west of Cook Inlet. The concentration of intense seismic activity in the Benioff zone below 70 km depth observed beneath Mt. Iliamna is a persistent feature that characterizes this segment of the subducted Pacific plate. The deeper seismicity east of the Cook Inlet region appears to be bounded by a northwest-southeast trending line, which passes about 50 km northeast of Valdez (Figure 5). Such a line approximately delineates the northeastern terminus of the Aleutian Benioff zone (Stephens and others, 1984). The diffuse appearance of the Aleutian Benioff zone in Figure 8, section C, may be attributed in part to a lack of focal depth control for earthquakes north of the USGS network (north of latitude 62°N). Of the relatively few shocks located in the northeastward-dipping Wrangell Benioff zone (Stephens and others, 1984), south of the Wrangell volcanoes, two of the deepest earthquakes ever located in this zone occurred in April 1985 (Figure 8, section B). One was a M_p 2.1 event on April 3 at a depth of 88 km beneath Mt. Drum, and the other a M_p 1.9 shock on April 25, at a depth of 80 km east of Mt. Blackburn.

The distribution of earthquakes with depths less than 30 km is shown in Figure 6. Seismicity within the North American plate west of about longitude 148.5°W . is concentrated along the volcanic arc and within distinct clusters, such as those beneath the northern Cook Inlet basin and north of the Castle Mountain fault. The most pronounced concentration of shallow epicenters is due to continuing aftershock activity from the August 1984 Sutton earthquake ($5.7 M_b$) which occurred on the Castle Mountain fault (Lahr and others, 1986). In July and August 1985, a tightly clustered swarm of about 40 earthquakes with magnitudes of 2.4 and smaller occurred near the intersection of the Caribou and Castle Mountain faults, about 15 km east of the Sutton aftershock zone. Earthquakes of this magnitude have been located by the network in this area in the past, but the relatively large number of smaller events located during the last year is probably due to systematic changes that include applying a lower magnitude threshold for processing events in this area, and improved detection capabilities resulting from the installation of two seismographs in 1984 near the Sutton aftershock zone.

The apparent decrease in the rate of crustal and shallow Benioff zone activity beneath the southern Kenai Peninsula compared to 1984 data (Fogleman and others, 1986) is the result of the removal of six (five in the summer of 1984, one in 1985) of the nine seismographs that had been operating in this area.

North of Prince William Sound two concentrations of events occur in the shallow seismicity (Figure 6). The tight cluster of events about 50 km west of Valdez along the northern margin of Prince William Sound is due to continuing aftershock activity from the 1983 Columbia Bay shocks (Page and others, 1985), which are attributed to normal slip on a NNE-striking fault within the subducted Pacific plate. A more diffuse concentration of events located about 40 km to the northeast has a similar trend, but is offset from the strike of the Columbia Bay aftershock zone.

An apparent increase from previous time periods in the rate of shallow seismicity beneath western Prince William Sound, is the result of both the increased detection capability of the network following the installation of three new seismographs on and near Knight Island in the summer of 1985, and a lower magnitude threshold that is applied to this area to select events for processing. Most of the preliminary epicenters of earthquake occurring beneath southwestern Prince William Sound are located in two clusters, one beneath Knight Island and one about 30 km to the south beneath Latouche Island. The better constrained events are concentrated between 15 and 27 km depth.

SOUTHERN ALASKA - 1985 MAGNITUDE 3.0 AND LARGER

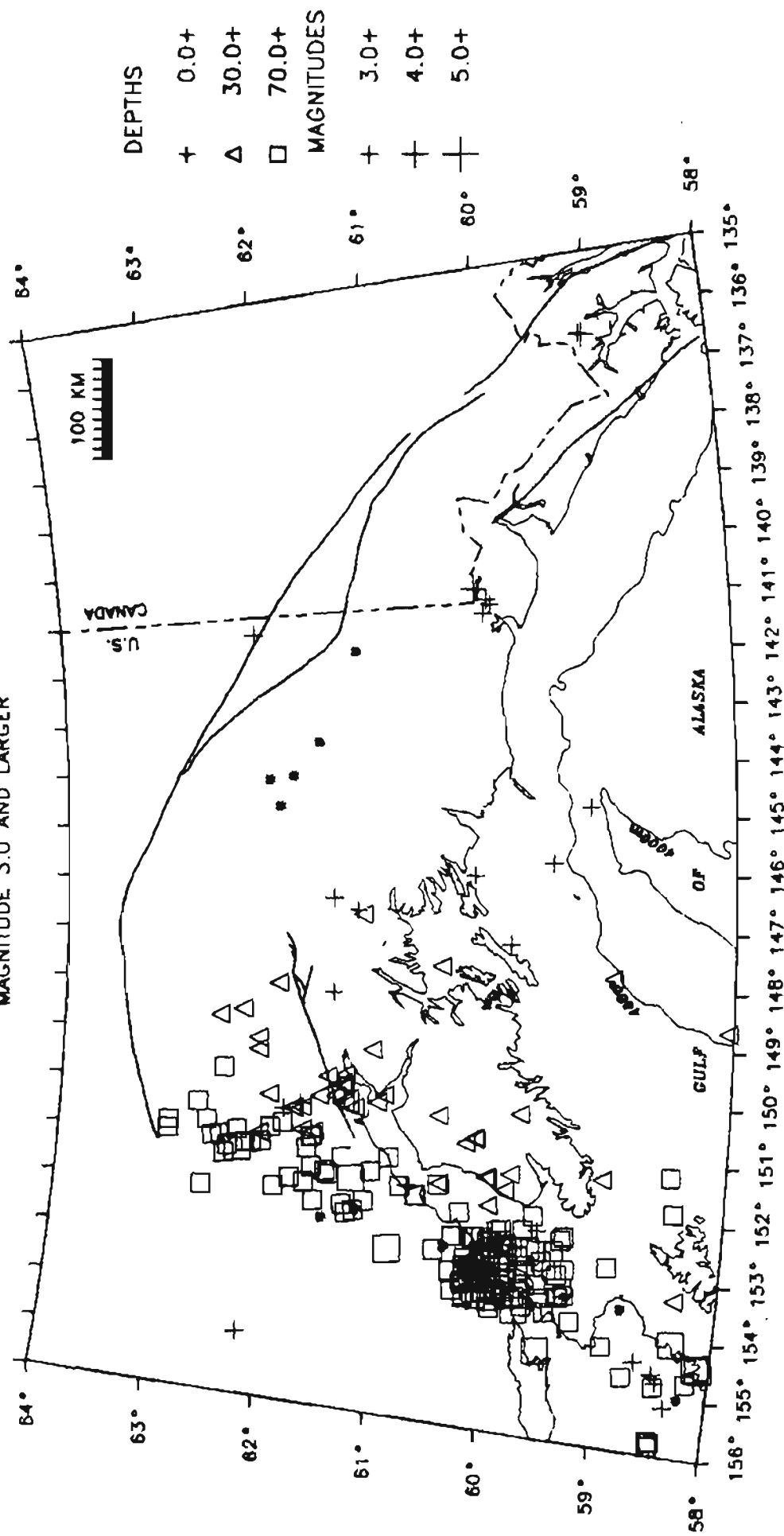


Figure 4: Map showing the epicenters of earthquakes of magnitude of 3.0 or larger in 1985. Quaternary volcanoes are indicated by stars.

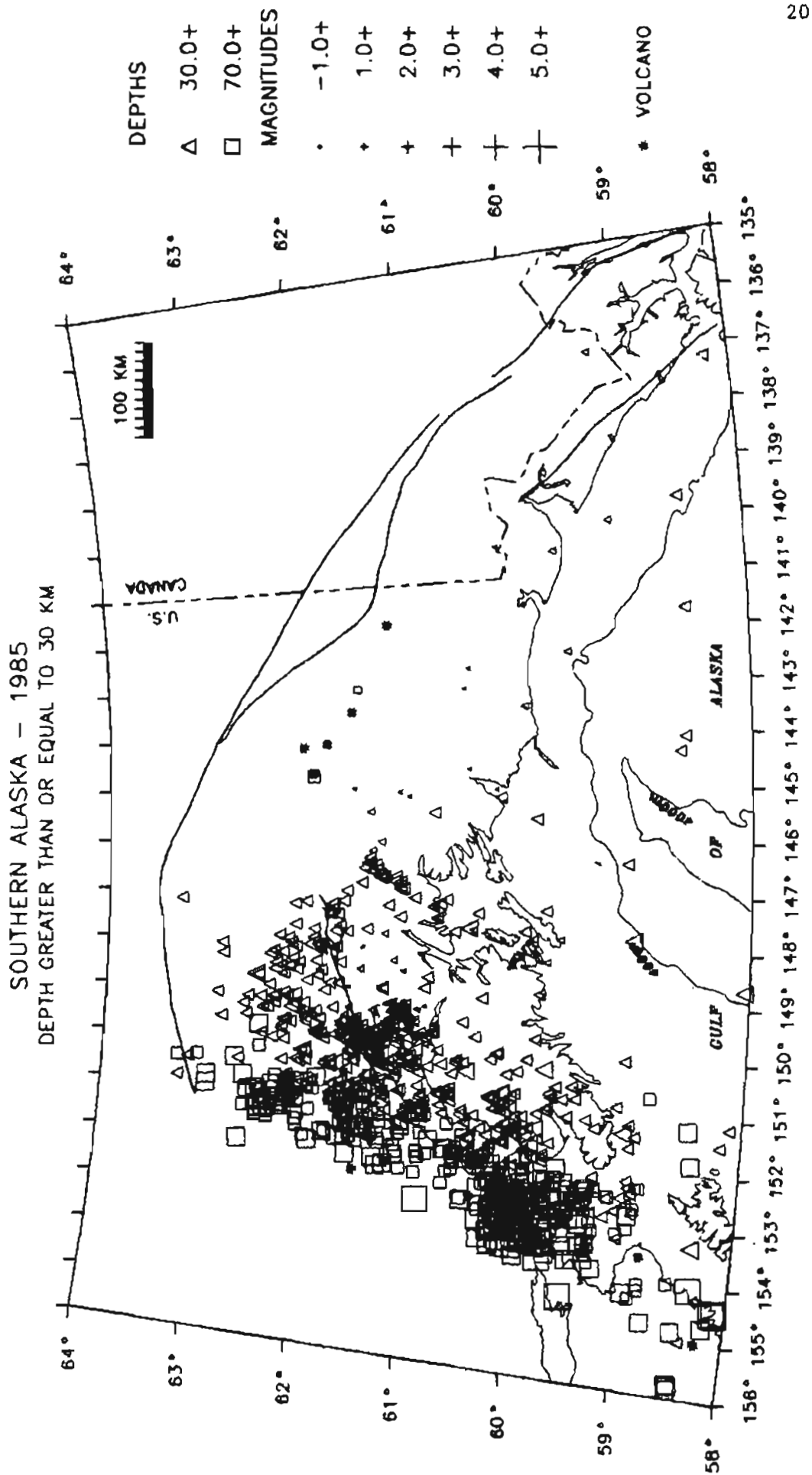


Figure 5: Map showing epicenters of earthquakes with depths equal to or deeper than 30 km during 1985. Quaternary volcanoes are indicated by stars.

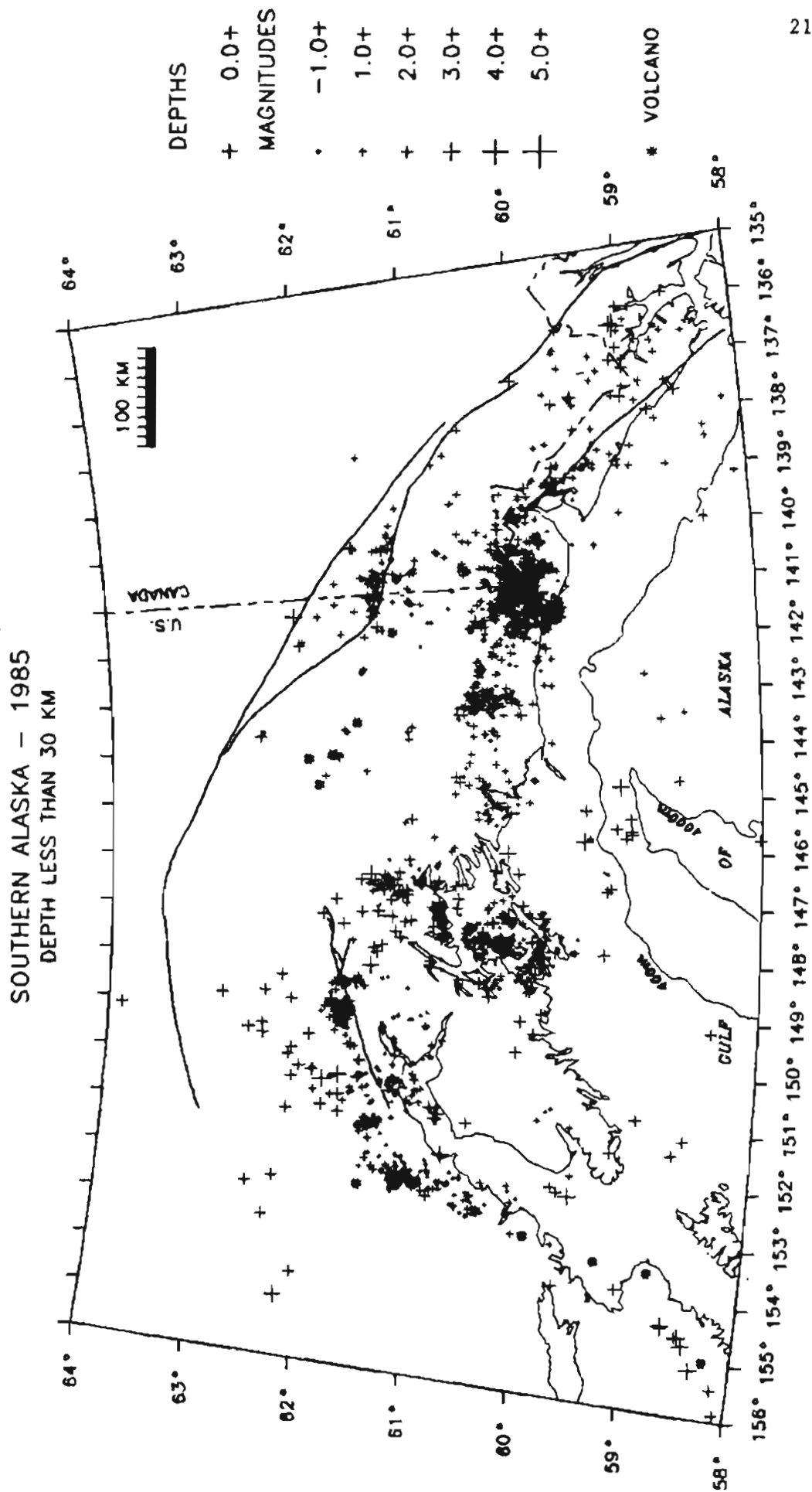


Figure 6: Map showing epicenters of earthquake epicenters with depths shallower than 30 km during 1985. Quaternary volcanoes are indicated by stars.

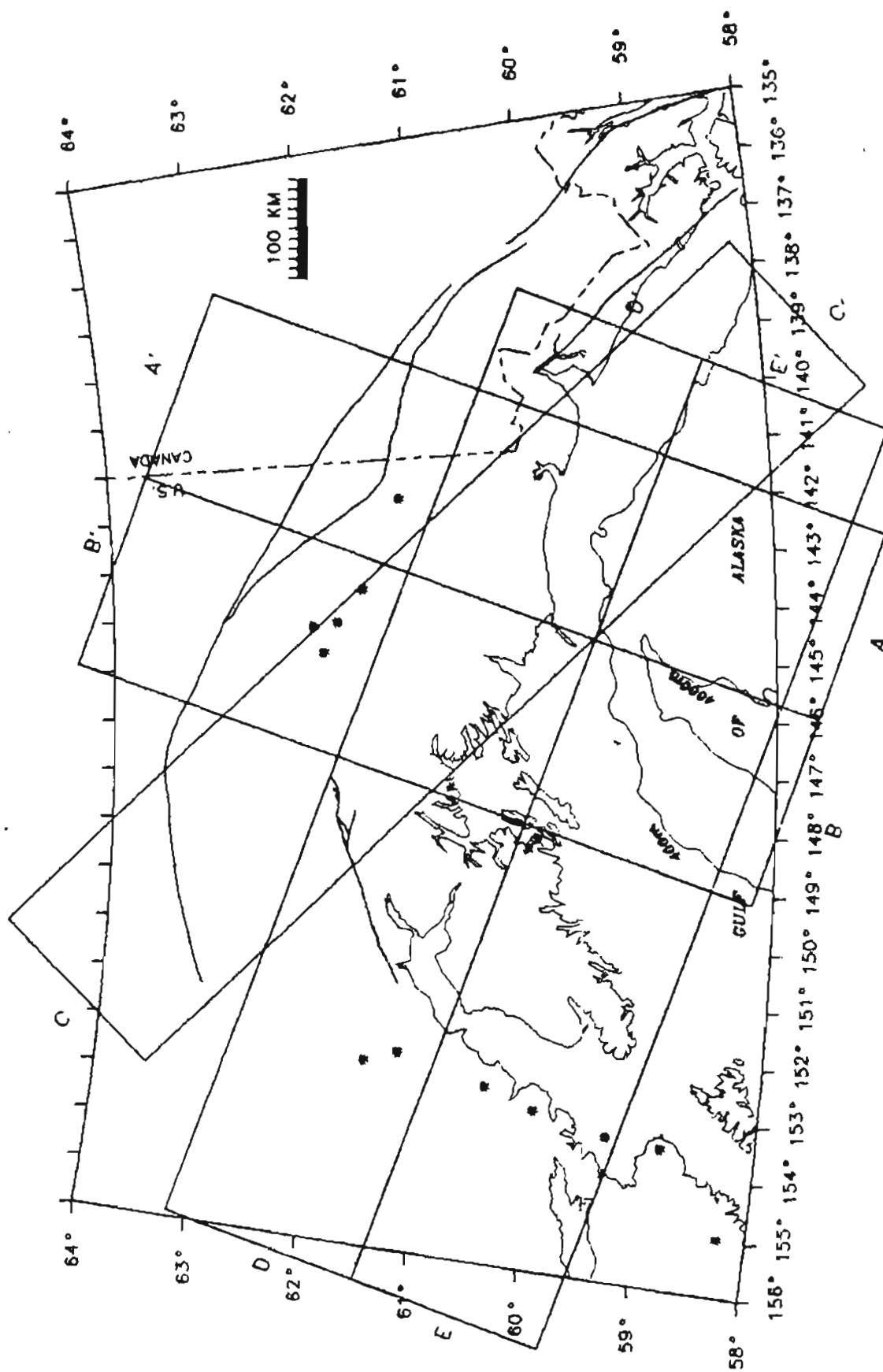


Figure 7: Reference map showing the areas represented in the cross sections in Figure 8.

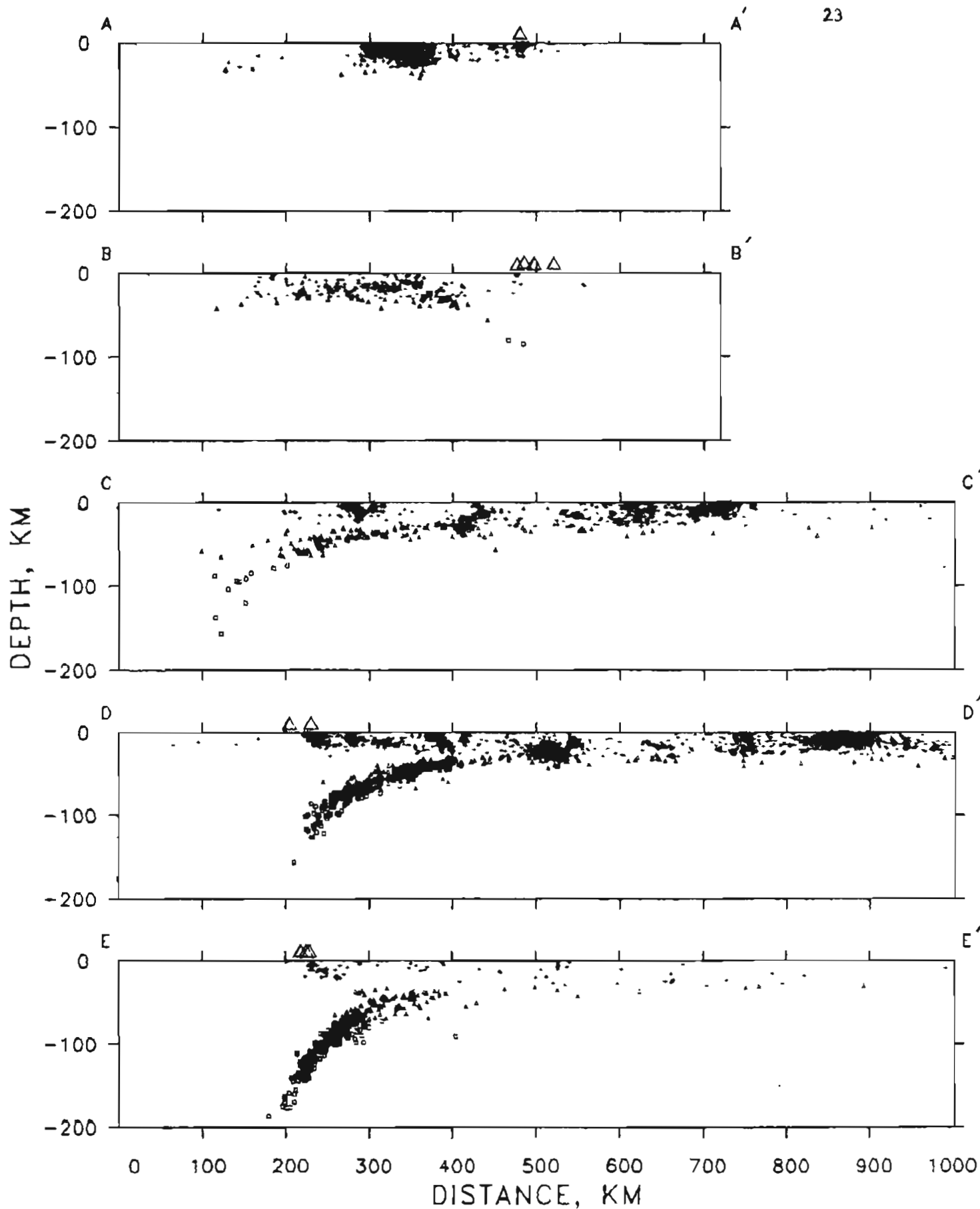


Figure 8: Vertical sections of hypocenters for the areas indicated in Figure 7. Quaternary volcanoes are plotted as triangles above zero depth. No vertical exaggeration. Symbol types are same as Figures 4-6, except symbols are not scaled with magnitude.

East of longitude 145°W. , the apparent high rate of shallow activity is due at least in part to a lower magnitude threshold used in selecting events for processing. In contrast to the region west of Prince William Sound, most of the earthquakes within the prominent concentration of activity north of Icy Bay in the 1979 St. Elias aftershock zone (Stephens and others, 1980), occur in a thin subhorizontal tabular zone that may be the thrust interface between the North American plate and either the underthrusting Pacific plate or the colliding Yakutat block. Well-located events from the St. Elias area indicate that the crust above the inferred thrust interface is also seismically active, but the rate of activity is low compared to that along the interface. In the Waxell Ridge and Copper River Delta areas, about 75 and 200 km west of the St. Elias aftershock zone, respectively, the nature of the activity is less certain because of uncertain focal depths. Nonetheless, the broad areal distribution of activity in these areas is similar to that observed within the St. Elias region and suggests that the Waxell Ridge and Copper River Delta activity may also reflect low-angle faulting. The Waxell Ridge and Copper River Delta concentrations of seismicity occur near the center and western edge, respectively, of the Yakataga seismic gap, which extends westward from the western limit of the St. Elias aftershock zone to the eastern extent of the 1964 rupture near the longitude of Kayak Island. The Yakataga gap is a likely site for a great ($M_s > 7.8$) thrust earthquake within the next one or two decades (McCann and others, 1980). Over the past ten years, the spatial distribution of microearthquake activity in and around the gap has been remarkably stable, and, except for the continuing but slowly decaying aftershock activity from the 1979 St. Elias earthquake, the rate of activity during 1985 does not differ markedly from that observed over the past decade (see Appendix B, References of Previously Published Catalogs). Concentrations of earthquakes are observed along the Fairweather fault north and east of Yakutat Bay and along the western section of the Duke River fault, but the earthquake hypocenters are not sufficiently well constrained to associate confidently the seismicity with particular mapped fault traces. The diffuse character of the seismicity east of longitude 138°W. and south of latitude 59.5°N. is at least partially attributed to this area being outside the seismograph network.

AVAILABILITY OF DATA

The contents of the Appendix may be obtained on magnetic tape by contacting the authors. Appendix B lists previously published catalogs available from the USGS Open-File Services Section, Western Distribution Branch, Box 25425, Federal Center, Denver, CO 80225 (telephone: 303-236-7476). Information about the availability of this data and other preliminary data on magnetic tape can be obtained by contacting the principal investigators.

ACKNOWLEDGEMENTS

We thank Tom Sokolowski, Wayne Jorgensen, John Sindorf, George Carte and the entire staff of the NOAA Tsunami Warning Center for their assistance in maintaining our recording equipment in Palmer, Alaska, as well as making their seismic data available to us.

We thank Niren Biswas and the staff of the Geophysical Institute of the University of Alaska for cooperating in the operation of southern Cook Inlet seismograph stations.

We are indebted to all of those who have spent time fabricating, installing, and maintaining the seismograph network in Alaska.

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APPENDIX A

Southern Alaska Earthquakes for 1985

Earthquakes from southern Alaska 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 9 hours.
2. Epicenter in degrees and minutes of north latitude (LAT N) and west longitude (LONG W).
3. DEPTH, depth of focus in kilometers.
4. MAG, magnitude of the earthquake, coda duration magnitude M_D unless noted otherwise. A letter following the magnitude indicates a magnitude other than M_D , as follows:
 - A - Amplitude magnitude (XMAG), USGS.
 - B - Body-wave magnitude (m_b), USGS National Earthquake Information Center (NEIC).
 - C - Local magnitude (ML), EMRC.
 - G - Local magnitude (ML), GIUA.
 - H - Approximate coda duration magnitude obtained from Helicorder records based on an empirical relation between coda durations measured on Develocorder records and coda durations measured on Helicorder records.
 - P - Local magnitude (ML), Alaska Tsunami Warning Center.
 - S - Surface-wave magnitude (M_S), NEIC.
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. D1, epicentral distance in kilometers to the station closest to the epicenter.
9. RMS, root-mean-square traveltimes residual in seconds:

$$RMS = \left[\frac{\sum_{i=1}^N W_i [R_i]^2}{N} \right]^{1/2}$$

where R_i is the observed minus computed arrival time of the i th arrival, W_i is the corresponding weight of the arrival, and the weights are normalized so that their sum equals N , the total number of P, S, and S-P readings used in the solution.

10. SEH, standard error in kilometers of the horizontal direction with least control. $SEH = MAXH/1.87$, where MAXH is the largest horizontal deviation in kilometers of the one-standard-deviation confidence ellipsoid (see Figure 9 below). In previous catalogs MAXH was referred to as ERH. Values of SEH that exceed 25 km are tabulated as 25 km.

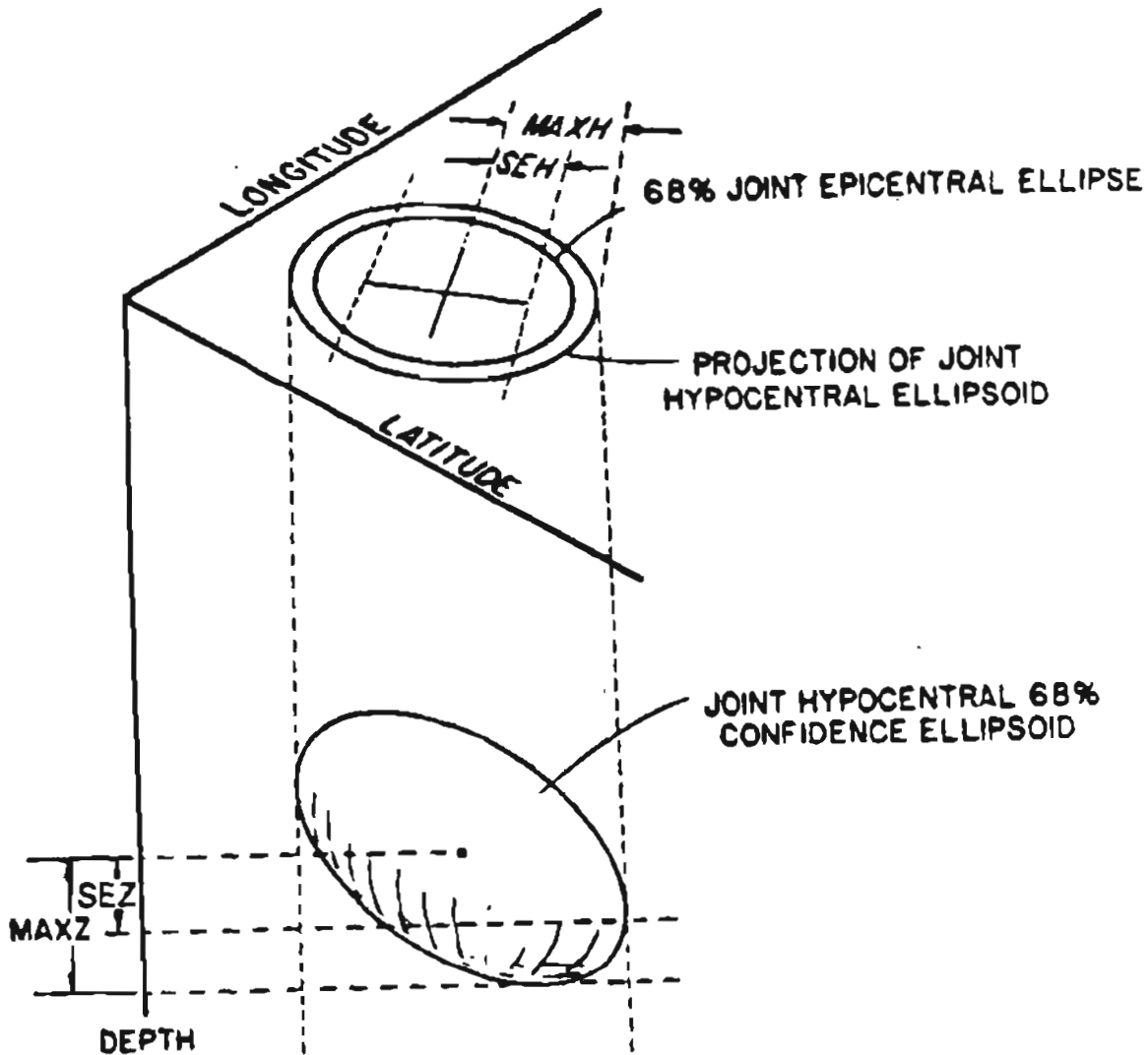


Figure 9. Relationship between the confidence ellipsoid and SEH, MAXH, SEZ, and MAXZ. The projected ellipse has the same orientation and eccentricity as the joint epicentral 68-percent confidence region, but has 1.23 times longer axes. The error ellipsoid is calculated assuming a standard deviation of 0.16 sec for the arrival time readings given a weight code of 0.

11. SEZ, standard error in of depth kilometers . $SEZ = MAXZ/1.87$ where MAXZ is the largest vertical deviation in kilometers of the one-standard-deviation confidence ellipsoid (see Figure 9). In previous catalogs MAXZ was referred to as ERZ. Values of SEZ that exceed 25 km are tabulated as 25 km.
12. Q, quality of the hypocenter. This index is a measure of the precision of the hypocenter (see section Analysis of Hypocentral Quality) and is calculated from SEH and SEZ as follows:

<u>Q</u>	<u>Larger of SEH and SEZ (km)</u>
A	< 1.34
B	< 2.67
C	< 5.35
D	> 5.35

13. AZ1, DIP1, and SE1 are the azimuth in degrees (clockwise from north), dip in degrees, and length in kilometers of the most nearly horizontal of the three principal semi-axes of the one-standard-deviation error ellipsoid. Values of SE1 that exceed 25 km are tabulated as 25 km.
14. AZ2, DIP2, and SE2 are defined as above, but correspond to the principal semi-axis of intermediate dip.
15. AZ3, DIP3, and SE3 are defined as above, but correspond to the most nearly vertical principal semi-axis.

Magnitudes and felt reports listed below an event were obtained from the Preliminary Determination of Epicenters of the USGS National Earthquake Information Center (NEIC), from the Department of Energy, Mines and Resources, Canada (EMRC), or from the NOAA Alaska Tsunami Warning Center (ATWC). The body-wave (m_b) and surface-wave (M_s) magnitudes are those determined by the NEIC.

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN	TIME	LAT N	LONG W	Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3				
dy	hr	min	sec	deg	min	deg	min	km	deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km				
6	16	48	30.4	60	11.2	141	2.3	4.8	1.4	13	5	113	4	0.33	0.6	0.6	A	286	2	0.6	17	29	0.9	194	51	1.3
6	20	3	32.8	61	9.5	152	12.6	8.1	0.2A	3	3	184	9	0.32	15.6	16.0	D	306	21	1.5	300	37	0.8	59	46	41.9
7	2	55	23.9	60	11.4	152	4.2	63.6	2.2	15	7	125	41	0.45	0.6	1.0	A	118	6	0.9	26	13	1.1	232	76	1.9
7	5	55	34.0	60	17.9	140	45.7	10.0	1.5	11	4	144	22	0.30	0.9	1.5	B	99	13	1.0	3	25	0.7	214	61	3.2
7	14	10	6.8	60	18.2	141	20.1	18.3	0.8	10	6	111	19	0.32	0.7	1.0	A	81	12	1.0	341	30	0.7	190	57	2.2
7	14	51	25.4	60	29.4	143	41.8	20.4	0.8A	9	7	177	66	0.68	1.1	2.1	B	286	6	1.2	195	8	2.1	52	80	8.9
7	15	38	8.3	60	8.2	141	37.6	8.2	0.9	13	7	138	9	0.32	0.4	0.7	A	363	3	0.5	354	11	0.8	155	79	1.4
7	15	51	25.7	60	59.7	152	6.3	90.1	2.6	17	9	151	21	0.37	1.3	1.2	A	300	3	1.6	293	44	3.1	107	46	1.5
7	18	54	8.9	62	32.3	149	21.1	61.7	2.7	21	13	110	81	0.49	1.4	3.3	C	271	5	2.5	2	20	0.9	168	69	6.7
7	23	32	15.6	60	15.6	141	0.3	13.0	1.6	14	5	126	23	0.23	0.6	1.2	A	114	3	0.8	23	24	0.7	211	66	2.4
8	2	39	20.1	60	19.2	141	17.5	13.0	1.0	7	5	115	25	0.30	1.0	1.6	B	240	8	1.3	81	26	1.0	235	61	3.4
8	3	27	13.8	60	6.6	140	22.5	7.7	1.3	9	6	144	7	0.47	2.5	0.7	B	28	12	4.7	290	34	0.6	135	53	1.2
8	3	31	26.3	59	22.9	153	15.9	105.1	3.1	11	5	145	69	0.33	1.5	2.1	C	281	0	2.9	191	14	1.7	11	76	5.9
8	4	45	36.7	62	30.3	151	24.1	113.6	3.4	17	6	196	124	0.37	1.9	4.9	C	292	11	2.7	25	14	1.4	165	72	9.7
3.2 ML ATWC																										
8	6	29	3.4	60	6.3	141	1.8	11.9	0.9A	9	5	186	43	0.32	1.7	1.4	B	292	3	0.7	201	10	3.1	38	60	2.6
8	9	2	59.3	59	57.5	141	11.7	16.8	0.8A	5	2	214	54	0.20	2.9	6.3	D	290	2	1.8	200	3	5.4	54	86	11.8
8	9	5	6.3	60	10.8	141	2.7	5.0	1.2	10	4	132	44	0.20	0.9	1.7	B	286	1	0.8	196	3	1.6	34	67	3.1
8	9	8	34.9	60	6.2	141	7.5	6.8	0.6A	7	3	162	45	0.32	2.7	2.3	C	113	3	0.9	21	28	5.3	209	62	4.1
8	12	52	50.6	60	13.4	141	1.8	11.3	1.1A	9	5	126	42	0.26	1.3	1.6	B	301	4	0.7	34	29	2.0	204	61	3.3
8	19	49	7.7	60	11.3	139	45.1	18.6	1.0	6	4	193	27	0.41	2.0	1.6	B	116	8	1.0	211	33	4.3	14	56	2.1
8	23	26	44.2	60	15.7	141	10.3	12.1	1.2	10	7	120	33	0.16	0.5	1.1	A	98	4	0.6	8	10	0.8	210	79	2.1
9	4	2	18.7	61	45.9	149	49.7	59.7	0.8A	8	7	154	46	0.21	1.9	2.3	B	165	25	2.1	268	26	1.6	38	53	6.3
9	6	15	18.1	58	43.5	136	28.6	15.0	1.9	3	1	353	160	0.12	25.0	25.0	D	31	2	64.4	300	34	6.0	124	58	99.0
9	8	1	38.6	61	49.3	149	39.1	45.0	1.3A	14	14	166	22	0.56	0.7	0.8	A	269	4	0.7	177	31	1.3	6	59	1.6
9	12	52	48.6	60	10.6	141	29.6	2.6	1.7	9	6	128	25	0.50	0.6	1.3	A	9	7	1.0	101	15	0.7	255	73	2.4
9	15	31	11.1	61	23.0	150	18.8	45.7	1.7	17	14	81	25	0.45	0.4	1.3	A	81	3	0.6	165	5	0.8	319	82	2.4
9	16	19	3.3	58	22.7	138	19.9	20.1	1.8	4	3	345	124	0.25	25.0	25.0	D	261	0	15.3	341	34	4.0	171	55	99.0
9	16	43	22.6	60	8.2	141	15.0	9.6	0.4A	5	3	196	57	0.29	4.7	2.1	C	120	13	0.9	26	16	9.0	249	70	3.3
9	19	28	21.3	60	17.2	140	44.5	15.1	4.3	18	7	104	34	0.60	0.7	1.2	A	16	1	1.2	286	7	0.6	114	83	2.3
5.7 MB 5.1 MS 5.4 ML ATWC																										
FELT (IV) AT YAKUTAT AND (II) AT CAPE YAKATAGA. ALSO FELT AT BURWASH LANDING, HAINES JUNCTION AND WHITEHORSE IN YUKON TERRITORY, CANADA.																										
9	19	30	52.0	60	15.4	140	45.0	14.4	3.9A	11	7	140	33	0.49	0.7	1.2	A	83	4	1.4	302	8	0.7	149	81	2.2
9	19	33	43.8	60	15.0	140	42.3	10.0	2.4A	9	8	142	30	0.38	0.8	0.9	A	301	8	0.5	33	10	1.5	173	77	1.8
9	19	34	22.0	60	15.6	140	45.6	13.7	3.0A	8	7	140	33	0.38	0.6	1.1	A	294	3	0.6	24	3	1.1	159	86	2.0
9	19	35	7.9	60	15.3	140	41.9	8.3	1.7A	6	6	150	30	0.25	1.3	1.3	A	310	10	0.7	211	43	2.6	50	45	2.3
9	19	40	10.8	60	15.5	140	48.5	11.7	1.6	9	8	139	36	0.30	1.0	1.1	A	213	6	1.8	304	11	0.6	95	77	2.1
9	19	40	36.3	60	14.4	140	48.3	8.8	1.7	6	5	182	34	0.30	2.2	1.3	B	312	14	0.6	48	20	4.4	190	65	2.2
9	19	42	32.2	60	16.5	140	38.6	10.9	1.2	8	7	148	29	0.46	1.3	1.2	A	224	7	2.4	315	9	0.7	97	79	2.3
9	19	43	15.5	60	14.4	140	47.8	10.2	1.5	6	6	156	34	0.14	1.8	1.3	B	312	11	0.6	48	20	5.4	195	67	2.3
9	19	48	1.6	60	15.4	140	41.9	10.1	1.4	8	7	143	30	0.28	0.8	1.1	A	307	10	0.5	39	12	1.4	178	74	2.1
9	19	48	47.3	60	16.0	140	39.3	16.4	1.2A	7	6	147	29	0.32	1.2	1.1	A	308	10	0.6	212	34	2.3	52	54	1.8
9	19	49	14.5	60	15.9	140	47.3	14.4	2.1	12	12	139	35	0.44	0.6	1.0	A	24	3	1.1	294	9	0.5	132	81	1.8
9	19	50	48.1	60	15.5	140	46.8	8.3	1.4	7	6	153	34	0.33	1.2	1.3	A	308	7	0.6	42	33	2.1	207	56	2.5
9	19	52	44.8	60	17.1	140	48.3	12.1	1.5	8	6	140	37	0.40	0.7	1.2	A	305	5	0.5	37	19	1.2	201	70	2.3
9	19	53	42.7	60	15.8	140	41.5	15.7	2.0	11	8	144	30	0.30	0.6	0.9	A	295	8	0.5	26	8	1.2	161	79	1.7
9	19	59	43.6	60	13.2	140	47.2	14.5	1.3	7	6	153	32	0.46	2.0	1.1	B	312	11	0.7	45	16	3.8	189	70	1.8
9	20	0	39.3	60	18.6	140	32.9	16.4	1.4	6	6	165	29	0.33	2.2	1.2	C	261	7	5.2	322	14	0.7	141	57	2.0

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z		MAG		NP NS		GAP		DI RMS		SEH SEZ		Q AE1 DP1		SE1 AE2 DP2		SE2 AZ3 DP3		SE3	
dy	hr	mn	sec	deg	min	deg	min	km		deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	deg	deg	km	
9	20	3	23.0	60	15.3	140	43.0	11.6	2.3	12	8	142	31	0.21	0.6	1.0	A	35	6	1.1	304	9	0.5	158	79	2.0	
9	20	5	55.9	60	16.0	140	42.3	12.1	1.5	6	5	177	31	0.15	2.4	1.9	B	319	15	0.6	31	23	4.7	207	49	2.8	
9	20	6	37.0	60	15.3	140	43.6	13.5	2.1	14	9	141	33	0.37	0.7	0.9	A	26	2	1.2	296	12	0.5	125	78	1.8	
9	20	8	21.4	60	16.8	140	38.1	12.3	1.5	7	5	174	29	0.17	3.0	1.5	B	361	4	4.8	321	11	0.6	150	58	2.5	
9	20	8	41.9	60	16.4	140	46.3	14.2	2.1	13	13	140	35	0.35	0.6	1.1	A	40	3	1.0	310	9	0.6	148	81	2.1	
9	20	25	57.7	60	14.9	140	40.0	9.7	1.3	8	6	150	28	0.42	1.6	1.3	B	44	1	3.0	314	11	0.7	189	79	2.2	
9	20	26	15.9	60	15.8	140	41.8	7.3	1.4	5	5	149	31	0.41	0.9	1.3	A	301	5	0.5	33	16	1.7	194	73	3.5	
9	20	33	32.7	60	14.8	140	47.4	13.2	1.3	7	6	155	24	0.37	1.2	1.2	A	307	11	0.6	46	40	2.1	205	48	2.5	
9	20	40	0.1	60	14.5	140	42.3	12.9	1.3	7	6	179	30	0.38	2.3	1.4	B	318	10	0.6	81	11	3.9	201	54	2.0	
9	20	40	18.4	60	15.8	140	41.2	2.5	1.4	6	5	182	30	0.64	2.6	1.5	B	301	7	4.1	320	9	0.6	123	57	2.4	
9	20	41	24.7	60	14.1	140	42.2	11.7	1.6	8	6	154	29	0.36	1.1	1.0	A	306	10	0.6	210	31	2.2	52	57	1.9	
9	20	47	58.1	60	16.7	140	41.0	7.6	1.2	7	3	146	31	0.23	1.4	2.1	B	313	10	0.8	47	23	2.2	201	65	4.2	
9	20	48	14.0	60	13.4	140	43.1	16.0	1.4	6	6	156	29	0.51	1.6	1.2	B	42	0	3.1	312	9	0.8	132	81	2.2	
9	20	50	23.8	60	15.8	140	43.1	11.7	1.4A	10	6	142	31	0.31	0.9	1.2	A	302	3	0.6	33	14	1.6	200	76	2.3	
9	20	50	52.0	60	14.9	140	45.0	10.9	1.5A	6	3	156	32	0.32	4.3	3.6	C	317	8	1.0	81	28	8.6	216	46	3.9	
9	21	8	41.8	60	16.3	140	43.6	8.3	1.3	7	6	149	33	0.25	1.1	1.2	A	307	7	0.6	42	36	1.8	207	54	2.4	
9	21	13	54.8	61	42.6	148	23.1	21.3	1.0	13	10	79	11	0.47	0.4	0.7	A	382	3	0.6	191	14	0.8	24	76	1.3	
9	21	24	39.3	60	14.8	140	48.8	13.6	1.6	9	5	140	35	0.22	1.0	1.1	A	35	3	1.9	306	9	0.6	143	81	2.0	
9	21	31	16.6	60	16.0	140	41.7	11.3	1.3	7	7	144	31	0.29	0.8	1.3	A	310	12	0.5	44	17	1.4	187	69	2.5	
9	22	1	4.2	60	15.5	140	49.8	9.6	1.3	9	6	139	37	0.22	1.0	1.1	A	304	5	0.6	37	30	1.7	205	59	2.2	
9	22	15	30.9	60	15.1	140	41.4	14.2	1.6	9	9	143	30	0.28	0.7	1.0	A	42	8	1.4	310	13	0.5	163	75	1.9	
9	22	24	2.1	60	14.9	140	49.3	9.7	1.3	5	5	155	52	0.41	1.9	2.2	B	137	6	1.0	81	29	2.7	237	46	3.8	
9	22	29	12.1	60	16.0	140	40.2	10.4	1.5	8	5	145	60	0.42	1.3	2.0	B	317	5	0.7	81	16	1.7	215	53	3.4	
9	22	47	45.0	60	14.8	140	42.7	14.4	1.2	7	5	152	58	0.24	1.2	1.8	B	128	1	0.7	37	21	2.0	221	69	3.5	
9	23	3	6.6	60	14.7	140	41.5	11.2	1.6	11	6	142	60	0.31	1.1	1.6	B	309	0	0.8	38	20	1.9	219	70	3.2	
9	23	7	4.3	60	13.9	140	42.3	20.0	1.2	6	5	164	69	0.29	1.2	1.9	B	312	1	0.8	43	22	1.8	220	68	3.7	
9	23	17	20.7	60	13.9	140	42.3	14.4	1.2	8	6	140	59	0.41	1.0	1.8	B	121	2	0.6	30	16	1.7	218	74	3.1	
9	23	29	35.7	60	14.8	140	42.5	12.6	1.3	6	5	152	59	0.39	0.9	2.0	B	305	2	0.6	36	17	1.4	208	73	3.8	
9	23	29	54.7	60	15.8	140	42.0	12.8	1.3	7	6	149	59	0.37	1.4	2.1	B	315	3	0.7	81	14	2.0	216	52	3.5	
9	23	42	41.2	63	52.7	149	7.4	8.5	2.6	16	4	173	19	0.79	1.5	0.9	A	261	31	2.7	351	33	0.9	128	46	1.7	
10	0	53	1.7	60	14.1	140	42.8	18.0	1.6	8	5	140	59	0.30	1.3	1.8	B	130	1	0.8	39	20	2.3	223	70	3.4	
10	2	8	51.2	60	15.4	140	41.7	11.8	1.6	10	6	143	30	0.28	1.1	1.2	A	305	8	0.6	40	31	1.9	202	58	2.6	
10	2	12	1.4	60	15.1	140	44.9	12.4	1.2	7	5	152	32	0.27	1.3	1.4	B	303	8	0.7	39	38	2.0	203	51	3.1	
10	2	31	7.7	60	16.6	140	39.2	10.0	0.9	6	2	148	30	0.14	4.5	3.5	C	261	11	7.2	322	15	0.9	127	56	5.8	
10	2	59	10.0	60	15.8	140	45.3	11.4	1.0	6	3	151	33	0.15	1.4	2.8	C	309	11	0.8	42	15	2.2	184	71	5.4	
10	3	18	34.9	60	13.0	140	48.1	12.7	1.0	6	2	190	33	0.16	4.4	2.0	C	31	13	8.4	297	19	2.2	154	67	3.4	
10	3	21	17.3	61	52.2	150	27.2	39.2	2.0	19	10	167	39	0.60	0.9	1.7	B	93	4	0.9	3	5	1.7	222	84	3.2	
10	4	2	41.7	60	15.8	140	46.4	9.9	1.0	6	2	151	34	0.15	2.8	2.9	C	307	12	1.2	43	25	5.2	194	62	5.7	
10	4	2	59.1	60	10.7	140	44.4	18.7	1.1	3	1	182	28	0.11	13.6	21.5	D	298	19	1.1	37	25	3.3	175	58	47.6	
10	5	20	26.0	60	17.1	140	46.5	1.9	0.9	5	1	148	36	0.04	2.6	4.1	C	307	6	1.1	39	19	4.3	200	70	8.0	
10	5	56	4.3	60	16.0	140	40.2	8.4	1.1	5	3	154	30	0.23	3.0	4.5	C	81	14	3.5	318	16	0.9	107	51	8.6	
10	6	21	26.3	60	14.1	140	45.5	12.7	1.3	8	4	140	32	0.28	2.1	1.6	B	206	5	3.9	297	6	0.9	77	82	2.9	
10	7	2	26.4	62	19.0	149	35.6	56.6	2.5	23	10	126	63	0.48	1.3	2.5	B	289	6	1.4	22	19	1.8	182	70	5.0	
10	7	14	25.3	60	13.9	140	45.3	9.6	1.2	7	5	140	31	0.25	1.3	1.8	B	40	8	2.4	309	11	0.8	166	76	3.5	
10	7	56	22.7	61	27.1	151	17.3	14.2	0.6A	5	4	101	29	0.49	4.5	8.6	D	350	17	1.5	261	23	0.9	116	62	18.0	
10	8	38	12.4	60	14.9	140	44.2	13.8	1.5	9	5	140	32	0.20	1.2	1.5	B	300	4	0.7	32	27	2.0	202	63	2.9	
10	9	32	55.0	60	14.9	140	50.4	11.5	1.1	5	1	156	52	0.27	2.9	6.0	D	89	10	2.5	358	10	5.0	224	76	11.6	
10	9	40	49.2	60	14.8	140	41.5	17.6	2.8	11	6	142	60	0.41	0.7	1.7	B	28	1	1.4	118	2	0.7	271	88	3.2	
10	10	6	21.6	60	12.4	141	41.9	3.7	1.8	11	3	111	17	0.34	0.8	1.1	A	307	0	1.6	37	4	0.9	217	86	2.2	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
10	10	23	13.5	61	41.8	149	59.7	46.4	1.6	19	13	141	8	0.39	0.8	1.2	A	276	1	0.7	186	13	1.4	10	77	2.3
10	10	22	43.6	60	15.2	140	46.8	13.5	1.4	7	3	139	55	0.19	1.3	2.4	B	305	1	1.1	35	11	2.4	210	79	4.5
10	10	58	20.4	60	15.7	140	39.1	10.6	1.8	10	4	146	29	0.23	1.2	1.6	B	43	13	2.1	309	14	0.7	174	71	3.1
10	11	46	5.4	60	14.9	140	45.1	9.3	1.2	6	2	153	32	0.27	2.9	2.9	C	306	13	1.2	43	27	5.3	193	60	5.5
10	12	5	16.4	60	14.1	140	41.2	14.4	1.7	11	6	141	21	0.25	0.8	0.8	A	119	1	0.7	29	45	1.1	210	45	1.9
10	12	33	18.8	60	15.1	140	39.5	14.8	1.5	9	4	145	23	0.32	1.1	1.1	A	203	4	0.9	36	44	1.2	209	46	2.8
10	12	25	31.2	60	15.7	140	39.9	11.0	1.2	7	4	145	24	0.31	1.9	3.5	C	306	15	0.9	42	22	1.8	184	63	7.3
10	12	38	16.1	60	15.7	140	39.8	12.2	1.3	9	4	145	24	0.27	1.2	1.6	B	203	7	0.8	38	34	1.3	203	55	3.5
10	12	39	0.8	61	8.6	150	33.3	16.1	1.2	12	7	73	37	0.62	0.6	1.7	B	87	1	1.0	177	9	1.1	351	81	3.3
10	13	15	58.1	60	14.7	140	47.6	12.8	1.1	8	1	136	17	0.26	1.4	3.2	B	94	16	1.2	261	42	5.4	1	9	1.9
10	13	57	3.3	62	5.3	150	13.7	13.6	1.1A	5	5	212	69	0.42	2.2	3.1	C	95	3	1.0	187	27	3.2	359	63	6.4
10	14	2	41.7	60	16.0	140	48.3	13.4	1.2	8	4	138	18	0.39	1.4	1.9	B	296	5	0.8	30	35	1.2	199	54	4.3
10	14	6	43.5	61	45.0	150	34.9	46.7	1.8	13	8	145	33	0.42	1.1	1.4	B	81	3	0.9	349	14	1.9	183	76	2.6
10	16	2	34.8	61	10.4	150	49.1	10.1	1.1	6	6	116	23	0.52	1.0	1.7	B	315	2	1.1	261	15	1.2	52	51	2.8
10	16	25	50.3	60	15.5	140	46.8	14.3	1.2	8	3	138	18	0.29	1.6	1.5	B	103	14	1.0	0	42	1.7	207	45	3.7
10	17	14	42.2	61	17.2	146	53.3	31.1	2.9	32	10	43	29	0.64	0.4	0.5	A	286	0	0.5	16	9	0.8	196	81	0.9
10	17	27	32.3	60	15.8	140	39.5	11.8	1.2	8	5	146	24	0.23	1.6	2.1	B	306	13	0.8	43	27	1.8	193	60	4.6
10	18	36	24.6	61	33.7	150	6.0	31.0	0.6A	5	3	178	36	0.07	4.7	5.0	C	90	16	1.8	192	37	6.0	341	49	11.6
10	18	47	37.7	61	32.3	149	52.5	45.3	0.8A	6	5	155	47	0.23	1.8	3.3	C	81	3	1.3	173	33	2.2	344	67	6.7
10	19	27	24.0	61	20.4	149	53.7	25.7	1.0A	7	6	134	47	0.25	1.2	5.8	D	82	1	1.3	352	4	2.1	186	86	10.9
10	20	0	30.6	60	14.3	140	40.8	12.5	1.4	7	4	142	22	0.17	1.4	1.6	B	314	13	0.9	53	33	1.9	206	54	3.5
10	20	59	19.3	59	58.5	152	21.6	74.9	3.1	15	6	154	34	0.34	1.1	2.0	B	337	1	2.0	81	4	1.4	234	75	3.8
10	21	41	4.0	60	15.4	140	40.6	10.3	1.0	6	2	152	23	0.10	1.8	2.8	C	103	2	1.0	12	31	1.8	198	59	5.9
10	21	46	46.7	59	22.8	151	16.3	41.5	2.8	12	6	286	48	0.46	2.8	3.7	C	273	9	2.0	177	33	3.3	16	55	8.1
10	22	5	3.9	60	46.6	148	35.4	21.3	2.1	31	12	55	5	0.51	0.5	0.7	A	278	5	0.6	188	5	0.9	53	83	1.4
10	22	23	41.6	60	13.8	140	42.1	16.8	1.6	9	5	139	20	0.28	1.1	1.0	A	115	2	0.8	207	40	2.5	23	50	1.3
10	22	26	48.0	60	14.6	140	41.2	12.9	1.2	6	4	148	22	0.07	2.4	3.7	C	307	16	0.9	45	27	1.2	190	58	6.2
11	0	17	3.0	59	13.2	139	46.5	19.9	1.0	4	4	282	54	0.23	6.7	17.8	D	314	1	2.0	224	20	3.2	47	70	35.5
11	2	4	55.2	61	48.1	149	33.6	22.2	0.7A	5	4	203	32	0.27	4.5	15.2	D	8	0	3.0	278	16	2.4	98	74	29.6
11	2	31	9.0	60	15.5	140	36.7	7.6	0.9	5	5	169	26	0.15	2.1	4.2	C	316	17	0.8	52	17	1.9	184	65	6.7
11	2	47	4.4	61	35.1	149	34.7	36.3	1.4	16	9	114	18	0.64	0.9	1.3	A	273	14	0.9	178	21	1.4	34	64	2.5
11	4	7	11.9	60	15.0	140	48.0	12.4	1.1	7	5	136	17	0.30	1.9	1.6	B	296	6	0.8	202	37	4.3	34	52	2.0
11	5	55	59.5	60	15.1	140	37.3	5.4	1.3	9	5	147	25	0.17	1.3	1.8	B	312	15	0.8	50	29	1.4	198	57	3.8
11	9	38	39.2	60	15.1	140	45.2	14.6	1.7	13	4	139	19	0.23	0.8	1.0	A	298	4	0.8	29	23	1.1	200	57	2.1
11	10	23	44.0	60	12.5	152	32.1	39.6	2.3	18	11	126	16	0.50	1.4	1.6	B	81	7	1.1	147	15	2.3	324	61	2.8
11	12	25	28.3	59	50.6	152	14.4	70.5	2.6	18	8	172	50	0.30	1.2	1.9	B	94	1	1.2	4	5	2.2	195	85	3.6
11	13	23	2.0	61	24.0	150	12.9	43.2	0.7A	10	5	100	29	0.29	1.4	2.2	B	192	7	2.6	101	11	1.4	314	77	4.2
11	13	12	27.6	61	13.3	150	5.0	44.6	1.2A	9	4	97	44	0.16	1.2	4.1	C	8	6	1.9	97	8	1.7	240	80	7.8
11	15	23	18.7	60	12.3	140	44.1	18.8	2.4	14	6	135	17	0.48	1.0	0.9	A	290	0	0.8	200	40	2.2	20	50	1.3
11	16	54	21.5	61	15.3	148	35.7	15.8	0.4	3	3	181	19	0.08	15.3	11.6	D	179	10	1.1	81	37	35.8	282	51	2.6
11	17	41	53.7	60	9.8	141	11.1	3.2	1.1	7	2	176	8	0.14	3.7	1.8	C	21	0	7.0	291	15	0.8	111	76	3.5
11	17	54	30.4	61	38.2	146	4.2	30.2	0.8	10	3	133	24	0.47	1.2	1.7	B	126	15	1.7	31	17	2.0	256	67	3.4
11	18	19	54.0	59	40.1	153	0.5	99.3	2.7	10	4	198	58	0.17	1.9	2.4	B	81	16	1.9	177	27	2.9	323	58	5.1
11	19	59	27.8	61	32.0	149	50.5	57.2	2.1	23	12	62	13	0.42	0.7	1.2	A	263	5	0.8	171	16	1.1	10	73	2.3
11	20	30	17.8	60	7.4	152	4.7	58.1	2.6	18	10	133	42	0.56	0.7	1.6	B	101	5	1.1	10	5	1.3	236	83	2.9
11	21	24	21.2	61	40.4	149	31.4	42.0	1.1A	8	5	169	23	0.30	1.9	2.1	B	288	23	3.1	184	30	1.7	49	51	4.6
12	0	3	9.4	61	53.8	141	9.0	0.8	1.4A	6	4	266	104	0.22	1.4	8.2	D	311	0	2.1	41	2	2.5	221	88	15.3
12	0	34	3.2	61	40.2	150	54.3	63.0	1.0A	5	8	122	25	0.29	0.9	1.4	B	81	8	0.9	170	12	1.6	317	76	2.8
12	0	43	18.8	61	6.8	150	32.6	13.0	1.0A	11	9	75	41	0.66	0.6	0.8	A	293	9	0.6	200	16	0.7	51	71	1.6

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RM5	SEH	SE2	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km	
12	0	54	31.7	62	6.3	149	24.3	51.1	1.0A	10	7	185	38	0.42	1.6	1.6	B	280	14	0.9	23	40	2.5	175	46	3.5	
12	2	43	16.9	61	15.8	150	9.1	52.5	1.1A	14	11	86	39	0.85	0.3	2.1	B	6	0	0.9	96	1	0.8	276	89	3.9	
12	3	29	11.9	61	14.7	148	30.2	30.4	0.9	22	12	50	19	0.82	0.5	0.5	A	284	7	0.9	193	8	0.6	65	79	1.0	
12	4	51	21.6	61	16.4	149	19.3	33.2	1.3	23	11	71	37	0.43	0.5	1.0	A	322	7	0.7	261	15	0.6	79	57	1.6	
12	7	2	40.4	60	15.7	140	42.1	9.9	1.0	9	7	143	31	0.24	1.0	1.1	A	306	9	0.5	41	30	1.8	301	38	2.1	
12	7	49	55.7	60	5.3	140	50.0	0.0	0.6A	3	2	213	32	0.47	9.9	5.6	D	383	5	0.7	190	28	20.8	22	61	4.3	
12	8	16	16.2	59	59.8	140	40.3	3.2	0.7	7	6	184	26	0.39	0.9	1.3	A	277	12	0.7	181	25	1.4	30	62	2.7	
12	9	37	10.2	60	15.7	140	42.1	5.8	1.5	9	8	275	78	0.41	2.0	2.2	B	25	2	0.9	293	43	2.0	117	47	5.2	
12	9	59	57.1	60	7.2	140	51.7	16.1	0.8A	5	2	176	34	0.18	3.5	3.0	C	18	7	6.3	237	12	0.8	138	76	3.9	
12	11	42	10.7	61	22.9	149	46.6	45.6	0.9A	13	8	67	31	0.37	0.6	1.9	B	51	1	0.8	167	10	1.0	245	79	3.6	
12	11	44	23.6	61	48.9	148	48.3	12.8	0.1A	4	4	165	8	0.15	0.8	1.4	B	25	6	1.4	117	24	0.8	282	65	2.9	
12	12	21	39.3	61	46.6	149	2.7	15.4	0.3A	10	6	110	6	0.41	0.7	0.9	A	319	3	0.8	261	29	0.7	54	48	1.6	
12	12	44	49.8	60	33.9	142	29.1	23.4	0.9A	5	5	111	44	0.39	0.8	1.3	A	11	4	0.7	280	14	1.3	117	76	2.5	
12	13	17	16.0	61	42.8	149	50.2	46.4	1.0A	12	9	144	9	0.40	0.8	0.8	A	91	7	0.9	187	37	1.4	352	52	1.7	
12	13	38	9.7	60	18.3	140	48.2	12.6	1.5	11	9	137	35	0.23	0.7	1.0	A	295	4	0.5	26	6	1.3	172	83	1.9	
12	17	19	0.1	60	19.5	141	18.6	15.8	0.9	7	5	114	24	0.48	0.6	1.2	A	117	1	1.0	27	13	0.8	211	77	2.3	
12	17	31	48.5	61	34.3	146	24.6	35.3	2.3	34	12	83	27	0.67	0.4	0.4	A	121	16	0.5	20	34	0.8	232	61	0.6	
12	17	37	6.0	61	21.4	150	4.8	15.9	1.2	18	11	65	35	0.63	0.4	1.0	A	192	7	0.7	283	10	0.5	67	78	1.9	
12	18	21	41.3	60	16.1	140	42.6	11.4	1.3	11	9	142	30	0.34	0.6	1.0	A	301	5	0.5	32	9	1.1	182	80	1.9	
12	18	23	27.6	60	22.7	141	16.2	7.6	0.8	7	5	121	27	0.63	0.8	2.3	B	8	10	1.0	100	12	0.7	239	74	4.5	
12	18	27	10.5	60	14.5	140	44.8	12.7	1.0	8	7	154	32	0.44	1.1	1.0	A	306	12	0.6	208	31	2.2	54	56	1.7	
12	18	49	22.9	61	44.3	149	16.3	42.5	1.1A	13	9	131	17	0.40	1.0	0.9	A	297	6	1.0	33	44	2.2	201	45	1.3	
12	21	56	35.9	60	14.1	140	42.1	13.3	1.2	9	6	140	29	0.25	1.0	1.1	A	301	8	0.6	35	26	1.7	195	63	2.1	
12	22	26	47.7	62	9.9	150	47.9	65.8	2.5	21	10	207	43	0.56	1.1	1.4	B	83	6	1.0	351	20	2.0	189	69	2.7	
12	22	59	5.5	60	15.7	140	48.2	16.1	1.3	6	6	153	53	0.28	1.4	2.3	B	135	3	0.8	81	22	1.6	231	49	3.8	
13	3	55	42.3	60	28.0	141	25.8	19.3	1.0	6	4	119	35	0.32	1.0	1.7	B	261	3	1.9	11	6	0.8	164	83	3.2	
13	5	12	46.1	61	47.4	149	3.9	14.8	0.2	9	6	153	7	0.35	0.6	0.7	A	332	12	0.9	281	37	0.6	78	48	1.3	
13	5	14	16.5	61	49.0	149	47.7	50.0	1.2A	11	8	306	19	0.46	1.1	1.1	A	261	11	1.3	151	40	1.6	2	45	2.4	
13	5	47	32.8	60	55.7	149	52.3	45.3	1.0A	13	6	94	29	0.43	0.8	2.2	B	41	7	0.9	310	10	1.2	166	78	4.2	
13	7	17	56.7	61	54.7	148	5.3	37.9	1.6	25	12	177	17	0.60	0.7	0.4	A	353	8	1.4	261	39	0.8	93	50	0.6	
13	10	21	42.8	61	7.9	146	29.3	16.5	0.7	11	9	122	8	0.51	0.8	0.7	A	261	11	0.6	141	25	1.6	8	50	1.0	
13	11	45	8.7	60	32.7	143	44.2	15.4	1.1A	10	5	122	55	0.57	0.9	3.4	C	1	1	1.7	91	2	0.7	244	88	6.4	
13	19	14	53.3	60	28.6	145	5.3	17.0	0.7	12	7	189	9	0.43	0.6	0.6	A	216	31	1.3	100	37	1.0	334	38	1.0	
13	22	2	38.0	57	57.9	156	2.3	141.9	3.4	9	5	269	212	0.32	5.8	9.2	D	329	7	3.6	261	27	6.8	73	65	17.6	
14	0	15	29.1	59	51.1	151	49.1	52.8	2.3	13	5	168	36	0.42	0.8	1.4	B	287	5	0.8	18	5	1.5	153	83	2.6	
14	9	31	58.3	59	55.4	141	28.4	8.4	1.3	15	3	179	34	0.57	1.1	1.7	B	68	7	0.6	182	26	1.5	345	61	3.5	
14	10	1	5.0	59	54.3	151	32.2	69.1	2.8	18	7	153	20	0.34	0.9	1.6	B	92	5	0.9	1	11	1.6	206	78	3.0	
14	12	55	15.4	61	55.2	149	11.8	2.8	1.4	23	10	167	15	0.66	0.5	0.9	A	9	4	0.9	277	25	0.4	107	65	1.9	
14	15	44	44.3	60	11.3	141	39.8	2.8	1.0	8	3	134	20	0.35	0.6	1.6	B	108	2	1.1	199	7	0.8	2	83	3.0	
14	16	1	55.2	60	12.6	152	31.6	89.8	3.2	19	9	67	16	0.36	0.6	0.8	A	204	3	0.9	114	15	1.0	305	75	1.6	
3.8 ML ATWC																											
14	16	19	2.0	60	15.6	140	42.8	12.3	1.5	14	6	142	21	0.31	0.7	0.7	A	111	4	0.5	18	44	0.9	205	46	1.7	
14	20	50	13.5	61	25.7	140	45.8	0.5	1.6A	9	5	245	60	0.85	1.3	20.5	D	349	0	1.8	261	0	2.4	0	90	38.4	
14	21	32	45.8	60	50.7	150	52.0	56.9	2.4	15	10	50	23	0.51	0.5	1.0	A	98	3	0.7	5	11	0.9	201	79	1.8	
14	22	59	23.4	60	15.1	140	46.7	15.1	0.7A	7	4	155	16	0.20	1.9	1.9	B	291	4	0.8	25	44	1.7	197	46	4.8	
14	23	23	57.5	60	44.8	143	15.5	13.7	1.9	18	12	77	59	0.80	0.3	1.3	A	43	0	0.6	133	1	0.4	313	89	2.4	
15	0	40	20.9	61	12.8	140	55.7	2.5	1.1	5	3	243	35	0.28	2.8	25.0	D	307	0	2.2	37	3	4.4	217	87	63.2	
15	3	21	27.6	61	21.8	150	21.1	52.1	3.1	29	9	134	41	0.37	0.8	2.1	B	261	3	0.7	155	9	1.2	7	71	3.9	
3.5 ML ATWC																											

FELT (II) AT ANCHORAGE AND KNIK.

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
15	3	50	27.5	60	1.2	140	51.8	1.0	1.2	7	4	189	18	0.35	1.6	1.9	B	115	7	0.8	210	36	2.4	16	53	4.0	
15	4	31	36.3	60	13.3	140	42.8	16.8	2.1	13	5	138	19	0.32	0.8	0.8	A	293	0	0.7	23	43	1.1	203	47	1.8	
15	8	58	40.4	61	54.9	148	56.8	6.6	1.3	17	8	181	9	0.41	0.9	0.7	A	41	28	1.1	151	33	1.8	280	44	1.0	
15	9	19	14.9	60	16.1	140	40.0	10.7	1.0	7	4	146	24	0.32	1.9	2.4	B	300	9	1.0	36	34	2.3	197	55	5.4	
15	11	0	46.7	61	17.5	152	13.0	7.1	1.1	5	4	198	4	0.20	2.1	0.9	B	96	12	4.0	197	42	1.9	353	46	1.0	
15	11	7	37.7	60	35.0	145	13.8	10.4	0.5	7	4	104	6	0.61	1.0	1.2	A	81	10	0.9	344	34	1.2	185	54	2.7	
15	12	54	11.4	60	15.1	140	57.4	9.0	0.8	7	5	128	12	0.22	1.6	2.0	B	305	5	0.9	39	38	1.2	209	52	4.6	
15	14	28	14.3	60	12.6	140	45.5	0.2	1.2	6	2	134	17	0.25	2.0	3.5	C	93	5	0.7	1	17	3.3	199	72	6.9	
15	18	47	8.9	60	16.2	140	49.1	9.3	1.3	9	5	138	18	0.32	1.2	1.9	B	305	3	0.8	36	30	1.0	210	60	4.0	
15	18	48	14.2	60	15.9	140	49.2	10.7	1.5	10	6	137	17	0.20	0.9	1.2	A	305	4	0.7	38	36	1.0	210	54	2.6	
15	19	16	4.5	60	16.2	140	48.0	9.6	1.2	8	5	139	18	0.19	1.3	2.0	B	294	0	0.8	24	32	1.1	204	58	4.3	
15	22	23	14.4	60	15.8	140	39.2	10.4	1.0	6	3	155	24	0.12	1.7	2.6	B	316	15	1.0	52	24	2.1	197	61	5.6	
15	22	38	52.6	60	15.8	140	48.2	9.2	1.1	8	3	138	18	0.36	1.9	2.5	B	293	2	0.9	25	34	2.0	200	56	5.6	
15	23	4	52.8	61	53.3	148	56.2	8.2	1.3	14	7	190	6	0.42	0.9	0.6	A	81	15	1.4	165	19	1.6	311	65	1.0	
16	0	51	32.5	59	49.8	139	4.6	31.1	1.1	7	5	217	26	0.71	2.6	1.0	B	261	12	4.2	322	16	0.8	126	55	1.6	
16	3	23	10.9	60	15.1	143	7.8	8.6	0.6	14	7	174	17	0.85	0.9	1.7	B	285	10	0.6	18	19	1.4	169	68	3.4	
16	9	58	36.8	61	20.1	148	17.4	35.2	1.0A	7	5	132	12	0.41	1.3	0.7	A	343	1	0.7	261	16	2.4	76	72	1.1	
16	10	29	46.9	61	21.8	149	8.2	40.2	0.8A	9	6	148	26	0.39	0.8	1.4	B	269	3	1.4	178	16	0.9	9	74	2.7	
16	10	52	22.3	59	6.0	137	41.5	15.3	2.5	10	7	190	78	0.28	14.8	2.7	D	216	9	28.1	309	19	3.8	102	69	2.5	
3.3 ML ATWC																											
16	13	51	51.5	61	43.2	149	48.2	47.1	1.2	12	8	189	9	0.36	1.0	1.4	B	262	10	1.1	168	24	1.5	13	64	2.8	
16	14	28	59.1	60	3.0	152	41.4	96.4	2.6	16	8	145	16	0.55	0.9	1.0	A	85	15	1.3	183	27	1.5	329	58	2.1	
16	16	21	37.1	61	46.6	149	5.4	14.7	0.2	6	5	217	9	0.18	0.8	1.1	A	197	18	0.8	100	19	1.3	327	63	2.2	
16	19	33	12.0	60	23.8	144	58.1	33.5	0.9	10	6	198	16	0.53	1.6	0.7	B	327	5	2.6	261	8	1.9	94	64	1.1	
17	1	11	47.4	61	33.5	147	54.9	11.8	2.0	33	19	83	33	0.82	0.3	0.5	A	290	11	0.3	196	20	0.6	47	67	1.0	
17	8	26	58.6	60	18.7	142	27.0	14.9	0.6	12	6	64	24	0.33	0.7	1.0	A	81	5	0.7	340	28	1.0	180	60	2.2	
17	10	12	19.6	61	43.8	149	33.0	41.7	0.9A	13	7	182	19	0.51	0.9	1.0	A	90	8	1.0	186	37	1.2	350	52	2.3	
17	13	12	34.8	61	21.8	149	9.2	41.5	1.0A	12	7	99	26	0.27	0.8	1.3	A	269	5	1.4	178	9	0.9	28	80	2.5	
17	13	47	40.0	61	28.0	141	42.1	10.4	1.8	14	9	232	59	0.55	1.3	1.3	A	304	8	1.0	207	43	2.8	42	46	2.0	
17	14	26	9.9	61	27.8	149	56.5	37.4	1.6	25	14	64	21	0.56	0.5	0.5	A	85	6	0.5	180	37	0.8	347	52	1.1	
17	14	44	22.5	59	36.0	138	53.8	13.3	1.3	7	4	217	17	0.57	3.7	1.7	C	261	22	6.4	334	27	0.7	126	52	3.1	
17	16	8	57.7	60	7.6	141	6.0	15.2	0.8	6	5	186	5	0.58	1.4	0.5	B	203	5	2.7	296	29	0.7	104	60	1.0	
17	19	22	17.0	60	16.4	150	45.5	47.2	3.8	29	4	83	39	0.38	0.7	1.4	B	261	0	0.9	346	14	1.2	171	75	2.7	
4.6 MB				4.5 ML ATWC				FELT (IV) AT NINILCHIK AND (III) AT HOMER, MOOSE PASS AND TYONEK. ALSO FELT AT ANCHORAGE, KENAI AND SEWARD.																			
17	19	27	21.1	60	16.6	150	46.3	43.9	3.6	29	5	82	39	0.37	0.6	1.2	A	261	4	0.8	348	6	1.1	136	82	2.2	
4.2 ML ATWC																											
18	0	23	5.3	60	15.9	140	41.7	7.7	0.6	7	3	149	31	0.21	1.6	3.5	C	307	12	0.7	40	15	2.4	180	71	7.0	
18	6	17	50.6	61	10.5	152	14.0	6.6	1.9	22	11	113	10	1.16	0.6	0.4	A	112	1	1.2	202	26	0.5	20	64	0.9	
18	6	24	9.1	60	28.4	142	15.3	15.0	0.9	9	5	113	31	0.52	0.8	3.5	C	261	2	1.3	347	8	1.1	157	81	6.6	
18	8	15	1.9	59	59.3	141	16.2	5.0	1.1	8	5	208	49	0.26	2.4	1.8	B	120	10	0.8	215	26	4.8	11	62	3.0	
18	11	7	59.9	59	34.9	138	53.5	17.6	1.3	6	3	217	14	0.41	6.8	3.8	C	331	28	0.7	261	37	11.9	102	42	4.4	
18	15	36	8.5	61	8.7	152	15.9	3.5	1.7	19	9	112	12	0.99	0.8	0.7	A	300	18	1.5	200	26	0.4	60	57	1.4	
18	19	37	19.5	60	15.3	140	47.4	9.8	0.7A	6	3	153	34	0.19	2.1	2.6	B	298	9	0.8	34	30	3.4	193	58	5.3	
18	22	37	32.6	60	20.1	141	22.2	16.7	1.1	13	5	123	21	0.17	1.0	1.3	B	335	15	0.8	81	28	0.9	222	55	2.9	
19	0	52	29.8	60	17.3	140	40.4	6.8	1.1	9	5	148	25	0.26	0.9	1.8	B	303	6	0.6	35	23	1.1	199	66	3.7	
19	3	7	48.7	60	10.8	139	43.5	16.7	1.2	8	4	194	26	0.49	2.1	1.5	B	302	7	0.9	207	34	4.7	42	55	1.5	
19	7	58	18.6	61	26.4	150	54.8	54.4	2.1	22	11	172	60	0.54	0.8	1.7	B	261	2	0.6	145	10	1.3	0	62	2.9	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
19	9	3	3.3	61	8.3	146	27.9	16.6	0.9	8	5	122	7	0.46	1.1	0.7	A	45	1	0.6	135	20	2.1	312	70	1.1
19	10	36	48.6	61	48.3	149	3.5	15.5	0.8	9	7	164	6	0.34	0.7	0.9	A	143	6	1.0	261	21	0.7	45	49	1.8
19	12	51	50.7	61	38.8	148	29.7	34.6	1.0A	12	4	75	20	0.24	1.0	0.9	A	329	2	0.9	81	40	1.9	237	45	1.6
19	15	0	2.8	61	26.1	150	7.9	52.4	0.8A	9	5	128	28	0.39	1.3	2.5	B	262	5	1.1	170	21	1.6	5	68	5.0
19	15	43	1.7	60	35.9	151	21.1	66.1	2.9	23	8	64	58	0.53	0.5	1.3	A	28	7	0.8	119	10	0.7	263	78	2.5
19	23	0	53.9	60	20.2	140	46.8	2.6	0.8A	7	3	147	25	0.25	0.8	2.8	C	81	6	0.9	349	10	1.1	201	78	5.3
20	0	24	41.7	60	6.7	143	12.2	26.0	1.5	16	12	190	23	0.44	1.1	0.6	A	183	11	2.1	278	23	0.6	69	64	1.0
20	1	48	20.0	61	26.0	149	53.0	19.6	0.8A	10	8	101	46	0.39	0.6	1.3	A	187	2	1.0	277	15	0.7	90	75	2.5
20	3	23	23.9	61	55.3	149	11.7	3.9	1.7	27	17	167	15	0.77	0.5	0.6	A	174	19	0.9	273	25	0.4	51	58	1.2
20	4	29	15.4	62	33.1	151	1.9	91.5	3.0	18	9	108	69	0.49	1.0	2.3	B	296	9	1.2	29	16	1.3	178	71	4.6
20	15	6	24.1	60	14.6	140	42.4	11.2	0.6	10	3	141	21	0.24	1.8	1.6	B	289	2	0.6	197	41	4.4	21	49	1.4
20	16	48	18.4	60	18.1	143	9.3	12.0	1.1	14	9	155	21	0.91	0.5	1.0	A	26	7	0.9	295	8	0.5	157	79	1.9
21	2	11	29.6	61	41.3	151	15.5	82.1	2.4	22	12	215	67	0.62	1.3	1.3	A	81	3	0.8	334	37	2.5	175	50	2.2
21	2	35	50.2	61	42.3	151	29.3	77.7	2.5	22	10	188	60	0.52	1.8	1.4	B	330	5	3.1	81	12	0.8	221	65	2.5
21	3	0	0.3	58	59.6	152	24.1	68.6	2.4	10	4	130	122	0.17	1.5	8.3	D	273	0	2.8	3	1	1.5	183	89	15.6
21	9	45	49.4	60	11.9	139	42.7	12.2	1.3	10	4	196	28	0.46	1.0	1.0	A	317	19	0.6	64	39	1.1	207	45	2.5
21	11	59	32.6	60	15.4	140	49.8	11.6	1.1	12	6	136	16	0.25	0.8	0.9	A	302	10	0.5	41	40	0.9	201	48	2.2
21	20	9	12.6	61	25.5	147	46.8	30.3	1.1	17	11	62	27	0.43	0.4	0.6	A	111	7	0.6	20	7	0.7	246	80	1.2
22	5	3	38.0	60	15.6	140	42.4	14.1	1.3	11	5	143	22	0.19	0.7	1.0	A	123	4	0.6	30	35	0.8	219	55	2.1
22	5	3	58.8	60	15.3	140	42.6	14.9	1.6	11	6	142	21	0.24	0.8	0.9	A	124	4	0.6	31	39	0.8	219	51	2.1
22	5	8	29.0	61	4.9	150	31.1	17.4	1.3	11	7	76	44	0.52	0.5	1.4	B	203	4	0.8	293	6	0.7	79	83	2.7
22	9	7	20.1	61	9.9	152	15.0	6.0	1.3	10	7	113	11	0.76	0.8	0.7	A	320	32	1.0	207	33	0.5	83	41	1.8
22	9	32	38.2	62	16.1	151	10.2	84.3	3.1	21	8	100	37	0.51	1.1	1.2	A	81	9	1.0	340	32	1.9	184	55	2.3
22	10	42	5.9	60	7.8	141	15.9	9.4	1.5	12	5	138	13	0.16	0.7	0.7	A	198	5	1.3	288	8	0.8	76	81	1.3
22	13	31	54.8	60	2.8	141	43.1	6.3	0.7	6	2	195	18	0.13	1.3	2.3	B	145	3	2.2	81	16	1.0	245	60	4.0
22	18	49	35.1	60	22.6	147	11.1	12.2	2.0	36	6	55	38	0.50	0.4	0.7	A	192	1	0.8	282	17	0.6	99	73	1.4
23	9	10	44.3	60	29.0	142	13.0	6.4	0.9	6	3	161	29	0.37	4.5	7.9	D	326	12	0.6	81	21	2.2	214	56	16.0
23	13	21	22.8	60	7.6	140	59.3	12.8	0.7	8	5	183	4	0.39	1.5	0.6	B	205	12	2.9	112	16	0.7	330	70	0.9
24	4	23	56.5	61	26.6	150	12.4	59.0	1.3A	9	7	141	29	0.91	0.8	1.6	B	83	6	1.0	174	11	1.4	325	77	3.2
24	4	34	31.6	60	10.4	141	2.7	10.7	1.5	12	10	114	2	0.24	1.3	0.5	A	210	14	2.5	112	31	0.6	321	55	0.7
24	5	20	18.0	60	9.3	141	2.8	11.0	1.2	10	10	157	1	0.35	1.5	0.5	B	294	8	0.7	203	8	2.8	69	79	0.8
24	5	25	49.0	59	25.0	152	38.8	67.1	2.6	12	6	119	86	0.27	1.0	2.4	B	108	3	1.3	198	13	1.7	5	77	4.6
24	13	30	0.3	60	26.7	151	26.6	50.2	2.7	26	12	76	35	0.63	0.5	1.4	B	102	9	0.7	11	10	0.8	233	77	2.7
24	14	23	42.1	59	42.8	139	27.4	21.0	0.8	6	3	153	6	0.71	2.7	1.5	B	317	5	0.7	81	15	4.5	214	53	1.9
24	17	50	1.0	60	22.7	151	33.5	49.9	2.8	25	14	88	40	0.60	0.5	1.1	A	107	7	0.7	15	13	0.7	225	75	2.1
24	20	45	7.4	61	33.0	149	49.4	49.5	1.1A	11	8	102	12	0.42	0.9	1.5	B	266	4	0.8	174	20	1.4	7	70	3.0
25	2	49	27.7	59	35.4	152	56.3	90.2	2.5	15	9	93	36	0.54	1.0	1.4	A	81	7	1.2	155	17	1.6	328	66	2.6
25	5	28	28.4	61	10.4	146	35.2	12.5	0.2A	5	4	185	13	0.34	2.4	2.8	C	224	6	0.9	319	40	1.4	127	49	6.8
25	6	4	35.8	60	19.4	145	11.6	30.8	0.9A	11	7	215	24	0.42	1.3	0.7	A	344	6	2.4	81	37	0.9	246	52	1.4
25	11	12	4.3	61	37.0	149	45.0	67.1	0.7A	5	5	281	47	0.23	4.2	3.9	C	185	26	2.6	296	37	4.3	69	42	10.1
25	12	14	47.2	60	20.5	141	15.8	9.0	1.1	9	3	135	27	0.72	1.0	1.7	B	121	5	0.9	28	26	1.3	221	63	3.6
25	14	26	28.4	60	32.3	141	58.3	7.6	0.3	4	3	192	24	0.34	1.1	3.1	C	82	8	1.5	350	14	0.8	201	74	6.0
25	16	45	26.1	61	0.3	149	55.0	43.0	1.7	27	16	45	51	0.45	0.3	1.4	B	82	2	0.5	352	3	0.6	206	86	2.7
25	17	4	45.9	59	49.3	153	18.0	111.8	2.8	15	9	77	48	0.41	1.2	1.2	A	41	5	1.4	306	44	2.5	136	46	2.0
26	0	49	46.9	60	13.3	152	14.9	69.8	2.3	17	7	124	32	0.37	0.8	1.5	B	177	3	1.5	86	12	1.3	281	78	2.8
26	1	30	30.7	59	51.8	152	38.2	79.1	3.1	17	7	82	37	0.39	1.0	1.8	B	81	3	1.4	154	6	1.6	322	72	3.2
26	4	47	38.5	60	15.5	140	45.0	10.4	1.1	7	4	151	33	0.31	3.2	2.2	B	316	12	0.9	261	12	4.8	109	52	3.4
26	6	9	35.2	61	15.4	149	21.3	42.3	1.4	17	13	72	39	0.49	0.6	1.6	B	263	1	1.2	173	9	0.9	359	81	3.1
26	14	34	40.3	61	39.5	149	46.1	41.3	2.0	22	13	132	6	0.60	0.6	1.0	A	271	1	0.8	181	19	1.1	4	71	1.9

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA JANUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
30	18	40	25.9	61	12.5	149	11.2	21.1	0.4A	4	4	306	39	0.22	6.0	10.6	D	355	4	1.0	262	29	2.2	92	61	22.8
30	19	15	11.0	60	11.9	140	58.7	13.8	1.2	9	6	147	42	0.25	1.1	1.0	A	299	1	0.6	209	25	2.3	30	55	1.8
30	21	49	47.2	62	22.8	150	45.1	74.1	2.8	32	10	101	60	0.58	1.1	1.6	B	93	5	1.0	0	27	1.4	193	62	3.4
30	23	51	7.8	61	12.1	149	17.8	33.1	1.1A	10	9	64	40	0.35	0.8	1.6	B	359	1	0.9	269	23	1.0	91	67	3.3
31	1	5	52.0	60	16.1	140	32.5	5.6	0.6	7	4	153	25	0.57	1.8	2.1	B	300	12	0.6	38	33	2.8	193	54	4.4
31	3	15	24.5	59	50.8	152	37.3	71.8	2.6	17	6	53	39	0.48	0.8	1.5	B	81	4	0.9	171	6	1.4	317	83	3.4
31	3	24	4.7	60	22.0	141	14.3	18.6	0.2A	4	3	150	28	0.19	2.3	4.4	C	238	9	1.7	81	23	1.1	239	62	9.1
31	4	8	50.0	61	50.9	148	48.1	37.0	2.2	28	12	160	9	0.61	0.6	0.4	A	351	4	1.1	82	9	0.6	237	80	0.7
31	6	45	27.3	60	38.7	152	48.0	10.9	0.8	8	7	94	22	0.96	0.7	1.0	A	17	13	0.6	280	27	1.0	130	60	2.1
31	7	3	44.3	60	14.9	140	47.7	12.3	0.4A	6	3	155	34	0.19	2.5	2.5	B	302	12	1.1	43	39	4.1	198	48	5.3
31	7	57	37.4	61	41.0	149	30.7	40.8	1.7	24	12	131	20	0.67	0.6	0.6	A	95	3	0.8	187	37	0.9	1	53	1.3
31	19	40	58.6	60	13.9	140	59.0	8.7	0.7	8	3	123	20	0.11	1.4	2.7	B	81	14	0.8	335	19	0.9	201	62	5.4
31	19	48	43.7	61	24.2	149	9.8	45.3	0.8A	10	6	179	21	0.25	1.2	1.6	B	169	10	1.2	262	17	2.1	50	70	3.2
31	22	30	56.3	60	16.1	140	56.0	7.3	0.9	7	4	140	42	0.16	1.2	2.0	B	297	2	0.6	28	23	1.9	202	67	4.1

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA FEBRUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
1	1	3	21.8	60	15.7	140	56.5	12.3	0.9	8	4	157	42	0.11	1.1	1.8	B	310	9	0.7	44	23	1.5	200	65	3.6
1	9	10	10.5	59	50.0	153	34.3	144.4	3.3	13	6	98	35	0.28	2.4	1.7	B	324	5	4.3	81	35	1.9	228	47	3.3
1	11	4	17.4	60	14.6	140	46.3	8.4	1.2	9	4	139	33	0.31	1.1	1.6	B	37	5	2.1	306	9	0.6	156	80	3.1
1	18	39	19.8	61	21.3	151	1.1	58.2	2.4	26	14	78	19	0.44	0.6	1.0	A	81	2	0.6	153	21	0.9	346	63	1.8
1	21	51	39.7	60	0.9	152	45.4	91.2	2.6	16	8	97	19	0.38	0.8	1.1	A	168	11	1.4	81	12	1.0	302	74	2.0
2	9	28	36.9	61	31.5	149	52.2	53.4	1.9	25	13	57	14	0.38	0.5	0.9	A	265	5	0.5	173	20	0.9	8	69	1.7
2	10	45	42.5	61	17.4	150	36.1	13.9	0.5A	8	6	103	21	0.35	1.1	1.2	A	272	26	1.2	166	28	1.0	37	50	2.7
2	11	14	28.2	60	11.7	140	50.4	8.2	1.6	10	6	126	12	0.30	0.7	0.7	A	111	8	0.4	15	41	0.7	210	48	1.7
2	11	36	26.5	61	17.4	152	11.3	6.5	0.6	4	4	196	3	0.31	2.0	0.7	B	261	5	3.7	165	44	1.5	356	45	0.8
2	13	13	49.0	61	40.2	152	10.4	116.3	3.3	24	8	151	45	0.36	1.2	0.9	A	40	10	1.2	306	18	2.4	158	69	1.7
2	14	17	53.1	60	50.2	146	37.6	10.8	2.2	32	10	43	12	0.87	0.3	0.6	A	286	4	0.4	195	7	0.6	45	82	1.1
2	15	55	22.6	59	30.6	138	52.7	25.6	1.4	6	2	218	7	0.24	5.3	4.2	D	261	15	11.2	114	41	2.0	359	23	1.0
2	16	13	57.3	61	16.9	152	14.0	6.9	1.0	6	4	198	4	0.42	1.4	0.7	B	188	8	1.0	95	23	2.7	296	66	0.8
2	22	8	16.7	58	1.3	145	44.4	0.2	2.5A	14	7	280	225	0.71	12.8	8.1	D	321	7	20.1	261	27	10.6	64	50	13.7
2	23	23	3.1	59	58.7	141	42.8	0.6	0.6A	8	3	240	23	0.22	1.0	2.5	B	292	1	1.8	202	2	1.9	49	88	4.7
3	1	2	9.2	60	30.9	143	1.0	10.6	1.0A	4	3	153	36	0.31	1.3	7.4	D	266	0	2.4	356	5	1.3	176	85	13.9
3	3	25	46.5	60	11.8	139	32.2	19.6	1.1	7	5	204	28	0.66	2.3	1.8	B	125	3	1.4	217	34	5.1	31	56	2.0
3	4	26	8.8	61	40.8	149	32.0	42.6	1.0A	10	8	131	23	0.53	1.5	1.8	B	281	11	1.2	184	33	1.8	27	55	4.0
3	6	42	38.9	60	11.6	141	37.7	10.0	1.1	7	1	174	19	0.09	1.7	1.8	B	261	3	2.8	162	40	2.0	354	49	4.1
3	8	14	26.9	61	8.8	140	37.4	7.2	1.1A	4	4	267	43	0.47	2.6	12.3	D	323	0	2.3	81	7	3.0	233	61	20.6
3	9	25	57.0	61	40.9	149	37.5	48.3	1.2A	15	7	134	14	0.42	1.2	1.4	B	268	16	1.1	169	30	1.7	22	55	3.0
3	17	7	24.4	61	29.9	149	56.2	44.2	1.3A	14	9	67	17	0.38	0.8	1.7	B	81	2	0.9	168	12	1.3	342	77	3.3
3	17	56	51.5	60	26.6	141	4.9	16.9	0.9	5	3	143	32	0.27	1.4	4.4	C	314	0	1.0	43	15	1.6	224	75	8.5
3	18	14	43.4	59	42.4	152	35.8	74.1	2.3	11	5	146	54	0.21	1.2	2.3	B	86	4	1.4	176	9	2.1	332	80	4.4
3	19	10	59.0	61	32.7	150	8.8	57.0	3.3	29	9	155	19	0.36	1.0	1.8	B	261	5	0.8	155	17	1.4	5	66	3.5
3.3 ML ATWC										FELT AT ANCHORAGE, EAGLE RIVER, PALMER AND WASILLA.																
3	19	32	54.2	61	29.2	147	12.9	24.0	2.4	29	14	50	39	0.64	0.4	0.7	A	201	4	0.7	291	8	0.5	85	81	1.4
3	20	7	49.1	60	48.1	141	1.9	14.9	0.9	4	4	193	25	0.06	1.4	1.8	B	154	19	1.1	261	35	2.1	34	55	3.8
3	21	13	35.4	62	28.5	151	11.2	99.8	2.6	13	3	189	115	0.44	4.0	10.1	D	275	13	3.8	9	14	3.0	144	71	20.1
3	21	42	14.4	61	51.4	149	5.7	4.8	-5	4	3	312	7	0.25	2.6	2.6	B	185	8	2.5	282	44	2.0	87	45	6.7
3	21	44	56.7	60	59.6	146	10.2	19.1	0.7A	3	3	248	18	0.03	3.0	3.6	C	190	10	1.6	93	36	3.4	293	52	8.1
3	22	17	49.4	59	52.9	153	21.8	118.7	2.8	13	6	89	45	0.21	1.5	1.7	B	44	12	1.8	139	22	2.8	287	65	3.3
4	3	7	5.2	61	2.5	148	49.2	33.9	2.4	35	15	49	22	0.46	0.3	0.4	A	110	7	0.6	201	10	0.5	345	78	0.8
4	4	24	11.2	61	2.9	147	1.6	15.5	2.0	32	12	41	5	0.48	0.3	0.6	A	16	6	0.6	285	9	0.4	139	79	1.1
4	12	38	1.0	60	9.9	141	12.7	5.6	1.0	11	6	156	10	0.29	1.0	0.8	A	25	2	1.9	295	4	0.6	142	86	1.4
4	15	55	45.3	60	14.5	140	44.4	15.6	1.2	11	7	139	19	0.33	0.7	0.8	A	122	2	0.6	30	43	0.8	214	47	1.9
4	16	1	29.7	61	41.8	149	38.1	37.5	1.7	27	14	137	14	0.66	0.5	0.5	A	266	1	0.6	357	35	1.1	175	55	0.8
4	17	53	27.9	60	39.0	147	47.9	22.0	1.0	22	13	69	37	0.87	0.5	0.9	A	263	4	0.5	172	21	0.8	3	69	1.8
4	20	14	58.8	61	25.1	149	54.8	39.9	0.9A	14	9	68	26	0.60	0.6	2.1	B	188	3	1.1	97	6	0.8	304	83	3.9
4	22	42	31.8	60	36.2	147	37.8	15.8	2.4	35	15	67	42	0.65	0.3	0.7	A	174	7	0.6	266	13	0.4	56	75	1.4
5	6	9	30.5	60	27.6	141	32.6	20.2	0.5A	4	3	153	16	0.20	13.6	13.2	D	102	28	1.2	352	33	0.9	223	44	35.5
5	12	6	29.7	60	24.0	141	3.2	2.0	0.1A	4	3	171	27	0.93	1.2	3.7	C	311	6	0.9	42	13	1.4	197	76	7.2
5	12	7	56.9	61	25.8	140	35.7	4.7	1.7	13	6	242	65	0.69	1.5	5.0	C	126	1	1.6	36	8	2.5	223	82	9.5
5	14	14	59.4	61	15.1	149	18.5	31.7	1.0A	17	11	57	46	0.38	0.5	0.8	A	337	8	0.7	261	17	0.8	94	67	1.6
5	23	6	26.5	60	11.6	141	10.6	1.3	0.1	4	4	182	9	0.22	22.9	14.9	D	299	8	0.6	204	33	51.2	41	56	3.0
6	2	11	55.9	60	16.4	140	41.5	10.2	1.1	10	7	145	23	0.23	0.9	1.1	A	303	12	0.6	40	33	1.1	196	55	2.3
6	2	34	45.9	61	49.4	149	3.9	4.6	-2A	3	3	304	5	0.05	1.6	1.5	B	181	17	1.4	81	42	3.6	289	44	2.0
6	6	11	26.6	60	13.8	141	10.0	2.4	0.9	8	7	130	11	0.56	0.9	1.4	B	313	15	0.5	49	22	1.2	191	63	2.8
6	6	49	52.4	59	49.7	139	16.9	14.6	2.2	10	5	192	19	0.88	1.7	1.0	B	261	20	2.8	324	22	0.8	117	51	1.6

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA FEBRUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
6	11	10	0.1	62	29.5	149	21.2	57.2	2.4	22	10	219	75	0.46	1.5	3.1	C	278	1	1.3	9	19	2.0	185	71	6.0	
6	13	47	20.7	59	57.6	140	14.3	28.0	0.9A	4	3	172	15	0.11	3.8	1.8	C	18	21	7.7	119	25	3.4	253	56	1.2	
6	23	43	16.4	61	14.2	143	33.5	16.5	0.8	6	4	134	27	0.29	1.6	3.3	C	108	2	0.7	199	22	1.8	13	68	6.6	
7	0	12	53.1	60	20.6	141	10.9	14.7	1.7	13	8	125	23	0.41	0.7	1.3	A	81	10	0.9	333	16	0.7	197	64	2.5	
7	0	44	16.6	59	53.8	152	46.4	94.0	3.2	17	6	79	32	0.27	1.3	1.9	B	81	8	1.4	147	17	1.9	324	60	3.4	
7	8	59	10.9	60	46.5	152	17.5	17.2	0.5A	4	4	180	23	0.51	9.4	2.6	D	16	0	1.0	106	11	18.0	286	79	3.6	
7	10	0	31.5	61	17.6	150	22.1	43.8	1.2A	12	11	89	28	0.55	0.6	1.3	A	192	7	1.1	101	9	0.7	319	79	2.4	
7	10	8	16.9	60	47.2	152	18.8	15.8	0.3A	4	4	175	24	0.48	25.0	14.6	D	196	1	0.9	106	16	98.4	289	74	3.7	
7	12	27	15.5	60	15.6	141	40.2	12.4	0.8	5	2	229	12	0.13	3.0	0.9	C	261	12	5.3	335	41	2.0	157	45	1.1	
7	17	38	58.6	61	30.5	150	17.5	52.4	1.1A	7	7	163	25	0.31	1.2	2.9	C	81	1	1.2	169	13	2.0	347	77	5.5	
7	19	5	41.8	60	1.6	142	36.2	26.0	0.9A	6	3	242	24	0.33	1.9	1.1	B	181	17	3.7	81	29	2.6	297	55	1.7	
7	21	7	48.7	60	36.9	143	5.6	15.1	1.1	6	3	104	48	0.12	1.2	3.3	C	261	3	2.2	157	4	1.4	23	75	6.1	
8	6	17	39.6	61	35.3	152	6.1	10.4	0.9A	7	6	206	36	0.55	2.5	1.7	B	199	3	0.6	291	26	5.2	103	64	2.5	
8	9	27	19.4	61	15.4	152	17.3	5.3	0.5	6	2	201	7	0.25	2.8	2.9	C	151	2	1.7	261	42	1.0	59	44	7.3	
8	12	55	44.8	60	6.7	140	33.2	6.8	2.3	11	9	141	17	0.27	0.9	0.8	A	290	1	0.5	200	28	1.8	22	62	1.4	
8	13	39	17.0	61	34.8	151	54.5	112.9	2.8	24	9	171	31	0.58	1.0	1.1	A	29	2	1.2	120	33	1.6	296	57	2.2	
8	15	16	25.8	60	18.4	144	44.9	5.4	0.9A	11	6	238	36	0.37	1.5	2.3	B	203	12	2.1	106	26	1.6	315	61	4.9	
8	17	21	52.0	61	37.5	151	21.1	6.2	1.4	14	10	119	37	0.87	0.4	0.8	A	273	0	0.7	183	18	0.6	3	72	1.6	
8	19	45	7.4	59	51.5	151	0.1	40.3	2.0	22	8	101	12	0.44	0.8	0.9	A	272	5	0.8	6	37	1.1	175	53	2.0	
8	21	3	33.1	60	11.3	139	41.4	21.4	1.2	8	4	196	26	0.62	1.7	1.1	B	123	11	0.9	219	27	3.4	13	60	1.5	
8	22	3	21.4	60	2.6	140	22.7	8.0	0.7A	7	3	162	9	0.18	3.2	2.8	C	280	11	1.6	20	41	7.8	178	47	1.1	
8	23	28	21.9	60	13.2	139	41.5	8.7	1.0	7	6	211	30	0.42	1.3	1.6	B	309	12	0.9	46	31	1.6	200	56	3.5	
9	0	26	22.0	60	12.6	139	38.4	11.1	1.2	9	6	200	29	0.50	1.2	1.3	A	308	10	0.8	46	39	1.3	206	49	3.1	
9	3	38	46.4	59	55.3	153	27.6	134.5	3.7	15	5	83	44	0.21	1.8	1.5	B	261	5	1.7	317	21	2.8	159	50	2.2	
9	7	47	38.4	60	39.2	144	34.8	33.9	0.7A	7	8	120	15	0.30	0.8	0.9	A	139	8	1.5	42	39	0.9	239	50	2.1	
9	10	6	15.3	60	25.8	152	45.3	5.4	0.3	6	5	155	25	0.67	1.0	0.8	A	25	6	0.6	117	19	2.0	278	70	1.4	
9	19	29	7.1	61	24.1	149	43.8	34.1	0.9A	6	4	140	20	0.24	2.2	2.0	B	261	11	1.7	135	28	4.2	5	45	2.7	
9	20	58	22.8	60	12.4	141	16.6	12.2	0.9	10	7	152	15	0.32	0.9	0.6	A	300	10	0.5	208	14	1.7	65	73	1.0	
10	10	8	25.6	60	17.3	141	41.2	18.9	0.6A	7	4	196	8	0.28	1.5	0.9	B	17	22	3.0	119	28	0.9	254	53	1.4	
10	12	10	32.2	61	41.3	150	10.2	45.5	3.0	30	7	82	16	0.45	0.6	0.9	A	179	4	1.1	89	6	0.6	303	83	1.8	
3.0 ML ATWC																											
10	21	14	26.6	61	52.1	150	59.5	66.3	2.5	21	5	155	31	0.51	0.8	0.9	A	96	10	0.9	191	29	1.4	349	59	1.8	
11	0	40	13.1	59	48.6	137	31.0	27.0	1.6A	8	4	300	87	0.28	19.1	25.0	D	330	14	3.6	261	31	2.5	84	51	62.9	
11	0	41	46.4	60	43.0	152	10.4	15.0	0.5	7	7	148	20	0.88	0.9	1.8	B	23	9	0.6	116	22	0.9	272	66	3.7	
11	1	17	9.2	60	16.4	140	47.5	10.7	1.0	10	8	139	19	0.31	1.0	1.3	A	301	2	0.6	32	33	1.0	208	57	2.9	
11	1	59	20.1	60	22.2	140	24.1	12.4	1.2	9	5	174	31	0.56	1.0	1.7	B	316	14	0.8	51	19	1.4	192	66	3.5	
11	2	43	2.2	61	9.9	149	40.9	39.6	0.8A	6	5	124	11	0.17	1.3	1.0	A	122	26	1.3	261	39	1.4	17	27	2.5	
11	5	30	10.2	61	15.0	149	18.9	38.6	0.7A	5	5	160	13	0.31	0.9	0.8	A	28	2	1.8	296	38	2.0	121	52	0.9	
11	5	33	58.7	59	48.8	139	19.3	21.9	0.7	7	6	188	17	0.54	2.4	1.4	B	320	0	0.8	261	15	4.0	50	56	2.0	
11	7	47	45.3	60	12.8	139	38.6	7.4	0.7	7	5	200	29	0.51	1.4	2.0	B	330	11	0.9	81	26	1.6	222	55	4.1	
11	9	7	5.0	60	22.2	141	3.0	2.8	1.0	10	8	133	24	0.48	0.5	1.1	A	314	4	0.5	45	13	0.8	207	76	2.0	
11	13	39	51.8	60	15.0	143	23.7	12.1	1.8	23	16	128	32	0.74	0.5	0.9	A	8	3	1.0	278	6	0.6	125	83	1.7	
11	18	59	54.6	58	7.5	154	23.8	106.1	4.1	11	3	123	120	0.31	2.7	7.9	D	206	7	2.0	297	15	2.9	92	73	15.4	
4.7 MB 4.8 ML ATWC																											
12	0	47	52.3	62	12.1	151	5.2	73.8	2.9	22	8	170	34	0.44	1.1	1.1	A	90	10	1.0	352	39	1.8	192	49	2.3	
12	4	19	44.4	61	49.7	149	3.0	5.5	0.0	6	6	257	5	0.42	1.2	0.9	A	336	23	1.4	82	33	2.7	218	48	0.8	
12	4	51	40.7	60	13.9	141	40.5	9.4	0.6	5	4	235	15	0.37	1.7	0.9	B	132	1	1.0	222	6	3.1	33	84	1.6	
12	6	42	12.6	61	50.3	143	37.2	0.1	1.6	14	9	234	45	0.64	1.0	10.2	D	279	0	0.8	9	0	1.9	0	90	19.1	
12	9	31	47.2	60	8.3	141	9.3	6.1	0.1A	4	3	212	7	0.50	3.3	1.1	C	22	14	6.4	284	29	0.8	135	57	1.4	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA FEBRUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZI	DP1	SE1	AZ1	DP2	SE2	AZ2	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
12	11	26	29.3	60	40.5	140	39.4	6.6	1.0	9	7	192	49	0.65	1.1	1.8	B	81	3	1.7	140	6	0.6	321	58	2.9
12	13	15	38.5	61	47.6	148	50.0	15.0	1.4	20	14	98	6	0.72	0.4	0.4	A	162	8	0.7	64	44	1.0	260	45	0.5
12	16	50	37.5	62	53.6	149	8.1	61.4	2.6	21	8	130	81	0.54	0.9	2.6	B	270	2	1.5	1	15	1.1	173	75	5.1
12	22	9	38.3	60	11.4	152	27.6	93.9	2.5	18	9	94	20	0.39	1.0	1.7	B	261	4	0.9	139	12	1.4	4	56	2.8
13	2	56	3.8	60	26.8	143	5.0	13.5	1.1A	15	8	114	20	0.59	0.6	1.3	A	286	6	0.6	17	10	1.0	165	78	2.4
13	6	49	20.1	60	13.2	141	7.2	11.5	1.6	14	9	123	9	0.46	0.7	0.5	A	310	16	0.5	209	33	1.4	62	52	0.8
13	7	44	18.0	61	7.2	152	14.1	14.1	0.2	3	2	186	12	0.19	25.0	25.0	D	307	24	2.5	199	35	1.3	64	46	99.0
13	9	36	26.0	60	10.4	140	55.3	4.2	0.2A	6	4	119	7	0.34	1.2	1.5	B	94	10	0.7	357	34	1.2	198	54	3.5
13	12	6	47.4	59	55.0	140	45.5	0.2	0.8A	8	3	197	31	0.26	0.7	1.9	B	290	1	0.6	199	6	1.3	29	84	3.6
13	15	59	54.3	61	51.4	150	19.7	8.7	3.1	27	8	70	33	0.41	0.5	0.8	A	6	7	1.0	273	22	0.5	113	67	1.6
3.9 ML ATWC								FELT (IV) AT KASHWITNA AND WILLOW. (III) AT WASILLA AND (II) AT ANCHORAGE AND PALMER.																		
13	17	2	31.2	61	2.7	141	35.6	11.6	0.8	11	5	191	17	0.33	1.0	1.6	B	301	5	0.8	209	16	1.8	48	73	3.0
13	18	9	11.8	60	23.9	153	10.4	134.8	3.5	17	7	84	46	0.30	1.0	1.7	B	165	3	1.8	81	7	1.5	279	80	3.3
3.5 ML ATWC								FELT (II) AT HOMER.																		
13	18	32	50.2	58	44.8	138	57.8	21.2	1.4A	5	4	318	79	0.22	3.7	2.2	C	333	22	3.8	81	24	7.6	209	54	2.2
13	21	50	16.2	59	38.4	152	39.4	85.4	3.4	18	6	96	53	0.35	0.9	1.6	B	261	2	1.1	146	8	1.4	3	66	2.8
3.7 ML ATWC								FELT (II) AT ANCHORAGE, BIG LAKE AND WILLOW.																		
14	5	12	49.0	60	10.7	140	20.6	13.6	1.1	6	3	170	10	0.43	3.9	1.6	C	195	19	7.7	295	26	1.0	73	57	2.0
14	6	1	1.8	60	59.6	147	9.9	14.0	1.9	27	16	82	39	0.44	0.4	0.7	A	183	9	0.8	275	13	0.5	59	74	1.3
14	13	1	51.3	59	50.6	151	52.1	47.1	2.2	18	9	139	39	0.32	0.7	1.5	B	353	0	1.4	263	7	0.9	83	83	2.8
14	13	9	28.5	61	50.4	150	24.7	54.7	3.4	26	4	94	35	0.32	0.9	1.5	B	174	4	1.6	84	5	0.9	303	84	2.9
3.8 ML ATWC								FELT (II) AT ANCHORAGE, BIG LAKE AND WILLOW.																		
14	16	4	50.5	61	30.8	140	9.4	0.8	1.1A	3	3	328	88	0.16	3.0	25.0	D	305	0	6.7	35	1	4.6	215	89	99.0
14	20	1	2.0	61	0.9	141	35.6	3.4	0.6	4	4	197	15	0.47	1.4	8.5	D	288	3	0.9	197	6	1.9	44	83	15.9
14	20	11	28.2	61	15.5	152	15.6	5.5	0.4	3	3	255	6	0.46	25.0	25.0	D	316	9	2.7	261	44	1.0	54	36	62.8
14	20	38	9.7	60	16.7	140	42.0	13.5	0.9	5	5	153	23	0.29	2.1	2.6	B	318	20	0.9	81	20	1.9	200	48	5.6
14	20	41	21.3	60	43.3	144	41.9	28.5	1.3	13	10	60	11	0.37	0.8	0.8	A	17	30	0.8	126	30	1.0	252	45	1.9
14	21	43	9.0	62	4.2	150	57.5	63.5	2.3	17	6	205	32	0.55	1.4	1.7	B	1	8	2.7	93	11	1.3	236	76	3.3
15	2	8	37.5	62	8.7	151	26.9	87.8	2.6	18	7	260	19	0.42	1.7	1.7	B	81	15	2.0	178	36	3.0	332	51	3.4
15	3	6	41.6	60	10.5	152	44.3	101.1	2.8	18	6	91	4	0.42	1.7	1.6	B	81	5	1.6	145	6	2.7	301	63	2.8
15	6	1	34.0	60	7.1	141	10.9	0.4	0.3	4	2	219	9	0.25	1.7	3.9	C	185	7	3.0	276	11	1.0	63	77	7.5
15	10	9	49.0	61	31.5	151	27.8	75.0	2.7	26	10	96	38	0.48	1.0	1.4	A	81	17	1.0	165	22	1.6	312	62	2.7
15	11	47	60.0	60	4.8	139	49.0	20.0	1.0	6	3	194	17	0.44	3.8	1.1	C	211	6	7.1	119	11	1.1	329	77	2.0
15	11	48	12.0	60	7.9	139	42.2	15.6	1.8	7	6	202	20	0.48	2.3	1.0	B	305	15	0.9	211	16	4.4	76	68	1.6
15	13	42	44.8	61	54.8	147	18.4	30.9	2.7	28	13	108	9	0.83	0.8	0.6	A	192	4	1.4	100	16	0.7	296	73	1.1
2.5 ML ATWC								FELT (II) AT ANCHORAGE, BIG LAKE AND WILLOW.																		
15	15	21	43.3	61	44.5	150	40.5	4.1	0.8A	4	4	146	31	0.55	1.5	1.4	B	150	8	0.9	81	37	2.7	251	48	2.5
15	17	38	23.7	59	47.3	141	27.0	4.1	1.1A	6	2	198	47	0.27	2.0	4.4	C	192	9	3.3	285	16	1.6	74	71	8.6
15	17	44	32.3	62	27.3	148	11.9	31.7	2.4	23	8	117	72	0.50	1.6	1.2	B	283	11	1.5	186	30	3.4	31	58	1.8
15	17	57	18.7	62	22.5	148	13.1	39.1	2.4	26	10	114	63	0.52	1.2	4.0	C	358	2	2.3	88	10	1.4	257	80	7.5
15	21	58	34.7	60	34.6	152	20.4	15.2	-1	3	3	172	7	0.36	21.8	4.3	D	111	11	41.6	17	21	1.1	227	66	1.4
16	3	16	18.3	60	23.8	152	36.6	11.4	0.6A	3	3	176	23	0.44	25.0	10.4	D	207	1	0.7	117	11	99.0	302	79	5.1
16	3	51	59.5	59	45.9	153	11.8	13.1	1.9	15	6	106	47	0.74	0.9	2.8	B	81	2	0.8	326	9	1.2	181	63	4.9
16	3	59	30.7	60	19.1	141	18.6	14.2	2.1	14	7	113	24	0.37	0.8	1.1	A	321	9	0.7	81	19	0.9	213	54	2.0
16	4	9	44.9	60	19.3	141	20.1	16.6	1.3	7	5	136	23	0.32	1.2	1.5	B	331	21	1.2	81	27	1.3	212	51	3.3
16	6	35	24.2	60	19.6	141	20.7	15.0	1.0	7	3	136	22	0.23	2.0	3.0	C	118	5	1.7	25	32	1.5	216	58	6.6
16	6	45	3.1	61	4.1	152	17.8	14.9	0.5A	3	3	191	18	0.19	22.6	25.0	D	304	20	4.1	201	30	1.1	62	52	69.5
16	12	32	47.9	60	14.8	151	37.4	50.3	2.2	23	7	83	29	0.39	0.8	1.5	B	302	1	0.9	32	18	1.2	209	72	3.0

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA FEBRUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
20	16	4	55.6	60	19.8	141	21.0	14.3	1.6	17	10	112	22	0.47	0.5	0.7	A	125	3	0.5	34	26	0.9	221	64	1.4
20	17	52	35.0	60	18.5	141	10.9	14.9	1.0	12	6	120	19	0.41	0.9	0.9	A	309	4	0.7	43	44	1.1	215	46	2.2
20	18	31	41.9	60	16.3	141	11.0	14.4	1.6	15	8	116	15	0.31	0.6	0.8	A	306	2	0.6	37	26	1.0	212	64	1.6
20	19	24	51.8	61	53.5	148	56.6	1.3	-1A	4	4	274	6	0.61	1.8	6.2	D	33	9	1.0	124	9	2.5	259	77	11.9
20	22	55	44.9	61	50.3	148	53.2	14.5	-5A	3	3	185	4	0.03	1.3	1.3	B	84	26	0.9	338	30	2.3	207	48	2.9
21	0	35	40.6	60	21.5	140	26.0	11.3	1.3A	9	7	171	31	0.66	1.1	1.8	B	304	11	0.7	39	23	1.5	190	64	3.6
21	0	37	5.9	60	18.6	140	25.4	16.6	1.3A	10	8	166	26	0.49	0.9	1.0	A	312	16	0.6	53	33	1.1	200	52	2.3
21	5	39	44.5	61	51.8	149	16.1	5.0	0.5A	8	7	223	16	0.59	0.9	1.1	A	261	13	0.6	165	22	1.5	19	64	2.2
21	5	56	34.1	60	6.0	141	8.5	2.4	0.4A	3	2	221	9	0.21	2.2	3.2	C	107	8	1.5	202	33	1.4	5	56	7.2
21	6	47	28.0	60	14.8	140	24.5	25.2	0.7	4	3	203	19	0.46	22.1	19.5	D	301	30	0.8	54	34	2.8	180	41	55.2
21	10	19	31.3	60	58.3	151	57.2	5.2	0.3	9	7	132	24	0.62	1.2	1.2	A	176	5	0.6	81	44	0.9	270	46	3.1
21	13	9	21.1	61	3.2	148	3.6	26.7	2.2	40	17	49	21	0.43	0.3	0.6	A	110	2	0.4	200	7	0.6	4	83	1.1
21	16	57	2.4	60	7.7	141	16.6	7.4	0.6	12	8	158	14	0.41	0.9	0.6	A	292	12	0.6	26	20	1.7	173	66	1.1
21	22	45	14.4	60	14.4	140	43.6	15.0	0.9	9	7	139	19	0.31	1.0	1.0	A	303	3	0.7	35	45	1.1	210	45	2.3
22	1	37	31.8	61	3.3	151	10.3	63.8	2.5	25	11	55	35	0.44	0.4	1.1	A	5	0	0.7	95	10	0.6	275	80	2.0
22	4	31	2.5	59	47.3	139	4.3	11.5	0.8	7	5	215	23	0.63	1.3	1.6	B	326	6	0.7	81	33	1.3	228	49	3.5
22	4	45	53.1	59	59.5	151	53.7	74.7	2.4	21	10	119	34	0.60	0.5	1.0	A	8	0	1.0	98	6	0.8	278	84	1.9
22	8	7	33.3	60	22.9	144	25.7	18.9	1.0	16	12	171	14	0.52	0.5	0.5	A	348	4	1.0	82	43	0.7	254	47	1.1
22	10	58	19.8	60	8.2	141	11.6	14.0	1.4	14	7	156	9	0.38	0.9	0.6	A	119	1	0.6	29	13	1.7	213	77	1.0
22	12	43	46.6	60	14.3	141	27.3	5.6	1.0	10	5	156	21	0.53	0.8	1.1	A	23	2	1.5	292	3	0.7	146	86	2.0
22	13	13	47.1	61	40.9	151	10.9	74.5	2.7	21	7	109	34	0.49	0.8	1.2	A	85	8	0.9	178	23	1.2	337	66	2.3
22	16	18	31.1	59	29.8	138	51.2	6.3	0.7	4	3	236	5	0.18	3.6	4.8	C	104	32	2.9	261	32	10.1	3	16	0.7
22	22	18	47.3	60	52.2	152	16.2	4.5	1.2A	8	6	166	34	0.60	1.1	1.0	A	193	2	0.5	101	45	1.0	285	45	2.6
23	0	26	7.4	60	44.3	143	11.9	24.6	1.5	17	8	84	57	0.89	0.4	0.7	A	283	4	0.6	193	5	0.8	52	84	1.3
23	4	25	31.9	60	9.6	153	11.7	121.6	3.2	17	4	81	21	0.24	1.4	1.8	B	321	5	2.0	261	9	1.6	84	58	2.9
23	5	5	47.5	61	22.1	140	9.3	1.1	1.8	10	6	247	78	0.33	1.4	3.9	C	300	2	1.4	30	9	2.3	198	81	7.3
23	8	57	21.1	59	53.4	153	11.5	110.0	3.1	15	5	75	39	0.27	1.2	1.1	A	43	18	1.1	299	38	2.5	153	47	1.8
23	9	23	14.8	60	11.0	139	45.0	13.4	0.9	8	2	193	26	0.42	2.2	2.3	B	298	1	0.9	29	44	1.6	207	46	5.7
23	9	52	18.3	60	11.5	139	41.8	12.4	0.5A	5	3	230	27	0.36	1.9	2.2	B	115	3	0.9	23	39	2.0	209	51	5.0
23	11	14	26.4	60	12.3	141	4.6	0.6	0.2A	5	2	138	6	0.39	3.0	5.1	C	328	11	1.1	81	22	1.6	218	57	10.5
23	14	45	28.3	60	9.3	141	6.7	9.2	0.7	10	5	153	4	0.27	1.3	0.5	A	206	3	2.5	298	27	0.7	110	63	0.9
23	15	56	17.7	61	9.9	152	13.3	8.0	-1	4	4	189	9	0.30	1.7	1.5	B	312	24	1.4	201	38	0.8	66	42	4.1
23	20	56	56.0	61	50.6	149	20.4	6.0	1.2	15	10	171	20	0.73	0.5	0.6	A	358	6	0.9	266	19	0.4	105	70	1.3
24	0	2	26.9	59	24.4	138	12.8	16.0	1.5	4	3	330	38	0.66	8.4	5.9	D	313	35	2.3	194	35	19.2	74	36	1.7
24	5	55	0.0	60	56.0	150	51.0	10.9	1.8	24	14	48	30	0.69	0.5	0.9	A	316	2	0.6	81	8	0.4	216	54	1.4
24	7	1	28.0	61	52.6	149	2.1	1.3	0.6A	8	4	185	6	0.68	1.3	2.7	B	348	11	1.2	261	19	1.8	108	68	5.3
24	10	15	31.9	60	5.5	137	10.8	2.6	2.0	9	3	299	119	0.20	2.4	5.6	D	309	4	3.4	40	10	4.1	198	79	10.6
24	17	37	37.0	61	1.1	152	23.6	109.9	2.8	22	7	108	31	0.41	1.1	1.3	B	27	6	1.2	119	19	2.1	280	70	2.6
24	19	47	2.1	60	15.6	140	39.6	12.8	0.7	9	4	145	24	0.20	1.4	2.0	B	312	15	0.7	49	27	1.4	196	59	4.4
24	21	52	29.1	60	23.2	142	5.4	6.6	0.7A	7	4	137	19	0.51	1.7	3.8	C	16	16	1.3	281	17	0.8	147	66	7.8
25	3	47	15.6	61	8.5	152	13.9	6.5	0.2A	4	4	187	10	0.36	1.2	1.4	B	200	26	0.6	306	28	1.4	76	50	3.3
25	4	25	9.1	59	54.8	152	36.0	86.4	3.0	18	10	83	32	0.67	0.7	1.0	A	174	3	1.3	84	4	0.9	301	85	1.9
25	15	8	15.3	59	59.2	141	13.5	1.8	0.9	10	6	173	22	0.47	0.8	1.2	A	123	11	1.0	218	22	1.2	8	65	2.5
25	15	9	19.9	59	58.7	141	11.4	2.6	1.9	11	5	173	21	0.34	0.6	0.9	A	303	7	0.6	210	22	0.9	50	67	1.8
25	15	56	25.0	61	1.2	150	54.0	56.1	2.6	26	10	50	36	0.46	0.4	1.1	A	30	0	0.7	120	4	0.6	300	86	2.0
25	19	28	59.8	61	13.7	146	29.0	9.9	0.0A	2	3	214	13	0.01	8.5	13.0	D	23	12	1.2	286	30	3.1	132	57	28.9
25	22	14	55.0	61	32.2	150	52.0	9.4	0.3A	7	6	106	11	0.64	0.9	0.8	A	37	15	1.1	140	41	2.1	291	45	0.6
26	0	6	39.5	62	26.3	153	14.7	14.0	2.9	15	5	125	103	0.55	1.6	4.5	C	144	3	1.2	81	6	2.5	264	62	7.6

4.0 ML ATWC

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA FEBRUARY 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
26	0	48	39.0	61	1.9	152	20.0	16.4	0.6	4	4	196	22	0.42	9.5	17.8	D	198	8	0.6	292	27	3.7	93	62	36.8
26	1	2	46.3	60	50.9	154	7.7	106.3	2.9	10	6	201	106	0.13	2.0	2.6	B	168	11	1.6	81	22	3.3	284	65	5.2
26	1	50	14.6	59	57.5	141	12.3	3.0	1.1	10	6	175	24	0.38	0.9	1.3	A	124	8	0.9	218	27	1.4	19	62	2.7
28	17	0	40.2	61	28.7	146	38.2	21.0	2.3	30	14	64	39	0.75	0.3	0.7	A	7	1	0.6	277	10	0.4	103	80	1.4
28	17	54	48.3	60	12.7	141	31.1	16.0	1.6	14	7	134	31	0.67	0.6	0.7	A	87	1	0.6	177	21	0.9	354	69	1.3
28	18	35	58.3	60	23.3	142	5.2	8.1	0.6	8	4	144	19	0.35	1.3	2.7	C	38	7	1.2	306	23	0.7	144	66	5.6
27	2	38	35.6	61	30.8	141	0.7	0.0	1.4A	8	6	253	64	0.39	3.7	2.6	C	310	9	1.7	81	23	6.9	207	43	1.3
27	3	29	46.9	61	29.0	141	8.6	8.4	1.4A	7	6	251	60	0.40	1.5	3.9	C	313	3	1.5	43	7	2.6	200	82	7.4
27	3	35	40.4	61	29.1	141	5.2	0.1	1.2A	5	5	254	59	0.34	1.4	15.0	D	312	0	1.5	42	0	2.6	0	90	28.2
27	6	16	5.0	61	20.2	150	24.7	15.4	2.0	29	8	78	23	0.58	0.4	0.9	A	271	7	0.4	180	13	0.6	29	75	1.6
27	7	35	35.0	61	28.8	140	44.2	0.9	2.1	13	9	242	66	0.53	1.3	4.0	C	115	1	1.3	25	3	2.3	223	87	7.4
27	7	38	28.8	60	14.3	140	57.5	10.2	0.9	6	5	126	10	0.35	1.5	1.6	B	90	18	0.9	345	38	0.7	200	46	4.0
27	9	39	30.6	59	54.7	141	31.5	4.7	1.1	9	8	187	38	0.60	0.8	1.2	A	106	1	0.8	197	26	1.3	14	64	2.3
27	16	30	45.0	61	49.0	148	59.5	1.1	-1.1A	4	4	201	3	0.51	0.8	2.1	B	279	2	1.5	189	8	0.6	23	82	4.0
27	23	61	22.3	59	11.1	138	48.9	10.0	1.7	5	4	317	30	0.63	5.0	3.3	C	147	32	2.7	34	32	10.9	271	41	2.5
28	3	33	45.2	60	35.0	152	26.2	18.4	0.5A	3	3	172	2	0.42	25.0	5.3	D	114	9	63.0	19	28	1.2	220	60	1.3
28	4	55	31.2	60	34.1	143	44.3	20.0	1.0A	7	5	121	55	0.86	0.9	1.8	B	261	1	0.9	351	17	1.5	168	73	3.5
28	9	21	1.1	59	53.3	153	14.2	112.1	2.7	15	11	74	40	0.50	1.1	1.4	B	81	12	1.2	164	23	1.9	323	63	2.8
28	11	31	5.9	60	9.4	140	35.6	27.0	1.0A	4	4	160	20	0.23	3.5	2.7	C	301	32	0.9	59	37	1.8	183	37	8.1
28	12	33	27.2	61	40.0	149	29.8	37.0	2.2	30	15	126	21	0.66	0.5	0.5	A	261	11	0.5	358	42	0.9	159	46	0.8
28	14	50	39.0	61	31.6	151	1.9	72.9	2.2	22	17	186	17	0.48	0.9	1.0	A	81	6	0.6	186	24	1.5	337	65	2.0
28	21	58	44.6	60	14.7	141	0.9	10.4	1.7	11	10	123	10	0.29	0.8	0.7	A	313	15	0.6	211	40	1.8	59	46	0.7
28	22	20	52.9	60	18.0	152	11.0	90.8	2.3	19	17	115	33	0.54	0.7	1.1	A	163	3	1.2	81	11	1.0	269	76	2.0

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA MARCH 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DF1	SE1	AZ2	DF2	SE2	AZ3	DF3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
19	5	38	35.5	60	6.9	140	45.3	26.5	0.7A	5	4	192	18	0.18	4.5	2.0	C	285	12	1.0	191	20	9.0	44	66	2.2
19	14	42	15.2	60	57.1	152	6.4	9.5	0.2A	4	3	194	26	0.49	6.0	0.8	D	284	0	11.2	194	14	0.6	14	76	1.6
19	18	34	5.4	61	33.1	141	17.4	0.2	2.1	15	7	242	65	0.41	1.5	3.4	C	302	2	1.2	32	5	2.8	100	85	6.3
19	19	43	16.0	60	20.1	140	20.0	10.4	0.7A	8	4	175	27	0.45	2.5	3.0	C	325	18	1.1	81	26	2.6	210	50	6.6
19	21	16	24.7	61	33.2	141	15.5	3.2	1.3A	8	6	251	66	0.28	1.2	7.3	D	313	2	1.3	43	3	3.1	189	86	13.8
19	23	17	6.4	60	14.2	141	4.3	2.1	0.4A	7	3	123	9	0.14	2.5	4.0	C	329	14	1.0	81	23	1.4	215	56	8.4
20	3	18	21.0	61	29.5	149	53.9	42.9	3.3	29	9	103	18	0.53	0.6	1.3	A	261	2	0.6	161	12	1.0	0	74	2.5
3.2 ML ATWC										FELT (II) AT ANCHORAGE.																
20	3	20	7.6	60	21.6	152	7.2	91.7	3.1	21	10	58	29	0.49	0.7	0.9	A	186	13	0.9	91	23	1.1	303	63	1.7
20	3	48	52.0	61	46.0	149	5.3	11.4	0.4	7	7	196	9	0.41	1.0	0.8	A	326	32	1.6	210	34	0.6	87	39	2.0
20	4	15	21.8	61	22.4	149	49.5	38.8	1.1A	12	7	140	20	0.43	0.7	0.6	A	301	12	1.4	34	14	0.8	172	71	1.1
20	5	17	38.3	59	41.3	151	1.5	5.8	1.4	11	7	213	12	0.48	1.5	0.8	B	164	9	2.8	261	36	0.9	62	52	1.6
20	6	46	50.7	60	43.4	140	34.5	19.8	0.8A	5	5	222	49	0.41	1.5	1.7	B	145	4	0.9	261	26	2.3	48	54	3.3
20	9	9	53.7	60	13.2	153	6.0	125.5	3.7	16	3	80	16	0.25	1.4	1.1	B	216	1	1.6	126	7	2.7	314	83	2.0
4.1 MB										FELT (II) AT NONDALTON.																
20	12	10	32.8	59	22.9	152	55.9	97.4	3.3	14	7	103	29	0.34	1.1	1.8	B	176	5	1.9	85	21	1.4	279	68	3.6
20	12	38	15.7	60	25.0	152	5.6	76.5	2.4	20	8	101	25	0.32	1.0	1.8	B	144	8	1.6	81	18	1.1	260	57	3.2
20	14	21	20.5	61	19.5	149	25.3	37.4	1.2A	19	10	56	12	0.40	0.5	0.8	A	290	4	1.0	190	5	0.6	58	84	1.6
20	15	5	0.4	61	29.9	149	54.1	44.9	2.5	29	12	104	17	0.49	0.6	1.1	A	261	7	0.5	155	13	0.9	15	68	2.0
20	16	18	4.1	61	48.6	149	5.1	15.4	1.0	13	10	171	7	0.61	0.9	0.8	A	133	12	1.2	261	36	0.7	32	39	1.9
20	20	32	26.5	60	0.1	140	45.5	1.5	0.9	9	6	163	23	0.50	0.9	1.0	A	296	2	0.5	205	34	1.6	29	56	2.0
20	23	27	23.8	61	16.9	146	43.8	28.9	2.9	31	10	45	27	0.57	0.3	0.7	A	188	2	0.6	278	7	0.5	82	83	1.3
3.5 ML ATWC										FELT (IV) AT VALDEZ.																
21	0	19	35.3	60	37.9	143	13.3	19.2	1.3	16	9	110	52	0.53	0.5	1.0	A	14	1	0.9	284	12	0.6	109	78	1.9
21	0	28	5.2	61	20.9	151	39.1	14.7	0.4A	3	3	333	20	0.08	2.8	4.7	C	161	21	2.7	81	26	2.1	293	56	9.5
21	3	31	2.5	60	30.6	142	69.8	18.3	0.7A	7	4	115	35	0.31	1.0	1.6	B	81	3	1.7	339	5	1.0	190	77	5.0
21	4	20	23.5	60	30.6	143	3.3	20.6	0.8A	6	4	157	36	0.18	1.4	3.1	C	8	4	0.9	277	5	2.6	136	84	5.8
21	12	48	18.9	60	59.1	147	16.2	22.5	2.1	30	15	85	11	0.57	0.4	0.6	A	188	5	0.7	279	13	0.5	77	76	1.2
21	14	0	19.4	61	31.6	141	19.8	0.0	1.2	11	5	241	63	0.32	2.4	15.6	D	307	0	1.5	37	1	4.5	217	89	29.3
21	17	29	58.1	62	9.8	151	34.1	100.3	2.8	19	7	165	98	0.42	3.6	4.3	C	81	9	1.5	328	32	4.0	183	50	9.4
21	21	6	22.8	61	17.0	152	11.7	4.5	0.3	3	3	288	3	0.03	1.4	1.2	B	167	6	1.2	261	31	2.8	87	58	2.0
21	22	46	9.1	61	15.2	152	16.6	2.7	1.8	20	8	213	7	0.83	0.7	0.5	A	112	24	1.4	6	32	1.1	232	48	0.6
21	32	46	36.2	60	3.8	140	24.8	10.4	0.6	8	3	159	9	0.64	1.9	1.0	B	288	4	0.9	19	17	3.6	185	73	1.5
22	3	12	0.4	61	46.3	151	13.9	75.0	2.4	21	8	224	66	0.57	1.7	1.7	B	81	7	0.9	331	42	2.9	178	44	3.3
22	3	0	9.1	61	29.7	149	55.0	42.2	2.9	28	9	106	18	0.54	0.7	1.3	A	261	2	0.6	161	14	1.1	359	73	2.5
3.1 ML ATWC										FELT (II) AT ANCHORAGE.																
22	3	24	46.2	60	51.5	147	5.5	41.6	2.4	32	12	90	2	0.63	0.5	0.8	A	282	1	0.5	12	2	0.9	165	88	1.5
22	4	27	16.2	61	11.1	152	10.3	2.3	-2	3	3	272	6	0.03	1.2	4.0	C	261	7	1.9	324	8	0.9	119	61	6.7
22	12	13	36.3	62	32.5	149	53.6	64.5	2.8	23	9	100	92	0.47	1.8	3.7	C	81	3	1.6	330	22	1.0	178	60	7.3
22	15	19	2.3	60	17.7	141	10.3	17.2	0.9	9	6	121	18	0.28	1.4	1.3	B	301	3	0.7	208	44	3.4	34	46	1.1
22	15	33	29.5	60	2.6	141	25.4	1.1	0.8A	9	6	170	25	0.38	1.2	1.5	B	294	0	0.9	204	32	1.9	24	58	3.0
22	18	66	32.7	58	37.5	135	55.3	70.9	2.4A	4	2	354	193	0.56	25.0	25.0	D	30	1	44.1	209	34	4.4	121	56	99.0
22	21	12	14.5	59	56.4	138	27.9	23.1	1.2	7	5	262	59	0.49	1.7	2.6	B	81	7	2.9	334	17	1.5	190	65	4.9
23	1	0	34.2	60	43.6	140	38.7	18.7	0.9A	4	4	217	46	0.42	1.8	2.3	B	310	0	1.1	261	22	2.6	49	52	3.9
23	3	47	24.7	61	11.1	152	10.6	5.7	0.0A	3	3	275	7	0.04	1.2	1.6	B	331	11	1.0	261	17	2.0	98	62	2.8
23	4	28	50.5	60	9.4	140	49.7	9.2	0.8	8	7	144	11	0.46	1.1	0.8	A	105	9	0.6	201	32	2.3	1	56	0.9
23	6	39	15.3	59	49.7	153	24.6	122.4	2.6	13	8	98	44	0.26	1.8	1.8	B	81	18	2.0	163	34	3.1	324	51	3.5
23	10	14	13.5	59	55.6	142	52.8	24.8	1.2A	8	4	223	31	0.22	1.9	0.8	B	150	6	3.2	81	21	1.7	266	60	1.3
23	15	44	55.8	60	14.7	140	46.0	16.5	1.6	11	8	138	18	0.31	0.7	0.7	A	118	1	0.5	26	43	0.8	200	47	1.7

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA MARCH 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
23	18	6	37.4	58	55.9	143	32.2	15.5	1.7A	8	1	279	147	0.36	25.0	25.0	D	286	5	11.7	19	31	7.1	188	59	99.0
23	18	28	23.2	60	21.1	141	20.0	16.8	1.9	13	9	116	23	0.58	0.4	0.6	A	113	5	0.5	21	17	0.7	219	72	1.1
23	18	38	31.9	60	7.1	152	54.2	117.4	3.1	10	15	70	9	0.66	0.7	0.9	A	224	2	1.0	138	24	1.3	318	66	1.7
23	19	59	30.8	59	53.2	140	1.0	4.0	0.7	7	4	173	23	0.62	1.1	1.5	B	291	7	0.6	197	29	1.3	33	60	3.2
23	23	11	8.6	59	50.3	139	16.4	20.7	1.2	8	5	194	20	0.48	1.6	1.0	B	325	5	0.8	261	20	2.8	69	57	1.4
24	3	13	50.7	60	9.5	139	43.5	9.5	0.9	6	4	203	23	0.42	2.2	1.5	B	121	3	1.0	213	29	4.5	26	61	2.0
24	3	43	56.9	61	15.3	149	50.1	41.9	1.0A	10	7	128	15	0.50	1.4	1.5	B	16	2	1.2	285	14	2.6	114	76	2.8
24	5	9	8.6	61	16.7	152	12.7	7.7	0.6	4	4	245	3	0.38	1.5	0.9	B	104	19	2.9	359	38	2.0	215	46	1.0
24	10	30	58.7	60	36.9	143	1.4	4.9	1.2A	7	3	144	60	0.38	2.0	9.8	D	317	1	1.3	261	6	2.4	56	56	15.4
24	11	11	6.9	60	14.1	140	44.4	10.0	1.1	8	6	138	19	0.25	1.1	1.3	A	111	3	0.7	19	37	1.2	206	53	2.9
24	14	11	27.7	61	44.2	149	4.2	8.3	0.4	11	9	128	9	0.33	1.0	0.7	A	108	14	1.8	202	18	0.6	342	67	1.2
24	14	38	57.1	61	21.5	146	42.2	30.1	3.2	31	10	52	32	0.60	0.4	0.7	A	13	0	0.7	283	6	0.5	103	84	1.3
3.6 ML ATWC										FELT (IV) AT VALDEZ.																
24	15	44	49.1	61	22.3	139	50.4	15.4	1.5A	4	4	294	92	0.32	5.4	2.5	C	261	30	4.6	327	35	9.1	126	43	2.6
24	16	21	4.8	61	17.1	152	14.3	8.4	0.9	4	4	252	5	0.27	1.7	1.0	B	101	25	3.3	354	33	2.1	221	47	1.0
24	18	10	33.9	59	56.4	140	35.8	8.6	1.3	8	1	188	26	0.41	1.6	4.0	C	117	4	1.3	208	19	1.5	16	71	8.0
25	5	9	51.5	61	48.5	148	59.0	14.4	1.1	14	10	124	4	0.46	0.5	0.5	A	113	23	0.9	221	36	0.6	358	45	1.0
25	7	23	54.0	60	13.2	151	40.6	60.1	2.3	22	7	62	56	0.35	0.6	1.3	A	90	5	0.8	359	12	1.0	202	77	2.5
25	9	48	2.6	60	12.6	141	15.1	12.7	1.1	13	3	149	14	0.14	1.1	0.7	A	211	17	2.1	308	22	0.7	86	62	1.2
25	10	6	57.3	59	55.3	140	13.2	9.8	0.7	8	5	176	20	0.76	1.7	1.9	B	120	3	0.8	212	42	1.3	27	48	4.6
25	14	16	18.4	60	1.6	140	44.4	2.8	1.4	13	4	160	22	0.39	1.0	1.2	A	110	1	0.5	201	36	1.3	19	54	2.6
25	14	29	30.2	59	14.1	152	52.3	62.1	2.4	12	4	138	97	0.14	1.7	5.8	D	188	7	2.4	96	12	1.5	308	76	11.2
25	16	37	23.1	60	19.6	140	45.4	21.6	0.6A	7	4	147	25	0.57	2.1	3.4	C	328	18	1.1	81	18	1.5	205	56	7.1
25	17	1	27.1	61	48.4	149	3.0	15.4	1.1	15	7	159	6	0.33	0.6	0.8	A	144	2	0.9	261	30	0.6	51	50	1.5
25	18	7	29.0	60	37.3	143	14.6	19.6	1.0A	13	5	99	52	0.43	0.6	2.3	B	262	2	0.7	172	4	1.1	19	86	4.4
25	19	22	4.0	61	23.2	147	31.3	25.2	2.2	31	12	60	43	0.53	0.3	0.8	A	115	1	0.4	205	10	0.6	19	80	1.4
25	19	38	13.1	60	13.2	139	37.0	7.0	1.3	9	4	202	30	0.50	1.8	1.8	B	322	0	1.0	81	41	1.6	232	41	4.0
25	23	45	58.0	61	11.1	150	3.3	15.6	0.8A	11	11	100	27	0.48	0.5	1.6	B	345	4	0.9	261	13	0.7	92	75	3.1
26	3	52	50.6	60	15.9	140	6.9	12.8	0.5	8	2	182	20	0.32	2.2	2.8	C	87	28	1.1	343	26	1.7	215	52	6.5
26	7	43	57.9	61	27.0	150	38.4	68.3	2.7	27	10	162	48	0.35	0.8	1.6	B	261	2	0.6	188	14	1.4	359	71	2.9
26	9	20	16.7	61	3.1	152	18.9	14.6	0.5A	4	3	194	20	0.26	3.3	0.8	C	287	6	6.2	195	17	0.6	36	72	1.4
26	18	35	37.9	60	14.4	140	38.2	12.1	0.6	9	4	144	24	0.23	1.3	1.8	B	306	16	0.7	44	28	1.5	191	58	4.0
26	18	36	22.8	60	14.1	140	37.8	12.7	1.4	12	5	144	24	0.21	0.9	0.9	A	304	14	0.6	46	41	1.3	199	46	1.2
26	18	55	33.3	59	56.1	152	49.0	83.4	2.4	14	5	159	28	0.32	0.9	1.2	A	81	10	1.0	173	18	1.5	323	69	2.3
27	3	41	57.5	60	13.0	141	3.1	11.3	1.2	13	4	117	7	0.28	1.1	0.8	A	320	31	0.6	208	32	2.4	83	42	0.8
27	8	37	10.1	59	40.8	152	48.2	99.7	2.5	13	6	104	56	0.20	1.3	1.6	B	81	13	1.3	177	29	1.9	329	58	3.3
27	15	39	36.1	61	10.2	151	19.3	69.0	2.7	25	3	121	39	0.41	0.8	2.1	B	159	10	1.3	81	11	0.8	297	71	4.0
27	17	42	1.4	59	54.1	141	33.9	1.9	0.7A	7	3	223	41	0.17	1.7	3.7	C	270	3	1.3	1	17	2.6	170	73	7.2
27	20	12	33.7	60	30.9	142	58.8	13.2	0.5A	6	5	96	36	0.74	0.9	4.5	C	7	3	1.0	277	4	1.6	134	85	8.5
27	21	9	49.8	61	14.0	149	6.1	31.8	0.8A	13	10	52	25	0.33	0.5	1.1	A	261	0	0.9	347	5	0.7	171	84	2.1
27	21	12	29.8	59	56.0	140	36.4	0.4	0.9	8	4	189	27	0.37	0.7	2.0	B	282	1	0.8	192	11	1.2	17	79	3.9
27	23	40	14.3	60	7.3	141	6.2	9.0	0.8	10	4	156	5	0.29	2.1	0.7	B	292	7	0.7	24	15	4.2	178	73	0.0
28	0	5	9.3	60	13.8	141	1.5	2.3	0.8	12	8	120	8	0.45	1.0	1.4	B	305	3	0.8	37	32	1.0	210	58	3.1
28	2	24	3.9	60	44.4	150	58.4	55.2	2.5	24	7	71	14	0.36	0.6	1.2	A	97	6	0.8	6	6	1.2	232	81	2.3
28	3	6	51.2	60	45.3	152	33.6	120.8	2.7	19	9	160	22	0.28	1.4	1.6	B	38	4	1.8	130	26	2.5	300	64	3.1
28	3	34	45.6	60	6.8	140	29.9	9.8	1.1A	7	4	161	14	0.62	4.0	1.4	C	283	10	1.2	16	13	7.7	157	73	2.1
28	5	15	37.9	61	47.2	149	4.9	11.2	1.1A	5	4	203	8	0.17	1.4	1.6	B	300	12	2.0	202	35	1.4	46	53	3.7
28	10	13	56.4	61	46.2	151	50.0	108.8	3.0	23	10	143	52	0.36	1.2	1.8	B	92	1	1.5	2	27	1.7	184	63	3.7
28	11	36	42.0	60	20.1	139	41.1	5.2	0.8	7	2	206	41	0.20	1.4	3.4	C	109	4	1.6	19	7	2.5	229	82	6.5

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA MARCH 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SE2	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
28	12	19	0.0	61	18.5	152	11.5	6.3	-1A	3	3	293	5	0.03	2.0	1.9	B	33	2	2.0	123	23	3.8	298	67	3.5	
28	15	54	27.9	59	3.4	138	34.7	23.1	1.7	5	2	332	47	0.06	6.9	1.5	D	341	1	4.3	81	8	12.9	244	77	2.2	
28	17	29	37.2	61	19.6	149	32.2	39.1	0.7A	5	3	186	9	0.11	2.3	2.2	B	81	21	1.8	306	25	4.2	191	37	3.2	
28	19	33	30.5	61	32.2	141	12.4	1.5	1.2A	5	4	255	64	0.18	1.9	25.0	D	307	0	1.8	37	1	3.1	217	89	99.0	
28	21	46	39.4	61	19.4	140	43.8	16.5	1.1A	5	2	253	51	0.17	3.4	4.5	C	350	21	4.3	90	26	2.6	228	56	10.0	
29	10	23	33.5	61	16.8	152	10.8	4.0	-2	3	3	283	2	0.06	1.2	0.8	A	24	1	0.9	293	23	2.3	118	67	1.2	
29	10	52	15.9	60	8.5	141	4.6	9.5	0.3	8	4	183	3	0.35	1.5	0.4	B	28	4	2.8	120	19	0.8	287	70	0.8	
29	10	52	24.2	60	8.7	141	4.3	9.8	1.2	12	8	154	2	0.26	1.1	0.4	A	36	2	2.0	306	10	0.8	137	80	0.7	
29	12	18	40.3	60	9.5	141	0.9	13.0	0.6	12	6	122	1	0.25	1.0	0.5	A	296	0	0.7	205	10	2.0	25	80	1.0	
29	17	58	20.3	60	10.9	141	0.6	9.8	1.0	11	7	114	3	0.25	1.0	0.5	A	291	0	0.6	201	22	2.1	31	68	0.7	
29	18	24	0.7	60	45.1	143	22.8	14.3	1.1	15	7	87	65	0.58	0.6	2.3	B	277	0	0.7	187	2	1.1	7	88	4.3	
29	20	34	47.8	61	11.6	146	35.1	4.9	0.1	3	3	233	15	0.08	3.2	11.4	D	18	8	0.9	286	13	1.8	139	75	22.2	
30	0	39	23.8	59	31.4	152	34.2	67.7	2.3	13	7	110	75	0.32	1.0	2.1	B	88	8	1.1	180	14	1.6	329	74	4.1	
30	3	54	32.0	62	16.2	148	20.5	23.0	2.2	26	10	122	52	0.69	0.9	0.7	A	171	29	1.6	81	38	1.1	296	44	1.5	
30	5	11	26.4	59	48.6	141	21.6	0.2	1.0A	9	3	193	42	0.10	1.4	2.6	B	274	8	1.7	182	11	2.5	39	78	4.9	
30	6	49	44.8	60	31.1	144	58.8	16.3	0.8	13	9	143	13	0.67	0.5	0.6	A	83	5	0.7	351	25	1.0	184	64	1.1	
30	6	43	44.9	61	17.8	152	21.8	8.1	0.3	3	2	318	11	0.07	3.8	6.0	D	288	20	2.0	26	23	2.9	161	89	13.0	
30	7	39	0.6	60	39.3	142	51.3	20.9	1.2	12	10	78	50	0.46	0.5	0.8	A	2	3	0.9	272	13	0.7	105	77	1.6	
30	14	53	38.2	61	13.4	152	4.9	122.1	3.1	22	7	63	5	0.43	1.1	1.3	A	81	18	1.3	160	26	1.9	314	57	2.4	
30	18	24	8.0	60	13.7	141	2.2	10.7	1.3	11	7	119	8	0.53	1.0	0.8	A	311	16	0.6	208	37	2.3	60	48	0.7	
30	20	15	28.9	61	38.3	140	38.7	0.1	1.5	9	4	255	84	0.27	4.4	16.2	D	312	1	3.7	42	3	8.1	204	87	30.4	
31	0	22	0.8	61	34.0	140	46.8	0.8	1.3A	9	3	260	73	0.30	3.4	19.6	D	307	0	2.3	37	2	6.3	217	88	36.8	
31	6	30	52.5	59	44.0	152	56.4	90.6	3.2	14	6	86	50	0.34	1.1	1.4	B	218	5	1.4	123	26	1.8	316	63	2.8	
31	7	4	34.4	60	28.3	146	19.4	28.5	2.5	23	13	111	13	0.53	0.5	0.6	A	109	3	0.5	199	3	0.9	334	86	1.1	
31	8	4	23.3	61	33.2	147	7.6	27.9	2.9	28	13	58	33	0.57	0.4	0.6	A	114	1	0.4	24	4	0.7	218	86	1.1	
3.6 ML ATWC																											
31	9	45	37.4	61	7.7	152	14.3	0.9	1.0	11	7	159	11	0.68	0.8	1.2	A	112	9	1.4	205	17	0.5	355	71	2.4	
31	9	48	46.6	61	10.6	152	6.0	4.6	-1A	4	4	150	3	0.48	1.0	0.8	A	179	12	0.8	81	35	2.1	285	53	0.9	
31	10	12	39.8	60	18.5	140	25.2	17.5	1.5	9	8	162	22	0.49	1.1	1.0	A	312	14	0.6	210	39	2.5	58	48	1.2	
31	13	16	59.2	60	53.8	138	34.9	5.4	1.6	8	7	270	120	0.65	4.9	4.5	C	145	4	1.8	81	41	11.3	259	43	2.3	
31	13	42	5.0	60	6.6	151	56.8	68.2	3.3	19	5	103	37	0.41	0.8	1.7	B	81	2	1.0	150	3	1.3	312	69	3.0	
3.9 ML ATWC																											
FELT (III) AT HOMER.																											
31	15	5	49.8	60	3.8	140	40.9	12.1	2.4	14	7	144	24	0.60	1.0	0.9	A	287	16	0.6	31	39	2.2	179	46	1.2	
31	15	58	18.7	60	58.5	152	54.7	155.6	4.0	15	7	134	52	0.38	1.9	1.8	B	305	1	2.6	261	37	1.8	36	34	3.1	
31	22	40	29.1	60	18.9	143	5.4	6.1	1.7	19	9	110	19	0.92	0.5	2.2	B	295	3	0.5	25	3	0.9	160	86	4.2	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA APRIL 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
1	2	14	59.5	60	15.1	140	45.5	15.6	1.7	12	9	143	19	0.26	0.9	1.0	A	309	9	0.7	47	43	1.2	210	46	2.2	
1	6	21	1.0	60	32.6	141	59.0	7.4	0.6	4	3	193	24	0.26	2.3	6.7	D	81	10	2.2	343	13	0.9	205	72	13.1	
1	10	0	6.7	61	10.6	152	11.8	10.1	0.0A	4	4	183	8	0.31	1.3	1.1	B	192	21	1.0	90	28	2.6	314	54	2.1	
1	13	33	25.2	61	29.7	140	50.3	0.1	1.1A	4	4	259	65	0.45	2.1	25.0	D	298	0	2.5	28	0	3.9	0	90	99.0	
1	13	59	34.0	61	16.6	152	16.6	5.1	1.6	6	4	243	7	0.46	1.3	1.4	B	347	23	1.8	261	41	0.8	104	44	3.3	
1	14	0	14.9	61	18.4	152	12.7	3.6	-3A	3	3	301	5	0.03	1.8	2.4	B	17	1	1.6	287	15	3.2	111	75	4.6	
1	15	0	12.8	61	33.6	141	16.6	1.9	1.7	6	4	251	66	0.24	2.3	25.0	D	295	0	1.7	25	1	3.8	205	89	99.0	
1	15	13	59.0	60	14.7	140	41.6	11.9	1.4	12	5	142	21	0.18	1.1	1.2	A	300	8	0.7	36	39	1.3	200	50	2.8	
1	20	51	7.0	60	20.9	141	8.4	13.6	1.3	10	3	126	22	0.27	1.1	1.9	B	310	1	0.8	40	27	1.2	218	63	4.0	
2	0	14	2.9	60	3.3	140	40.8	8.3	0.9	8	7	177	22	0.47	0.9	0.7	A	288	0	0.5	18	25	1.7	198	65	1.3	
2	7	59	3.8	59	40.1	153	3.8	96.8	2.6	11	4	111	59	0.15	1.5	1.8	B	81	17	1.4	175	34	1.9	327	52	4.0	
2	10	18	36.8	58	55.4	152	17.3	73.0	2.5	10	5	136	82	0.19	1.3	5.4	D	4	0	1.7	94	7	2.2	274	83	10.2	
2	10	20	20.0	61	57.6	148	54.3	8.3	2.2	22	8	195	14	0.73	0.8	0.7	A	31	21	1.2	139	39	1.7	280	44	0.8	
2	11	14	55.3	60	10.4	141	11.5	0.1	0.4	4	2	201	9	0.35	9.7	3.5	D	294	8	1.4	202	17	18.9	48	71	3.6	
2	16	38	53.6	61	6.2	141	14.6	1.6	1.4	5	5	227	16	0.16	1.7	11.8	D	314	1	1.2	44	4	2.7	210	86	22.1	
2	19	32	3.9	60	28.5	147	42.1	25.6	2.6	32	11	101	56	0.63	0.5	0.8	A	261	8	0.5	162	11	0.8	24	74	1.5	
3	2	28	13.6	60	59.0	151	7.9	68.2	2.9	25	6	94	27	0.38	0.5	1.4	B	177	2	1.0	86	10	0.7	278	80	2.7	
3	8	9	42.5	60	11.0	140	57.8	6.7	0.3	3	1	243	5	0.00	4.8	3.2	C	286	4	9.0	193	40	9.4	21	50	0.9	
3	13	8	14.6	59	34.7	150	45.3	43.6	2.0	16	6	156	22	0.35	1.5	1.0	B	86	7	1.3	178	11	2.8	324	77	1.8	
3	13	14	24.2	62	6.0	144	41.5	84.9	2.1	24	11	73	68	0.35	0.9	1.9	B	81	7	1.4	337	8	1.1	206	72	3.5	
3	17	3	4.7	60	18.3	141	18.3	11.4	1.4	16	5	125	23	0.37	0.8	1.0	A	320	9	0.7	81	19	1.1	212	53	1.8	
4	2	14	45.6	60	27.9	147	43.2	23.9	2.5	32	7	102	57	0.55	0.6	0.7	A	261	13	0.5	163	27	0.9	14	59	1.4	
4	3	32	13.2	62	15.8	149	6.3	44.8	3.1	26	3	135	48	0.43	0.9	2.0	B	289	2	1.5	19	17	1.2	192	73	3.8	
3.1 ML ATWC																											
4	6	31	23.0	60	11.1	151	23.4	44.7	2.3	19	5	94	17	0.47	0.6	1.7	B	306	6	0.8	37	10	1.0	185	78	3.2	
4	9	11	13.8	61	8.2	152	15.9	3.6	-1A	4	4	195	12	0.33	1.0	0.9	A	186	4	1.3	93	39	2.1	281	51	1.4	
4	9	12	14.0	61	7.9	152	13.3	8.1	0.0A	4	4	184	11	0.31	2.0	2.2	B	203	24	1.4	309	33	2.0	84	47	5.2	
4	9	47	20.6	62	17.0	150	58.4	95.2	2.6	18	6	99	116	0.46	2.1	4.4	C	263	3	1.5	354	22	2.4	166	68	8.8	
4	10	51	52.3	60	20.0	140	47.7	15.0	0.5A	7	5	154	24	0.36	1.5	3.0	C	314	12	0.9	49	22	1.3	197	65	6.1	
4	12	40	20.3	60	16.4	141	26.7	10.9	1.1	11	5	144	19	0.28	1.1	1.0	A	118	10	0.7	217	41	2.3	17	47	1.4	
4	15	0	32.9	62	19.0	149	6.7	45.2	2.2	25	7	137	54	0.53	1.2	1.8	B	275	9	2.0	10	29	1.4	169	59	3.7	
4	18	34	41.9	59	48.1	152	46.9	84.6	3.1	16	4	84	42	0.26	0.9	1.2	A	82	9	1.0	174	14	1.6	320	73	2.3	
4	19	40	4.3	60	20.0	141	17.1	12.8	0.8	11	5	116	24	0.60	1.4	1.9	B	118	3	0.8	26	35	1.1	212	55	4.4	
4	20	59	27.5	60	8.6	141	7.4	9.6	1.0	12	5	154	5	0.24	1.2	0.5	A	24	0	2.3	295	23	0.6	114	67	0.9	
4	21	35	57.6	59	49.8	152	57.1	91.6	2.5	15	4	93	40	0.18	1.0	1.3	A	81	9	1.1	174	22	1.8	330	66	2.5	
5	4	10	2.7	59	44.9	138	48.4	22.6	1.3	7	4	232	33	0.64	2.6	2.0	B	330	20	1.1	261	41	4.7	85	41	2.6	
5	6	41	28.1	59	56.1	153	19.3	126.9	3.2	13	4	155	39	0.28	1.7	1.3	B	326	8	3.0	81	30	1.5	225	51	2.4	
5	6	44	56.6	61	37.3	140	40.3	1.9	1.7	9	5	263	81	0.34	1.6	17.0	D	340	1	2.1	81	1	2.8	211	79	31.3	
5	13	29	4.8	61	53.1	149	17.8	43.7	2.8	29	6	125	18	0.43	0.9	0.9	A	81	17	1.0	313	17	1.1	197	46	1.7	
3.0 ML ATWC																											
5	16	15	40.6	62	16.4	147	13.6	40.5	2.4	27	11	114	49	0.71	1.0	2.5	B	90	2	0.9	0	11	1.6	190	79	4.8	
5	17	52	13.9	60	46.2	151	53.6	82.7	3.1	22	10	64	36	0.34	0.6	1.1	A	81	12	0.9	156	12	1.0	299	68	2.0	
5	22	55	23.0	60	18.7	141	18.4	15.8	0.5A	6	4	135	23	0.14	2.2	3.3	C	117	3	1.0	25	33	1.2	212	57	7.3	
5	23	43	28.6	59	38.8	151	55.6	4.8	1.8	13	6	112	60	0.38	0.8	1.6	B	261	11	0.8	336	20	1.1	140	63	3.0	
6	2	14	51.7	60	33.9	147	19.4	30.0	2.1	30	11	135	37	0.59	0.5	0.5	A	262	14	0.6	164	29	0.8	15	57	1.0	
6	2	34	33.6	60	9.4	148	33.3	0.1	1.8	28	10	177	50	0.50	0.6	0.7	A	9	15	1.2	272	26	0.6	126	60	1.5	
6	3	6	39.4	60	7.5	141	5.7	0.8	0.3	4	3	186	5	0.20	1.7	2.8	C	268	8	0.9	174	28	1.4	13	61	6.1	
6	3	55	26.4	60	15.7	140	42.6	16.0	1.2	12	6	143	22	0.29	0.8	0.9	A	299	2	0.7	31	42	0.9	207	48	2.1	
6	17	19	42.0	59	45.1	141	3.9	7.3	1.3A	10	9	187	45	0.47	1.1	1.6	B	129	6	0.9	222	25	1.7	26	64	3.3	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA APRIL 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
27	5	3	56.4	61	48.2	148	59.8	10.0	1.0	12	10	102	4	0.44	0.6	0.5	A	134	11	0.7	81	40	1.0	236	37	0.4
27	6	51	21.3	60	15.3	140	56.8	11.3	1.1	9	6	129	12	0.18	0.8	0.9	A	87	27	0.8	339	30	0.6	210	47	2.1
27	9	17	52.9	60	48.0	143	27.2	5.6	0.7A	6	4	101	65	0.68	1.3	24.8	D	282	1	1.0	192	2	1.7	39	88	46.5
27	13	38	14.6	61	25.8	148	52.4	35.3	2.3	30	15	38	22	0.62	0.4	0.4	A	261	5	0.6	154	26	0.5	0	59	0.8
27	20	58	55.4	60	16.4	141	0.5	10.6	1.0	8	7	127	13	0.20	0.8	0.8	A	340	24	0.6	89	37	0.9	225	44	2.0
27	22	30	40.0	61	14.4	146	26.7	6.0	0.3A	3	3	208	14	0.21	4.1	10.3	D	21	6	0.7	289	20	2.1	127	69	20.6
27	22	34	14.6	61	34.5	150	42.7	10.4	0.4A	5	5	115	13	0.28	0.6	0.6	A	81	7	1.1	342	34	0.8	181	54	1.2
27	23	43	17.5	60	59.1	147	13.6	31.4	2.1	28	21	97	10	0.64	0.3	0.3	A	280	3	0.3	11	13	0.7	177	77	0.5
28	4	10	59.0	60	34.0	142	55.5	13.5	1.6	15	10	86	41	0.76	0.5	1.2	A	317	3	0.6	81	3	0.7	199	56	1.9
28	4	13	24.3	60	22.3	141	17.6	2.9	1.3	11	7	118	28	0.68	0.9	1.0	A	319	7	0.6	81	23	1.2	217	51	1.9
28	4	37	36.5	61	7.3	152	15.8	12.3	0.3A	4	3	192	13	0.21	4.4	5.3	C	305	23	2.2	201	30	0.9	66	61	12.8
28	8	43	13.2	60	19.8	141	21.0	18.3	1.3A	8	7	123	26	0.54	0.9	1.0	A	319	16	0.6	81	21	1.5	205	50	1.9
28	9	21	25.3	60	16.2	140	39.0	12.1	0.9A	7	3	147	25	0.23	1.1	1.9	B	309	11	0.8	45	27	0.9	199	60	4.0
28	9	38	25.2	61	34.6	141	5.8	3.8	1.6A	7	3	254	69	0.45	1.7	11.2	D	287	0	1.5	17	4	2.8	197	86	21.1
28	10	12	20.9	60	9.1	153	12.8	132.7	2.9	13	4	203	22	0.35	2.5	1.7	B	261	13	4.5	344	17	2.8	131	68	3.2
28	13	47	32.5	60	12.8	152	8.8	72.7	2.4	17	7	140	37	0.41	1.0	1.4	B	1	14	1.4	99	26	1.1	246	60	3.0
28	14	48	36.9	62	19.5	147	56.1	40.7	2.7	18	10	103	61	0.74	0.8	2.6	B	344	4	1.4	81	8	0.8	229	79	5.0
28	15	52	8.3	60	15.9	141	16.6	19.0	0.9A	6	4	134	18	0.22	1.5	2.3	B	261	17	2.0	326	33	0.7	143	47	4.5
28	23	10	38.0	62	5.9	149	26.6	50.7	2.7	21	14	110	38	0.44	0.8	1.0	A	276	8	0.8	11	34	1.2	174	55	2.1
28	23	12	44.3	59	51.6	153	23.9	125.5	2.8	11	3	226	48	0.21	2.4	2.2	B	81	16	4.6	305	28	2.7	186	36	2.5
29	5	19	43.7	61	19.6	150	21.1	15.4	1.2A	14	12	85	26	0.68	0.4	1.0	A	118	1	0.5	209	11	0.6	23	79	1.9
29	5	57	33.3	60	8.3	141	12.1	13.9	1.5	9	8	156	9	0.42	0.7	0.5	A	34	13	1.3	297	31	0.6	144	56	0.9
29	7	5	31.0	60	37.9	151	56.5	79.6	2.5	19	11	95	26	0.38	0.7	1.1	A	10	2	0.8	101	26	0.9	276	64	2.3
29	8	23	57.7	61	9.5	152	12.1	7.4	0.4A	4	4	181	8	0.43	1.3	1.3	A	309	26	1.4	201	32	0.6	70	46	3.3
29	8	47	32.2	60	34.6	142	56.7	15.9	1.4	12	10	87	42	0.99	0.4	1.2	A	1	3	0.6	271	4	0.7	128	85	2.3
29	10	42	25.8	61	11.8	152	9.7	5.8	-4A	3	3	257	6	0.02	1.1	1.3	A	261	0	2.0	335	10	0.9	171	71	2.4
29	11	5	34.2	60	20.4	141	23.2	16.6	1.0A	8	7	124	28	0.48	0.8	1.3	A	261	1	1.3	325	13	0.6	167	61	2.2
29	12	59	33.5	60	15.5	139	43.4	6.9	1.5	10	6	109	34	0.78	0.8	1.3	A	315	9	0.7	50	26	1.0	208	62	2.7
29	22	26	52.4	61	16.6	152	15.0	8.5	0.8	5	4	191	5	0.29	1.5	0.7	B	93	20	3.0	193	24	1.1	328	58	0.7
30	2	9	2.3	60	47.2	138	24.8	5.6	1.7A	6	4	271	115	0.44	7.9	6.9	D	291	30	5.5	177	35	3.5	50	40	19.1
30	4	23	34.2	60	3.3	139	20.9	23.3	1.3A	6	4	213	20	0.50	2.4	1.8	B	125	15	1.3	224	32	5.1	13	54	2.4
30	12	43	6.1	61	18.9	140	45.2	7.6	1.4	5	4	241	50	0.36	6.5	25.0	D	123	1	2.0	33	10	3.7	219	80	66.9
30	18	4	19.1	61	31.6	149	46.1	43.7	2.3	25	14	74	15	0.37	0.7	1.0	A	261	0	0.8	166	27	1.1	351	63	2.0
30	18	57	58.8	60	12.6	141	7.9	8.3	0.9	8	6	131	8	0.24	2.0	0.8	B	216	17	3.9	110	42	1.3	323	43	0.9

**PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA
MAY 1985**

ORIGIN TIME				LAT N		LONG W		Z	MAG	NT	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
31	13	42	35.4	60	10.8	139	42.4	7.4	0.7	6	4	205	26	0.37	1.7	2.0	B	112	1	0.9	22	38	2.3	203	52	4.4
31	23	8	5.7	60	7.4	141	27.3	10.4	1.0	4	3	237	24	0.64	2.7	1.6	C	292	3	0.8	24	23	5.3	195	67	2.4

**PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA
JULY 1985**

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
81	70	27	32.8	61	51.1	148	30.3	3.9	1.5	14	9	175	10	0.62	0.7	1.1	A	2	8	1.2	269	23	0.5	110	66	2.2
81	71	36	43.6	60	24.7	147	43.0	24.4	0.5A	3	3	155	7	0.05	2.8	1.5	B	81	23	2.4	179	24	3.1	288	39	2.0
81	21	53	16.9	61	25.7	146	8.9	1.3	2.0	11	6	250	82	0.36	2.2	4.6	C	293	2	2.0	23	15	3.6	198	75	8.8
81	21	55	30.9	61	23.7	140	7.6	1.1	1.7	6	3	270	126	0.46	2.7	5.8	D	302	6	2.3	34	19	3.6	195	70	11.0
81	22	45	55.8	59	57.8	140	38.5	2.2	1.1	7	5	187	28	0.40	0.8	2.2	B	109	1	0.6	199	14	1.2	15	76	4.2

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
4	14	20	39.0	61	4.5	152	17.6	14.6	0.3A	4	4	193	17	0.14	3.8	3.9	C	201	26	1.3	309	32	4.6	80	46	9.4
4	18	17	6.6	60	24.5	147	42.0	27.1	0.6	4	4	151	7	0.10	1.5	1.9	B	81	13	2.4	149	23	1.7	319	56	3.5
4	20	15	42.1	62	19.4	148	52.5	15.5	2.0	18	10	203	54	0.51	1.2	2.2	B	200	2	2.3	291	26	1.3	106	64	4.5
4	23	32	15.5	60	2.7	140	42.2	1.9	1.2	5	3	182	22	0.17	2.1	3.0	C	107	4	0.7	199	29	2.8	10	61	6.3
5	0	11	16.9	62	35.7	148	42.0	46.5	2.4	16	8	123	85	0.60	1.7	4.0	C	38	10	2.0	305	15	2.3	160	72	7.9
5	0	47	18.3	61	1.7	147	12.5	25.7	1.8	22	10	87	18	0.61	0.5	1.1	A	261	2	0.9	339	12	0.7	162	73	2.0
5	3	12	9.6	61	13.5	150	16.5	47.0	2.5	27	10	62	37	0.60	0.6	1.2	A	262	2	0.6	171	12	1.0	1	78	2.3
5	3	25	37.7	61	14.3	150	17.5	45.3	2.2	24	14	63	35	0.53	0.5	1.4	B	173	1	0.9	263	3	0.7	65	87	2.7
5	5	52	9.4	61	49.4	148	57.4	11.3	-2A	3	2	177	2	0.02	2.8	2.1	B	346	13	2.9	261	38	6.2	93	50	1.7
5	9	52	21.9	60	6.5	141	7.1	2.2	0.9A	3	2	218	7	0.05	3.3	4.5	C	261	0	2.3	170	36	1.6	351	54	10.4
5	10	16	51.4	60	24.9	147	50.0	27.1	0.9	5	5	115	8	0.13	1.3	1.4	B	193	2	1.5	102	41	2.3	285	49	2.8
5	16	4	13.9	60	16.3	147	51.3	21.0	0.7	7	6	127	11	0.28	0.7	0.8	A	175	17	1.0	271	18	1.2	45	65	1.7
5	18	3	15.9	60	40.8	147	24.7	12.7	1.7	24	8	68	27	0.40	0.5	0.8	A	261	19	0.6	345	27	0.8	135	57	1.6
5	19	26	53.4	60	41.8	147	26.5	10.2	2.3	27	8	66	28	0.40	0.6	1.0	A	261	16	0.6	345	26	0.8	139	59	2.0
5	20	32	15.0	60	18.4	147	16.8	27.7	0.9	5	5	172	26	0.08	1.4	2.4	B	81	9	1.3	145	13	2.1	310	60	4.2
5	21	32	50.6	60	34.8	147	29.1	16.5	2.5	31	7	76	15	0.46	0.5	0.8	A	261	6	0.5	344	25	0.8	158	63	1.6
6	0	48	31.6	60	22.7	147	40.4	19.0	0.3A	7	7	122	5	0.44	0.6	0.5	A	120	25	1.1	225	29	1.0	356	50	0.9
6	2	59	29.3	61	6.4	152	19.3	4.0	0.5	10	8	167	17	0.83	0.8	1.0	A	23	0	0.5	113	17	1.4	293	73	2.0
6	5	32	38.5	60	39.7	143	3.6	8.8	0.9A	6	3	137	57	0.20	3.1	21.4	D	317	0	1.0	261	6	2.2	47	56	33.6
6	5	57	40.2	60	34.7	147	54.7	16.9	0.5A	6	6	114	17	0.24	1.4	2.0	B	48	8	0.9	313	33	0.8	150	56	4.5
6	6	52	41.3	61	50.6	148	30.8	5.3	1.2	19	11	159	10	0.56	0.5	0.6	A	274	9	0.4	183	9	0.9	49	77	1.1
6	8	47	38.7	60	27.0	147	46.1	23.4	0.5A	5	4	137	7	0.09	2.6	1.2	B	141	19	3.8	81	38	1.8	257	40	2.0
6	12	54	29.0	60	23.0	143	23.0	11.1	1.2A	11	4	90	30	0.42	0.7	2.8	C	261	3	0.7	347	5	1.2	139	83	5.3
6	18	49	53.3	60	41.4	147	27.3	11.8	0.5	7	5	119	27	0.37	1.0	1.3	A	223	3	0.6	315	33	1.2	128	57	2.9
6	23	17	18.3	60	30.0	145	7.1	27.1	1.2A	18	11	140	6	0.58	0.6	0.5	A	106	11	0.6	10	29	1.1	215	59	0.9
7	1	21	53.7	60	56.0	147	11.9	25.1	0.9A	9	7	141	8	0.16	0.9	0.8	A	224	2	0.6	132	43	1.9	316	47	1.2
7	2	27	28.5	60	42.0	147	29.9	9.3	0.5	6	6	125	27	0.54	0.9	1.2	A	261	8	0.5	330	37	0.7	160	48	2.5
7	3	54	31.9	61	47.3	148	53.5	13.2	2.7	31	7	110	2	0.76	0.4	0.3	A	20	31	0.8	134	34	0.7	259	40	0.5
3.5 ML ATWC										FELT (II) AT CHICKALOON.																
7	5	20	0.9	60	13.3	151	18.2	46.8	2.2	25	10	76	20	0.50	0.4	1.0	A	81	6	0.7	342	10	0.6	199	75	2.0
7	6	7	12.2	61	49.7	148	53.7	15.2	0.0A	5	5	167	4	0.18	1.1	0.8	A	89	7	1.2	355	32	2.3	190	57	1.0
7	8	37	33.4	60	23.6	148	20.7	8.4	0.5	6	6	183	21	0.67	1.8	2.7	C	22	17	1.6	283	27	0.5	140	57	6.1
7	12	42	32.0	59	21.7	153	23.7	118.5	3.9	13	3	154	65	0.31	1.5	2.5	B	197	9	2.6	104	16	2.2	315	71	4.9
4.3 ML ATWC										FELT (II) AT ANCHORAGE.																
7	13	35	40.5	60	14.8	148	6.3	12.6	0.6	7	6	153	22	0.39	0.9	2.0	B	321	15	1.1	261	20	1.0	96	52	3.3
7	15	20	15.7	60	27.5	147	47.3	20.9	0.6	6	6	144	8	0.23	0.8	0.7	A	42	21	0.8	295	36	1.7	156	46	1.3
7	16	55	22.4	61	33.5	151	38.8	84.5	3.2	23	8	109	42	0.46	0.8	1.0	A	218	4	0.9	126	28	1.2	315	62	2.0
7	20	12	37.9	60	34.3	147	57.7	27.0	0.5A	4	4	230	16	0.11	2.0	2.0	B	28	18	1.5	283	40	2.2	137	45	4.8
7	20	50	36.6	60	2.7	141	32.6	8.3	1.4	8	7	175	31	0.59	1.3	1.4	B	290	2	0.7	198	42	1.4	22	48	3.3
7	22	13	16.9	61	49.3	148	57.7	14.4	0.8	9	7	102	2	0.34	0.7	0.5	A	5	19	1.3	108	33	1.2	250	51	0.7
7	23	11	40.8	61	10.7	149	29.3	41.2	2.9	33	8	42	8	0.41	0.4	1.1	A	123	5	0.8	214	6	0.6	354	82	2.0
7	23	16	44.7	61	11.7	149	28.2	38.2	2.3	33	9	43	7	0.57	0.4	0.5	A	222	2	0.6	131	21	0.7	317	69	0.9
2.7 ML ATWC										FELT (II) AT ANCHORAGE.																
7	23	40	11.5	61	52.5	148	30.9	3.9	0.9A	5	3	228	12	0.29	5.2	13.1	D	184	5	2.8	277	21	0.6	81	68	26.4
7	23	40	16.5	61	49.4	148	30.6	6.9	1.1	5	5	185	9	0.31	1.0	1.0	A	261	10	0.7	160	41	1.5	2	47	2.3
8	0	45	10.7	61	57.4	148	33.2	10.0	1.1	10	4	223	20	0.62	0.9	1.4	B	270	11	0.9	3	16	1.6	147	70	2.7
8	1	22	5.5	60	26.1	147	44.1	21.0	0.4	8	6	119	6	0.35	0.9	0.9	A	40	18	0.8	293	41	0.8	148	43	2.2
8	4	28	24.3	61	50.7	148	31.3	5.1	2.2	21	6	159	11	0.56	0.7	0.7	A	274	5	0.5	182	24	1.2	15	65	1.3
8	4	45	38.6	61	51.5	148	30.8	3.6	1.1	12	6	187	11	0.70	1.1	1.2	A	261	16	0.5	157	36	1.5	10	49	2.7

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
8	6	13	27.6	61	51.5	148	31.4	9.9	1.8	19	10	172	12	0.51	0.6	0.4	A	265	7	0.4	359	29	1.2	163	60	0.7
8	7	10	3.8	60	21.4	147	39.0	19.6	0.7	10	7	94	5	0.37	0.7	0.6	A	136	4	1.0	81	5	0.7	276	54	0.9
8	8	42	35.7	62	2.9	151	21.7	76.8	2.6	16	3	225	12	0.45	2.9	2.4	C	81	8	2.0	158	30	5.5	337	57	4.1
8	9	24	19.7	60	17.3	153	21.4	160.3	3.9	16	5	96	32	0.32	1.4	2.3	B	21	1	2.6	291	3	2.4	129	87	4.3
4.2 MB				4.2 ML ATWC				FELT AT HOMER.																		
8	11	23	38.5	60	43.5	147	43.0	27.8	0.9	6	3	168	29	0.17	1.6	1.7	B	36	3	0.8	303	43	1.7	129	47	4.1
8	16	5	20.6	61	51.0	148	31.0	4.2	1.1	11	7	203	11	0.41	0.7	1.1	A	261	7	0.5	350	8	1.3	129	79	2.1
8	16	38	49.4	61	50.2	148	31.0	6.1	1.7	17	8	158	10	0.61	0.6	0.5	A	261	11	0.4	165	22	1.1	15	65	1.0
8	17	6	16.0	60	23.3	147	49.1	25.8	0.5A	3	3	166	6	0.07	1.6	1.3	B	139	27	3.1	33	28	2.6	265	49	2.0
8	17	22	39.1	61	50.0	148	31.0	4.5	1.1	11	6	172	10	0.41	0.7	1.0	A	3	2	1.2	273	7	0.6	109	83	1.8
8	18	33	2.3	59	3.5	137	11.5	27.4	2.6	9	3	206	106	0.33	12.6	8.2	D	306	13	2.3	45	32	27.7	197	55	5.3
8	21	15	3.5	61	50.9	148	32.5	3.8	2.2	22	6	159	12	0.56	0.7	1.0	A	359	18	1.0	261	23	0.5	123	60	2.2
2.8 ML ATWC				FELT AT CHICKALOON.																						
8	21	22	54.3	61	50.8	148	30.4	3.6	1.1	13	5	174	10	0.39	1.0	1.7	B	4	16	1.2	268	21	0.5	129	63	3.6
8	21	24	11.0	60	27.3	147	33.9	24.6	0.4	6	4	126	5	0.11	1.2	1.1	A	81	15	0.8	318	34	2.6	186	42	1.5
8	21	38	45.0	58	27.9	154	44.3	0.0	3.2	11	3	123	151	0.54	3.3	2.4	C	342	6	2.3	261	23	6.4	86	65	3.9
3.7 ML ATWC																										
8	22	3	55.5	61	50.9	148	30.9	4.5	1.6	20	10	159	11	0.55	0.5	0.8	A	263	7	0.5	355	16	0.9	150	72	1.5
8	22	21	2.3	61	51.8	148	32.2	5.8	2.3	27	6	161	12	0.70	0.8	0.7	A	264	21	0.6	157	38	1.6	16	45	1.3
2.6 ML ATWC				FELT AT CHICKALOON.																						
8	22	32	15.0	61	49.7	148	31.2	3.5	1.0	13	6	172	10	0.42	0.7	1.2	A	359	10	1.2	265	22	0.5	112	66	2.5
9	0	6	38.4	58	22.2	155	8.1	19.6	3.2	10	5	242	167	0.42	9.6	13.8	D	335	0	2.3	81	33	5.2	245	54	30.2
9	2	38	49.0	61	50.6	148	30.6	8.1	1.9	25	11	159	10	0.65	0.5	0.4	A	348	1	0.9	261	16	0.4	81	74	0.8
9	3	8	33.2	60	24.2	147	44.0	23.2	0.4A	6	4	115	6	0.15	0.9	0.8	A	338	11	1.5	81	17	1.5	220	66	1.4
9	4	17	50.2	58	24.8	154	58.3	33.1	2.8	9	7	238	160	0.74	2.7	25.0	D	337	0	2.0	261	0	4.9	0	90	99.0
9	5	7	25.6	60	24.6	147	44.2	21.8	0.5A	5	4	120	7	0.32	1.2	0.9	A	81	15	1.3	167	26	2.3	321	60	1.5
9	6	28	22.6	60	19.4	141	47.7	11.7	0.9	8	4	144	5	0.36	1.6	1.0	B	6	17	3.1	111	40	2.2	258	45	0.8
9	9	44	31.4	60	27.3	147	46.7	22.2	0.5A	5	4	167	7	0.14	1.2	1.0	A	81	24	1.5	172	26	2.2	309	55	1.9
9	10	40	27.3	61	50.1	148	30.9	5.9	1.1	13	5	191	10	0.51	0.7	0.7	A	285	6	0.8	19	37	1.4	187	52	1.3
9	11	13	49.5	60	34.7	143	10.3	1.7	0.7	6	4	101	23	0.87	1.0	17.0	D	261	1	1.8	344	2	0.9	143	83	31.7
9	13	24	1.2	61	26.6	148	23.3	8.8	0.5A	7	4	127	5	0.54	0.8	0.6	A	261	12	1.5	358	36	0.9	155	52	1.2
9	14	54	13.8	61	50.4	148	30.9	8.8	1.7	20	10	158	10	0.62	0.6	0.5	A	261	14	0.5	353	19	1.1	136	66	0.9
9	17	34	39.6	61	51.8	148	29.9	9.8	1.5	20	9	160	11	0.79	0.6	0.5	A	168	8	1.1	261	18	0.5	55	70	0.9
9	18	22	53.8	60	38.0	147	56.5	15.1	1.5	25	8	50	22	0.37	0.5	1.0	A	23	12	0.6	289	18	0.5	145	68	2.1
9	18	34	19.6	60	24.6	148	30.5	5.1	0.7	11	8	139	29	0.57	0.6	1.0	A	4	2	1.0	273	15	0.5	101	75	2.0
9	22	32	25.7	59	54.7	152	53.5	103.8	2.8	17	5	86	30	0.20	1.2	1.3	A	81	19	1.3	175	36	1.8	326	50	2.8
9	23	27	50.1	60	36.5	147	18.8	18.0	0.9	17	8	78	24	0.64	0.7	0.9	A	81	2	0.4	318	21	0.9	175	51	1.5
10	0	31	1.1	61	44.7	148	30.0	10.0	1.1	15	9	134	11	0.57	0.6	0.9	A	185	10	0.9	281	28	0.6	77	60	1.8
10	0	41	23.1	59	34.5	138	11.7	29.5	1.9	5	5	313	41	0.52	2.9	2.7	C	265	4	2.6	172	42	7.3	359	48	1.4
10	3	44	22.7	61	40.5	150	2.4	10.0	1.9	22	7	145	9	0.77	0.6	0.6	A	270	20	0.6	165	36	0.8	23	47	1.3
10	6	29	49.4	59	57.3	153	4.5	100.1	2.6	15	5	140	29	0.23	1.1	1.2	A	39	5	2.0	131	21	1.5	296	68	2.3
10	11	9	13.7	60	3.5	140	12.9	19.4	1.1	6	4	150	5	0.73	4.3	1.5	C	20	17	8.5	123	34	0.8	268	51	1.2
10	12	26	1.3	61	25.3	140	23.1	6.0	1.3A	5	4	265	72	0.39	2.8	6.3	D	281	0	3.0	11	17	4.0	191	73	12.4
10	15	33	19.9	61	50.9	148	31.7	10.1	1.9	22	12	159	11	0.75	0.5	0.6	A	351	15	0.9	261	16	0.4	124	68	1.1
10	18	21	58.5	60	45.9	151	56.7	77.4	2.4	23	6	66	33	0.35	0.8	1.1	A	31	2	0.9	122	29	1.2	297	61	2.3
10	18	44	33.1	60	28.7	143	14.1	23.9	2.4	23	5	70	21	0.43	0.5	0.6	A	81	11	0.5	328	24	0.7	190	56	1.1
10	19	2	56.4	61	16.6	152	28.2	5.0	0.1A	3	3	327	17	0.38	1.7	8.6	D	357	0	2.9	267	9	2.1	87	81	16.3
10	19	15	28.5	60	24.9	147	42.8	22.5	1.2	18	9	86	7	0.43	0.5	0.5	A	81	13	0.6	306	37	0.7	181	33	0.9
10	19	48	40.2	60	29.0	143	15.8	16.1	1.3	7	7	151	23	0.45	0.8	1.9	B	264	11	0.8	357	14	0.9	137	72	3.8

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
11	0	33	56.0	62	16.3	151	2.1	76.9	2.5	11	6	250	41	0.38	1.6	1.5	B	81	25	1.4	329	35	3.2	197	43	2.9	
11	2	13	44.8	61	50.4	148	30.0	3.8	1.5	13	9	173	9	0.62	0.7	1.1	A	7	10	1.3	273	20	0.5	122	67	2.1	
11	3	32	4.8	60	8.2	139	22.3	3.7	1.0	5	3	238	25	0.77	0.9	2.0	B	314	2	1.0	45	18	1.3	218	72	3.8	
11	4	58	3.7	60	17.2	140	56.2	9.0	0.8	8	1	199	16	0.19	1.7	1.8	B	301	17	1.0	45	37	1.5	191	48	4.4	
11	7	19	48.8	60	12.5	141	3.3	9.4	1.4	10	4	142	6	0.30	2.0	0.8	B	112	10	0.9	204	14	3.8	347	73	1.3	
11	8	58	2.3	61	48.5	149	2.9	10.3	1.5	20	7	170	8	0.71	0.5	0.8	A	196	1	0.9	287	28	0.7	104	62	1.6	
11	9	3	33.4	61	49.6	149	6.9	12.8	1.0	12	3	174	12	0.30	0.7	1.0	A	265	9	0.8	358	17	1.2	148	71	1.9	
11	9	16	5.3	60	32.2	147	32.8	15.8	0.5	7	5	132	10	0.36	1.2	1.3	A	81	13	1.0	311	29	1.7	185	41	2.4	
11	10	34	14.1	60	25.1	147	22.9	28.0	0.6	5	5	146	15	0.94	0.9	1.3	B	51	19	1.0	149	22	1.2	284	60	2.8	
11	10	44	32.3	60	36.5	147	53.5	16.3	0.5	8	7	119	20	0.45	0.9	1.5	B	261	8	0.6	336	29	0.7	156	57	3.0	
11	13	14	2.6	60	5.4	141	10.1	1.3	0.3	4	3	214	10	0.25	1.3	2.6	B	276	9	1.0	182	22	1.4	27	66	5.3	
11	13	44	52.7	60	4.6	141	9.7	1.1	0.4A	3	1	227	11	0.00	1.6	4.8	C	124	7	1.8	216	15	1.5	10	73	9.5	
11	16	37	45.6	60	27.5	147	47.7	20.7	0.6	6	5	120	8	0.22	0.8	0.8	A	197	16	1.1	95	36	1.5	307	50	1.7	
11	17	24	5.4	60	9.1	152	48.0	104.7	3.0	16	7	115	4	0.60	1.0	1.1	A	141	3	1.4	81	11	1.0	246	58	1.8	
11	20	18	33.7	60	32.8	147	33.8	17.1	0.9	13	9	116	10	0.36	0.5	0.6	A	37	7	0.5	303	34	0.8	137	55	1.4	
11	21	46	23.0	60	19.0	147	20.9	28.3	0.6	5	5	192	22	0.18	1.2	1.5	B	180	4	0.9	87	35	1.4	276	55	3.3	
11	22	39	43.5	60	43.0	147	45.8	16.6	1.0	15	6	62	29	0.32	0.5	1.4	A	261	12	0.8	336	16	0.6	129	65	2.6	
11	23	8	37.1	60	34.3	147	29.9	18.3	0.9	12	7	78	14	0.29	0.6	0.9	A	261	9	0.6	337	28	0.8	154	58	1.7	
11	23	16	47.5	60	23.2	147	41.8	21.6	0.6A	4	3	189	5	0.39	1.3	0.7	A	81	15	1.9	166	15	2.3	304	68	1.1	
12	0	44	58.2	60	21.6	147	38.2	15.4	0.4	6	6	127	6	0.36	0.6	0.8	A	22	7	1.0	113	9	1.1	255	79	1.5	
12	3	30	45.3	61	5.7	152	15.9	2.8	1.4	7	6	180	15	0.68	1.0	0.9	A	202	17	0.5	103	26	2.0	321	58	1.6	
12	10	3	9.9	59	38.6	151	6.1	36.6	2.0	12	4	133	15	0.35	1.6	2.1	B	87	3	2.0	355	35	1.5	181	55	4.8	
12	14	1	51.2	59	38.5	153	1.0	95.1	2.8	12	6	113	61	0.20	1.5	2.4	B	187	13	2.6	93	15	1.7	316	70	4.7	
12	17	39	25.0	61	52.9	151	45.7	108.6	2.6	16	8	211	16	0.41	1.6	1.7	B	81	4	1.9	164	40	2.7	346	49	3.4	
12	19	42	6.8	60	21.2	139	48.8	12.3	1.2	8	4	212	38	0.65	1.9	2.4	B	112	3	1.6	19	36	2.0	206	54	5.5	
12	21	20	30.8	61	50.2	148	29.3	4.1	1.1	9	9	173	9	0.61	0.9	1.0	A	266	15	0.7	170	22	1.6	28	63	2.0	
12	21	53	44.8	62	26.9	149	7.3	41.1	2.2	19	10	233	76	0.57	1.9	4.9	C	91	5	1.8	359	14	2.8	200	75	9.6	
12	22	40	16.6	60	21.5	141	20.5	7.0	1.5	8	6	127	28	0.34	1.0	2.5	B	261	11	1.4	323	12	1.2	116	58	4.2	
12	23	32	44.4	61	51.4	149	5.1	6.3	1.2	10	6	180	13	0.64	1.2	1.2	A	188	9	1.7	286	41	1.0	88	48	3.0	
13	0	4	33.3	60	34.8	147	43.0	22.9	0.6	7	5	111	13	0.22	1.2	1.5	B	43	10	1.0	307	31	1.8	149	57	3.2	
13	0	54	6.0	60	11.4	139	39.0	15.8	0.8	4	2	259	26	0.09	4.0	4.1	C	308	5	1.7	43	44	4.1	213	46	10.0	
13	3	4	11.8	60	21.9	147	44.0	19.0	0.5	4	4	150	2	0.13	1.3	1.4	B	264	12	2.4	170	19	1.2	25	67	2.8	
13	3	8	54.0	59	44.5	153	33.0	120.6	2.7	9	7	179	36	0.31	2.8	2.5	C	81	15	2.4	321	30	5.6	189	46	3.7	
13	4	10	59.9	61	50.5	148	30.2	0.2	1.2	8	7	173	10	0.47	1.0	1.2	A	261	4	0.8	351	10	1.9	149	79	2.2	
13	5	35	20.6	60	5.4	147	49.6	21.1	1.1	13	10	133	15	0.37	0.7	0.9	A	8	7	1.0	273	30	1.0	110	59	1.9	
13	6	46	2.2	60	37.7	145	20.6	21.9	1.2	11	6	130	68	0.53	1.2	2.4	B	14	15	1.6	109	19	0.8	248	65	4.8	
13	7	46	8.9	61	48.8	148	30.8	4.7	1.1	9	6	176	10	0.59	1.3	1.1	A	266	18	0.9	11	38	2.8	156	46	1.6	
13	7	58	58.1	60	21.8	147	39.1	20.3	1.2	14	10	94	5	0.29	0.7	0.7	A	261	6	0.8	335	35	1.1	162	52	1.3	
13	9	54	48.4	60	55.5	152	1.4	83.6	2.5	20	10	125	29	0.43	1.1	1.4	B	165	13	1.2	81	29	1.6	278	58	2.9	
13	15	17	5.1	60	27.1	148	20.4	8.5	0.5	7	7	126	20	0.58	1.8	3.2	C	190	10	1.5	285	27	0.6	81	61	6.7	
13	20	52	42.4	60	3.1	141	4.5	1.9	0.8	5	3	195	12	0.08	2.1	3.2	C	261	15	2.3	140	17	1.1	18	52	6.2	
13	21	27	42.4	60	45.5	147	37.8	15.6	1.5	18	9	65	32	0.38	0.7	1.4	A	261	12	0.6	335	22	0.8	140	61	2.7	
13	21	29	41.5	59	26.1	146	40.7	27.9	2.7	19	4	211	19	0.61	2.0	1.0	B	123	1	1.3	213	18	4.0	30	72	1.5	
3.2 ML ATWC																											
14	2	18	1.6	61	49.9	148	22.8	35.3	2.2	28	13	157	4	0.53	0.8	0.5	A	341	17	1.5	82	31	0.7	227	54	1.0	
14	2	20	32.0	61	55.1	149	5.9	15.8	0.6	6	4	181	19	0.88	1.4	2.0	B	187	12	2.1	283	29	1.3	77	58	4.4	
14	3	14	29.0	60	32.4	147	38.4	24.9	0.6A	5	5	161	8	0.63	1.3	0.9	A	24	5	1.2	293	9	2.5	143	80	1.8	
14	3	24	23.5	60	3.0	141	4.3	2.0	0.8	5	3	199	12	0.07	1.5	2.3	B	123	6	0.9	217	29	1.7	22	60	4.9	
14	4	5	10.9	58	48.8	138	8.6	0.6	1.6	4	3	351	83	0.48	17.4	25.0	D	329	0	4.4	261	1	30.1	59	68	99.0	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAT	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
14	4	44	12.0	61	33.2	146	9.0	33.8	1.9	22	12	96	14	0.65	0.7	0.5	A	172	29	0.8	81	35	1.2	300	46	0.9
14	4	59	13.9	60	3.6	147	53.4	20.5	2.0	22	9	133	16	0.36	0.6	0.9	A	261	15	0.8	348	15	1.1	125	69	1.7
14	10	0	5.1	60	20.9	150	50.7	57.2	2.4	27	8	73	39	0.45	0.7	2.0	B	81	5	0.9	329	7	1.0	199	66	3.5
14	10	36	27.7	61	27.0	151	18.7	70.4	3.6	29	5	87	30	0.38	1.1	2.2	B	81	6	0.9	154	20	1.3	334	63	4.2
4.2 MB				3.7 ML ATWC																						
14	12	6	55.6	61	36.2	146	44.5	11.1	1.9	27	10	78	40	0.49	0.5	1.0	A	313	4	0.7	223	6	0.9	77	83	1.9
14	15	47	30.2	62	2.7	149	46.9	49.8	2.5	25	4	180	44	0.36	1.5	2.1	B	275	0	1.1	5	6	2.7	185	84	4.0
14	16	33	14.6	60	3.3	141	7.2	8.9	0.8	7	3	197	12	0.25	2.4	1.8	B	289	1	0.9	21	36	5.3	198	54	1.5
14	22	30	48.1	61	48.2	149	4.5	15.0	1.1	9	7	201	9	0.48	0.9	1.2	A	168	13	1.5	264	22	0.8	50	64	2.4
15	4	11	40.0	60	34.2	147	42.1	20.4	0.5	6	6	92	12	0.20	0.8	1.5	B	278	5	1.1	10	23	0.9	176	66	3.1
15	5	11	34.9	61	55.4	148	31.3	9.8	0.9	10	6	211	16	0.90	1.7	2.0	B	6	14	1.9	266	35	0.8	114	52	4.8
15	5	39	14.7	59	37.3	152	46.8	86.0	2.7	9	6	187	63	0.24	1.4	2.5	B	105	2	1.7	195	8	2.5	1	82	4.6
15	6	13	48.7	61	51.4	148	28.3	10.0	0.9	7	5	203	9	0.34	1.4	1.5	B	165	9	2.1	264	42	0.9	65	46	3.7
15	7	5	6.8	59	42.2	139	22.3	16.5	0.9	4	4	163	4	0.24	3.4	1.4	C	326	11	1.0	261	18	5.9	92	58	1.9
15	8	3	0.7	61	50.5	148	29.7	7.4	0.9	7	5	199	9	0.33	1.2	1.0	A	262	15	0.9	4	37	2.6	154	49	1.6
15	8	57	41.0	61	50.8	148	29.5	7.1	0.9	7	5	201	9	0.41	1.2	0.9	A	263	16	0.9	2	27	2.4	146	58	1.4
15	8	58	3.7	61	51.6	148	29.7	3.5	1.0	6	3	205	10	0.15	1.9	4.4	C	2	8	2.3	269	20	0.7	113	68	8.9
15	9	4	15.9	61	51.2	148	30.2	6.9	1.2	11	8	204	10	0.48	1.0	0.8	A	264	1	0.7	354	33	2.0	172	57	1.4
15	10	3	5.6	60	20.7	140	43.1	1.7	1.0	9	4	174	27	0.65	2.2	1.9	B	288	9	1.1	191	39	5.0	29	50	2.2
15	10	55	37.8	59	59.6	142	52.3	25.2	1.3A	7	5	210	24	0.29	2.8	1.4	C	95	12	1.1	0	23	5.6	211	64	1.5
15	11	13	52.5	61	50.7	148	29.8	6.9	1.1	10	8	201	10	0.41	1.1	0.8	A	261	12	0.8	354	26	2.1	148	61	1.4
15	12	59	45.7	61	51.4	148	30.2	8.0	0.8	11	10	205	10	0.44	1.1	0.8	A	261	16	0.8	353	22	2.0	136	63	1.4
15	14	7	42.5	60	27.0	147	46.3	22.8	0.2	5	5	110	7	0.18	1.2	1.1	A	327	18	0.9	81	35	2.5	217	45	1.7
15	15	18	4.8	61	51.0	148	30.2	6.9	1.0	10	9	203	10	0.44	1.0	0.9	A	261	9	0.8	359	41	2.0	161	48	1.5
15	16	56	19.0	61	48.9	148	50.4	13.3	0.7	5	5	229	7	0.29	1.5	1.3	B	81	10	1.4	320	30	3.0	184	47	1.9
15	21	46	21.9	60	28.8	146	54.8	28.5	1.1A	9	7	105	25	0.31	0.9	1.7	B	261	2	1.0	322	9	1.4	159	60	2.8
15	22	19	55.6	61	57.4	149	55.7	45.2	2.2	28	12	171	34	0.60	0.9	1.4	B	276	1	0.9	6	13	1.7	182	77	2.7
16	3	41	9.0	60	26.2	147	45.2	22.3	0.4	4	4	155	7	0.18	1.2	1.2	A	287	16	2.1	184	37	1.3	36	48	2.8
16	4	4	28.2	61	30.3	146	43.2	22.0	2.2	29	11	68	43	0.65	0.4	0.7	A	192	1	0.7	282	3	0.6	84	87	1.3
16	4	48	15.6	60	17.6	143	4.7	13.6	1.0	8	6	149	17	0.75	0.6	1.0	A	278	10	0.7	10	14	1.0	153	73	2.0
16	12	56	41.1	60	40.5	147	23.1	5.8	1.0	11	7	90	27	0.48	0.7	1.0	A	38	7	0.6	304	28	1.0	141	61	2.0
16	14	55	14.5	60	24.9	140	17.6	0.5	1.3	12	6	185	35	0.58	0.8	1.5	A	81	4	1.1	318	6	0.6	193	56	2.5
16	15	29	17.2	60	20.8	139	33.5	9.2	1.0	9	4	213	44	0.55	1.3	1.8	B	327	8	1.0	81	26	1.6	224	54	3.7
16	16	7	19.6	60	25.9	147	42.8	22.2	0.6	4	4	135	5	0.11	1.1	1.0	A	149	31	1.3	263	34	2.2	28	40	2.0
16	16	33	6.2	60	59.3	146	56.6	13.3	2.2	31	14	40	15	0.63	0.3	0.5	A	261	2	0.4	331	18	0.5	165	63	0.8
16	17	18	53.1	61	45.4	149	43.8	4.0	2.3	31	9	151	14	0.65	0.6	0.9	A	6	12	1.0	271	22	0.4	123	65	1.9
16	18	11	28.0	60	43.4	147	42.0	20.8	0.7	5	5	216	29	0.24	1.6	1.7	B	214	2	0.8	305	43	2.2	122	47	3.8
16	18	14	11.2	61	47.0	149	43.7	4.2	1.8	29	9	154	17	0.65	0.5	0.9	A	9	9	0.9	276	23	0.4	119	65	1.9
16	18	36	35.9	61	50.2	148	31.0	6.4	0.9	16	8	173	10	0.73	0.7	0.5	A	264	22	0.5	4	24	1.4	136	57	0.9
16	22	10	54.6	60	36.1	147	45.9	20.1	0.5	5	5	197	17	0.27	1.1	1.2	A	30	10	0.7	294	29	1.9	137	59	2.5
16	22	16	8.8	60	34.6	142	28.0	6.1	1.4	14	5	105	26	0.57	0.5	3.2	C	81	1	0.6	319	1	0.7	200	58	5.0
17	0	16	36.1	60	27.0	147	47.9	18.9	0.3	5	5	140	9	0.30	0.9	0.8	A	283	7	1.7	192	8	0.9	54	79	1.5
17	2	0	39.9	60	27.5	147	47.1	20.8	0.6	5	5	144	8	0.19	1.0	0.9	A	18	8	0.7	283	35	2.0	119	54	1.5
17	5	0	40.7	59	32.8	137	46.2	13.0	1.4	5	3	326	64	0.15	6.4	21.9	D	329	3	4.1	81	13	3.0	228	64	39.9
17	6	15	55.8	60	3.7	141	5.0	4.8	0.3	5	3	195	11	0.18	1.8	1.4	B	129	17	0.8	261	39	1.1	26	34	3.9
17	7	23	39.7	60	25.0	147	50.6	23.1	0.5A	4	4	140	8	0.20	0.9	1.0	A	270	13	1.8	172	27	1.0	23	59	2.0
17	7	29	19.4	60	18.7	141	18.2	12.6	1.3	12	10	118	23	0.50	0.5	0.9	A	312	9	0.6	43	9	1.0	178	77	1.7
17	18	19	2.6	58	40.8	144	18.3	31.4	2.1A	11	8	272	185	0.63	3.6	25.0	D	271	0	5.3	181	1	6.5	1	89	99.0
17	21	3	53.7	60	5.0	141	7.8	0.1	1.0	10	6	162	10	0.48	0.7	1.2	A	289	2	0.5	198	26	0.9	23	64	2.5

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
18	0	50	47.2	60	59.8	147	58.5	20.3	0.8	9	7	111	22	0.19	0.4	1.0	A	38	3	0.6	307	10	0.7	144	80	1.9
18	2	29	23.7	60	5.0	141	8.2	0.0	0.2	5	3	194	10	0.33	1.1	1.7	B	290	2	0.6	199	39	1.5	24	61	3.5
18	4	5	47.5	60	37.2	147	58.9	21.2	0.8	9	8	94	21	0.25	0.6	1.1	A	81	5	0.8	327	14	0.7	187	62	2.0
18	4	13	18.0	60	42.0	147	41.5	18.9	0.7	11	8	88	26	0.33	0.4	0.7	A	4	12	0.7	270	17	0.6	127	69	1.4
18	4	36	38.2	60	36.3	147	41.8	15.4	0.6	10	6	94	16	0.33	0.5	1.0	A	261	13	0.8	343	20	0.6	136	65	2.0
18	6	24	38.0	60	16.5	147	11.4	19.5	1.1A	9	8	149	31	0.44	0.7	0.8	A	284	3	0.6	355	21	1.3	166	69	1.4
18	7	13	39.7	60	46.6	147	42.2	35.2	2.7	32	8	56	35	0.44	0.5	0.7	A	81	6	0.7	319	17	0.5	185	54	1.1
18	9	30	54.0	58	44.0	151	23.7	7.1	2.4	9	3	278	89	0.34	13.2	15.1	D	272	13	6.1	13	38	2.3	167	49	37.5
18	9	55	35.2	60	24.2	147	43.8	26.6	0.7A	3	3	148	6	0.02	1.5	1.1	B	176	1	2.7	265	23	2.0	83	67	2.1
18	10	30	31.8	60	23.9	148	52.1	17.5	1.6	21	9	132	20	0.60	0.4	0.7	A	336	0	0.6	261	1	0.5	65	74	1.3
18	14	4	40.4	61	50.0	149	17.7	5.4	1.4	19	11	174	21	0.72	0.5	0.7	A	188	18	0.9	287	26	0.5	67	58	1.4
18	15	27	5.3	61	23.5	149	56.3	40.7	2.1	27	9	58	26	0.51	0.5	1.1	A	263	3	0.6	172	11	0.9	8	79	2.1
18	15	27	36.8	62	1.3	150	57.1	81.9	2.5	10	6	193	31	1.01	1.5	1.6	B	194	26	2.4	90	27	1.3	321	51	3.5
18	15	27	49.5	60	38.3	143	6.3	1.7	2.0	8	4	160	25	0.57	0.7	23.6	D	261	0	0.9	341	0	1.2	0	90	44.3
18	21	8	42.1	60	22.9	147	37.7	20.9	0.7	7	5	94	7	0.16	0.7	1.0	A	82	15	0.8	347	19	1.2	208	65	2.0
18	22	29	9.9	60	47.5	148	23.3	21.5	1.0	11	9	83	8	0.54	0.6	0.9	A	309	6	0.6	218	10	1.1	70	78	1.7
19	1	50	51.9	61	0.9	147	2.8	4.2	0.1A	4	4	183	15	0.31	1.5	6.8	D	81	2	1.1	326	6	1.9	186	64	11.7
19	2	9	38.0	60	24.4	147	43.5	22.6	0.6A	7	7	115	7	0.19	0.7	0.7	A	81	17	1.1	334	24	0.9	200	57	1.4
19	4	23	18.9	60	20.8	141	23.7	4.2	0.6	8	5	147	19	0.41	1.7	1.6	B	111	8	0.7	14	42	1.6	210	47	4.4
19	12	3	44.0	60	20.1	147	14.6	24.0	1.0A	11	8	130	26	0.22	0.5	1.1	A	161	3	0.9	81	9	0.7	270	76	2.1
19	14	12	40.8	61	21.4	149	50.2	39.3	1.6	20	13	50	19	0.62	0.5	1.1	A	96	7	0.8	188	11	0.8	334	77	2.0
19	16	19	20.1	59	56.5	141	45.8	1.5	1.0A	7	2	238	46	0.17	1.9	4.5	C	261	0	2.8	141	4	1.8	351	60	7.3
19	19	28	21.1	59	56.4	141	47.1	5.7	0.9A	7	4	239	47	0.41	1.5	3.2	C	121	4	1.7	212	13	2.6	14	76	6.1
19	20	20	58.6	60	1.9	141	42.0	12.4	1.7	11	7	165	36	0.52	1.0	1.0	A	282	4	0.6	18	41	2.1	187	49	1.6
19	20	33	47.8	60	27.6	147	44.3	20.1	0.2	6	6	100	5	0.21	0.7	0.8	A	334	18	0.8	81	21	1.3	211	58	1.6
19	21	54	3.8	61	29.2	150	42.7	54.9	2.2	24	12	105	3	0.45	0.5	0.9	A	82	2	0.5	173	14	1.0	344	76	1.8
20	0	19	20.8	58	57.3	152	40.8	97.9	2.9	9	3	143	104	0.30	1.4	3.7	C	347	1	1.2	81	12	2.3	252	77	7.1
20	1	36	41.5	59	56.7	141	45.3	0.0	0.9	5	4	211	40	0.51	1.3	2.8	C	292	1	1.4	22	3	2.4	184	87	5.3
20	2	53	30.4	60	10.6	141	9.1	10.7	1.4	11	6	140	7	0.19	1.7	0.6	B	15	1	3.3	285	11	0.6	110	79	1.1
20	4	37	17.7	60	48.3	150	46.9	49.5	2.3	28	9	54	26	0.52	0.4	1.2	A	293	3	0.7	23	6	0.8	176	83	2.2
20	5	37	50.8	60	32.4	147	32.3	14.4	1.5	21	13	81	10	0.50	0.4	0.5	A	39	6	0.4	305	34	0.5	138	55	1.0
20	7	19	48.4	60	14.7	139	47.4	1.5	1.4	10	3	195	31	0.36	0.9	2.2	B	112	2	0.8	22	13	1.4	211	77	4.1
20	8	55	22.6	60	55.7	147	20.4	4.9	-1A	4	4	168	14	0.11	2.5	3.3	C	278	6	1.0	9	14	4.6	166	75	6.3
20	10	38	19.4	60	58.2	147	17.6	18.9	1.8	29	11	45	15	0.53	0.3	0.5	A	6	1	0.5	276	18	0.4	99	72	1.0
20	11	39	1.5	60	27.9	143	12.1	19.3	1.3	9	5	112	19	0.45	0.6	1.4	B	261	8	0.6	350	15	0.8	143	73	2.8
20	13	19	23.8	61	19.9	152	4.5	11.1	-2A	3	3	274	4	0.17	1.3	1.3	A	199	12	1.6	98	41	2.0	302	46	2.7
20	15	41	38.3	60	24.2	147	44.5	21.7	0.7A	9	7	114	6	0.29	0.5	0.6	A	88	14	0.9	351	28	0.8	202	58	1.3
20	15	48	3.0	60	4.8	141	9.2	5.1	1.0	10	5	162	11	0.34	1.0	1.0	A	292	2	0.6	24	44	2.5	200	46	0.9
20	17	43	28.2	61	20.7	149	38.2	5.8	0.8A	6	4	214	12	0.76	1.4	1.0	B	209	14	1.5	111	30	2.9	321	56	1.3
20	18	13	58.4	61	31.3	149	55.2	43.3	2.2	30	8	67	15	0.56	0.6	0.8	A	261	9	0.7	158	21	0.9	11	64	1.5
20	23	4	16.8	61	15.6	149	17.7	43.4	1.8	29	12	68	14	0.40	0.5	0.8	A	81	5	0.6	148	6	0.7	302	66	1.4
21	4	0	6.5	60	17.4	140	54.0	11.8	0.9	9	5	160	17	0.21	1.3	1.3	A	100	17	0.7	356	40	0.8	208	45	3.3
21	5	45	1.6	61	12.9	149	18.8	39.4	2.3	31	5	45	14	0.46	0.5	1.3	A	206	1	0.9	116	7	0.7	304	83	2.4
21	9	10	31.3	61	53.5	149	19.1	5.1	1.0	11	4	222	25	0.66	1.1	1.1	A	263	14	0.7	4	38	1.9	157	40	2.3
21	12	38	45.6	61	27.7	146	39.9	32.7	2.1	23	11	65	40	0.65	0.5	0.5	A	302	19	0.6	203	24	0.8	66	59	1.1
21	22	24	41.7	62	15.2	149	19.0	52.7	3.0	22	6	198	57	0.40	1.5	2.3	B	270	2	1.3	0	21	2.5	175	69	4.4
21	22	40	25.1	61	23.9	149	55.2	40.6	2.8	32	10	56	26	0.43	0.5	1.1	A	262	0	0.6	172	7	0.9	352	83	2.1
22	8	5	49.5	60	23.0	142	21.6	2.7	1.0	7	6	124	28	0.66	0.6	9.0	D	83	1	0.6	353	1	1.1	218	89	16.8
22	13	21	4.6	60	7.2	140	57.0	9.8	2.3	17	5	114	6	0.29	0.7	0.5	A	101	7	0.5	193	17	1.4	349	72	0.9

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
22	14	41	40.5	60	57.8	151	16.4	57.6	2.2	25	13	46	49	0.48	0.5	1.3	A	81	12	0.6	171	12	0.7	308	73	2.8
22	14	50	27.8	61	21.1	146	44.3	39.3	2.2	33	12	60	33	0.61	0.4	1.4	B	206	2	0.8	297	6	0.6	94	85	2.7
22	14	56	39.4	60	18.7	147	38.4	19.7	0.5	6	5	156	7	0.18	1.2	1.4	B	186	1	1.0	96	38	1.6	277	52	3.0
22	16	22	51.3	60	7.9	141	19.6	0.4	0.9	10	6	162	17	0.52	1.1	1.2	A	288	4	0.5	193	42	1.3	20	48	2.7
22	18	24	25.5	60	43.7	147	30.9	15.9	2.3	35	16	32	28	0.46	0.3	0.6	A	348	9	0.5	261	15	0.4	109	72	1.1
22	18	46	19.3	60	24.5	147	41.9	23.0	1.9	30	9	86	7	0.39	0.4	0.4	A	35	6	0.5	130	42	0.8	298	47	0.6
22	18	28	19.3	61	51.8	148	31.4	8.6	2.1	30	9	161	12	0.66	0.5	0.5	A	268	22	0.5	168	27	1.0	32	54	0.9
22	21	20	12.5	60	25.1	147	45.1	24.5	0.6A	4	4	132	8	0.23	1.3	1.3	B	291	24	2.3	186	31	1.5	52	49	2.9
23	0	1	33.5	60	26.8	147	40.1	23.2	0.5A	6	4	98	7	0.15	1.0	1.0	A	81	27	1.5	322	32	1.3	198	41	2.1
23	0	55	54.1	60	8.9	147	6.6	15.3	1.3	18	6	210	41	0.38	1.1	1.3	A	97	7	0.8	191	29	1.8	355	60	2.6
23	1	38	53.0	60	10.7	141	5.0	6.3	0.3A	5	3	162	4	0.12	1.2	0.9	A	282	24	0.7	178	28	2.4	46	52	1.7
23	2	16	3.5	60	51.2	151	44.2	15.0	3.2	25	6	104	30	0.69	0.5	1.3	A	159	4	0.6	81	13	0.7	267	72	2.6
3.9 MB				3.8 ML ATWC				FELT (III) AT CHUGIAK AND STERLING. FELT (II) AT ANCHORAGE AND COOPER LANDING.																		
23	4	33	25.2	62	25.5	148	28.7	42.0	2.3	27	9	112	69	0.67	1.3	4.0	C	326	1	1.8	81	9	1.3	231	64	6.9
23	4	59	56.8	60	24.0	147	41.0	19.0	0.5A	7	7	120	6	0.39	0.5	0.5	A	82	23	0.9	335	35	0.8	198	46	1.1
23	8	43	1.4	60	26.9	147	44.5	18.5	1.3	23	7	80	6	0.46	0.4	0.5	A	261	17	0.5	339	37	0.6	148	48	0.9
23	13	26	24.6	60	24.7	141	35.4	11.3	1.0	10	4	102	10	0.45	0.8	1.0	A	1	23	0.6	104	28	0.9	238	52	2.2
23	13	55	25.2	60	26.3	147	45.8	17.4	0.6A	9	7	106	7	0.35	0.6	0.6	A	27	22	0.9	286	26	0.9	152	55	1.2
23	14	15	14.2	60	23.9	141	31.7	3.5	0.7	9	6	105	13	0.70	0.8	1.2	A	335	11	0.6	81	16	0.9	216	85	2.3
23	14	21	13.9	62	0.5	148	59.9	8.9	1.5	24	11	175	27	0.62	0.7	0.8	A	9	4	0.9	276	38	0.6	104	52	1.9
23	14	22	44.3	60	34.9	147	30.5	17.8	0.9	15	9	77	15	0.33	0.4	0.6	A	34	4	0.6	302	17	0.6	137	72	1.2
23	15	44	49.5	60	13.6	141	0.9	12.5	1.3	12	4	120	8	0.13	1.2	0.8	A	306	21	0.6	201	34	2.6	62	48	0.8
23	19	46	50.7	61	35.2	151	8.8	9.2	1.8	22	10	104	25	1.00	0.4	0.5	A	270	11	0.4	2	11	0.7	136	74	1.0
23	21	50	14.7	60	10.5	148	23.2	27.2	1.2	16	11	136	37	0.60	0.4	1.0	A	356	2	0.8	266	17	0.5	93	73	2.0
23	22	19	45.9	61	10.3	151	21.8	67.8	2.5	27	7	60	37	0.36	0.7	1.2	A	81	6	0.7	145	24	0.9	338	55	2.1
24	0	19	56.3	60	18.3	147	21.2	19.1	0.9	13	6	120	22	0.30	0.5	0.8	A	161	4	0.8	81	15	0.7	266	72	1.5
24	0	43	49.3	62	38.0	143	39.5	14.5	2.2	11	5	267	133	0.17	1.9	1.6	B	200	3	3.6	109	18	1.7	299	72	2.9
24	2	3	1.1	60	25.7	141	35.3	7.9	1.4	15	9	102	12	0.51	0.8	0.6	A	286	1	0.5	16	15	0.5	192	75	1.2
24	4	20	29.5	60	25.2	141	36.6	9.7	1.1	12	4	101	10	0.22	0.8	1.0	A	119	13	1.0	21	32	0.7	228	55	2.3
24	4	48	8.8	60	25.6	141	35.0	12.5	1.5	14	10	102	12	0.52	0.4	0.6	A	327	0	0.5	81	23	0.5	237	57	1.1
24	6	32	3.3	60	25.1	141	35.8	9.8	1.4	14	7	101	11	0.34	0.4	0.7	A	107	14	0.7	11	22	0.5	227	63	1.4
24	6	53	20.8	60	25.8	141	34.5	8.5	0.3A	8	5	104	12	0.34	0.7	1.4	B	102	10	1.2	9	12	1.0	230	74	2.7
24	8	42	45.8	60	25.7	141	37.5	10.9	0.1A	7	5	101	10	0.49	0.9	0.9	A	127	29	1.5	19	30	0.8	252	46	2.1
24	9	11	45.5	61	5.9	152	18.3	9.0	0.4	6	4	197	15	0.24	1.3	1.4	B	203	25	0.6	305	25	2.1	74	53	3.1
24	13	2	7.4	60	3.0	140	40.0	6.4	0.4A	6	3	180	23	0.40	3.9	3.0	C	103	2	0.9	11	36	8.7	196	54	3.1
24	13	4	25.6	60	0.6	140	41.6	0.2	0.9	10	3	161	24	0.28	1.2	2.0	B	99	2	0.6	190	22	1.9	4	88	4.0
24	13	8	2.5	60	1.2	140	41.0	0.2	0.2A	5	4	206	25	0.23	2.5	3.0	C	280	2	0.9	189	20	4.6	15	70	5.8
24	14	24	1.9	60	0.2	140	40.9	0.0	0.5A	6	3	187	26	0.13	1.3	3.0	C	280	0	0.6	190	2	2.4	10	88	5.6
24	14	59	44.7	61	20.0	151	7.7	4.8	0.6A	7	7	85	25	0.70	0.6	0.8	A	81	1	0.6	333	14	1.0	175	67	1.4
24	15	27	22.3	61	14.3	152	21.4	8.7	-4A	3	3	316	11	0.14	2.0	2.5	B	344	0	1.7	261	36	2.0	74	53	5.6
24	15	35	0.8	61	16.5	152	18.4	8.6	-2A	3	3	310	8	0.11	1.3	1.5	B	194	7	1.5	289	38	1.9	95	51	3.3
24	16	2	6.2	60	25.7	141	34.5	8.4	0.3A	8	5	104	12	0.37	0.6	1.1	A	102	11	1.1	8	18	0.7	222	60	2.3
24	17	17	46.7	61	19.4	151	6.6	7.0	0.7A	11	8	75	25	0.73	0.4	0.7	A	149	12	0.7	261	15	0.5	29	61	1.3
24	17	40	12.6	61	34.3	151	7.7	11.1	0.6A	8	5	105	24	0.56	1.0	2.2	B	284	16	0.6	189	17	0.7	55	86	4.5
24	22	41	39.2	61	25.4	149	45.6	1.4	0.7A	6	5	152	23	0.70	1.0	1.9	B	352	0	0.8	262	17	1.6	82	73	3.7
25	1	5	13.1	60	25.8	141	34.3	8.5	1.4	14	7	103	12	0.48	0.5	1.0	A	274	6	0.9	5	9	0.6	151	79	1.8
25	2	0	55.1	61	7.5	142	2.8	20.1	0.7A	4	4	236	19	0.52	1.3	1.5	B	3	4	2.4	94	11	0.9	253	78	2.9
25	4	39	25.0	59	56.5	141	31.1	9.0	1.4	11	6	177	31	0.52	0.7	0.9	A	97	11	0.5	192	24	1.1	344	63	1.8

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAO	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
25	5	5	22.2	60	8.1	153	4.9	3.6	1.2A	5	5	263	16	0.44	1.3	1.1	A	12	1	2.0	103	37	2.9	281	53	1.2	
25	6	40	21.3	60	21.0	142	53.5	13.8	1.0A	10	7	102	11	0.54	0.3	0.9	A	119	8	0.8	309	7	0.9	354	81	1.7	
25	7	14	7.1	60	9.7	140	56.6	10.0	1.3	13	7	134	5	0.26	0.7	0.4	A	200	16	1.3	101	37	0.6	317	58	0.8	
25	12	9	6.4	60	36.2	141	37.0	12.3	2.3	16	6	102	28	0.60	0.5	1.1	A	305	6	0.8	214	7	0.5	76	81	2.1	
25	16	36	27.1	60	10.3	141	7.0	5.9	1.7	16	7	132	5	0.39	0.5	0.5	A	53	32	0.9	298	34	0.5	174	40	1.1	
25	16	56	17.2	61	51.8	148	30.1	9.9	1.6	23	10	161	11	0.71	0.7	0.9	A	3	17	1.0	264	28	0.5	121	57	2.0	
25	20	44	14.1	59	56.4	141	32.8	17.2	0.9A	7	5	204	29	0.61	1.0	1.6	B	267	4	1.1	176	11	1.8	17	78	2.9	
25	22	24	22.4	60	15.0	140	59.8	3.3	0.3	5	3	165	11	0.30	2.0	2.9	C	81	17	2.9	339	24	0.8	201	59	6.3	
26	2	38	35.7	60	39.0	147	41.9	19.4	0.5	9	7	91	21	0.32	0.4	0.7	A	261	8	0.5	353	31	0.6	151	68	1.5	
26	7	50	16.5	61	50.6	148	29.8	4.2	1.2	15	8	174	9	0.66	0.6	0.7	A	270	11	0.6	4	21	1.1	154	66	1.4	
26	11	20	20.5	60	27.8	147	43.8	22.1	0.5	9	4	89	5	0.79	0.8	0.8	A	81	15	1.0	316	27	0.8	189	45	1.6	
26	12	21	43.4	60	30.7	147	36.0	20.6	0.4	7	5	137	6	0.26	0.8	1.2	A	81	14	0.9	328	16	1.0	202	59	2.3	
26	12	57	54.0	60	2.1	141	32.4	15.9	1.1A	5	2	209	31	0.12	2.1	3.2	C	279	13	1.0	181	28	1.8	31	58	6.9	
27	3	46	56.5	60	26.1	147	46.4	23.2	0.7A	5	5	103	8	0.12	1.3	1.2	B	336	6	1.2	81	39	2.9	239	48	1.7	
27	5	7	53.3	61	11.0	152	18.3	14.0	0.3	4	4	216	12	0.17	2.8	2.6	C	321	28	3.2	210	34	1.3	81	43	6.8	
27	5	16	28.1	60	37.4	141	44.5	11.5	1.1	6	4	113	30	0.36	1.3	4.7	C	3	8	0.8	272	10	1.5	131	77	9.0	
27	6	36	25.3	60	45.2	150	49.4	69.2	2.3	27	10	57	23	0.62	0.5	1.4	B	82	2	0.7	352	6	0.9	190	84	2.6	
27	6	40	5.1	59	29.4	152	39.5	88.1	2.6	14	4	115	78	0.26	1.3	2.4	B	293	3	1.8	202	10	2.3	39	60	4.6	
27	9	1	22.0	60	25.9	147	44.4	17.2	0.3	12	7	113	7	0.29	0.6	0.7	A	261	0	1.0	344	23	0.8	171	66	1.4	
27	13	52	18.7	62	21.2	149	47.0	55.0	2.8	27	6	132	79	0.48	1.8	3.4	C	96	2	1.2	6	18	2.9	192	72	6.8	
27	14	45	55.3	61	47.8	149	0.3	9.9	0.6	8	4	242	5	0.42	1.5	0.7	B	129	7	2.8	35	30	1.7	231	59	1.0	
27	16	14	46.1	61	51.0	147	38.7	30.3	2.6	31	8	153	17	0.62	0.7	0.7	A	268	3	0.7	176	37	1.1	2	53	1.6	
3.0 ML ATWC																											
27	16	43	13.5	59	25.0	138	55.8	1.0	1.3	5	5	268	5	0.13	2.6	3.4	C	176	14	4.6	272	23	1.3	57	63	6.9	
27	19	55	32.0	60	19.1	147	37.0	17.8	0.4	6	4	158	7	0.28	1.3	1.4	B	171	11	1.1	81	35	2.1	277	54	3.0	
27	21	40	23.9	61	16.0	152	11.2	0.4	0.3	3	3	264	3	0.04	1.7	8.8	D	90	1	3.3	180	3	1.2	342	87	16.6	
27	23	40	12.1	62	39.6	151	22.6	96.7	2.8	14	3	278	76	0.32	6.1	4.4	D	81	26	3.4	184	34	13.0	320	47	5.8	
28	1	0	14.2	61	33.3	149	50.4	46.4	2.6	32	12	74	11	0.48	0.8	0.9	A	285	3	0.6	174	18	0.9	4	72	1.7	
28	7	27	59.6	60	6.4	141	31.0	4.9	1.7	6	5	221	27	0.37	1.8	1.2	B	133	1	0.9	42	20	3.6	226	70	1.9	
28	11	1	9.7	60	24.5	147	45.1	23.1	0.5	8	7	113	7	0.22	0.5	0.6	A	36	18	0.9	295	29	0.8	153	55	1.1	
28	16	16	32.0	60	32.3	147	50.7	23.4	0.4	7	4	109	14	0.16	0.7	0.7	A	320	23	0.8	81	26	1.2	203	45	1.4	
28	19	11	14.3	61	0.0	152	29.1	3.7	1.5	12	8	193	31	0.76	1.0	1.1	A	199	2	0.4	108	31	1.9	292	59	2.1	
28	19	21	42.2	61	49.0	148	52.4	14.3	2.0	26	12	157	6	0.64	0.5	0.4	A	261	14	0.5	158	22	1.1	19	61	0.7	
28	19	54	58.7	60	12.0	140	21.5	2.1	1.1A	3	2	183	79	0.07	8.8	5.4	D	295	4	4.3	203	23	17.7	34	67	8.0	
28	21	27	10.5	61	8.8	151	7.1	64.1	2.5	24	7	56	41	0.51	0.6	1.7	B	195	8	1.0	103	11	0.9	320	76	3.2	
29	1	10	22.8	60	9.2	140	7.8	26.7	1.8	6	4	187	50	0.30	2.4	1.6	B	121	6	0.8	214	24	4.9	18	65	2.5	
29	2	9	58.4	60	27.2	147	46.5	20.3	0.7	7	6	98	7	0.18	0.7	0.7	A	261	11	1.1	327	19	0.7	137	58	1.2	
29	3	1	28.4	61	41.0	150	19.8	52.2	2.4	31	11	138	24	0.45	0.7	1.1	A	86	2	0.6	177	17	1.2	349	73	2.2	
29	7	8	21.4	60	19.5	147	44.2	21.7	0.9A	6	5	156	3	0.15	1.0	0.8	A	164	4	0.7	81	33	2.1	260	56	1.1	
29	8	11	50.6	60	24.9	147	41.3	21.7	1.6	19	11	86	6	0.42	0.4	0.5	A	29	18	0.5	290	25	0.6	151	58	1.0	
29	8	13	41.5	60	14.3	140	57.8	23.2	1.6	6	5	165	10	0.63	2.9	1.3	C	309	7	0.8	216	23	5.8	55	66	0.9	
29	8	25	18.0	61	5.5	150	46.5	12.0	1.8	22	11	58	41	0.68	0.3	0.7	A	281	5	0.5	169	7	0.5	26	81	1.3	
29	8	50	42.8	60	29.6	147	42.0	22.6	0.2	4	4	250	4	0.20	1.0	1.0	A	262	16	1.9	160	36	1.2	12	50	2.2	
29	11	57	50.0	60	17.2	147	50.2	11.5	0.3	8	6	123	9	0.61	0.5	0.6	A	161	2	0.6	261	26	0.8	67	62	1.3	
29	15	18	13.3	61	57.9	149	13.9	2.8	1.0	13	7	198	27	0.51	0.8	1.8	B	18	4	1.3	287	23	0.6	117	67	3.7	
29	16	7	51.2	61	12.1	150	56.8	6.7	0.9A	9	4	77	31	0.54	0.9	1.1	A	261	13	0.8	157	18	1.5	21	64	2.1	
29	16	9	36.1	60	58.8	145	24.6	35.0	2.1	25	16	76	61	0.50	0.4	0.4	A	110	9	0.6	18	12	0.7	236	75	0.8	
30	1	11	4.6	61	15.6	148	52.7	39.1	2.4	27	10	53	28	0.55	0.5	1.3	A	261	0	0.7	318	6	0.6	171	57	2.1	
30	3	53	2.3	60	6.2	141	7.7	7.7	0.6	4	4	191	8	0.11	2.6	1.3	B	10	5	4.8	276	42	1.0	105	48	3.2	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA AUGUST 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
30	6	45	58.7	60	19.1	147	49.7	21.5	0.5	4	4	162	6	0.12	1.3	1.5	B	81	7	2.4	180	16	1.3	326	69	2.9	
30	21	27	39.6	60	40.1	151	55.2	84.8	2.4	25	9	64	29	0.45	0.7	0.9	A	192	6	0.9	100	15	1.2	303	74	1.8	
30	21	57	4.9	61	21.1	149	28.2	38.9	1.3A	17	9	88	13	0.39	0.5	0.5	A	39	7	0.8	303	41	1.0	137	48	0.7	
30	22	59	38.2	61	55.5	148	47.9	39.6	2.3	30	12	167	18	0.48	0.6	0.7	A	81	15	0.7	345	22	1.2	203	63	1.3	
31	0	20	29.8	59	29.4	152	57.7	83.9	3.2	14	8	124	77	0.56	0.8	1.6	B	188	3	1.5	97	4	1.0	314	85	3.0	
31	0	23	20.9	60	22.2	147	44.1	20.0	0.7A	6	6	117	2	0.23	0.7	0.8	A	354	14	1.2	89	17	1.2	227	88	1.6	
31	1	32	22.0	60	6.6	140	44.3	6.6	1.7	8	6	144	17	0.32	0.9	0.8	A	117	17	0.6	221	39	2.1	8	46	1.0	
31	4	22	13.1	60	25.0	147	48.8	19.2	1.3	19	9	80	9	0.31	0.4	0.4	A	219	5	0.7	312	35	0.6	122	55	0.9	
31	5	3	11.4	60	26.5	140	18.4	4.7	1.5	7	5	187	51	0.71	0.8	1.6	B	314	11	1.0	46	12	1.4	182	74	3.2	
31	6	36	23.1	60	28.5	147	18.4	13.3	1.2	18	9	99	19	0.35	0.5	0.7	A	81	3	0.5	324	7	0.7	189	62	1.3	
31	6	58	38.0	60	10.9	140	56.7	10.1	3.3	12	4	136	6	0.68	0.8	0.7	A	280	9	0.9	186	21	1.5	32	67	1.2	
4.3 ML ATWC																											
31	7	2	36.9	60	8.7	140	59.8	11.7	0.9	7	2	187	2	0.21	1.8	0.5	B	207	8	3.3	115	18	1.2	320	70	0.8	
31	7	5	19.6	60	8.4	141	0.7	12.3	1.3	7	5	168	2	0.38	1.2	0.5	A	212	3	2.3	304	31	0.8	117	59	1.0	
31	7	8	46.2	60	8.1	141	0.4	11.4	1.1	7	5	168	3	0.39	1.1	0.4	A	214	3	2.1	124	6	0.8	331	83	0.7	
31	7	16	12.2	60	7.8	141	2.2	10.9	1.1	7	3	189	3	0.31	1.5	0.5	B	26	6	2.9	118	19	1.4	270	70	0.8	
31	7	33	47.6	60	7.3	141	2.1	10.1	0.8A	7	4	170	4	0.30	2.3	0.7	B	28	12	4.3	122	18	1.4	266	68	0.8	
31	7	35	46.2	60	9.0	141	1.4	10.7	1.2	7	5	187	1	0.40	1.1	0.4	A	210	6	2.0	117	27	0.9	312	62	0.7	
31	8	0	16.8	60	7.1	141	8.6	6.0	0.6	7	2	173	7	0.10	3.1	2.3	C	272	32	0.8	29	36	7.1	153	38	1.9	
31	8	29	17.5	60	7.7	141	7.8	9.1	0.7A	7	3	171	6	0.24	2.3	0.9	B	26	18	4.6	126	27	1.3	267	57	0.8	
31	8	37	51.1	60	10.2	141	2.7	10.5	1.8	9	7	131	2	0.38	0.8	0.4	A	210	10	1.6	114	28	0.9	318	60	0.6	
31	12	14	36.3	59	58.1	141	47.4	9.9	1.1	7	3	205	44	0.28	0.9	1.7	B	277	8	1.4	185	12	1.6	40	75	3.4	
31	12	25	32.8	60	27.1	140	1.6	11.1	0.8A	7	5	200	65	0.68	3.0	8.0	C	136	1	1.9	81	6	4.3	235	55	9.3	
31	13	24	18.6	60	20.5	147	17.0	21.7	0.5A	9	9	128	24	0.30	0.6	1.1	A	85	4	0.6	354	8	1.1	201	81	2.0	
31	17	2	38.6	59	52.7	141	41.4	2.6	1.2A	7	3	210	48	0.29	0.7	1.7	B	101	2	1.0	191	6	1.4	353	84	3.1	
31	17	46	2.6	60	34.8	147	53.3	17.5	0.6A	10	6	90	17	0.35	0.7	0.8	A	261	4	1.1	322	23	0.6	162	53	1.4	
31	18	28	32.1	60	24.5	147	43.5	22.2	0.7	16	12	84	7	0.39	0.4	0.5	A	30	2	0.6	299	39	0.6	122	51	1.0	
31	18	55	0.3	59	58.5	141	48.0	7.8	0.8A	6	2	204	43	0.09	1.0	2.6	B	261	8	1.4	167	9	1.7	31	77	4.9	
31	20	12	9.0	60	23.1	147	18.1	21.4	0.9A	10	6	118	21	0.14	0.5	1.0	A	182	3	0.9	81	10	0.6	289	76	1.8	
31	21	27	39.7	61	47.8	148	54.0	11.3	0.2A	4	4	243	3	0.10	1.0	1.3	A	81	23	1.0	171	29	1.3	314	54	2.7	
31	22	27	56.7	60	27.0	147	46.4	19.0	0.3A	8	7	93	7	0.27	0.9	0.9	A	261	27	1.4	331	29	0.9	119	47	1.6	
31	23	4	38.1	59	50.7	152	28.5	86.3	2.7	17	6	87	42	0.49	1.6	1.7	B	329	5	1.2	81	26	2.8	230	56	3.0	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DF1	SE1	AZ2	DF2	SE2	AZ3	DF3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
1	1	43	40.2	60	24.7	147	39.2	21.4	0.6	6	5	122	6	0.10	1.0	0.7	A	261	0	1.8	339	7	0.8	171	76	1.3
1	8	30	30.3	60	14.1	140	42.6	13.4	0.9	7	6	174	20	0.36	2.0	1.7	B	90	32	0.9	336	33	1.1	212	41	4.8
1	9	18	56.3	61	46.3	149	7.6	14.8	0.7	7	4	242	11	0.29	1.5	0.5	B	118	9	2.8	20	41	1.1	218	48	0.7
1	15	43	18.7	60	18.9	146	46.7	19.1	1.1	19	11	160	18	0.33	0.4	0.9	A	261	0	0.5	155	2	0.8	351	74	1.6
1	16	40	45.0	61	40.6	148	31.9	3.8	0.9	11	4	98	18	0.40	0.6	1.5	A	323	12	0.7	261	17	0.6	95	66	2.5
1	21	31	42.1	60	4.4	140	34.7	5.8	1.9	7	5	164	27	0.50	1.8	1.3	B	122	10	0.8	218	31	3.7	16	57	2.0
1	21	42	38.2	61	33.0	151	1.3	73.0	2.6	17	7	106	18	0.32	0.8	1.3	A	81	11	0.8	169	21	1.1	324	66	2.6
2	0	14	43.6	61	19.8	149	7.1	25.0	1.0A	5	4	123	26	0.28	0.9	1.6	B	304	2	1.7	34	10	1.0	203	80	3.0
2	0	30	43.6	60	4.3	147	51.9	19.0	0.9A	8	5	172	15	0.30	1.1	1.3	A	214	20	1.4	316	31	1.1	96	52	2.8
2	2	4	31.5	61	9.5	149	31.9	39.2	0.8A	4	3	178	10	0.12	3.3	3.0	C	55	27	3.1	147	36	1.6	278	42	7.9
2	2	34	50.4	60	5.9	141	14.7	3.2	0.8	4	3	232	13	0.16	2.4	2.3	B	278	16	0.9	175	38	4.3	26	48	4.7
2	3	29	24.7	59	58.1	140	15.9	13.5	1.2A	5	4	169	48	0.35	10.4	2.7	D	32	0	19.4	122	4	1.2	302	86	5.1
2	10	55	17.2	60	0.9	153	23.8	122.3	2.9	12	4	134	37	0.18	1.6	2.2	B	10	8	1.9	279	12	2.9	133	76	4.2
2	12	4	34.0	60	27.6	152	6.3	82.0	2.8	12	6	217	21	0.27	2.0	2.5	B	179	8	2.9	83	35	2.0	280	54	5.7
2	12	15	19.2	62	42.8	149	17.5	49.1	2.3	16	8	262	107	0.61	2.7	10.6	D	261	0	3.0	332	9	3.5	171	69	19.0
2	21	15	26.0	60	10.1	141	11.0	9.4	1.0	6	3	169	9	0.12	3.9	1.1	C	28	6	7.3	293	40	1.1	125	49	2.4
3	0	1	49.1	59	27.8	140	20.0	14.9	1.5A	5	4	232	58	0.32	2.2	3.0	C	284	7	1.7	192	16	4.0	37	72	5.7
3	2	33	49.4	60	21.4	147	38.9	23.0	0.8A	5	5	153	5	0.11	1.4	1.1	B	170	20	1.2	268	21	2.8	40	60	2.0
3	4	5	36.8	59	35.8	152	15.6	76.5	2.4	17	8	98	58	0.43	0.8	1.2	A	16	0	1.5	287	5	0.8	106	85	2.2
3	13	3	19.9	61	1.2	152	22.0	14.4	0.6A	4	4	200	25	0.10	1.9	0.8	B	107	4	3.6	198	19	0.6	6	71	1.5
3	16	6	30.6	61	56.6	148	56.8	7.2	0.9	19	10	193	19	0.66	0.7	0.9	A	22	8	1.2	287	34	0.6	124	55	2.1
3	15	25	16.7	61	1.7	152	22.7	15.1	0.1A	4	4	202	24	0.10	4.8	24.9	D	202	1	0.9	292	10	3.6	106	80	47.4
3	16	14	50.0	60	24.6	147	31.7	16.7	0.4	4	5	234	9	0.25	0.9	1.3	A	182	7	1.1	88	27	1.3	285	62	2.7
3	16	21	5.7	60	24.1	147	31.3	16.9	0.4	5	5	165	10	0.13	0.9	1.2	A	23	1	0.9	114	33	1.1	291	57	2.5
3	18	15	14.6	61	48.0	148	53.1	10.2	0.5	3	4	235	4	0.12	1.2	1.6	B	196	3	1.5	104	33	1.4	291	57	3.6
4	7	28	5.8	61	10.3	152	8.1	4.7	-5	3	3	279	5	0.06	1.4	1.9	B	261	17	2.2	329	30	1.1	140	50	3.6
4	7	40	12.3	61	24.5	150	40.4	54.8	2.4	30	11	88	7	0.46	0.6	1.2	A	81	5	0.7	171	13	1.0	330	76	2.3
4	10	1	22.5	60	50.3	152	24.0	10.0	1.1	9	7	178	29	0.61	1.5	1.6	B	192	7	0.6	96	40	1.7	290	49	3.8
4	14	6	33.8	61	20.4	151	14.5	66.9	2.5	28	11	82	30	0.37	0.8	1.7	B	81	10	0.8	162	18	1.2	321	68	3.2
4	15	5	2.8	60	2.1	147	21.3	5.2	0.6	8	7	224	17	0.31	1.3	1.1	A	29	4	1.2	120	9	2.4	275	80	2.1
4	23	51	11.6	61	52.9	149	14.4	9.2	1.2	14	11	163	21	0.62	1.0	1.2	A	181	7	1.4	276	37	0.7	82	52	2.8
5	1	17	18.1	60	27.0	143	46.1	21.7	1.7	12	10	128	30	0.70	0.6	1.0	A	277	5	0.6	9	19	1.0	173	70	2.0
5	3	52	20.2	61	38.4	149	58.1	42.0	2.9	35	6	80	5	0.45	0.6	0.8	A	92	1	0.5	182	15	1.1	358	75	1.6
3.1 ML ATWC										FELT (II) AT ANCHORAGE.																
5	3	58	29.4	61	41.7	149	57.7	40.3	2.1	29	13	144	7	0.49	0.5	0.8	A	276	0	0.5	6	0	0.9	0	90	1.5
5	9	58	53.6	59	24.4	152	49.5	60.4	2.7	14	3	126	86	0.30	1.0	2.7	C	197	7	1.6	106	12	1.2	317	76	5.3
5	11	9	25.2	61	0.1	146	34.3	8.4	1.9	29	16	52	7	0.64	0.3	0.5	A	225	2	0.4	316	13	0.6	126	77	0.9
5	12	28	19.7	60	2.2	153	38.7	158.8	3.3	15	4	154	49	0.38	2.7	2.0	C	83	13	5.2	179	24	2.8	327	62	3.7
5	17	22	15.4	60	18.4	141	15.5	16.8	1.3	8	5	116	21	0.29	0.7	0.9	A	124	9	1.2	30	23	0.9	234	65	1.8
5	20	0	42.8	60	10.4	141	5.9	4.6	0.4	5	4	289	21	0.54	2.0	2.5	B	313	8	2.6	81	24	1.5	211	45	4.6
5	20	6	41.9	60	7.4	140	57.0	15.6	0.8	6	5	158	29	0.22	1.3	1.5	B	97	16	0.9	357	32	2.1	210	53	3.3
5	20	6	44.7	60	24.2	147	40.1	20.4	0.4	9	9	154	7	0.21	0.7	0.6	A	287	25	0.8	176	39	1.5	41	41	0.9
5	23	31	38.2	61	47.2	140	2.6	15.0	0.9	12	9	156	6	0.74	0.6	0.8	A	167	13	1.1	263	26	0.6	53	61	1.7
6	0	59	19.9	60	23.6	147	7.5	16.1	1.1	20	10	122	30	0.42	0.6	0.8	A	261	0	0.6	323	16	0.8	171	58	1.3
6	1	22	39.0	61	17.6	152	12.7	7.4	0.7	4	4	239	4	0.20	1.2	1.2	A	261	31	1.5	123	33	2.8	11	29	1.0
6	1	55	10.8	60	23.2	141	13.3	12.4	1.8	9	6	123	29	0.37	0.8	1.2	A	114	5	1.5	22	18	0.9	219	71	2.4
6	4	14	9.3	61	15.3	152	11.5	2.9	-2A	3	3	278	2	0.01	1.1	1.1	A	184	15	0.8	286	38	2.3	77	48	1.8
6	4	17	20.8	61	17.1	152	12.0	4.4	-4A	3	3	291	3	0.02	1.4	1.3	B	34	10	1.3	297	34	2.8	138	54	2.5
6	5	10	38.3	60	19.5	141	11.7	10.6	1.2	6	3	153	31	0.35	1.6	1.8	B	107	14	1.5	6	38	2.0	213	49	4.1

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	OAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	A22	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min																			
6	7	41	29.9	60	4.7	149	20.1	10.1	2.0	34	11	145	7	0.74	0.7	0.8	A	271	12	0.8	6	23	1.2	155	64	1.6
6	9	49	6.0	60	0.2	147	32.2	26.7	1.0A	6	6	223	7	0.24	1.1	1.3	A	358	21	1.3	98	26	1.8	234	56	2.8
6	12	7	46.4	60	2.3	148	10.0	5.5	0.4A	5	3	253	29	0.23	5.4	25.0	D	328	4	1.6	261	9	4.3	84	65	53.4
6	17	36	39.1	60	26.1	162	19.3	19.6	1.0	8	6	119	16	0.41	1.0	1.3	A	38	15	0.8	138	33	1.0	287	53	2.9
6	17	52	29.0	61	37.2	151	25.3	3.8	1.2	11	8	127	40	0.88	0.5	1.2	A	193	3	0.8	102	7	0.9	306	82	2.3
6	19	34	23.8	60	26.8	147	46.0	18.8	1.4	15	10	77	7	0.31	0.5	0.5	A	29	13	0.8	290	35	0.6	136	52	1.1
7	3	9	56.0	61	2.1	147	24.8	19.0	2.2	32	16	42	24	0.47	0.3	0.6	A	14	2	0.6	283	15	0.5	111	76	1.2
7	7	12	33.4	60	1.4	141	27.8	11.0	1.6	9	8	180	14	0.39	0.9	0.8	A	111	12	0.9	12	36	1.9	216	51	1.1
7	7	49	3.7	61	16.0	152	15.5	7.6	0.1	3	2	300	6	0.03	2.3	4.6	C	188	1	2.3	278	16	3.8	94	75	8.9
7	16	19	59.0	59	56.1	153	6.6	101.6	2.6	15	7	143	32	0.18	1.3	2.1	B	182	3	2.3	91	10	1.6	268	80	4.0
7	16	56	19.0	61	8.6	150	20.9	11.3	1.2	15	11	67	42	0.75	0.7	1.2	A	286	9	0.6	192	25	0.9	34	63	2.5
7	17	13	44.3	62	23.6	151	7.6	81.6	2.8	21	6	104	51	0.43	1.5	2.3	B	327	13	1.8	81	18	1.7	210	58	4.5
7	18	37	45.4	59	56.0	141	37.5	7.0	1.2	9	7	200	26	0.56	1.3	1.2	A	95	11	1.3	358	31	2.6	202	57	2.1
7	19	22	41.2	60	32.7	145	22.3	11.6	1.0	14	10	119	9	0.66	0.8	0.8	A	109	4	0.7	203	44	1.4	15	46	1.4
7	19	28	0.6	60	32.0	147	39.9	16.6	1.4	25	12	69	6	0.48	0.4	0.7	A	24	14	0.6	289	19	0.7	148	66	1.3
7	22	8	50.8	61	8.4	150	20.7	15.0	1.0	8	8	105	42	0.66	0.7	1.9	B	302	3	0.8	211	4	1.3	68	85	3.6
7	22	18	2.3	60	51.7	151	45.7	11.7	1.5	21	13	106	31	0.72	0.6	1.2	A	151	14	0.7	81	20	0.8	281	69	2.2
8	5	1	6.0	60	2.9	147	7.1	7.9	1.0	17	14	180	30	0.42	0.8	1.0	A	281	1	0.7	156	3	1.4	7	75	1.9
8	8	43	4.4	61	2.8	145	40.5	25.9	1.1A	12	11	104	37	0.53	0.6	1.0	A	81	8	1.0	157	15	0.8	321	68	1.9
8	10	44	1.8	60	17.1	142	57.1	5.0	0.7	6	4	132	11	1.12	0.7	2.7	C	298	4	0.9	29	5	1.3	170	84	5.1
8	16	35	52.4	60	38.9	147	37.4	18.7	1.9	27	13	67	20	0.48	0.4	0.7	A	261	8	0.5	347	20	0.8	149	68	1.4
8	18	11	43.1	60	20.0	145	13.0	0.2	1.5A	5	4	172	22	0.37	3.1	3.4	C	197	20	1.7	92	36	1.3	310	47	8.5
8	18	36	57.1	62	29.7	151	26.1	95.5	2.7	14	7	273	58	0.41	2.9	2.9	C	84	23	2.8	336	36	4.0	199	45	6.7
8	20	2	36.8	61	6.4	149	47.2	44.1	1.5	11	11	87	20	0.35	0.7	1.2	A	103	2	0.9	13	2	1.3	238	87	2.3
9	14	9	0.2	60	22.5	147	9.6	19.0	1.0	14	10	127	29	0.42	0.5	0.7	A	261	1	0.5	329	24	0.8	169	58	1.2
9	14	13	7.1	60	56.3	151	2.8	15.0	2.0	28	7	55	24	0.66	0.4	1.2	A	123	1	0.7	213	5	0.6	22	85	2.3
9	19	1	20.6	60	25.4	147	35.0	23.0	0.4	7	6	125	5	0.12	0.4	0.7	A	116	12	0.8	22	13	0.7	246	72	1.3
9	20	6	43.3	60	26.0	147	45.4	17.1	0.4	8	6	111	7	0.44	0.8	0.6	A	81	30	1.6	321	54	0.6	198	38	1.0
9	20	36	59.6	61	42.3	151	6.2	73.8	2.5	23	12	120	33	0.59	1.0	1.4	B	85	10	1.0	179	20	1.6	330	67	2.8
9	22	53	48.9	61	44.2	150	57.2	77.5	3.8	28	5	81	32	0.85	1.1	1.6	B	82	18	0.9	180	23	1.3	318	60	3.4
4.3 MB				4.3 ML ATWC				FELT (III) AT ANCHORAGE, PALMER AND WILLOW.																		
10	7	25	16.5	60	5.9	141	16.3	0.1	1.0	4	2	320	12	0.20	2.6	2.6	B	142	5	2.5	261	39	5.2	47	43	3.7
10	15	36	56.4	60	27.7	144	19.3	21.7	1.0	9	7	127	14	0.80	2.0	1.4	B	292	23	0.8	187	33	4.4	50	46	1.3
10	18	28	38.4	59	32.5	152	37.6	78.9	2.2	13	6	261	72	0.23	2.7	2.5	C	314	2	1.8	46	38	5.6	221	52	4.0
10	17	20	6.7	61	21.3	151	41.6	97.9	4.4A	27	3	103	16	0.82	1.2	2.2	B	81	8	1.3	156	22	1.5	331	62	4.3
4.4 MB				4.0 ML ATWC				FELT (III) AT ANCHORAGE, (II) AT PALMER AND BIG LAKE.																		
10	17	58	17.1	60	23.3	152	4.3	88.6	2.4	22	11	88	28	0.31	1.0	1.7	B	152	4	1.1	81	22	1.4	252	61	3.3
10	18	33	36.0	59	58.6	147	48.7	23.9	0.8A	8	8	222	9	0.41	1.2	1.4	B	81	9	1.8	324	23	1.3	187	54	2.7
10	23	56	22.7	61	1.6	146	40.0	11.1	2.0A	21	6	64	7	0.51	0.7	0.9	A	261	8	0.7	323	24	0.9	153	53	1.0
11	8	20	37.8	62	58.0	149	4.9	55.2	2.5	15	8	146	133	0.57	3.1	17.2	D	81	2	2.7	347	8	3.5	185	81	32.6
11	8	40	30.9	60	2.0	153	3.8	98.8	2.6	14	7	194	21	0.27	2.0	2.3	B	261	1	3.5	151	7	1.9	358	69	4.2
11	9	52	40.8	61	17.5	152	14.4	4.5	0.5	3	3	301	5	0.07	1.6	1.6	B	20	0	1.7	110	43	3.3	290	47	2.7
11	12	21	30.9	60	7.6	141	6.1	0.0	0.7	5	3	293	21	0.52	1.5	2.3	B	86	18	1.6	348	21	2.2	213	62	4.7
11	12	30	52.7	61	52.2	148	58.8	0.5	1.2	14	7	211	11	0.77	0.7	1.1	A	19	7	1.2	285	26	0.7	123	63	2.3
11	12	50	43.4	60	50.5	151	3.9	58.0	2.3	27	13	57	14	0.51	0.4	1.6	B	152	4	0.7	81	6	0.6	281	70	2.8
12	3	10	29.0	59	56.7	141	28.0	10.8	1.0	7	5	200	22	0.48	1.2	1.2	A	134	17	1.5	261	29	1.0	26	42	2.7
12	9	22	0.9	61	54.6	149	2.7	4.0	1.0	14	9	210	17	0.49	0.8	0.9	A	198	19	1.5	296	21	0.6	70	61	1.8
12	13	16	34.0	59	57.5	147	55.0	19.2	0.9A	8	5	230	15	0.20	1.6	1.8	B	318	26	1.1	261	39	1.8	85	36	3.1

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SE2	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min																			
12	15	17	5.9	62	33.9	151	20.4	88.8	2.6	10	3	282	66	0.23	4.6	3.0	C	179	28	9.6	290	33	5.2	58	44	2.7
12	20	8	35.2	60	55.0	151	3.6	11.7	2.3	28	9	56	22	0.51	0.4	0.7	A	265	2	0.6	355	7	0.7	159	83	1.4
12	21	28	7.6	59	59.9	141	24.9	11.6	1.3	9	6	185	17	0.45	0.8	0.7	A	100	18	0.6	353	42	1.9	207	43	0.9
12	22	14	3.0	60	13.4	141	15.8	6.9	0.6	4	3	266	14	0.07	1.1	1.5	B	107	19	1.7	9	24	0.9	232	59	3.1
12	23	38	29.4	60	14.2	141	0.1	10.8	1.1	7	5	151	28	0.12	1.2	1.5	B	101	14	0.6	1	35	1.2	209	52	3.4
13	2	12	11.4	59	10.7	137	40.2	4.7	1.9	7	3	198	141	0.24	25.0	14.1	D	132	13	6.0	38	14	99.0	263	71	11.1
13	3	9	24.4	59	58.2	141	27.0	13.0	1.1A	8	4	193	20	0.40	1.2	1.0	A	281	20	1.0	132	39	1.4	6	35	2.5
13	4	43	6.8	60	21.7	147	20.1	19.1	1.5	24	13	91	5	0.42	0.3	0.4	A	8	17	0.6	263	30	0.5	119	55	0.8
13	8	30	57.6	60	47.7	147	9.9	14.2	0.3A	5	5	113	10	0.37	0.8	1.3	A	281	6	0.7	143	13	1.1	9	59	2.3
13	10	7	1.6	61	10.3	152	10.4	7.0	-2A	3	3	286	6	0.05	1.3	1.5	B	329	16	1.1	281	30	2.0	88	51	2.8
13	13	44	46.6	60	54.8	147	17.5	0.8	0.2A	5	5	163	11	0.30	0.8	12.0	D	272	1	0.6	2	1	1.4	137	89	22.4
13	14	11	39.9	60	9.3	140	59.1	12.6	0.8	8	4	152	27	0.14	1.1	1.4	B	332	14	1.7	81	26	1.1	219	56	2.9
13	14	31	5.7	60	28.0	147	40.8	22.6	1.8	25	12	85	4	0.44	0.3	0.4	A	24	19	0.5	280	33	0.5	139	50	0.8
13	14	41	39.8	62	10.2	150	24.6	60.3	2.5	25	8	131	62	0.47	1.0	1.6	B	97	8	0.8	4	19	1.7	209	69	3.2
13	17	48	24.5	60	7.6	140	57.5	13.5	1.0	9	4	157	29	0.31	1.3	1.5	B	68	20	1.2	349	23	2.2	216	59	3.0
14	6	19	16.5	60	11.9	140	55.3	14.1	2.0	11	6	144	31	0.30	0.6	0.8	A	81	10	0.8	345	21	1.1	195	66	1.5
14	7	47	43.7	61	17.9	152	15.6	7.5	0.4	4	4	247	7	0.18	1.1	1.2	A	350	32	1.1	261	34	1.5	123	45	2.7
14	8	38	50.5	60	4.4	147	50.4	19.5	1.0A	14	9	141	14	0.40	0.6	0.9	A	324	34	0.7	261	26	0.8	108	47	1.6
14	9	22	6.8	59	18.6	136	56.6	31.3	1.9	9	4	210	168	0.37	13.3	25.0	D	312	0	4.4	42	1	24.8	222	89	99.0
14	11	25	14.6	60	56.9	142	32.0	2.8	0.7	7	6	120	25	0.54	0.5	11.7	D	7	0	0.6	97	1	0.9	277	89	22.0
14	14	30	38.7	61	58.7	149	49.7	53.8	2.6	25	6	106	37	0.30	1.1	1.2	A	284	7	0.9	18	33	2.0	183	55	2.4
14	18	39	58.9	60	26.0	143	13.8	4.4	0.7	9	6	163	21	0.54	1.2	4.7	C	348	2	1.0	261	10	1.6	89	79	8.9
14	19	51	59.2	61	33.8	151	15.6	5.3	1.5	18	13	107	30	0.88	0.3	0.6	A	261	1	0.5	168	15	0.6	355	75	1.1
14	21	33	17.0	60	59.8	147	7.1	15.5	2.2	31	12	28	13	0.60	0.3	0.6	A	261	10	0.4	338	21	0.4	144	64	1.1
15	0	31	42.4	60	14.8	141	1.7	7.7	0.7	4	3	151	27	0.17	2.7	2.8	C	81	24	1.6	329	31	1.8	199	47	7.1
15	0	40	28.8	60	13.5	141	1.1	10.3	2.9	11	4	149	27	0.25	1.7	2.0	B	81	23	1.4	333	27	1.9	203	51	4.6
15	0	46	26.0	60	15.1	140	59.3	0.8	1.0	6	2	153	29	0.22	2.1	3.8	C	107	6	1.3	14	24	2.4	210	66	7.8
15	1	28	16.8	59	6.1	136	25.4	1.9	4.1	10	2	142	195	0.38	1.5	25.0	D	310	0	2.5	40	0	2.8	0	90	57.4
5.4 MB 5.9 MS 5.1 ML ATWC																										
FELT (V) AT HAINES AND GUSTAVUS. (IV) AT SKAGWAY. PELICAN AND JUNEAU. FELT (III) AT AUKE BAY. ELFIN COVE. KAKE. HOONAH AND YAKUTAT. ALSO FELT AT WHITEHORSE. OARGROSS AND HAINES JUNCTION. YUKON TERRITORY.																										
15	2	3	50.1	60	15.7	141	0.5	6.9	2.0	6	3	153	29	0.32	1.8	2.3	B	296	13	1.0	34	35	1.0	188	52	5.4
15	7	47	44.3	60	16.2	140	16.9	14.0	1.5	6	3	170	50	0.21	1.1	4.8	C	23	7	1.7	292	8	0.9	164	79	8.8
15	7	59	36.4	60	35.5	147	57.3	23.5	1.0	13	10	81	18	0.28	0.4	0.7	A	213	6	0.8	305	18	0.5	105	71	1.4
15	11	12	7.0	60	11.6	141	16.2	10.0	1.2	7	6	139	12	0.42	1.3	1.0	B	126	17	2.6	27	29	0.8	243	56	2.0
15	11	34	1.0	61	45.9	149	1.3	10.3	1.1	11	10	169	5	0.61	0.6	0.6	A	165	10	0.8	264	41	0.6	64	47	1.4
15	12	24	50.4	62	54.9	149	34.7	45.2	2.6	19	4	156	132	0.53	2.3	9.0	D	93	4	1.8	2	8	3.6	209	81	17.1
15	13	36	17.3	60	41.1	152	29.4	0.4	0.2	3	3	223	13	0.29	4.0	2.9	C	3	14	0.6	263	35	9.1	111	52	1.6
16	2	17	19.5	60	0.5	140	40.1	0.3	1.0A	4	3	327	47	0.48	7.9	4.9	D	287	2	3.6	196	27	16.4	21	63	6.0
16	5	37	20.7	59	59.1	147	15.0	13.4	1.0A	3	3	304	22	0.13	5.6	9.1	D	5	9	1.7	100	20	3.1	259	59	19.8
16	7	5	1.6	60	13.3	141	9.5	10.1	0.3	4	2	280	19	0.08	3.6	5.6	D	112	6	4.8	19	31	2.5	212	58	12.1
16	10	30	30.3	60	25.2	142	36.2	10.6	0.7A	4	2	110	14	0.16	1.7	7.5	D	163	3	2.0	81	11	1.8	269	76	14.2
16	11	8	34.1	62	34.1	149	35.0	10.1	2.3	17	5	258	95	0.51	2.6	2.4	B	10	16	4.3	115	42	6.1	264	44	2.0
16	12	48	52.3	59	42.1	152	13.6	89.8	2.6	11	5	133	59	0.37	2.7	3.6	C	81	6	1.8	328	30	2.6	180	52	7.6
16	12	49	22.8	61	49.6	148	31.1	0.4	0.7A	5	3	195	10	0.36	1.7	25.0	D	261	0	0.8	348	0	3.2	0	90	75.8
16	14	20	42.0	62	15.9	150	46.6	54.9	2.5	14	8	238	83	0.61	2.5	5.2	C	261	3	1.4	352	20	3.1	163	70	10.3
16	14	23	9.9	59	58.2	148	50.1	33.8	2.4	25	11	163	37	0.72	0.7	0.6	A	262	0	0.8	171	11	1.3	352	79	1.2

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z		MAG		NP NS		GAP D1		RMS SEH SEZ		Q AZ1 DP1		SE1 AS2 DP2		SE2 AS3 DP3		SE3		
dy	hr	mn	sec	deg	min	deg	min	km						deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	km
16	20	29	38.5	60	3.7	141	20.2	10.7	1.0	6	2	308	12	0.10	4.6	1.1	C	261	1	8.0	329	18	3.1	168	62	1.5
17	3	33	50.4	60	8.6	152	24.0	75.2	2.6	19	5	118	23	0.30	0.8	1.1	A	81	16	1.0	160	19	1.3	307	63	2.0
17	8	22	27.1	60	46.0	147	30.7	12.7	1.2	18	9	61	27	0.60	0.6	0.9	A	208	1	0.5	298	22	0.8	116	68	1.9
17	9	59	5.5	60	24.1	147	41.8	22.9	1.1	14	10	87	6	0.31	0.6	0.5	A	346	20	0.6	94	40	1.3	236	43	0.8
17	12	12	32.8	60	32.2	140	37.9	18.0	1.5	10	7	178	61	0.59	0.7	1.4	A	316	0	0.8	81	1	1.0	226	55	2.1
17	18	16	0.5	61	19.8	139	58.7	5.1	1.8	8	4	258	84	0.34	1.8	8.5	D	109	2	1.8	18	7	3.1	215	83	12.4
17	18	58	29.4	61	52.6	149	4.8	4.1	0.5A	5	3	282	14	0.38	1.8	3.4	C	180	1	1.7	270	23	2.2	88	67	6.8
17	21	53	18.2	61	51.6	148	31.0	9.9	1.1	12	10	184	11	0.51	0.7	0.5	A	6	16	1.4	262	37	0.6	114	48	1.0
17	23	35	12.7	60	23.0	143	13.8	28.9	1.3A	10	7	133	22	0.37	0.6	0.4	A	192	25	1.1	297	30	0.7	69	49	0.6
18	2	35	52.4	62	20.1	149	34.8	68.1	2.4	23	8	127	72	0.43	1.2	3.0	C	100	2	1.0	9	11	2.1	200	79	5.8
18	3	10	18.0	60	16.2	140	41.3	11.2	0.8A	9	3	145	46	0.19	1.3	3.3	C	119	1	1.0	29	15	1.8	213	75	6.3
18	7	38	39.6	61	15.9	143	47.7	23.0	1.3	6	3	133	20	0.78	3.6	2.2	C	298	6	0.8	31	31	7.9	198	58	1.0
18	9	39	46.5	60	25.9	147	43.8	19.1	1.6	23	12	82	8	0.40	0.4	0.4	A	0	24	0.5	261	29	0.5	125	52	0.9
18	10	30	28.2	59	57.4	140	46.7	4.0	1.5	9	3	188	44	0.10	2.9	2.5	C	103	6	1.5	198	40	6.8	6	49	2.4
18	11	47	34.1	62	18.7	148	30.3	30.6	2.2	24	8	108	57	0.65	0.9	0.8	A	301	26	1.2	189	38	2.0	56	41	0.9
18	13	1	32.7	58	35.4	141	41.9	30.0	2.1	10	8	278	162	0.57	5.1	25.0	D	284	0	6.9	14	0	9.5	0	90	99.0
18	13	49	51.1	60	15.9	141	53.0	7.6	2.7	12	7	78	13	0.62	0.6	0.6	A	81	6	0.6	328	23	0.7	183	57	1.1
18	13	55	17.3	60	14.3	141	50.6	11.4	1.4	10	7	89	14	0.50	0.3	0.6	A	18	1	0.8	287	20	0.5	111	70	1.2
18	15	30	6.5	60	13.8	141	48.9	12.7	0.8	7	6	101	15	0.47	0.8	1.0	A	343	9	0.8	261	25	0.8	92	62	2.0
18	19	21	33.7	60	31.6	151	57.9	73.5	2.3	21	9	72	25	0.53	0.7	1.3	A	4	1	1.2	95	22	1.1	272	68	2.7
18	21	8	22.9	61	34.0	149	55.5	47.1	2.1	23	11	76	10	0.42	0.5	0.7	A	267	7	0.5	174	28	0.8	10	61	1.4
18	22	42	9.2	59	41.7	152	35.5	77.4	2.5	11	4	99	56	0.21	1.0	1.8	B	81	7	1.3	157	18	1.6	329	66	3.4
18	23	24	58.7	60	15.9	141	50.9	8.2	2.0	10	5	80	12	0.49	0.4	0.6	A	85	1	0.6	354	17	0.6	178	73	1.2
19	5	55	34.8	60	15.7	141	34.9	12.0	0.9A	6	4	145	14	0.36	1.0	0.7	A	261	15	1.8	336	18	0.8	128	63	1.3
19	6	53	21.9	61	42.9	151	31.5	88.4	3.2	25	9	105	30	0.35	0.9	1.0	A	81	4	0.9	162	36	1.3	345	53	2.1
19	13	57	54.0	60	13.8	141	53.4	11.3	0.9	6	2	95	16	0.16	1.1	1.8	B	205	5	0.7	114	12	2.0	317	77	3.4
19	17	56	42.3	62	55.6	148	15.7	43.3	2.4	16	6	126	126	0.48	1.9	17.6	D	339	1	3.2	81	2	2.4	225	78	32.4
19	20	18	35.5	61	33.7	151	14.1	4.0	1.3	11	8	105	28	0.89	0.4	1.0	A	204	1	0.7	114	7	0.6	302	83	2.0
19	20	48	42.3	62	9.3	151	41.5	97.7	2.7	17	7	168	21	0.39	1.8	1.3	B	142	10	2.7	81	19	1.8	263	55	2.2
20	3	38	4.8	60	38.3	147	20.3	12.2	1.0	10	8	99	25	0.42	1.0	1.3	A	81	4	0.7	316	16	1.3	181	51	2.2
20	10	54	59.2	59	11.2	138	54.8	27.9	1.6A	6	4	324	95	0.29	25.0	25.0	D	32	13	10.3	294	31	5.8	142	56	99.0
20	11	41	11.1	61	52.7	149	12.1	2.2	0.7	9	5	224	19	0.45	1.1	1.3	A	1	20	1.9	263	23	0.9	128	59	2.6
20	12	5	55.2	59	55.2	141	45.0	14.5	0.5	4	3	283	30	1.33	20.7	25.0	D	353	8	3.3	261	28	2.0	98	61	79.7
20	18	50	17.8	59	5.8	153	9.1	83.3	2.4	10	7	158	97	0.24	2.5	4.0	C	98	5	2.1	189	20	4.2	355	69	7.6
20	19	41	1.4	59	17.6	151	26.1	8.8	2.2	15	5	141	28	0.66	1.8	1.2	B	141	4	3.2	81	44	2.2	235	38	1.4
20	21	56	34.9	61	25.0	151	26.2	10.0	0.8	3	3	343	33	0.04	8.0	25.0	D	261	0	3.9	318	0	7.5	0	90	99.0
21	0	0	34.7	60	30.4	143	2.8	2.8	0.9	4	3	232	13	0.29	2.2	7.8	D	348	7	1.3	261	11	2.8	111	77	14.9
21	0	23	10.6	60	51.0	150	17.3	49.5	2.3	28	12	54	38	0.60	0.5	1.1	A	81	3	0.6	337	10	0.7	186	73	2.1
21	0	44	11.8	60	38.6	151	12.9	53.6	2.2	25	8	60	11	0.52	0.5	1.2	A	292	3	0.8	22	4	1.0	165	85	2.3
21	4	46	28.5	61	29.7	140	37.2	6.0	1.4	4	3	297	70	0.23	4.9	25.0	D	98	1	3.4	8	6	2.4	199	85	99.0
21	4	54	4.8	60	2.8	147	45.9	24.5	0.5A	3	3	208	9	0.24	4.6	2.1	C	345	16	1.1	81	10	9.0	218	65	3.0
21	5	6	51.5	60	13.2	141	0.2	7.0	1.0	7	3	142	27	0.19	1.2	1.6	B	109	6	0.8	15	31	1.4	209	58	3.5
21	5	59	16.3	59	47.3	153	20.1	108.3	2.7	13	3	111	48	0.22	1.2	1.9	B	81	14	1.8	170	15	2.1	308	70	3.7
21	6	44	10.3	60	28.1	142	17.5	24.3	1.5	10	7	67	31	0.27	0.5	0.8	A	36	4	0.9	303	27	0.7	133	63	1.6
21	7	3	38.3	60	14.0	141	48.3	13.4	0.8	6	4	106	13	0.20	0.8	0.9	A	189	19	1.0	292	32	0.9	73	51	2.0
21	8	49	58.5	60	18.1	140	28.9	10.0	1.1	6	2	180	61	0.15	3.7	4.4	C	296	8	1.2	32	36	4.5	196	53	9.8
21	10	36	10.1	60	24.8	141	23.0	17.0	0.7	5	3	116	21	0.12	1.1	1.8	B	118	14	1.6	22	23	0.7	237	63	3.8
21	21	10	57.5	61	0.4	149	39.0	15.6	1.0	10	8	160	27	0.53	0.7	1.4	B	9	2	0.6	279	18	1.1	108	77	2.6

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
22	2	4	6.8	60	16.2	140	54.0	13.3	1.0	9	3	133	35	0.12	0.8	1.4	B	103	7	0.8	11	14	1.4	219	74	2.8
22	3	32	19.7	61	15.1	145	20.1	28.0	2.3	29	13	99	41	0.95	0.5	0.8	A	6	6	0.9	99	24	0.6	263	65	1.6
22	5	33	19.2	60	21.0	144	37.9	13.7	1.0	6	5	200	21	0.62	3.0	1.2	C	288	11	0.9	194	16	5.8	51	70	1.5
22	5	43	0.3	59	6.5	151	19.2	53.4	3.6	15	3	142	47	0.21	1.6	2.8	C	185	2	2.3	275	5	3.0	73	85	5.3
4.6 MB				FELT (III) AT HOMER.																						
22	14	38	26.3	61	20.9	150	23.0	15.0	1.4	14	8	98	23	0.49	0.5	0.7	A	293	2	0.5	202	25	0.8	27	65	1.5
22	19	7	4.8	61	9.9	150	12.8	42.1	3.0	26	13	55	36	0.54	0.4	1.2	A	86	3	0.6	176	5	0.7	325	84	2.2
22	22	4	13.6	62	32.5	150	10.1	79.1	2.5	15	8	232	94	0.46	2.2	3.3	C	97	6	1.3	3	29	2.5	198	60	7.0
23	6	18	29.0	60	31.3	151	12.5	53.5	2.5	29	5	60	25	0.54	0.7	1.9	B	138	5	0.7	81	9	0.8	262	56	3.0
23	8	6	11.7	60	14.3	141	31.7	11.3	1.1	9	5	99	11	0.32	0.8	1.0	A	16	21	0.7	275	27	0.9	139	55	2.3
23	10	6	25.4	60	29.3	147	18.3	20.7	2.5	34	11	45	19	0.49	0.3	0.6	A	223	5	0.5	314	12	0.6	111	77	1.1
23	10	22	46.8	60	8.7	141	13.1	8.8	0.8	8	3	153	14	0.30	1.7	1.7	B	96	26	1.1	349	32	2.1	217	47	4.1
23	10	58	21.4	60	10.0	141	2.9	6.3	0.7A	5	2	275	24	0.27	4.5	5.9	D	318	18	2.9	81	21	1.5	202	48	12.7
23	17	2	3.2	60	19.4	141	16.3	18.4	1.6	10	7	116	23	0.28	0.6	0.7	A	276	19	1.0	15	25	0.6	153	58	1.4
23	20	54	27.4	60	34.8	144	37.3	0.2	0.6A	8	6	118	33	0.46	1.3	2.2	B	108	16	0.7	12	19	1.7	235	65	4.5
24	1	37	39.4	62	11.3	151	7.3	77.2	3.3	22	5	97	31	0.42	1.1	1.1	A	83	15	1.1	338	42	1.9	188	44	2.2
3.3 ML ATWC																										
24	7	6	53.2	60	24.0	147	40.6	23.2	1.8	24	9	88	7	0.39	0.4	0.4	A	9	23	0.6	261	37	0.5	124	44	1.0
24	7	21	24.2	60	34.3	143	16.3	7.5	0.8	6	5	194	27	0.77	1.6	5.5	D	348	5	1.3	261	5	2.8	125	82	10.4
24	10	2	30.4	60	18.3	140	38.3	10.7	1.5	9	5	152	49	0.31	0.7	1.8	B	110	1	0.6	20	14	1.1	204	76	3.4
24	10	17	35.7	62	25.9	151	28.1	89.3	2.8	20	4	106	50	0.54	1.9	1.7	B	316	20	2.7	81	40	1.9	210	36	3.9
24	15	21	10.1	60	52.7	150	50.3	51.3	2.3	31	10	49	27	0.57	0.3	1.1	A	125	1	0.6	35	3	0.6	233	87	2.0
24	17	49	44.2	61	18.0	149	13.1	40.0	1.4	22	12	50	19	0.37	0.5	0.7	A	19	1	0.7	110	20	0.8	286	70	1.4
24	23	13	54.3	61	28.0	149	25.9	1.6	0.3A	6	2	128	26	0.29	2.0	3.8	C	20	12	1.0	286	20	2.6	139	66	7.7
25	0	12	4.5	61	26.6	149	26.3	4.4	0.5A	6	3	194	23	0.37	2.4	1.9	B	207	1	0.7	117	18	4.7	300	72	3.4
25	6	27	43.0	60	22.1	140	38.4	0.2	1.2	10	4	159	52	0.45	1.0	2.4	B	135	1	1.0	81	8	1.2	231	53	3.7
25	11	30	34.9	60	29.9	143	1.8	8.8	0.6	5	3	94	11	0.37	2.3	4.0	C	261	20	2.2	351	21	0.9	128	61	8.4
25	19	12	54.6	60	16.9	140	46.8	12.6	0.7A	6	4	164	41	0.16	2.5	4.4	C	102	9	1.2	8	25	2.8	210	63	9.2
25	20	50	54.2	59	33.8	154	25.2	186.9	4.9	12	1	119	28	0.29	3.5	1.7	C	179	2	6.5	269	16	5.5	82	74	2.9
4.6 MB				FELT (IV) AT KENAI. (III) AT HOMER. COOPER LANDING.																						
5.3 ML ATWC				SKWENTNA. SOLDOTNA AND SUTTON. FELT (II) AT																						
				ANCHORAGE. PALMER. MOOSE PASS AND SEWARD.																						
25	21	50	43.4	60	29.0	147	17.3	22.7	2.3	30	14	45	20	0.61	0.3	0.4	A	261	7	0.4	343	17	0.5	148	70	0.8
25	21	55	38.1	59	55.9	141	29.3	15.5	0.5	7	4	200	24	0.37	1.5	1.3	A	124	24	2.3	261	34	1.2	17	31	2.8
25	23	50	56.7	61	47.6	146	56.8	30.6	2.2	13	6	126	21	0.62	0.6	0.7	A	270	0	0.6	180	37	0.8	0	53	1.5
26	5	22	49.7	61	30.0	151	9.2	16.0	0.4A	4	4	134	22	0.51	1.9	9.9	D	349	5	1.5	261	9	1.0	108	80	18.8
26	6	16	36.7	60	18.5	141	15.4	15.4	0.9	7	6	217	22	0.30	1.1	1.2	A	17	23	0.9	277	23	1.8	147	57	2.5
26	6	42	49.6	61	48.8	149	0.3	5.8	0.3A	4	4	267	6	0.25	2.6	1.0	B	123	13	4.9	23	36	1.9	230	51	1.3
26	6	43	1.0	60	21.9	153	31.1	166.4	3.5	17	10	96	44	0.53	1.7	1.8	B	81	10	1.9	317	30	2.2	183	45	3.4
26	7	20	4.1	61	7.9	152	20.5	11.8	-1A	3	2	323	16	0.02	3.4	4.5	C	307	21	3.1	206	26	3.5	71	55	10.0
26	7	22	37.4	60	9.8	141	56.0	7.4	1.4	10	7	102	15	0.31	0.5	0.9	A	280	13	0.8	14	16	0.8	153	69	1.7
26	10	10	28.6	62	2.4	151	57.3	101.6	3.3	26	6	94	23	0.43	1.8	1.5	B	309	12	3.4	42	18	1.7	187	68	2.9
26	10	23	50.4	59	42.1	147	33.7	1.6	0.9A	3	3	354	32	0.29	14.3	25.0	D	173	2	2.9	83	14	17.6	271	76	84.6
26	14	55	50.3	60	22.5	141	14.6	3.3	1.0	9	7	211	28	0.64	0.9	1.5	B	13	13	0.8	280	13	1.6	147	71	2.8
26	15	50	27.5	62	18.3	151	24.1	90.0	2.6	19	8	263	37	0.39	2.1	1.9	B	81	17	2.0	167	24	3.9	315	61	3.5
26	17	59	60.0	61	40.2	142	27.8	1.9	1.3	6	2	237	71	0.42	3.2	25.0	D	289	0	1.7	19	1	5.7	199	89	99.0
26	18	55	48.7	62	5.1	147	43.7	39.2	2.2	24	10	179	35	0.62	1.2	2.1	B	81	6	1.0	172	13	2.1	327	76	4.0
26	20	9	45.7	61	17.8	152	12.8	6.9	0.6	4	3	239	5	0.10	1.5	1.2	B	113	31	3.1	1	32	1.4	236	42	2.0
26	20	36	27.4	61	17.7	152	13.9	7.6	0.4	3	2	301	5	0.02	3.3	3.0	C	203	4	2.4	296	39	7.1	108	51	4.5

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA SEPTEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z		MAG		NP	NS	GAP	DI	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km							deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
26	23	24	57.8	60	7.9	140	38.4	0.3	1.2A	6	3	163	46	0.42	2.3	3.1	C	289	0	1.0	19	22	3.8	199	68	6.1			
27	0	2	20.5	60	8.9	141	1.6	13.4	0.9	4	2	305	25	0.04	3.4	3.4	C	316	5	3.3	261	42	7.4	51	37	2.2			
27	7	43	44.2	60	35.4	152	6.0	73.8	2.4	15	6	136	50	0.47	1.1	2.7	C	165	7	1.4	81	13	1.7	284	74	5.2			
27	12	8	49.8	60	21.1	140	13.6	2.0	1.1	5	3	199	55	0.55	2.7	3.2	C	306	3	0.9	214	34	4.1	40	58	6.6			
27	12	15	47.2	59	35.4	153	29.4	113.5	3.9	11	5	162	76	0.36	3.4	2.8	C	168	23	3.1	81	38	6.5	287	46	4.8			
4.3 ML ATWC																													
27	17	36	8.1	59	39.8	140	18.3	10.0	0.8	3	3	254	50	0.22	25.0	25.0	D	261	11	3.3	350	44	6.9	180	45	99.0			
28	2	32	56.5	60	34.0	142	39.9	25.7	0.8	4	3	110	17	0.24	1.1	1.3	A	23	17	0.9	123	30	1.7	267	55	2.8			
28	9	1	50.1	62	12.3	150	57.2	66.3	3.4	23	7	97	59	0.35	1.0	1.9	B	81	7	1.2	340	16	1.4	192	69	3.6			
3.8 ML ATWC																													
28	16	45	22.2	60	12.9	141	1.5	1.6	0.7	5	3	141	26	0.17	1.1	3.1	C	182	2	2.0	92	11	0.7	282	79	5.9			
28	20	38	31.8	60	3.6	147	49.1	19.8	0.9A	6	4	170	12	0.38	1.3	1.3	A	345	23	1.0	261	40	1.7	103	45	2.9			
28	22	44	47.0	61	19.4	146	44.7	27.5	2.4	27	11	48	31	0.66	0.5	0.9	A	261	0	0.7	322	12	0.6	171	59	1.5			
28	23	3	32.4	60	19.3	152	53.3	124.9	2.7	13	4	149	16	0.25	1.4	1.7	B	98	2	2.5	7	8	1.9	202	82	3.2			
29	0	51	23.1	61	52.0	148	29.9	9.9	1.1	13	11	208	11	0.55	0.9	0.7	A	3	22	1.8	261	30	0.7	124	52	1.3			
29	2	5	14.6	62	1.2	149	46.6	40.4	2.3	24	15	177	41	0.54	0.9	1.6	B	374	2	0.8	5	16	1.6	177	74	3.2			
29	4	28	22.2	60	23.7	145	1.1	14.6	0.8	9	8	195	19	0.58	1.7	1.0	B	209	18	3.3	111	24	0.8	332	59	1.9			
29	6	16	7.4	59	56.3	151	54.3	69.6	2.4	20	13	123	36	0.46	1.0	1.9	B	107	7	1.3	15	15	1.6	221	73	3.7			
29	7	27	42.3	60	31.1	146	19.9	10.9	1.3	11	7	174	7	0.32	1.6	0.7	B	202	6	3.0	293	9	1.2	79	79	1.3			
29	9	43	44.7	60	7.5	141	10.4	0.5	0.8	7	4	264	17	0.39	1.8	2.0	B	322	7	2.4	81	27	2.2	221	51	3.9			
29	10	32	59.4	58	22.1	138	31.3	0.3	1.9	5	1	189	188	0.69	24.5	15.1	D	154	19	7.0	81	35	47.0	273	48	15.0			
29	11	8	52.4	60	39.6	141	48.3	5.0	0.6	6	4	125	34	0.37	1.0	5.4	D	1	5	0.9	271	7	1.3	126	81	10.3			
29	11	9	1.9	59	21.5	136	55.4	0.1	1.9	4	1	356	167	0.07	25.0	24.3	D	115	1	6.5	25	1	99.0	250	80	45.4			
29	12	44	58.0	60	44.9	150	44.8	44.8	2.2	26	12	57	27	0.44	0.5	1.7	B	99	1	0.7	9	1	0.9	234	80	3.2			
29	15	36	14.6	60	17.0	140	55.0	6.7	1.0	6	6	133	34	0.15	0.8	1.6	B	111	3	0.8	20	17	1.2	211	73	3.1			
29	18	37	58.6	60	17.3	140	41.0	13.0	1.3	6	4	147	46	0.30	1.2	3.2	C	300	3	1.0	30	15	1.7	199	75	6.3			
29	19	4	44.3	62	32.5	151	32.6	95.5	2.7	12	7	282	63	0.74	2.9	2.6	C	86	10	2.9	184	38	6.1	344	50	4.0			
30	9	25	6.7	59	47.8	138	51.1	0.5	2.2	10	3	329	47	0.87	6.2	1.4	D	18	2	11.7	109	14	2.8	280	76	2.6			
30	9	46	7.2	58	28.0	155	49.8	135.9	3.2	10	6	281	174	0.48	5.1	6.4	D	163	4	3.1	261	33	6.8	67	56	13.7			
30	11	1	0.4	62	37.2	152	37.3	8.1	2.1	10	7	187	91	0.80	6.1	3.7	D	123	5	2.5	31	24	12.2	274	65	5.4			
30	13	41	35.2	60	6.1	148	30.4	12.9	1.5	25	13	166	49	0.62	0.8	1.6	B	7	0	1.3	277	25	0.6	97	65	3.2			
30	16	43	57.0	59	56.1	141	34.5	1.3	0.7	4	2	298	26	0.25	3.9	4.6	C	199	6	2.7	294	39	3.2	102	50	10.8			
30	16	53	15.2	60	38.5	141	47.2	9.8	0.5A	4	4	142	32	0.09	2.0	10.6	D	359	7	1.0	268	7	1.8	134	80	20.2			
30	20	8	57.0	61	51.8	149	50.5	46.5	2.8	29	15	133	24	0.50	0.9	1.2	A	281	6	0.9	352	9	1.7	138	79	2.3			
30	20	22	29.0	59	59.2	140	41.8	2.6	1.2	8	4	189	47	0.38	3.2	2.5	C	286	2	1.0	195	22	6.1	21	68	4.5			
30	23	3	10.6	60	41.5	144	6.8	3.8	1.3	12	9	65	40	0.96	0.7	19.9	D	261	0	1.1	328	0	1.1	0	90	37.4			

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
1	8	9	32.1	60	32.3	143	4.2	6.8	0.8A	8	6	91	16	0.54	0.6	3.2	C	37	2	0.9	307	7	0.8	143	83	6.0	
1	8	28	49.5	60	35.8	148	25.1	22.4	1.5	24	11	118	30	0.39	0.6	1.0	A	322	5	0.5	261	15	0.8	71	57	1.8	
1	4	34	8.1	60	14.4	141	13.6	11.5	0.9A	7	4	237	17	0.15	1.3	1.3	A	114	3	2.4	22	28	0.9	213	62	2.8	
1	11	15	44.3	60	25.7	143	6.4	18.0	1.5	11	7	113	14	0.29	0.6	0.9	A	261	9	1.0	345	12	0.7	132	74	1.8	
1	12	2	41.6	61	51.3	148	30.4	8.5	1.3	16	9	185	10	0.56	0.7	0.5	A	357	10	1.2	262	24	0.8	108	64	0.9	
1	13	1	57.4	60	2.7	140	49.6	9.0	1.3	8	5	172	38	0.62	1.3	1.3	A	102	2	0.8	194	44	2.8	10	46	1.9	
1	13	36	35.4	61	50.2	148	31.5	9.1	2.0	25	13	158	11	0.75	0.4	0.4	A	261	24	0.4	148	40	0.8	13	40	0.8	
1	15	50	57.7	60	16.3	140	48.5	13.0	1.5	9	6	138	39	0.23	0.8	1.2	A	112	1	0.6	22	18	0.8	205	72	2.3	
1	17	56	8.5	61	17.5	152	12.8	5.0	0.3	4	4	239	4	0.17	1.1	0.9	A	18	11	1.0	112	21	2.0	262	66	1.6	
1	21	49	24.8	62	1.9	149	50.9	46.6	2.4	26	11	179	42	0.47	0.9	0.9	A	272	9	0.7	10	42	1.2	172	47	2.1	
2	1	42	54.0	61	21.8	149	28.7	59.0	0.6A	9	6	189	14	0.37	1.5	1.8	B	81	22	1.1	162	34	1.9	318	49	3.8	
2	5	28	8.4	60	16.0	140	48.1	10.3	0.9A	7	5	138	39	0.19	1.0	2.5	B	102	7	1.0	10	16	1.3	215	72	4.9	
2	5	36	32.3	60	0.4	147	54.4	16.1	1.0	12	8	180	14	0.38	1.0	1.4	B	5	2	1.0	273	35	0.7	98	55	3.2	
2	9	46	10.0	58	9.6	155	26.7	4.8	2.9	9	3	255	181	0.30	25.0	25.0	D	344	9	8.0	81	40	20.8	244	49	84.6	
4.5 MB																											
2	11	23	58.4	60	14.1	141	12.9	9.7	0.7	8	5	126	17	0.14	1.2	1.9	B	301	2	1.9	32	30	0.9	308	60	4.1	
2	13	36	10.4	62	24.3	147	82.7	52.1	2.3	22	7	234	70	0.53	1.3	1.0	A	263	16	0.8	162	36	2.8	12	50	1.3	
2	15	14	37.6	60	41.2	151	58.8	88.1	2.4	24	8	68	26	0.30	0.9	1.4	B	140	17	1.3	44	20	1.0	268	63	2.8	
2	21	27	32.3	59	36.2	139	3.5	0.2	1.3	6	5	334	51	0.17	14.9	8.3	D	81	19	29.5	321	20	2.8	200	50	5.8	
3	3	16	49.9	60	54.7	150	57.7	13.9	2.2	29	6	52	34	0.60	0.3	0.7	A	117	2	0.5	208	2	0.6	343	87	1.3	
3	4	31	27.0	61	16.8	152	11.6	4.3	0.4A	3	3	287	3	0.02	1.1	0.8	A	20	0	1.0	290	17	2.2	110	73	1.4	
3	6	29	58.7	60	22.6	147	39.1	20.3	1.3	14	7	148	6	0.31	0.6	0.5	A	261	11	0.6	157	28	1.0	9	57	0.9	
3	14	1	29.6	60	15.2	140	53.8	9.4	1.2	9	5	135	34	0.27	1.3	1.4	A	307	16	1.5	81	21	0.9	198	40	2.5	
3	15	39	53.7	61	7.1	149	49.8	38.8	0.8A	7	5	111	20	0.15	0.9	1.1	A	261	1	1.5	161	9	1.3	357	77	2.0	
3	18	6	23.0	60	19.7	140	31.3	2.1	0.8A	5	4	162	65	0.25	2.7	3.2	C	18	1	5.0	287	8	1.2	115	82	6.1	
3	19	45	45.0	61	6.6	152	5.3	4.9	0.4A	4	4	184	8	0.41	1.5	1.6	B	190	19	0.7	293	34	2.2	76	50	3.5	
3	20	32	17.2	61	14.7	149	54.4	39.4	1.6	24	13	48	19	0.46	0.4	0.8	A	201	1	0.8	111	7	0.7	299	83	1.5	
4	1	35	54.6	60	18.8	141	10.5	5.9	0.8A	6	4	228	25	0.50	0.9	1.8	B	98	5	1.6	7	15	0.9	206	74	3.0	
4	6	54	25.5	60	17.2	151	23.6	54.9	2.4	26	4	108	52	0.53	0.7	1.5	B	107	2	0.9	17	5	1.3	219	85	2.8	
4	10	23	38.4	61	19.3	146	51.2	28.6	1.6	23	11	47	33	0.53	0.8	0.7	A	26	6	0.6	295	8	0.5	152	80	1.4	
2.1 ML ATWC														FELT													
4	12	17	44.6	60	14.8	141	9.2	5.3	0.8	4	3	146	21	0.16	1.4	3.5	C	123	5	1.7	31	19	1.3	227	70	7.2	
4	18	9	14.4	60	28.8	151	6.5	18.4	2.1	23	10	69	13	0.57	0.4	0.8	A	94	3	0.5	4	6	0.8	211	83	1.4	
4	23	49	46.7	61	41.5	140	5.4	0.1	1.7	9	4	264	105	0.26	3.7	5.8	C	81	9	3.4	318	16	4.0	191	53	10.4	
5	2	25	10.2	61	20.5	149	45.9	0.2	0.8A	4	2	308	15	0.43	4.0	25.0	D	328	1	2.1	81	1	6.8	205	67	99.0	
5	3	44	26.4	61	14.1	149	13.8	44.0	3.3	33	7	44	18	0.46	0.4	1.0	A	96	7	0.7	188	11	0.6	334	77	2.0	
3.8 ML ATWC														FELT AT EAGLE RIVER AND EKLUTNA LAKE													
5	3	16	47.4	60	0.4	147	54.8	20.2	0.8	9	7	180	15	0.62	0.8	1.0	A	261	3	1.1	329	23	1.0	164	58	1.0	
5	3	23	50.2	60	9.4	141	33.2	7.8	1.1	10	6	141	5	0.23	0.7	0.7	A	81	7	0.7	325	39	0.9	178	44	1.5	
5	3	55	40.6	60	10.0	141	30.3	8.7	0.4A	6	3	103	3	0.30	1.2	1.0	A	37	1	1.3	127	39	2.9	306	51	0.9	
5	8	4	23.9	60	34.9	143	12.4	8.9	0.9	5	4	157	24	0.64	0.8	3.3	C	26	4	0.9	295	9	1.1	140	80	6.3	
5	11	27	35.4	60	2.3	141	26.7	9.3	0.9	8	4	175	12	0.53	1.0	0.8	A	102	15	0.9	3	28	1.9	217	57	1.5	
5	12	14	33.8	60	33.2	141	44.9	10.7	1.0	8	3	93	22	0.18	1.0	2.1	B	1	8	0.8	270	13	1.8	122	75	4.1	
5	16	34	51.5	60	29.2	143	0.4	0.9	0.3	4	5	222	10	0.42	1.5	12.5	D	261	1	2.7	333	3	1.0	152	72	22.3	
5	17	9	26.2	60	3.7	141	22.0	6.1	1.0	10	7	170	11	0.56	0.8	0.7	A	261	22	1.0	130	29	0.8	11	38	1.5	
5	17	12	33.1	61	42.0	151	20.4	79.8	2.6	27	7	102	33	0.35	0.9	1.3	A	81	14	0.9	177	25	1.3	324	61	2.6	
5	17	31	47.9	59	42.8	153	56.9	1.3	2.0	10	7	243	82	0.83	1.5	1.3	B	328	28	2.7	83	39	1.8	213	38	3.0	
6	0	28	45.9	60	32.3	143	0.8	1.7	1.3	7	4	88	13	0.44	0.7	8.6	D	261	0	0.7	325	3	0.7	171	64	14.4	
6	7	48	43.7	60	6.7	141	14.7	5.9	0.9	4	3	317	13	0.15	3.3	2.3	C	318	2	2.9	281	30	6.1	51	47	1.6	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
6	11	54	7.0	60	30.5	143	16.3	1.9	0.9	5	2	149	24	0.38	1.4	23.5	D	0	0	1.3	270	1	2.5	90	89	44.0
6	12	40	50.1	60	15.9	141	4.6	12.0	0.9	9	7	126	26	0.29	0.6	1.1	A	81	14	0.8	246	17	1.0	308	68	2.2
6	13	56	12.2	60	50.6	152	15.5	3.9	1.1	6	4	164	31	0.47	1.4	2.4	B	194	3	0.5	103	19	2.3	393	71	4.6
6	14	53	31.1	60	38.8	143	8.2	1.4	0.9	6	4	97	27	0.34	0.7	20.6	D	261	0	1.3	346	1	0.7	171	85	38.4
6	18	47	22.1	61	28.0	150	23.1	13.7	1.5	15	8	99	19	0.58	0.4	0.5	A	98	1	0.5	188	23	0.6	6	67	1.0
6	18	52	15.3	61	22.7	146	49.4	25.9	2.5	28	10	52	38	0.62	0.5	1.0	A	261	0	0.6	324	5	0.6	171	63	1.7
6	19	42	47.2	60	37.3	144	34.0	0.2	1.2A	8	5	114	36	0.57	1.7	3.1	C	121	16	0.7	25	20	1.7	247	64	6.4
6	21	28	35.0	60	8.0	153	15.0	140.8	3.0	13	4	289	25	0.27	4.0	2.0	C	261	7	7.6	160	28	4.0	3	59	3.3
7	13	30	5.6	59	7.9	152	44.0	36.9	2.2	10	4	296	117	0.35	3.7	19.9	D	302	0	3.2	212	1	6.9	32	89	37.2
7	16	9	17.3	60	37.0	142	51.3	14.0	0.9	4	4	152	19	0.36	2.2	2.5	B	12	7	0.9	279	26	4.0	116	83	5.0
7	17	50	7.3	60	39.2	143	10.1	0.4	1.2	7	4	97	29	0.61	0.7	25.0	D	344	0	0.9	261	0	1.2	0	90	99.0
7	18	32	46.0	59	59.8	151	20.7	45.9	2.2	17	6	150	37	0.37	0.8	1.7	B	283	1	0.8	14	12	1.4	188	78	3.3
7	22	37	17.1	60	3.3	147	47.5	22.6	1.0	11	5	167	11	0.34	0.7	0.7	A	81	22	1.4	341	23	0.8	210	57	1.5
8	8	16	1.9	60	27.9	144	1.2	2.6	0.8	9	5	129	19	0.54	1.8	25.0	D	312	2	1.8	42	3	1.2	188	86	47.8
8	11	47	32.1	60	30.5	143	51.2	12.1	0.9A	4	3	133	30	0.25	2.8	4.5	C	81	5	1.0	337	27	2.7	180	59	9.4
9	4	7	44.0	59	26.1	152	26.2	82.8	3.9	14	5	165	86	0.28	1.7	3.3	C	292	6	2.3	201	8	3.1	58	80	6.3
4.8 MB				4.3 ML ATWC				FELT (III) AT HOMER.																		
9	5	27	3.3	59	49.8	141	21.1	10.2	0.8	5	2	312	36	0.32	3.2	3.0	C	195	8	2.6	97	42	7.1	294	47	4.0
9	11	10	14.8	60	48.2	143	13.8	21.3	1.1	7	5	80	41	0.44	0.7	3.0	C	273	2	1.2	4	4	1.0	167	85	6.7
9	12	56	27.3	61	23.0	151	53.8	104.3	2.6	20	6	149	19	0.36	1.3	1.6	B	40	6	1.4	134	34	1.9	301	55	3.5
9	13	53	48.8	60	11.1	140	58.8	7.1	1.1	6	6	274	28	0.26	1.7	2.2	B	303	20	2.6	42	25	1.2	179	57	4.8
9	14	29	54.4	60	23.1	150	7.5	39.8	2.6	27	12	82	15	0.45	0.6	1.0	A	81	1	0.8	338	8	1.1	178	76	1.9
9	14	58	35.1	60	20.0	141	21.0	13.7	0.8	8	5	113	22	0.29	1.1	1.3	A	9	22	0.9	270	22	1.9	140	58	2.7
9	20	25	30.8	60	1.0	141	1.4	14.0	1.1	5	3	202	29	0.51	4.3	2.1	C	218	21	8.6	324	36	2.7	104	47	2.3
10	2	56	24.0	59	59.5	141	35.7	11.9	1.2	9	8	191	19	0.46	1.1	0.9	A	261	20	1.0	356	29	2.1	139	55	1.8
10	6	41	47.0	61	33.0	150	37.2	60.7	2.7	30	11	118	12	0.64	0.6	1.4	B	88	2	0.6	179	14	1.0	350	76	2.8
10	10	4	32.8	61	25.0	152	11.3	112.6	3.5	24	4	77	16	0.27	0.9	1.3	A	118	8	1.6	210	12	1.3	355	75	2.5
10	11	47	48.6	60	17.8	147	36.8	16.7	1.2A	17	15	104	9	0.41	0.4	0.5	A	24	1	0.6	293	7	0.7	122	83	1.0
10	13	17	28.0	60	13.1	141	5.6	11.7	0.8A	8	7	140	22	0.25	1.0	1.3	A	332	19	1.1	81	26	0.9	214	53	2.8
10	13	20	0.7	60	12.5	141	3.7	10.9	1.0	9	4	142	24	0.24	0.9	1.5	B	304	9	1.5	38	22	1.1	193	66	2.9
10	16	55	39.1	60	11.9	141	1.9	14.1	1.5	10	6	144	25	0.19	0.8	1.3	A	340	14	1.2	81	21	0.9	220	63	2.6
10	18	15	51.0	59	49.2	141	23.8	2.3	0.9A	5	4	310	37	0.22	5.2	3.5	C	192	28	4.1	83	31	11.1	315	48	3.2
10	18	32	0.6	62	0.4	148	33.1	35.5	2.5	24	7	195	25	0.46	0.7	0.4	A	163	2	1.4	81	32	0.7	256	57	0.8
10	19	36	21.5	61	32.9	141	18.1	0.5	1.0A	4	3	275	65	0.17	1.7	25.0	D	312	0	1.5	42	0	3.1	0	90	99.0
10	21	31	24.0	61	20.4	147	38.0	28.5	2.1	26	10	51	19	0.46	0.3	0.7	A	296	4	0.4	205	9	0.6	50	80	1.3
11	4	43	50.4	60	58.6	150	52.8	17.3	1.8	26	10	96	32	0.58	0.4	1.0	A	276	5	0.5	185	7	0.6	41	81	1.9
11	5	12	4.3	62	21.4	149	43.7	44.5	2.3	22	10	229	77	0.65	1.2	2.5	B	81	6	1.1	344	19	1.5	187	69	4.9
11	9	41	57.0	61	39.6	150	19.9	11.2	1.6	21	13	135	24	0.75	0.4	0.5	A	267	11	0.3	174	13	0.7	36	73	1.0
11	10	43	28.4	61	37.7	150	18.8	7.6	0.9A	10	9	188	23	0.74	1.0	0.6	A	261	7	0.5	161	11	1.8	20	74	1.1
11	10	53	1.2	61	9.0	152	16.7	4.9	1.0	6	6	200	13	0.51	0.9	1.6	B	297	12	1.5	202	19	0.6	57	67	3.3
11	14	7	6.0	60	12.0	141	33.2	9.2	0.8	6	3	135	8	0.22	0.7	0.8	A	81	4	1.4	347	14	0.9	186	75	1.6
11	14	28	15.5	61	27.6	151	13.8	10.0	2.0	27	10	97	26	0.93	0.4	0.7	A	348	5	0.7	81	11	0.4	234	78	1.4
11	15	59	18.4	60	10.8	141	40.0	13.3	0.8	8	2	124	11	0.27	1.1	1.6	B	27	10	1.0	291	31	0.9	133	57	3.4
11	16	10	50.7	60	17.8	140	49.8	6.2	1.2	9	5	140	39	0.29	0.6	1.6	B	106	5	0.6	15	9	1.0	226	80	3.1
11	18	29	4.4	61	39.2	150	20.7	11.8	1.7	24	11	135	25	0.61	0.4	0.8	A	359	1	0.8	269	9	0.4	95	81	1.1
11	20	37	49.4	60	31.9	147	3.7	20.9	1.7	23	8	93	33	0.42	0.4	0.7	A	39	0	0.4	309	9	0.8	129	81	1.3
12	0	25	17.6	62	34.9	149	23.6	12.0	2.2	21	9	226	93	0.57	1.4	1.3	B	170	30	1.7	282	34	0.9	49	42	3.2
12	9	31	20.5	60	31.2	143	8.2	3.5	0.8	4	4	224	18	0.30	1.3	5.5	D	261	4	2.4	343	5	0.9	129	80	10.3
12	14	36	55.5	60	10.5	141	13.1	2.2	1.2	10	4	147	14	0.50	0.6	1.4	B	351	7	1.1	82	17	0.7	239	72	2.8

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
12	15	22	42.7	61	50.8	148	30.3	7.8	1.1	18	9	159	10	0.63	0.6	0.6	A	358	9	1.2	265	15	0.5	118	72	1.1	
12	15	26	36.0	60	11.5	140	58.0	6.4	0.9A	7	4	145	28	0.49	2.3	3.4	C	313	8	2.4	81	20	1.4	209	47	6.2	
12	15	58	29.8	59	58.3	142	11.8	4.7	2.5	11	3	179	12	0.61	0.9	0.7	A	274	5	0.6	181	28	1.7	13	61	1.2	
12	18	30	36.3	61	41.4	151	24.1	78.8	2.4	24	8	96	33	0.44	0.9	1.3	A	81	11	0.9	170	26	1.2	329	62	2.7	
12	18	45	4.8	61	1.9	151	14.9	77.1	3.8	29	3	45	32	0.41	0.5	1.4	B	167	2	0.9	81	6	0.9	276	83	2.7	
4.2 ML ATWC																											
FELT (II) AT ANCHORAGE.																											
12	18	55	44.7	61	1.8	151	16.1	71.0	2.4	28	7	44	32	0.49	0.5	1.1	A	11	3	0.9	101	15	0.7	270	75	2.2	
12	19	6	22.2	60	13.7	141	35.5	9.8	0.9	7	4	134	11	0.18	0.8	1.0	A	330	12	0.7	261	29	1.1	83	53	1.9	
12	19	12	13.8	61	1.4	151	13.9	69.6	2.7	29	10	44	31	0.54	0.4	1.1	A	11	1	0.7	102	15	0.6	277	75	2.1	
12	21	16	53.5	60	54.8	147	33.1	21.6	2.9	34	7	41	25	0.41	0.4	0.8	A	332	7	0.5	261	7	0.6	117	69	1.4	
12	21	31	29.3	61	7.7	151	9.3	63.6	2.9	29	9	54	43	0.51	0.5	1.2	A	81	9	0.7	171	15	0.8	320	73	2.3	
13	0	11	33.6	61	52.3	148	3.8	37.6	2.4	26	9	178	16	0.44	0.8	0.4	A	341	8	1.5	81	39	0.5	242	49	0.8	
13	0	52	39.4	59	59.2	149	42.3	55.3	2.8	30	7	161	19	0.59	0.8	1.6	B	83	1	0.7	353	7	1.4	181	83	3.0	
13	0	52	43.0	61	4.6	149	55.6	21.6	0.4A	6	2	200	27	0.28	4.3	9.5	D	289	8	1.6	196	22	2.2	38	66	19.4	
13	5	36	31.8	61	30.7	140	37.6	0.7	1.5	9	5	294	72	0.33	1.9	24.3	D	331	0	2.4	261	0	3.2	0	90	45.5	
13	8	44	1.7	61	16.4	152	15.6	15.4	0.5	3	3	302	6	0.19	1.5	1.9	B	189	4	1.8	282	30	2.5	92	60	3.8	
13	8	50	7.9	61	14.7	152	17.3	11.0	0.3	3	3	306	8	0.19	1.3	1.3	A	182	6	1.5	278	43	2.1	86	46	2.8	
13	9	54	53.1	60	12.7	141	14.2	13.2	0.6	7	4	244	15	0.27	1.0	0.9	A	124	31	1.7	9	36	1.0	243	39	2.0	
13	12	34	43.0	61	17.0	146	47.5	25.9	2.4	29	9	44	28	0.60	0.3	0.7	A	36	2	0.6	306	6	0.5	144	84	1.4	
13	13	33	50.3	61	47.5	149	3.8	11.8	1.1	18	10	156	8	0.52	0.5	0.6	A	3	5	0.9	270	31	0.6	101	59	1.2	
13	13	44	15.9	61	42.8	146	30.9	27.1	2.2	27	9	94	40	0.56	0.4	0.7	A	159	3	0.6	261	12	0.6	56	73	1.3	
13	16	16	36.7	59	41.9	150	46.9	39.6	2.3	22	6	218	9	0.23	1.1	1.8	B	265	2	0.8	355	19	1.7	169	71	3.5	
13	16	47	8.8	60	43.2	142	59.0	2.4	0.6	6	5	92	31	0.44	0.8	25.0	D	21	0	0.9	291	1	1.3	111	89	48.8	
13	19	8	14.7	60	38.2	143	4.1	2.5	0.7	6	5	93	24	0.43	0.9	15.1	D	10	1	0.9	280	1	1.5	145	89	28.3	
14	6	4	57.3	60	2.1	147	41.5	23.2	0.6A	4	3	160	6	0.10	4.5	2.0	C	88	21	8.9	339	40	1.3	199	43	2.5	
14	9	52	15.9	61	10.1	150	13.4	43.9	2.1	25	15	99	37	0.54	0.6	1.7	B	261	0	0.7	144	3	0.9	351	63	2.9	
14	10	58	16.9	60	17.3	141	56.0	8.4	0.9	5	3	99	13	0.36	0.7	1.4	A	261	3	1.1	323	17	0.6	162	57	2.4	
14	15	20	33.8	60	18.8	140	24.4	3.8	1.8	9	3	167	59	0.31	1.0	2.3	B	34	8	1.8	303	9	1.1	165	78	4.3	
14	16	14	32.1	60	39.5	143	14.4	8.1	1.0	5	3	166	32	0.32	1.2	4.1	C	261	5	2.0	338	6	0.9	126	75	7.6	
14	17	14	8.5	60	0.8	147	18.7	18.5	1.2A	6	2	292	19	0.20	2.4	1.1	B	276	18	4.6	20	37	1.3	165	47	1.8	
14	17	14	20.6	60	21.9	147	39.6	19.5	1.1	9	7	93	5	0.41	0.6	0.5	A	6	21	1.0	264	28	0.7	128	54	1.1	
14	20	51	50.8	60	0.7	148	56.7	12.6	2.2	26	10	165	30	0.66	0.7	0.7	A	281	13	0.5	20	34	1.0	173	53	1.6	
15	1	58	14.9	60	8.1	141	0.4	14.1	1.0	8	4	156	26	0.31	1.2	1.5	B	340	19	2.0	81	26	1.3	219	57	3.2	
15	2	55	18.0	61	41.3	140	3.8	0.6	1.9	9	4	264	106	0.40	2.9	3.7	C	81	12	3.3	323	20	3.9	193	54	6.9	
15	8	41	16.0	59	9.8	137	1.8	0.1	2.6	8	2	339	172	0.51	25.0	8.6	D	31	8	79.8	126	34	11.3	289	55	12.4	
15	12	50	28.9	59	44.9	137	42.4	12.4	2.6	9	3	334	110	0.44	4.8	1.7	C	186	5	9.0	280	31	4.1	88	58	2.5	
15	22	11	2.2	60	7.8	147	10.6	10.2	1.2	8	5	188	31	0.35	0.6	1.0	A	298	5	1.1	29	10	0.9	182	79	2.0	
15	23	2	52.4	60	16.0	141	24.3	5.4	0.9	7	4	193	14	0.34	0.8	1.1	A	91	2	1.5	1	19	0.6	187	71	2.1	
16	7	16	32.3	60	10.6	141	2.0	14.4	1.7	8	4	148	58	0.24	0.9	2.3	B	265	0	1.1	355	16	1.3	175	74	4.5	
16	7	40	59.3	59	46.9	147	47.2	35.1	1.5A	4	4	294	24	0.22	1.7	1.0	B	354	9	2.5	88	24	3.5	245	64	1.1	
16	7	41	15.4	60	11.4	141	0.1	15.9	1.6A	5	2	163	80	0.64	1.6	6.0	D	332	7	2.0	261	10	2.3	102	68	10.7	
16	9	2	31.4	60	7.6	141	6.7	5.9	1.3A	5	2	157	52	0.65	1.6	4.1	C	83	2	1.9	352	14	2.3	181	76	7.9	
16	12	21	47.5	60	16.9	145	12.8	19.1	1.3A	7	4	223	28	0.29	1.7	1.4	B	349	32	3.4	106	36	1.1	230	38	2.8	
16	15	14	43.7	61	53.0	149	10.7	5.1	0.6A	5	3	184	18	0.42	1.6	5.2	C	341	9	2.3	261	11	2.0	114	73	9.7	
16	16	23	5.6	60	1.9	141	35.0	10.2	1.0	7	6	178	14	0.34	0.9	0.7	A	94	19	1.0	351	35	1.8	207	49	1.2	
16	17	10	49.5	60	5.8	140	39.5	5.4	1.7	9	5	161	46	0.32	1.3	2.0	B	289	6	0.9	22	25	1.8	186	64	4.1	
16	21	35	47.3	60	18.1	139	15.8	11.9	1.0	7	4	264	44	0.53	25.0	25.0	D	357	23	1.2	261	35	3.5	117	49	92.9	
16	23	6	26.2	61	40.5	148	31.1	0.5	0.8	8	6	97	18	0.41	0.4	7.3	D	261	0	0.6	164	1	0.7	351	83	13.6	
16	23	13	43.9	61	49.3	148	31.3	4.7	1.4	17	11	157	10	0.84	0.8	0.8	A	261	8	0.4	349	21	1.4	151	68	1.6	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
17	5	9	36.0	61	50.8	148	29.3	9.5	1.2	14	10	174	9	0.67	1.0	0.7	A	2	14	2.0	267	20	0.7	125	65	1.4	
17	7	28	30.5	59	47.8	153	37.4	110.9	2.7	9	4	295	110	0.13	7.1	7.2	D	169	22	4.2	276	36	7.3	54	46	17.8	
17	11	7	53.6	60	10.9	144	15.8	8.2	0.7	9	4	216	17	0.75	2.9	3.2	C	267	7	1.9	171	40	3.1	5	49	7.6	
17	12	32	42.5	60	20.2	147	36.7	18.2	0.8	13	8	100	7	0.34	0.7	0.8	A	295	6	1.3	26	7	0.9	165	81	1.4	
17	14	38	12.8	61	19.3	147	38.5	27.7	2.7	25	10	56	45	0.46	0.5	1.0	A	306	4	0.5	215	7	1.0	65	82	1.8	
3.2 ML ATWC																											
17	18	27	20.1	63	12.2	150	28.0	64.9	2.8	13	6	289	147	0.45	4.8	12.5	D	89	6	4.7	358	13	7.2	203	76	24.2	
17	18	36	53.1	62	29.6	151	12.2	74.7	2.7	13	4	268	117	0.42	4.5	9.6	D	261	3	2.5	348	22	4.6	164	68	19.3	
17	18	48	17.0	60	27.6	145	2.4	11.8	1.5	14	7	144	12	0.50	1.0	0.9	A	98	24	0.7	204	33	1.9	339	47	1.8	
17	19	6	40.8	61	48.2	148	57.2	12.6	1.0A	6	6	241	4	0.30	1.5	1.0	A	323	11	2.4	261	15	1.0	97	57	1.7	
17	20	51	25.9	61	7.7	152	11.4	10.3	0.4A	4	4	176	10	0.32	2.0	1.6	B	196	23	1.1	88	35	4.3	312	46	2.4	
17	23	7	37.2	62	19.6	149	59.3	10.9	2.2	19	8	210	76	0.56	1.8	1.4	B	280	13	1.1	19	32	3.7	171	55	1.9	
17	23	20	54.3	62	15.4	147	38.5	37.7	2.5	18	6	221	50	0.39	1.3	0.7	A	352	0	2.5	82	41	0.9	262	49	1.5	
17	23	34	17.1	60	24.8	152	11.4	73.5	2.3	15	9	99	22	0.35	1.0	1.7	B	113	13	1.5	19	18	1.3	237	68	3.4	
18	6	23	5.3	61	57.7	148	44.2	18.8	0.8	9	6	202	23	0.21	1.5	2.0	B	261	10	1.1	346	31	1.9	154	57	4.2	
18	8	5	45.0	60	5.2	153	30.6	145.1	3.4	11	4	213	40	0.29	2.4	2.7	C	291	13	3.4	197	16	4.4	58	69	5.2	
3.3 ML ATWC																											
18	9	38	53.7	61	18.7	149	36.6	38.3	0.7A	4	3	194	8	0.18	2.1	1.8	B	45	2	1.7	136	32	4.3	312	58	3.0	
18	9	39	19.7	61	20.9	149	36.4	45.6	1.8	20	13	63	12	0.43	0.6	1.0	A	261	1	0.8	160	9	1.1	357	76	1.9	
18	12	53	20.5	60	19.1	141	17.2	11.9	0.9	4	2	210	22	0.10	2.4	4.4	C	109	14	2.9	14	22	0.9	229	64	9.1	
18	16	1	44.0	61	17.4	152	12.2	4.3	-2	3	3	293	4	0.03	2.2	1.6	B	132	20	4.2	33	23	1.7	259	59	3.0	
18	17	43	48.3	60	14.3	150	24.2	49.1	2.8	24	5	108	32	0.62	0.8	1.4	B	3	1	1.5	273	2	1.0	120	88	2.5	
18	19	28	25.7	60	42.2	142	58.4	4.0	0.7	7	5	77	29	0.57	0.8	13.0	D	6	1	0.8	276	2	1.3	123	88	24.4	
18	23	6	58.0	60	16.9	141	4.8	8.3	0.9	6	6	124	26	0.21	0.9	2.1	B	147	2	1.1	81	16	0.9	244	61	3.7	
19	3	31	35.9	59	43.6	153	40.2	111.4	3.2	10	3	121	30	0.55	2.5	1.4	B	333	5	4.7	81	34	1.8	236	52	2.8	
19	10	53	20.8	63	6.9	150	24.7	104.1	2.9	14	3	187	139	0.44	8.9	14.7	D	275	0	5.1	5	23	13.1	185	67	29.5	
19	12	43	19.3	61	49.9	151	4.6	8.3	2.8	20	3	143	29	0.25	0.7	1.0	A	216	21	1.1	117	23	0.5	344	58	2.2	
3.7 ML ATWC														FELT (II) AT ANCHORAGE.													
19	13	24	35.5	63	17.9	150	27.0	87.9	2.8	11	6	278	157	0.40	11.0	24.5	D	88	5	3.4	356	23	5.0	190	66	50.1	
19	14	49	32.6	58	42.5	143	26.1	28.0	1.6A	6	2	279	187	0.14	18.6	25.0	D	299	15	6.6	38	29	9.1	185	57	61.7	
19	14	53	26.1	61	34.7	149	46.7	40.0	2.6	31	13	97	10	0.52	0.5	0.9	A	273	6	0.5	182	9	1.0	36	79	1.6	
2.9 ML ATWC																											
19	22	44	11.8	61	18.8	152	17.0	126.2	3.2	19	6	124	9	0.26	1.2	1.3	A	205	2	1.2	114	32	2.1	298	58	2.5	
20	1	54	34.4	60	7.8	140	50.2	9.4	1.3A	4	3	173	70	0.13	6.9	8.9	D	312	7	2.2	46	31	10.0	211	58	18.7	
20	4	58	40.2	60	58.6	150	21.7	38.7	2.2	23	5	46	52	0.60	0.5	0.8	A	161	2	0.9	81	14	0.6	259	73	1.5	
20	5	44	22.9	60	7.2	140	40.9	7.5	0.6A	5	1	167	44	0.13	11.5	18.1	D	293	2	1.8	24	32	4.8	200	58	39.9	
20	5	54	40.9	60	16.0	142	6.0	8.7	0.6	4	2	180	22	0.25	3.0	5.0	C	354	19	1.0	261	25	1.5	119	59	10.8	
20	8	36	48.3	60	14.1	143	12.1	15.4	1.1A	4	3	182	21	0.61	1.6	2.7	C	276	8	1.1	10	25	2.0	170	64	5.5	
20	12	59	39.8	61	18.2	152	17.4	4.0	0.9	7	3	203	8	0.63	0.9	0.8	A	352	21	0.7	97	35	1.8	237	48	1.4	
20	14	13	48.9	61	38.8	151	16.8	21.4	0.6A	4	2	145	35	0.40	1.1	12.0	D	185	3	0.8	276	3	1.5	51	86	22.5	
20	15	9	48.8	60	11.1	141	4.3	4.2	0.9	5	1	268	23	0.14	3.5	4.5	C	129	15	5.8	30	29	1.4	243	57	10.0	
20	16	59	26.9	59	54.4	148	12.9	31.8	1.2A	5	4	228	33	0.27	1.6	2.2	B	177	7	2.9	272	30	1.2	75	59	4.7	
20	18	9	35.9	61	47.1	149	0.4	13.0	0.3	5	4	196	5	0.27	0.8	1.0	A	261	12	0.8	338	26	1.2	146	59	2.0	
20	20	26	51.7	59	38.4	145	11.4	28.2	2.3	18	5	176	69	0.64	1.1	0.9	A	81	15	1.1	170	31	2.0	327	56	1.6	
21	5	0	6.1	60	14.9	141	36.5	10.3	0.7A	3	1	178	14	0.00	9.5	7.3	D	320	8	1.1	81	31	20.8	220	47	2.0	
21	11	46	22.2	61	35.6	140	41.1	1.9	1.5	6	3	298	78	0.73	4.7	25.0	D	305	0	3.9	35	1	8.6	215	89	99.0	
21	15	34	14.2	60	15.1	142	29.5	16.1	0.7A	4	3	181	20	0.11	1.2	2.1	B	81	10	0.7	345	23	1.6	193	64	4.3	
21	15	48	51.2	62	30.4	151	3.7	77.2	2.5	9	3	261	63	0.46	3.2	1.9	C	160	4	5.9	81	30	2.0	257	58	3.8	
21	22	27	23.1	60	14.9	140	55.9	12.2	0.8A	4	3	172	47	0.19	1.9	4.5	C	109	10	1.2	16	15	2.4	231	72	8.8	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z MAG		NP NS		GAP D1		RMS SEH SEZ		Q AZ1 DP1		SE1 AZ2 DP2		SE2 AZ3 DP3		SE3				
dy	hr	mn	sec	deg	min	deg	min	km		deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km		
22	7	8	3.7	60	16.5	140	55.0	8.6	0.9	6	3	133	34	0.21	1.1	2.9	C	308	4	1.5	39	17	1.1	205	73	5.7
22	12	42	13.2	60	13.5	140	57.1	8.5	1.3	6	4	141	30	0.33	1.0	1.8	B	106	12	0.7	11	23	1.1	222	64	3.7
22	16	16	40.2	60	7.6	141	10.1	0.4	1.3	8	7	157	17	0.58	0.8	1.5	B	3	7	1.5	94	12	0.6	243	76	2.9
22	22	45	46.2	60	48.0	144	38.6	9.9	2.1	23	12	60	43	1.12	0.9	1.8	B	359	2	0.9	90	26	0.6	265	65	3.7
22	23	30	47.2	59	2.5	152	10.2	53.1	2.3	10	5	286	109	0.25	3.5	8.9	D	287	6	2.6	196	15	4.9	38	74	17.3
23	2	37	35.4	59	21.5	152	9.5	34.9	2.5	10	4	152	85	0.25	1.5	16.1	D	181	1	2.2	271	4	1.6	77	86	30.2
23	5	2	50.3	58	34.5	153	57.9	80.9	2.9	10	1	206	126	0.04	6.6	16.6	D	86	1	12.4	356	7	2.3	184	83	31.3
23	8	53	55.2	60	16.2	140	46.3	7.3	1.1	8	4	140	41	0.29	0.7	1.7	B	92	6	0.8	0	15	1.0	203	74	3.3
23	10	6	20.4	62	24.9	148	24.9	15.5	2.1	21	11	211	68	0.66	1.0	1.5	B	1	10	1.4	265	28	0.8	109	60	3.2
23	15	50	26.5	59	51.4	141	35.7	3.9	1.3	8	5	207	32	0.29	1.3	1.2	A	108	10	1.2	12	33	2.7	213	55	2.0
23	16	41	6.6	62	16.8	150	24.8	10.2	2.7	19	7	213	67	0.62	1.8	1.6	B	265	12	0.8	5	38	4.1	161	49	2.0
3.7 ML ATWC												FELT (III) AT TALKEETNA AND TRAPPERS CREEK. FELT (II) AT CHASE.														
23	19	38	42.4	60	23.4	147	35.8	22.5	1.2	13	9	93	9	0.45	0.8	0.9	A	81	6	1.0	322	26	1.0	181	51	1.6
23	20	15	7.4	60	8.9	152	49.5	104.2	2.4	13	9	195	4	0.35	1.7	1.3	B	178	6	1.8	271	22	3.4	74	67	2.2
24	1	57	30.9	61	14.1	151	54.1	88.4	2.8	18	7	53	10	0.31	0.8	1.2	A	29	5	0.9	121	22	1.3	287	67	2.4
24	5	5	24.8	62	24.4	151	16.8	84.9	2.8	14	7	265	49	0.35	3.1	1.3	C	164	7	5.7	81	38	1.4	263	51	2.8
24	5	49	56.0	60	14.9	140	55.6	15.0	1.0	5	4	136	32	0.46	1.9	4.1	C	339	10	1.2	81	20	0.9	226	65	8.3
24	7	42	35.5	60	20.8	151	42.8	65.2	2.2	17	7	108	41	0.50	0.9	1.9	B	331	4	1.1	81	12	1.3	225	66	3.5
24	9	35	42.6	59	17.2	153	50.8	123.4	3.2	9	3	180	115	0.17	4.2	4.4	C	289	15	7.3	188	35	3.2	38	51	10.2
24	10	5	51.1	60	26.2	141	19.1	16.5	1.0	5	3	196	25	0.12	1.3	2.4	B	274	6	2.5	6	13	0.6	160	76	4.7
24	23	14	20.3	61	10.7	152	8.4	3.0	0.1	3	3	271	5	0.06	1.2	2.7	B	261	9	1.9	319	18	0.9	142	53	4.5
25	0	5	50.2	60	12.6	141	1.5	8.8	1.0	9	8	142	26	0.26	1.4	1.6	B	309	10	1.5	81	24	1.0	206	42	3.1
25	2	32	17.6	60	18.3	141	0.6	6.9	0.8	9	6	130	31	0.40	1.2	1.7	B	290	10	2.2	23	19	1.1	174	68	3.5
25	11	57	56.6	60	14.7	141	47.0	7.5	1.0	8	8	105	13	0.38	0.6	1.1	A	356	3	0.8	265	19	0.9	95	71	2.2
25	13	55	6.5	60	24.8	147	46.9	27.2	1.3	13	9	158	8	0.33	0.6	0.7	A	103	14	1.2	9	19	0.8	228	66	1.5
26	0	23	23.8	60	13.9	147	53.3	15.6	0.6A	3	3	233	15	0.02	6.1	3.6	D	180	3	1.3	88	27	12.6	276	63	4.1
26	1	46	32.2	61	53.4	144	4.4	23.7	0.7A	3	3	249	52	0.06	3.4	2.5	C	179	31	7.0	63	36	5.0	298	39	1.6
26	1	52	19.0	59	59.8	141	43.0	1.8	0.4	5	4	245	18	0.62	2.9	2.1	C	261	8	1.2	158	27	5.9	5	59	3.2
26	17	56	42.4	60	27.5	148	27.1	0.9	1.5	21	11	96	41	0.74	0.5	1.0	A	345	0	0.9	261	18	0.5	75	71	2.0
26	18	29	58.0	60	10.5	152	46.7	104.6	2.6	11	6	176	2	0.30	1.7	1.6	B	157	2	1.7	261	40	3.7	65	48	2.5
27	0	19	5.6	61	38.3	146	34.5	27.9	1.3	11	9	83	38	0.73	0.6	1.1	A	290	7	0.7	199	7	1.0	65	80	2.1
27	2	0	30.8	60	43.1	152	39.9	10.9	0.4	5	3	196	21	0.58	2.8	2.8	C	356	21	0.9	261	39	4.0	110	46	6.4
27	5	46	9.2	61	37.8	149	43.1	47.5	1.0A	6	5	290	31	0.40	1.7	1.7	B	164	19	1.5	267	34	2.6	50	50	3.8
27	7	33	48.3	62	40.6	149	8.8	57.2	2.7	17	7	245	101	0.50	2.0	5.6	D	81	2	2.7	351	16	2.3	178	74	11.0
27	10	44	22.3	61	12.6	150	50.0	51.1	2.1	18	8	125	56	0.40	0.7	2.1	B	81	6	0.7	161	7	1.2	306	76	4.0
27	11	6	36.3	62	10.8	149	23.9	63.0	1.0A	5	3	238	52	0.29	2.7	2.9	C	30	18	4.9	291	26	2.7	151	58	6.0
27	11	45	53.3	61	56.3	144	2.1	0.6	1.4	9	4	218	57	0.45	1.9	25.0	D	284	0	1.1	14	1	3.4	194	89	63.6
27	11	54	11.9	61	57.2	148	56.2	10.0	0.3A	4	3	282	20	0.13	8.4	25.0	D	357	2	2.4	267	16	1.7	94	74	56.6
27	13	19	35.9	62	3.1	149	49.0	52.1	1.3A	6	6	233	56	0.34	2.5	3.9	C	177	3	4.6	267	8	1.6	67	81	7.4
27	15	16	9.8	61	46.2	149	6.2	15.4	0.8	9	5	191	9	0.36	0.9	1.2	A	224	17	1.2	321	23	1.5	101	61	2.5
27	15	19	16.5	60	28.7	143	25.2	15.0	0.8	6	4	119	31	0.22	1.0	4.2	C	261	0	0.9	321	9	1.0	171	59	7.0
27	18	26	40.9	61	15.5	152	11.2	2.5	-0.9	3	3	279	2	0.01	1.1	0.9	A	185	14	0.8	281	22	2.2	65	63	1.6
27	19	3	42.5	58	21.7	154	2.5	81.1	4.4	11	2	218	114	0.08	8.7	25.0	D	81	6	13.4	350	12	2.7	197	77	59.3
5.4 MB												4.8 ML ATWC														
28	5	7	25.1	60	22.0	141	17.5	19.1	1.7	10	4	118	55	0.17	0.7	2.2	B	26	3	0.7	117	5	1.3	265	84	4.2
28	8	28	22.9	61	49.7	151	5.0	80.6	2.7	20	6	225	76	0.37	2.5	1.9	B	81	5	0.8	165	33	5.1	343	56	2.7
28	9	52	39.8	61	54.8	149	6.4	6.3	1.1	15	7	193	18	0.38	1.5	3.6	C	261	1	1.1	322	17	1.5	168	57	6.3
28	11	14	48.1	60	34.3	152	48.3	113.6	2.8	14	3	112	22	0.25	1.4	1.2	B	88	12	2.6	183	21	1.7	330	65	2.3

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA OCTOBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SRZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3		
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km	
28	13	13	58.3	60	27.3	142	7.8	6.4	1.6	9	7	74	40	0.63	0.4	0.9	A	300	3	0.8	30	4	0.6	173	85	1.7		
28	14	4	25.1	60	13.4	141	11.5	0.5	3.1	10	5	138	51	0.27	0.8	1.2	A	268	11	0.9	0	14	1.4	141	72	2.3		
4.3 MB																												
28	14	20	33.5	60	14.9	141	11.1	2.6	2.3	9	5	134	53	0.37	0.7	1.6	B	261	3	0.7	230	16	1.0	160	64	2.8		
28	14	30	35.8	61	13.0	145	6.0	33.2	0.8A	6	5	124	54	0.50	2.8	6.8	D	195	9	2.6	102	19	1.2	309	69	13.7		
28	14	46	58.0	59	41.8	152	13.7	54.0	2.4	11	5	245	63	0.47	1.4	1.8	B	298	1	1.0	208	23	2.4	30	87	3.5		
28	15	38	44.4	60	8.7	141	0.2	12.0	1.4A	7	4	270	58	0.24	3.1	2.7	C	37	10	1.3	135	40	7.3	298	48	2.9		
28	23	49	4.4	61	22.1	152	9.1	8.2	0.5	3	3	310	10	0.09	1.3	1.6	B	228	6	1.6	321	32	1.9	129	57	3.3		
29	14	37	19.7	61	18.8	150	40.5	14.2	0.9A	11	10	68	17	0.45	0.4	0.6	A	124	16	0.6	222	26	0.6	6	59	1.2		
29	16	59	59.6	60	3.4	147	52.2	20.4	1.5A	11	9	152	14	0.37	0.7	1.0	A	2	15	0.9	266	23	0.8	122	62	2.1		
29	18	20	37.9	60	39.3	143	3.5	0.7	1.0	7	5	85	26	0.59	0.7	25.0	D	0	0	0.7	170	0	1.4	0	90	99.0		
29	18	49	15.0	60	39.0	143	1.4	7.9	1.0	6	5	117	24	0.81	0.9	4.8	C	3	5	0.7	273	7	1.2	128	81	8.8		
30	1	32	8.1	61	53.3	149	11.4	6.7	1.0	14	6	164	19	0.60	1.1	1.6	B	14	3	1.1	282	32	0.7	109	58	3.6		
30	1	33	24.4	61	54.5	149	14.5	5.6	0.6A	6	2	188	23	0.32	3.3	5.8	D	18	13	2.2	281	26	1.2	132	60	12.4		
30	1	34	59.3	60	2.5	147	47.9	19.8	0.8A	4	3	240	10	0.21	2.0	1.4	B	347	10	1.2	261	22	3.9	101	66	2.4		
30	2	10	7.2	60	12.6	147	17.6	25.3	1.0A	4	3	155	29	0.12	1.1	2.7	C	28	12	1.1	121	13	1.4	257	72	5.3		
30	2	14	20.7	61	38.3	151	17.7	7.7	1.2	8	7	116	35	0.87	0.7	0.9	A	275	20	0.7	174	27	0.9	37	55	2.0		
30	7	39	50.8	60	18.3	147	14.1	18.6	1.1	18	10	110	28	0.57	0.4	0.6	A	261	2	0.5	157	2	0.8	29	76	1.0		
30	10	15	12.0	61	21.5	146	44.0	28.1	2.1	26	12	51	35	0.72	0.4	0.8	A	203	7	0.6	295	9	0.5	76	78	1.6		
30	11	58	54.0	60	1.8	140	31.6	0.8	2.2	10	3	169	50	0.62	1.3	1.4	B	274	19	0.8	14	26	2.3	152	57	2.9		
30	13	3	3.5	59	44.8	147	48.8	7.7	0.5	5	4	276	29	0.17	9.7	10.7	D	347	8	3.4	281	42	0.9	86	47	26.7		
30	13	18	37.3	61	46.0	148	58.3	15.1	0.1A	3	2	293	3	0.17	3.2	1.5	C	262	12	6.1	3	40	3.5	159	47	1.5		
30	14	20	7.7	61	4.8	149	20.4	20.9	0.7A	3	1	165	22	0.00	6.1	20.5	D	221	8	1.4	129	14	2.8	340	74	40.1		
30	19	57	34.4	59	44.0	147	49.3	6.3	0.8	8	5	232	30	0.31	1.4	4.6	C	261	2	1.9	171	9	2.3	3	81	8.7		
30	20	47	41.7	61	17.5	150	21.8	13.9	1.2	14	7	93	28	0.53	0.6	0.8	A	172	12	0.8	206	14	0.5	43	71	1.5		
31	0	48	34.7	61	29.6	149	41.1	39.8	2.3	28	15	83	20	0.58	0.5	1.0	A	261	4	0.6	188	12	0.9	9	77	1.8		
31	6	56	10.0	60	39.4	151	50.8	75.9	2.8	18	7	93	32	0.28	0.8	1.4	B	24	15	0.9	119	19	1.1	258	65	2.9		
31	8	13	52.7	59	43.3	147	48.2	5.3	1.1	8	7	252	31	0.35	1.4	2.0	B	331	2	1.8	261	32	0.9	64	53	4.1		
31	12	15	59.2	60	58.3	152	4.5	4.6	1.4	7	5	147	24	0.39	2.1	1.1	B	189	5	0.6	281	20	4.1	86	69	1.7		
31	10	11	54.0	60	8.8	153	4.9	127.3	2.8	12	7	273	15	0.35	2.1	1.4	B	261	3	4.0	165	23	2.1	358	66	2.7		
31	18	32	42.3	60	38.7	150	23.1	46.4	3.0	26	10	56	14	0.62	0.7	1.2	A	81	6	0.7	324	10	1.0	194	61	2.2		

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAT	D1	RMS	SEH	SEZ	Q	AZ1	DF1	SE1	AZ2	DF2	SE2	AZ3	DF3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
1	0	31	45.7	59	45.1	147	48.9	2.3	0.9	5	5	319	28	0.21	2.4	18.3	D	139	1	3.2	261	2	2.5	30	58	29.1
1	2	16	25.4	60	15.8	140	46.7	4.1	1.3A	6	4	156	72	0.27	1.6	1.9	B	310	9	0.9	214	31	2.4	64	57	4.0
1	2	19	37.7	60	16.6	140	45.2	8.1	0.9A	4	3	161	72	0.09	4.2	3.3	C	309	6	1.3	41	27	8.4	209	63	5.4
1	6	34	5.6	60	48.7	148	52.4	20.6	2.1	25	11	49	14	0.60	0.5	0.7	A	81	2	0.8	328	5	0.7	189	66	1.2
1	6	45	33.8	61	10.9	149	49.1	41.0	2.2	28	12	41	16	0.46	0.6	1.4	A	261	2	0.7	161	8	0.9	3	68	2.4
1	11	36	23.8	60	22.2	146	16.0	15.3	0.4	4	4	277	18	0.10	2.8	1.6	C	30	13	6.3	132	42	1.2	287	45	3.7
1	14	0	7.0	60	17.1	140	41.4	8.8	1.5A	6	4	151	69	0.24	2.8	3.6	C	316	10	1.0	261	30	3.4	62	44	6.1
2	2	36	24.6	61	10.7	162	9.4	4.1	-1A	3	3	275	6	0.05	1.8	3.0	C	261	2	2.8	324	16	1.3	164	59	8.3
2	21	56	21.8	61	12.3	151	50.9	0.6	0.2A	3	3	293	11	0.03	1.9	25.0	D	19	1	1.4	109	2	2.6	262	88	66.8
2	22	57	53.7	60	14.9	153	10.5	124.4	2.8	13	7	272	21	0.39	2.2	1.8	B	263	7	4.2	356	26	2.4	159	63	3.4
2	23	18	52.5	60	11.6	141	7.1	1.9	1.5A	7	4	164	87	0.34	1.3	3.0	C	261	4	2.0	332	12	1.8	152	67	5.4
3	1	48	25.6	59	54.3	152	31.7	67.2	2.3	13	8	234	35	0.39	1.8	2.0	B	143	14	1.4	81	38	2.1	251	42	3.7
3	3	22	13.2	61	18.5	145	23.6	11.4	1.7	19	8	104	68	0.77	0.7	1.1	A	181	8	1.0	87	26	0.6	287	64	2.3
3	7	14	2.3	61	7.5	149	5.7	25.0	0.4A	3	2	251	28	0.01	3.2	2.0	C	82	6	1.2	351	14	6.2	191	75	3.6
3	16	17	48.2	61	28.1	140	7.0	0.5	1.3	4	2	303	86	0.55	3.6	25.0	D	267	0	3.0	357	1	6.6	177	89	99.0
3	16	43	44.1	61	55.3	147	12.9	44.8	2.7	22	10	155	11	0.39	0.8	1.6	B	93	4	0.8	184	15	1.4	348	74	3.2
3	17	17	45.1	61	47.8	148	57.8	14.2	-1	4	4	246	3	0.34	1.2	2.1	B	81	1	1.0	139	13	1.7	347	56	3.4
3	18	19	52.5	61	38.3	141	48.4	5.0	1.2	3	3	262	73	0.20	3.3	25.0	D	291	0	1.2	21	3	3.3	201	87	99.0
3	19	24	9.0	60	34.1	143	12.0	9.5	1.1	7	2	116	23	0.26	1.6	4.6	C	261	4	2.0	316	12	1.3	153	53	7.2
4	2	3	57.7	60	15.6	140	46.0	10.7	1.6	8	3	140	71	0.09	1.2	2.6	B	264	10	2.0	356	11	1.2	133	76	5.0
4	2	37	38.1	61	9.3	162	11.9	6.4	0.1	4	3	160	8	0.22	1.2	1.5	B	305	25	1.3	201	27	0.7	71	52	3.4
4	3	30	11.9	61	10.5	152	12.1	6.3	-1.5A	3	3	289	8	0.03	1.3	1.8	B	331	11	1.1	261	24	2.0	87	57	3.2
4	7	59	27.9	62	29.6	151	1.2	78.3	2.5	14	6	272	63	0.58	1.8	2.0	B	81	17	1.4	338	28	2.9	197	55	4.3
4	9	59	19.6	58	60.0	151	21.8	56.6	2.9	10	2	145	89	0.16	2.2	3.8	C	296	12	3.9	203	13	1.7	67	72	7.4
4	10	28	8.1	60	12.9	141	10.9	12.7	0.9A	6	3	253	51	0.33	4.9	6.3	D	31	12	1.3	293	33	4.8	138	54	14.3
4	10	34	23.9	61	32.0	151	16.8	4.1	1.4	11	8	107	30	0.64	0.5	1.2	A	81	4	0.6	154	9	0.9	325	70	2.2
4	14	39	57.7	61	16.1	152	16.2	6.7	1.4	11	4	192	6	0.46	1.2	0.8	A	347	21	1.1	91	33	2.7	230	49	0.6
4	15	3	49.8	61	54.1	151	46.1	109.5	3.1	21	7	166	15	0.34	1.3	1.3	A	81	11	1.4	313	36	2.4	181	39	1.9
4	16	13	3.0	60	31.4	148	21.7	17.5	1.5	21	9	86	40	0.63	0.7	1.7	B	356	4	0.7	265	20	0.4	97	70	3.4
4	16	19	15.6	61	11.2	162	8.4	1.9	-3A	3	3	258	5	0.11	1.1	3.0	B	261	4	1.8	322	8	0.7	141	60	4.9
4	19	42	24.5	58	26.4	139	57.5	9.1	2.4	8	6	307	170	0.58	25.0	25.0	D	81	20	5.3	303	17	6.7	188	34	99.0
4	23	20	18.8	60	5.9	153	1.4	119.3	2.8	13	8	207	15	0.41	1.6	1.3	B	151	8	1.8	261	8	2.9	26	67	2.2
5	1	28	2.2	62	23.3	151	16.7	88.9	4.4	17	3	104	47	0.41	1.5	2.1	B	317	11	1.8	81	16	1.4	205	51	3.8
5.1 MB				5.1 ML ATWC				FELT (IV) AT TALKEETNA AND AT DENALI NATIONAL PARK. (III) AT ANCHORAGE. COOPER LANDING. CHUGIAK. KASILOF. PAXSON. SKWENTNA. SUTTON. AND WILLOW. FELT (II) AT FAIRBANKS AND PALMER.																		
5	3	52	9.8	61	42.9	150	38.4	12.3	0.5A	8	8	142	28	0.46	0.6	1.3	A	27	4	1.1	296	20	0.7	128	70	2.6
5	11	30	43.8	61	16.8	152	11.6	3.9	-3A	3	3	287	3	0.03	1.1	0.8	A	20	3	1.0	290	8	2.1	130	81	1.6
5	11	58	36.7	61	16.8	152	11.8	5.9	-1A	3	3	288	3	0.02	1.1	0.9	A	199	2	1.1	200	21	2.1	104	69	1.6
5	12	52	8.0	60	50.2	151	52.0	14.1	0.4A	5	5	204	24	0.28	2.4	1.6	B	185	21	0.9	287	20	5.0	64	53	2.0
5	16	39	32.4	60	4.4	147	46.0	18.9	1.5	14	12	127	11	0.55	0.5	0.7	A	352	20	0.8	261	31	0.7	113	54	1.4
5	17	2	24.8	61	17.4	152	11.9	4.3	0.0	3	3	292	3	0.05	1.1	0.9	A	24	4	1.0	294	11	2.2	134	78	1.6
5	19	1	24.4	62	18.3	149	51.1	18.8	2.9	21	5	151	73	0.53	1.1	1.2	A	283	15	1.1	182	36	1.7	32	50	2.6
3.7 ML ATWC				FELT (III) AT TALKEETNA AND BIG LAKE FELT (II) AT PALMER.																						
5	21	36	37.3	61	9.9	152	3.3	4.0	-3A	3	2	325	2	0.03	2.0	0.7	B	117	6	3.7	209	23	2.6	15	66	0.8
5	22	41	52.0	60	59.5	151	37.4	76.0	2.6	21	8	72	31	0.37	0.9	1.3	A	29	0	1.0	119	32	0.9	299	58	2.8
6	0	8	21.0	60	59.7	150	51.6	15.0	2.0	24	10	67	35	0.60	0.3	1.1	A	343	0	0.6	81	5	0.6	253	81	2.0

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
6	11	44	24.1	60	7.0	152	27.0	5.8	0.7A	5	4	280	22	0.16	1.5	2.0	B	81	11	0.9	156	32	2.1	333	54	4.0
6	14	38	34.5	61	26.1	151	10.8	10.5	0.8	9	5	178	24	0.55	2.3	2.3	B	261	1	0.5	162	43	3.9	352	46	4.6
6	15	37	54.2	61	12.5	151	52.5	1.0	-2	3	3	285	10	0.09	1.2	12.8	D	19	1	0.9	109	3	1.8	271	87	24.1
6	21	56	52.0	61	35.6	147	41.9	33.5	2.6	25	9	90	33	0.51	0.4	0.5	A	277	1	0.4	187	33	0.6	9	57	1.0
6	22	28	2.0	60	29.6	143	40.4	22.4	1.1A	8	7	117	37	0.37	0.7	1.8	B	81	4	0.6	349	16	1.0	185	73	3.5
7	0	41	16.9	61	11.4	152	12.1	5.9	-1A	3	3	280	8	0.04	1.8	2.8	C	335	5	1.5	261	16	2.9	83	67	5.2
7	0	54	48.4	60	26.9	148	23.9	9.4	1.3	17	6	101	38	0.56	1.1	1.9	B	189	9	1.1	284	27	0.7	82	61	4.1
7	2	38	25.3	61	26.8	151	10.8	9.9	0.3A	4	4	194	23	0.23	18.9	26.0	D	163	-6	7.3	261	23	0.8	60	65	84.9
7	5	55	10.3	61	15.9	149	28.7	37.4	0.6A	5	3	144	5	0.14	2.1	1.6	B	261	2	1.6	316	20	3.3	166	50	2.3
7	11	49	10.2	59	52.7	147	44.1	10.1	0.7A	3	3	339	13	0.14	12.1	7.3	D	348	16	2.8	88	30	26.1	234	55	4.8
7	13	32	47.5	61	39.4	146	46.7	30.7	2.9	25	5	88	35	0.41	0.5	0.7	A	311	1	0.8	221	24	0.9	43	66	1.3
3.7 ML ATWC								FELT (II) AT KENNY LAKE AND CHITINA.																		
7	18	51	35.9	60	20.7	147	39.9	22.8	1.1	10	6	98	4	0.27	1.1	1.1	A	29	12	0.9	130	42	1.3	286	46	2.7
8	11	6	34.8	59	29.6	152	38.3	76.6	3.2	13	6	141	77	0.30	1.8	3.3	C	312	0	2.1	222	14	3.1	42	76	6.3
3.2 ML ATWC																										
8	11	25	29.1	60	5.1	141	23.5	3.8	1.6	10	6	164	36	0.42	1.0	1.7	B	84	9	0.9	351	20	1.7	197	68	3.3
8	12	50	18.5	60	5.5	141	21.4	5.1	1.3	6	5	163	38	0.35	1.4	2.2	B	88	10	1.1	355	16	2.3	209	71	4.2
8	15	12	27.1	60	10.9	141	11.5	6.0	1.7	9	4	146	49	0.19	0.9	1.7	B	83	2	1.0	352	18	1.4	179	72	3.2
8	17	40	47.2	61	43.3	150	0.2	50.2	2.5	26	11	189	10	0.52	1.2	1.2	A	262	7	0.9	167	35	2.0	2	54	2.5
8	18	18	32.9	60	3.5	147	37.1	21.7	0.7A	3	3	195	8	0.04	8.1	2.3	D	266	9	15.4	359	19	1.3	152	69	3.7
8	19	35	58.6	60	4.9	140	31.0	12.4	1.8	8	4	161	51	0.50	2.6	6.2	D	26	9	3.5	293	19	1.2	140	69	12.5
8	19	43	57.8	60	5.6	140	33.8	1.0	1.6	8	4	160	54	0.40	1.6	4.0	C	203	5	2.8	294	15	1.1	95	74	7.7
8	19	54	23.0	60	4.5	140	32.6	1.3	1.3	7	3	163	52	0.56	2.8	2.7	C	291	13	1.1	33	43	6.1	188	44	4.0
8	20	25	24.3	61	39.6	144	23.2	21.7	1.9	16	7	175	39	0.85	1.1	0.7	A	290	3	0.8	20	13	2.0	187	77	1.2
8	21	26	23.6	60	6.9	144	36.5	1.3	1.9	19	7	114	23	0.82	0.8	1.1	A	102	19	0.8	4	21	1.1	230	61	2.3
8	21	33	25.1	60	6.0	144	38.2	24.9	1.1	12	4	120	23	0.72	1.2	1.4	B	43	21	1.9	301	27	1.2	166	54	3.1
8	23	10	35.9	60	23.8	148	17.1	11.4	1.0	15	9	102	31	0.69	1.3	3.0	C	350	2	1.1	261	23	0.7	85	67	6.1
9	5	5	13.6	60	39.3	143	6.3	16.7	1.1	6	4	96	27	0.43	1.5	4.7	C	10	9	1.1	279	12	1.6	136	75	9.1
9	5	8	45.5	60	16.0	144	55.4	26.4	1.0	16	8	117	34	0.43	1.0	0.8	A	12	8	1.8	104	16	0.8	256	72	1.5
9	8	35	23.2	60	4.5	147	38.1	23.5	0.7A	4	3	186	10	0.06	8.2	2.3	D	267	1	15.4	357	11	1.4	172	79	4.4
9	10	39	47.5	61	16.5	152	11.1	3.7	-5A	3	3	283	2	0.02	1.9	1.3	B	292	9	3.5	200	10	1.5	63	76	2.4
9	12	20	40.3	61	19.3	149	10.4	31.9	0.6A	5	4	127	22	0.42	1.7	2.3	B	261	3	1.6	316	5	2.3	134	55	3.6
9	13	39	1.2	61	49.8	149	8.6	2.1	0.1	6	3	254	13	0.39	1.8	8.1	D	41	0	1.3	311	9	2.3	131	81	15.3
9	14	32	39.8	60	55.0	140	16.7	20.9	1.3A	4	4	244	57	0.25	5.0	2.6	C	125	12	1.5	32	13	9.5	256	72	4.6
9	15	15	5.3	60	56.1	140	14.8	18.4	1.2A	4	4	246	59	0.48	4.2	2.5	C	123	11	1.6	29	20	8.3	240	67	4.1
9	15	26	20.4	59	58.3	151	39.1	53.5	3.4	21	2	99	21	0.40	1.2	2.0	B	310	14	1.3	44	16	1.9	181	69	4.1
3.5 ML ATWC								FELT (II) AT HOMER.																		
9	17	14	44.3	60	19.2	141	2.3	7.0	1.3A	6	3	130	64	0.30	1.4	3.3	C	81	5	2.1	330	8	1.4	196	67	6.0
9	18	26	51.2	60	19.2	141	3.3	4.2	1.2A	6	3	129	63	0.21	1.0	3.0	C	347	1	1.2	81	13	1.4	253	76	5.7
9	19	40	24.9	60	0.0	147	24.8	25.1	0.7A	3	3	278	13	0.16	12.1	6.9	D	10	22	2.0	267	29	25.7	131	52	4.1
9	19	49	54.2	60	5.7	153	12.9	122.7	2.8	11	5	281	24	0.32	3.2	2.0	C	174	1	4.2	264	9	5.9	78	81	3.6
9	23	0	8.2	60	19.7	141	2.1	2.6	1.1A	5	5	130	64	0.28	0.9	2.2	B	315	2	1.1	45	13	1.4	216	77	4.2
9	23	4	58.6	60	41.8	147	26.5	17.2	2.0	25	11	66	28	0.44	0.4	0.8	A	1	6	0.6	270	10	0.7	122	78	1.5
9	23	8	21.1	60	19.6	141	1.3	0.2	1.5	7	5	131	65	0.38	0.9	2.2	B	143	2	1.1	81	7	1.2	249	61	3.7
10	0	24	9.7	61	50.6	149	4.0	8.9	0.7A	3	3	310	11	0.03	2.6	2.0	B	88	11	5.0	351	29	2.9	196	58	3.9
10	0	48	59.9	60	19.1	141	15.2	10.9	1.4	9	5	121	53	0.21	0.7	2.3	B	206	1	1.3	116	2	1.0	323	88	4.3
10	0	53	59.1	60	41.6	147	27.8	21.4	1.4	15	10	90	27	0.37	0.4	1.3	A	33	3	0.6	303	3	0.8	168	86	2.4
10	1	29	15.1	60	19.0	140	58.5	0.9	1.5	8	4	133	66	0.39	0.8	2.3	B	25	1	1.1	295	5	1.5	126	85	4.3
10	7	18	40.7	60	18.9	141	16.4	13.3	0.9A	6	3	159	72	0.16	1.0	3.9	C	38	0	1.8	128	7	1.3	308	83	7.3

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
10	8	36	27.4	60	19.2	141	1.1	7.2	1.3A	8	5	131	64	0.31	0.9	2.6	B	263	4	1.6	353	6	1.4	139	83	4.9
10	9	14	0.9	58	32.4	156	13.8	178.3	3.6	9	4	355	237	0.36	7.4	12.0	D	337	2	3.8	261	38	7.8	71	59	24.5
10	10	41	20.1	60	41.7	147	38.0	16.7	1.1	17	14	66	27	0.42	0.4	1.0	A	346	5	0.8	261	9	0.7	108	79	1.9
10	12	9	20.5	60	15.5	140	54.7	12.8	1.5	9	5	134	67	0.22	1.0	2.3	B	40	1	1.8	310	4	1.1	144	86	4.3
10	12	37	31.3	62	35.5	151	17.9	60.0	2.5	18	7	273	114	0.44	4.4	11.4	D	261	0	1.9	341	19	3.8	171	69	22.2
10	12	46	31.8	60	20.1	141	14.4	9.4	1.7	8	7	119	55	0.36	0.6	1.9	B	342	0	1.1	81	3	0.9	252	81	3.5
10	20	55	0.9	60	0.9	141	9.1	1.3	1.2A	5	4	204	85	0.38	5.0	4.1	C	109	1	1.5	200	37	11.1	18	53	4.5
11	3	23	13.2	61	32.5	150	36.5	56.6	2.2	35	10	181	41	0.57	0.8	1.1	A	361	4	0.6	162	13	1.5	7	74	2.0
11	6	6	11.3	60	22.2	141	22.5	16.1	2.0	10	4	113	52	0.37	0.7	1.7	B	142	2	1.1	81	6	0.8	251	60	2.8
11	7	45	36.0	60	40.2	141	45.9	21.2	1.6	9	6	88	40	0.43	0.6	1.9	B	309	2	1.2	319	12	0.6	48	78	3.6
11	7	49	41.6	60	15.4	140	48.0	12.6	1.0A	6	5	137	73	0.25	1.1	1.9	B	40	1	2.0	310	10	1.0	136	80	3.5
11	8	19	9.0	61	32.1	148	32.4	10.0	1.7	19	9	188	13	0.57	0.7	0.8	A	344	1	1.4	261	10	0.5	80	78	1.6
11	13	14	12.7	60	38.9	147	37.9	20.5	1.6	20	10	67	20	0.36	0.3	0.7	A	29	1	0.5	299	9	0.5	125	81	1.3
11	18	51	40.1	61	51.3	141	44.2	9.4	1.5	4	3	279	97	0.13	1.9	11.3	D	306	1	1.9	36	6	2.8	207	84	21.3
11	19	8	21.7	61	17.3	152	11.4	3.8	0.3	3	3	289	3	0.06	1.1	0.9	A	294	2	2.1	24	6	0.9	186	84	1.7
11	20	53	25.9	60	15.0	141	33.2	5.5	2.0	10	6	122	36	0.32	0.7	1.4	B	41	9	0.6	309	15	1.0	161	72	2.8
11	22	34	30.4	60	16.5	141	5.1	13.4	1.3A	8	6	130	59	0.19	0.7	1.8	B	81	3	1.1	347	8	1.2	191	81	3.5
12	0	59	38.4	61	10.1	151	14.0	68.7	2.7	25	6	122	44	0.43	0.6	1.3	A	165	8	1.0	81	13	0.8	288	74	2.5
12	6	11	12.5	59	47.8	141	32.4	18.5	1.7	7	5	213	38	0.20	1.6	1.1	B	201	12	3.1	106	30	0.7	320	66	2.2
12	6	31	29.7	62	26.2	149	58.4	32.1	2.3	19	7	237	68	0.48	1.2	1.4	B	271	14	1.3	11	33	1.8	161	53	3.0
12	7	12	14.6	60	29.5	140	36.5	17.7	1.3A	6	5	174	66	0.13	1.5	2.8	B	322	0	0.6	261	18	1.8	52	56	4.9
12	15	0	48.4	60	17.8	147	29.8	5.7	0.5	5	5	175	14	0.13	1.8	3.2	C	175	4	0.7	83	26	1.6	273	64	6.6
12	16	13	15.1	60	0.2	147	30.7	28.3	0.8A	5	5	206	8	0.16	1.1	1.4	B	122	18	1.7	21	30	1.2	239	54	3.0
12	23	12	50.4	60	17.8	141	9.8	18.3	1.5	9	6	126	56	0.21	0.5	1.3	A	283	0	0.6	13	9	0.8	193	81	2.5
13	0	57	10.6	62	2.2	144	28.9	13.5	1.6	7	3	218	75	0.33	1.7	1.8	B	112	3	1.1	19	42	2.2	205	48	4.0
13	1	10	15.7	59	48.8	141	37.7	19.6	1.7	7	6	222	34	0.50	1.5	0.9	B	199	2	2.8	108	19	0.7	295	71	1.8
13	5	38	17.4	61	15.9	152	18.4	5.9	0.6	3	3	309	8	0.02	1.2	1.7	B	192	7	1.4	286	26	1.9	88	63	3.5
13	6	22	23.1	60	39.7	141	44.8	24.1	1.3	8	7	159	41	0.27	0.7	3.0	C	308	2	1.2	217	11	0.7	48	79	5.8
13	9	38	42.9	60	33.8	151	37.8	66.3	3.4	26	9	69	30	0.44	0.6	1.3	A	38	11	0.9	130	11	1.0	264	74	2.4
4.5 MB				3.8 ML ATWC				FELT AT KENAI AND HOMER.																		
13	9	40	48.0	60	34.3	151	39.8	70.4	3.1	26	11	68	30	0.37	0.6	1.2	A	182	2	1.0	81	9	0.9	265	77	2.2
4.3 MB				3.8 ML ATWC				FELT AT KENAI AND HOMER.																		
13	9	42	32.8	60	33.5	151	38.3	65.8	2.9	21	15	69	30	0.74	0.5	1.2	A	159	5	0.6	81	11	0.9	275	73	2.3
13	10	38	0.2	60	22.9	141	19.9	13.4	1.1A	6	3	226	55	0.18	9.9	17.9	D	19	6	1.0	286	28	2.9	120	61	38.2
13	19	21	23.6	60	12.4	147	54.5	22.1	0.7	4	4	197	18	0.17	2.1	1.1	B	265	2	4.0	355	3	0.8	141	86	2.0
13	19	56	26.6	57	57.8	153	27.0	62.8	3.0	11	3	229	62	0.27	3.9	5.3	C	351	19	1.9	261	19	6.8	126	63	10.8
14	0	39	36.3	60	14.1	153	9.8	144.6	2.8	12	4	272	20	0.43	2.8	2.6	C	81	8	5.1	337	20	3.2	190	65	4.9
14	1	54	58.3	61	29.8	150	3.6	43.1	2.3	23	8	84	20	0.55	1.1	1.1	A	261	0	0.8	168	42	1.6	351	48	2.4
14	2	6	59.4	61	57.0	148	51.6	11.4	2.4	23	7	169	20	0.51	1.1	1.6	B	261	18	0.8	357	28	1.2	141	57	3.4
14	6	47	47.9	61	38.9	150	4.5	41.4	2.0	15	7	140	10	0.38	1.5	1.3	B	261	3	0.8	351	26	2.9	166	64	2.3
14	7	15	23.2	60	13.9	149	40.8	24.8	2.2	17	4	130	43	0.76	0.9	2.9	C	348	0	1.6	261	14	1.0	78	76	5.5
14	8	28	22.9	60	13.4	140	37.3	20.5	1.6	7	5	162	63	0.54	1.5	4.1	C	211	11	2.1	303	12	1.1	79	74	7.9
14	8	49	0.7	61	47.7	149	24.4	6.8	0.9	8	6	167	26	0.49	1.3	2.8	B	326	17	1.6	261	20	1.4	106	55	5.0
14	10	46	45.1	60	18.2	141	28.0	11.0	2.6	10	6	117	43	0.39	0.7	1.4	A	146	1	1.1	81	10	0.8	241	63	2.5
14	13	30	30.0	61	27.9	150	13.4	11.6	0.9A	6	5	136	28	0.51	0.9	1.5	B	86	2	0.9	355	6	1.6	194	84	2.8
14	15	29	23.6	60	11.3	153	21.4	139.0	2.9	12	3	203	30	0.37	2.3	2.3	B	319	19	2.6	81	21	3.7	202	48	4.3
14	20	48	62.4	61	40.1	150	2.1	6.5	2.9	27	6	140	9	0.78	0.9	0.7	A	263	15	0.6	168	24	1.7	22	61	1.3
				3.6 ML ATWC				FELT AT ANCHORAGE.																		
15	3	38	44.5	61	2.5	146	33.3	12.6	1.5	17	7	51	2	0.71	0.5	0.6	A	159	3	0.8	81	10	0.9	266	74	1.2

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NT	NS	GAP	D1	RMS	SEH	SE2	Q	A21	DP1	SE1	A22	DP2	SE2	A23	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
15	4	34	3.0	60	9.6	145	1.5	27.3	1.1A	7	7	241	43	0.93	1.8	1.0	B	15	8	3.4	383	12	1.3	138	75	1.9
15	5	17	33.0	60	1.5	153	8.1	121.3	3.0	14	8	141	25	0.66	1.4	1.5	B	186	17	2.0	385	27	2.4	68	57	3.1
15	13	5	30.0	61	22.2	150	53.2	58.3	2.1	20	7	70	13	0.30	0.9	1.8	B	81	3	0.8	163	18	1.4	342	70	3.4
15	21	34	29.9	61	49.7	148	53.0	21.2	1.0	9	6	205	7	0.28	1.2	1.5	B	340	10	2.1	261	13	1.2	111	70	2.7
15	22	42	21.0	61	30.0	151	14.6	4.6	1.2	12	8	102	27	0.55	0.6	1.2	A	81	3	0.6	164	9	1.1	332	78	2.3
16	2	1	12.3	60	12.6	148	57.5	14.3	2.3	23	9	80	33	0.55	0.6	0.9	A	81	1	0.8	160	7	1.0	343	77	1.7
16	3	58	26.2	60	13.0	140	44.9	10.9	1.6	7	6	140	69	0.27	1.2	2.4	B	261	8	1.4	331	16	1.9	142	63	4.4
16	7	11	13.3	59	7.4	136	23.1	23.7	3.3	9	3	216	196	0.51	15.3	15.3	D	319	3	3.5	261	41	17.0	52	40	32.3
4.2 MB				4.2 ML ATWC																						
16	18	58	8.7	62	15.7	150	58.9	78.3	2.6	13	5	246	42	0.65	1.8	1.9	B	81	9	1.4	343	36	3.3	183	53	3.6
16	21	21	29.3	59	19.5	153	8.7	98.2	2.9	11	4	144	79	0.32	1.2	3.4	C	81	3	2.2	168	7	1.7	327	82	6.5
16	22	7	46.1	60	24.9	147	42.8	18.5	1.0	11	8	86	7	0.57	0.5	0.5	A	261	28	0.8	358	32	0.7	134	48	1.0
17	1	9	28.9	61	37.8	146	29.5	41.0	2.9	26	11	80	34	0.53	0.7	1.5	B	396	9	0.7	304	15	1.1	56	72	2.9
17	4	11	49.7	58	58.6	152	48.1	38.3	2.6	9	3	154	134	0.21	3.2	17.9	D	2	0	1.6	92	1	6.0	272	89	33.5
17	8	40	26.2	62	25.7	149	15.7	63.7	2.6	20	13	213	75	0.66	2.2	3.1	C	269	1	1.3	359	34	1.8	178	56	6.8
17	14	0	39.5	61	10.6	152	8.6	5.5	-3A	3	3	272	5	0.11	1.2	1.4	A	261	13	2.0	327	20	0.9	133	57	2.5
17	14	7	5.6	59	58.3	141	34.9	9.0	1.9	9	7	196	25	0.34	1.5	1.3	B	95	14	0.9	197	39	3.4	349	48	1.8
17	14	19	39.4	62	5.5	147	54.0	35.3	2.1	23	17	198	39	0.66	0.9	0.5	A	347	4	1.8	81	5	0.6	220	82	0.9
17	22	40	55.1	62	46.2	150	25.1	85.2	3.3	15	6	191	105	0.32	2.6	4.1	C	89	10	1.6	354	29	2.5	196	59	8.8
				3.5 ML ATWC																						
18	2	11	15.5	59	54.3	147	48.8	27.3	2.1	16	10	223	13	0.38	0.8	0.5	A	108	3	1.4	108	6	1.5	319	84	1.0
18	5	34	33.7	60	57.4	152	34.2	0.0	2.0	19	8	108	37	0.79	0.8	0.5	A	108	7	1.5	197	9	0.6	339	79	0.9
18	6	0	49.4	57	56.1	153	38.0	63.7	2.8	10	5	237	71	0.27	6.6	9.9	D	261	5	11.6	340	33	2.2	163	55	21.6
18	10	44	3.0	59	55.0	153	8.8	117.3	2.8	14	8	209	35	0.48	2.1	1.7	B	261	6	4.0	165	27	2.4	1	62	3.3
18	21	0	4.8	60	7.2	140	53.0	3.8	1.7	8	5	158	65	0.35	1.0	2.0	B	281	8	0.9	14	18	1.4	168	70	3.9
18	22	56	63.6	61	17.2	152	11.6	8.3	-2A	3	3	289	3	0.14	1.1	1.0	A	200	4	1.2	291	19	2.1	99	71	1.8
18	23	22	20.1	61	28.5	151	4.5	60.8	2.3	19	7	95	18	0.54	0.9	1.8	B	261	1	0.7	159	18	1.4	354	68	3.4
18	23	34	4.0	61	17.2	152	11.7	5.4	-2	3	3	290	3	0.05	1.4	1.3	B	216	1	1.2	306	21	2.7	123	69	2.3
19	1	32	50.8	60	57.7	147	18.4	29.9	1.6	6	5	236	15	0.19	1.4	1.4	B	223	10	1.1	127	38	2.8	327	50	2.5
19	3	20	38.5	61	20.4	149	36.1	32.5	1.0A	6	4	106	11	0.36	1.5	1.3	B	204	10	1.4	106	40	3.3	305	48	1.7
19	3	50	36.3	59	59.2	150	66.2	3.7	1.1	7	5	140	21	0.53	1.3	1.2	A	214	17	1.0	320	41	0.7	107	44	3.2
19	19	58	54.9	62	13.1	150	12.5	11.3	2.6	15	9	202	65	0.51	1.9	1.5	B	274	9	0.9	10	36	4.1	172	53	1.9
				3.4 ML ATWC																						
20	8	13	56.2	60	42.5	160	11.6	45.1	2.4	17	10	84	22	0.70	0.8	1.5	B	81	9	0.9	339	15	1.2	198	69	2.9
20	11	38	14.3	61	28.3	149	44.0	40.4	3.1	18	10	84	21	0.44	1.0	1.3	A	266	3	0.8	175	27	1.5	2	63	2.7
				3.5 ML ATWC																						
FELT AT ANCHORAGE, BIG LAKE, EAGLE RIVER, PALMER AND WASILLA.																										
20	14	1	4.1	62	2.7	149	22.5	34.3	2.4	16	12	179	49	0.51	1.3	0.9	A	87	14	0.9	185	30	2.6	335	56	1.3
20	15	40	59.3	60	15.2	140	54.1	16.7	1.7	9	5	135	67	0.38	0.7	1.9	B	4	5	1.3	273	11	1.1	118	78	3.6
20	22	47	31.3	61	1.9	150	57.4	48.9	2.1	18	9	48	36	0.51	0.9	2.1	B	81	1	0.9	146	11	1.2	346	63	3.7
21	0	7	0.3	60	45.9	152	17.8	15.3	0.5A	4	4	180	22	0.57	7.0	5.6	D	18	5	0.8	109	35	15.2	279	55	7.1
21	4	36	48.4	59	56.8	152	52.2	94.0	2.5	13	6	212	28	0.26	1.8	1.3	B	261	18	3.4	144	31	1.7	12	47	2.2
21	4	46	51.5	61	16.8	151	42.7	99.5	2.6	20	6	86	16	0.33	0.9	1.3	A	216	4	1.0	124	24	1.5	315	66	2.5
21	7	40	52.6	60	31.8	147	41.8	7.2	1.3	20	6	60	8	0.43	0.7	1.0	A	18	9	0.6	283	31	0.7	122	58	2.1
21	8	53	11.5	60	7.9	139	18.8	15.1	1.0	5	4	271	27	0.16	25.0	25.0	D	267	26	8.2	17	35	3.1	149	44	73.7
21	11	46	34.5	61	15.3	152	14.5	6.1	0.4	4	4	238	5	0.37	1.0	0.9	A	209	34	0.8	326	34	1.4	88	38	2.3
21	13	30	1.7	60	12.5	149	6.0	10.2	2.1	28	8	138	71	0.70	0.8	2.0	B	191	7	1.1	283	19	0.5	82	70	3.9
21	15	48	42.0	61	52.3	147	25.3	38.8	2.1	22	10	153	7	0.85	0.8	0.4	A	347	10	1.5	84	35	0.5	243	53	0.8
21	17	28	40.7	61	30.5	146	30.0	32.0	2.6	25	9	77	31	0.72	0.4	0.5	A	261	6	0.6	161	12	0.5	15	73	0.9

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	DI	RMS	SEH	SEZ	Q	AZI	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
21	17	41	50.6	61	44.2	144	57.1	56.8	0.9A	7	4	175	58	0.20	1.6	2.0	B	271	1	1.0	2	24	2.9	179	66	3.8
21	17	58	13.4	59	49.7	140	46.9	9.1	1.0A	6	3	212	66	0.32	7.0	8.3	D	264	21	1.6	27	31	7.6	165	51	19.2
21	18	39	36.1	60	1.6	153	11.8	125.6	2.0	12	3	143	27	0.48	1.3	1.4	B	311	24	2.1	81	31	2.7	200	37	1.8
21	19	3	26.6	61	24.5	146	37.6	35.2	3.0	25	7	59	39	0.72	0.4	0.9	A	188	7	0.7	280	10	0.6	64	78	1.7
3.6 ML ATWC								FELT AT VALDEZ.																		
21	20	8	7.5	60	11.8	141	47.3	4.9	1.2A	7	7	116	22	0.28	0.7	1.7	B	115	2	1.1	24	21	0.7	210	69	3.3
21	20	9	19.4	61	26.3	146	41.5	21.1	1.8	22	8	81	42	0.54	0.3	0.9	A	313	2	0.5	223	6	0.6	61	84	1.6
21	20	31	39.8	60	5.9	147	64.5	22.3	0.7	9	7	160	19	0.55	0.9	0.9	A	355	13	0.9	261	43	1.6	99	45	1.9
21	22	48	4.1	60	7.6	141	17.6	8.8	1.7	9	6	156	42	0.38	0.9	1.7	B	81	10	0.7	345	16	1.1	198	69	3.4
21	23	7	58.2	59	1.7	152	17.1	58.5	2.3	10	6	162	114	0.53	1.2	5.3	C	189	4	1.3	270	6	2.1	65	83	10.0
22	0	32	47.5	60	8.3	141	16.7	3.7	1.3	8	5	153	43	0.39	0.9	1.9	B	81	9	0.7	348	17	1.3	198	71	3.8
22	0	54	40.6	60	10.3	152	31.3	11.0	1.3	10	6	159	16	0.59	0.8	1.3	A	11	4	0.9	103	30	0.6	274	60	2.8
22	1	15	34.0	61	49.1	148	54.1	16.5	1.8	25	14	158	5	0.64	0.5	0.5	A	170	18	0.8	268	23	0.6	46	60	1.0
22	1	43	20.0	59	55.9	141	50.3	15.9	1.0	8	2	202	16	0.45	2.6	0.8	B	37	1	4.8	296	25	2.2	119	65	1.2
22	3	42	44.3	60	1.6	147	43.8	21.3	1.0A	6	6	142	6	0.32	0.8	0.7	A	208	17	1.0	103	42	1.8	315	43	0.9
22	7	23	7.3	59	10.0	146	21.3	37.3	2.3	18	8	244	29	0.61	2.2	0.6	B	17	0	4.1	107	23	1.8	287	67	1.0
22	8	28	59.0	61	27.0	146	8.0	13.1	0.5A	8	5	118	12	0.59	0.8	0.8	A	261	21	0.9	148	33	1.4	15	46	1.5
22	9	3	55.3	60	16.5	141	30.4	7.6	1.4	8	7	120	39	0.28	0.6	1.4	B	40	9	0.6	308	10	0.9	171	76	2.6
22	11	51	55.0	59	11.2	150	50.9	36.9	2.1	16	5	264	64	0.28	2.6	4.5	C	85	1	1.7	175	4	4.8	341	86	8.6
22	12	52	39.6	60	44.8	151	24.9	70.3	2.4	28	10	56	10	0.48	0.5	1.1	A	32	8	0.8	123	11	0.7	266	76	2.1
22	15	42	50.5	60	36.5	142	34.7	10.9	1.8	14	8	54	24	0.74	0.4	2.2	B	24	1	0.5	294	1	0.7	159	89	4.1
22	17	50	54.8	61	33.6	151	14.8	4.1	1.5	22	8	106	29	0.65	0.3	0.7	A	171	8	0.6	81	14	0.4	290	74	1.3
22	18	19	5.7	60	35.8	142	33.6	1.4	1.6	11	7	55	23	0.78	0.5	8.0	D	296	0	0.9	26	1	0.5	206	69	15.0
22	21	39	47.3	60	34.6	142	31.9	5.5	0.9	6	4	146	23	0.70	0.9	4.7	C	36	4	0.6	126	4	1.6	261	64	8.8
22	23	48	43.5	60	33.1	142	32.0	7.0	0.6	4	3	121	21	0.20	0.9	5.4	C	137	1	0.8	81	7	0.7	234	55	8.4
23	1	3	33.2	60	5.5	140	37.8	7.1	1.4A	9	3	288	69	0.41	2.2	2.9	B	81	4	1.8	314	18	2.8	180	49	4.6
23	1	3	48.0	60	7.4	140	37.4	4.9	1.8	8	4	286	79	0.45	3.2	3.2	C	34	4	1.8	300	45	2.8	128	45	7.9
23	2	14	22.0	61	50.4	149	10.6	1.4	0.3A	7	7	214	15	0.79	0.9	2.6	B	261	11	0.6	342	11	1.3	122	72	4.6
23	4	10	50.7	60	2.1	147	53.8	13.9	0.9A	7	3	183	15	0.29	1.9	2.5	B	332	20	0.9	261	34	2.0	94	47	5.1
23	4	45	52.9	60	5.6	147	32.0	28.1	0.4A	4	3	218	13	0.09	5.0	2.0	C	0	9	1.0	267	15	0.6	120	72	2.8
23	7	8	29.5	61	30.1	150	9.1	47.6	2.5	33	12	94	22	0.48	0.5	0.8	A	263	2	0.4	173	18	0.9	359	72	1.6
23	9	0	25.9	60	9.1	140	55.2	13.1	1.3	8	4	273	51	0.23	1.9	1.9	B	81	8	1.5	311	32	2.9	180	40	3.3
23	9	41	16.0	61	46.8	151	10.9	83.5	3.3	27	7	125	30	0.40	1.1	1.5	B	81	8	0.9	166	26	1.7	335	62	3.0
23	11	23	27.6	61	11.8	151	41.1	78.2	2.5	23	9	60	30	0.31	0.8	1.0	A	55	14	1.0	154	32	1.1	305	54	2.2
23	11	59	13.4	60	32.4	151	38.3	68.9	2.2	26	9	76	32	0.55	0.5	1.2	A	346	2	0.9	81	11	0.8	246	78	2.3
23	12	42	32.5	60	43.5	147	25.3	15.2	2.3	30	11	36	25	0.43	0.3	0.7	A	3	3	0.4	272	13	0.5	106	77	1.3
23	12	50	45.9	60	35.8	142	22.0	9.9	0.8	6	3	83	31	0.58	1.0	6.8	D	26	0	0.8	116	5	1.5	296	86	12.8
23	13	54	20.5	60	3.4	140	52.3	11.5	0.8A	6	3	282	59	0.42	2.7	3.7	C	313	8	3.2	81	18	2.3	208	48	6.3
23	17	7	54.7	60	31.3	141	52.8	12.3	1.7	9	5	127	20	0.47	0.6	1.3	A	359	5	0.6	268	14	0.9	108	75	2.5
23	17	35	45.1	60	30.9	142	59.3	1.1	1.2	8	5	89	11	0.47	0.7	8.0	D	355	2	0.6	265	2	1.1	130	87	15.0
23	20	8	44.3	61	6.6	149	29.5	34.6	1.3	26	9	40	16	0.41	0.4	0.6	A	186	10	0.6	93	15	0.8	308	72	1.1
23	21	5	40.5	60	14.0	141	8.4	12.4	1.2	8	3	253	36	0.27	1.4	1.4	B	37	16	1.2	139	35	2.5	287	50	2.9
23	23	16	11.9	61	12.2	149	39.7	41.2	1.7	30	8	44	7	0.32	0.5	0.9	A	190	2	0.6	99	6	1.0	298	84	1.7
24	0	18	47.1	61	20.1	150	24.5	13.0	0.3A	4	3	202	23	0.32	1.1	0.7	A	18	6	2.1	285	25	1.8	121	64	1.3
24	7	40	8.3	60	43.2	147	25.9	17.2	1.6	20	9	64	26	0.77	0.3	0.7	A	38	1	0.5	308	14	0.5	132	76	1.3
24	14	28	22.3	61	12.6	152	1.9	101.0	2.9	24	13	87	3	0.36	0.8	1.0	A	49	13	1.2	146	27	1.4	296	60	2.0
24	15	0	41.2	59	59.9	152	43.1	83.3	2.7	18	8	132	21	0.54	1.1	1.5	B	182	14	1.4	86	22	2.0	302	63	2.9
24	16	30	31.9	60	34.2	142	28.8	1.1	0.6	5	4	131	24	0.52	0.8	26.0	D	25	0	0.7	115	1	1.1	295	89	62.3
24	18	32	52.3	61	0.9	148	36.6	35.3	2.1	27	13	57	23	0.46	0.6	0.4	A	144	3	0.5	81	11	0.7	249	61	0.7

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
25	1	8	38.8	61	50.3	149	23.0	4.2	0.8	12	10	174	25	0.63	0.6	0.9	A	182	2	1.1	272	16	0.6	86	74	1.7
25	1	53	2.7	60	34.3	142	29.0	0.1	0.6	7	6	85	25	0.68	0.7	25.0	D	261	0	0.7	317	0	1.0	0	90	99.0
25	4	11	44.8	60	18.4	141	14.1	10.8	1.0A	6	5	240	29	0.27	2.1	1.9	B	25	10	1.2	122	36	4.2	282	52	3.2
25	5	37	41.4	61	17.0	152	12.3	5.2	-3A	3	3	291	3	0.03	1.6	1.3	B	200	1	1.5	290	10	3.1	104	80	2.4
25	6	42	27.9	60	18.1	142	14.9	15.0	1.8	10	6	94	29	0.41	0.8	1.2	A	81	8	0.8	331	25	1.0	185	57	2.4
25	12	19	22.4	60	9.3	148	4.9	28.3	0.7A	3	3	267	29	0.11	10.6	8.1	D	358	1	1.9	87	37	24.6	265	53	4.2
25	12	39	51.7	62	19.7	150	52.8	67.9	2.3	15	7	251	51	0.60	1.8	2.1	B	81	10	1.4	348	16	3.4	202	71	4.0
25	12	44	51.7	61	18.7	152	11.7	4.7	-4A	3	3	295	5	0.03	2.8	2.5	C	42	9	2.0	139	38	5.9	301	51	3.7
25	13	34	12.8	61	1.4	149	52.4	9.5	1.0A	8	5	118	30	0.48	0.8	1.9	B	212	2	0.9	302	8	1.5	108	82	3.5
25	16	25	2.1	61	29.8	151	37.6	81.0	2.3	20	9	137	29	0.35	1.0	1.4	A	81	15	1.1	158	24	1.6	317	59	2.6
25	17	26	48.7	62	13.1	141	50.9	0.2	1.8	9	4	278	134	0.83	2.2	3.8	C	282	0	2.6	12	1	4.1	192	89	7.1
25	18	39	17.7	60	4.5	153	20.9	120.9	2.6	14	6	211	32	0.30	2.2	2.1	B	315	10	2.3	261	38	3.1	57	39	3.4
26	1	3	45.8	61	17.5	152	11.8	4.1	-5A	3	3	292	4	0.02	1.7	1.4	B	26	14	1.5	288	28	3.3	140	58	2.5
26	2	45	54.5	61	16.4	150	25.5	15.1	1.0A	12	7	71	27	0.73	1.0	2.5	B	289	6	0.8	197	17	1.1	38	72	4.9
26	2	49	46.8	60	4.4	147	58.1	28.3	1.0A	7	5	184	20	0.23	1.9	2.5	B	328	23	1.6	261	24	2.8	112	51	4.6
26	3	27	40.4	60	8.9	148	5.2	22.6	0.9	8	7	172	29	0.23	1.0	1.7	B	342	9	1.2	261	16	1.6	103	70	3.2
26	3	28	38.6	60	12.6	152	13.2	7.7	1.9	17	8	142	33	0.53	0.7	1.0	A	10	15	0.9	108	26	0.7	253	59	2.2
26	4	6	51.4	61	15.1	152	16.7	8.0	0.3	3	3	304	7	0.06	2.9	3.8	C	208	10	2.9	301	19	5.1	92	68	7.4
26	4	49	32.4	60	5.4	140	59.3	4.3	1.0	5	3	303	52	0.35	2.7	2.8	C	314	16	3.2	81	29	2.4	207	42	5.9
26	5	1	18.2	60	48.0	139	20.8	15.0	1.3A	5	3	330	110	0.39	25.0	25.0	D	193	9	15.6	290	39	8.3	92	50	99.0
26	10	36	27.0	58	12.1	154	41.2	181.8	3.7	8	2	241	139	0.98	15.7	11.3	D	335	13	5.5	81	23	30.9	221	60	18.2
26	14	27	33.2	61	3.4	150	43.8	40.1	2.2	21	15	45	44	0.84	0.4	1.9	B	351	1	0.8	81	5	0.8	250	85	3.8
27	4	13	25.2	60	8.9	152	34.6	97.7	2.6	10	6	187	14	0.40	1.7	1.6	B	21	25	2.1	130	35	2.8	264	45	3.5
28	3	2	31.1	60	56.9	147	1.0	17.8	2.1	27	11	43	9	0.64	0.5	0.7	A	261	9	0.6	316	17	0.5	140	51	1.2
28	5	15	53.9	60	23.9	152	58.8	139.5	2.8	10	6	224	26	0.24	1.7	2.3	B	296	2	3.1	27	18	2.5	200	72	4.4
28	6	57	50.7	60	2.2	141	20.0	11.8	1.8	8	6	270	39	0.48	2.1	1.8	B	312	15	3.5	81	18	1.2	199	46	2.9
28	11	47	21.1	61	42.8	151	50.5	109.6	2.8	21	8	190	34	0.39	1.3	1.3	B	81	16	1.5	330	41	3.0	186	43	1.7
28	12	36	8.4	60	29.4	143	23.2	23.0	0.8	3	2	249	30	0.13	13.9	15.0	D	208	7	1.8	304	42	1.3	110	47	38.3
28	19	47	21.9	59	0.3	152	49.1	98.2	3.0	11	5	188	131	0.41	2.4	4.6	C	4	1	2.0	274	5	4.5	105	85	8.7
28	23	9	12.7	61	28.5	149	56.6	42.8	1.4	25	11	65	20	0.53	0.4	0.6	A	103	4	0.5	194	13	0.7	356	76	1.2
28	23	9	26.0	61	28.0	149	57.7	48.9	3.0	24	17	67	21	0.94	0.5	1.0	A	274	0	0.6	184	18	0.8	4	72	2.0
2.9 ML ATWC												FELT AT PALMER.														
29	0	19	37.5	61	13.6	150	30.5	15.1	0.4A	5	5	134	29	0.56	1.1	2.9	C	167	10	0.8	261	12	1.5	39	74	5.7
29	1	32	44.8	60	38.5	142	59.9	4.8	0.4	5	5	90	23	0.44	0.9	6.9	D	272	0	1.8	2	5	0.9	182	85	13.0
29	2	15	55.0	61	37.4	150	33.3	12.0	1.3	12	9	130	20	0.53	0.4	0.6	A	272	4	0.5	4	17	0.8	169	72	1.1
29	6	11	51.7	60	12.7	140	20.5	0.5	1.8	8	3	292	79	0.20	2.4	1.8	B	220	21	1.7	115	35	5.2	335	48	2.1
29	6	22	1.3	60	14.5	147	39.0	26.4	0.2A	3	3	179	13	0.05	4.7	1.8	C	178	13	1.1	271	14	9.1	47	71	2.7
29	8	3	14.3	61	7.0	152	14.6	6.1	0.3	5	4	189	12	0.33	1.4	2.3	B	198	16	1.3	294	21	1.7	73	63	4.7
29	11	1	56.3	61	29.3	151	10.3	8.4	0.5A	6	4	115	23	0.57	1.1	2.4	B	355	9	1.1	262	22	0.6	106	66	5.0
29	15	11	41.9	61	9.6	146	31.0	5.0	1.8	29	5	46	12	0.52	0.6	0.9	A	216	2	0.6	306	18	1.0	120	72	1.8
29	15	39	52.5	60	25.1	142	3.9	5.9	1.0	7	5	77	19	0.35	0.6	1.7	B	31	10	0.8	299	13	0.5	158	74	3.3
29	17	58	58.8	60	11.0	141	51.1	8.4	0.2A	5	5	194	10	0.27	2.2	1.9	B	27	0	0.9	116	39	4.9	297	51	2.2
29	21	42	4.2	60	15.9	145	3.0	17.7	0.7A	8	4	165	31	0.24	2.0	1.6	B	113	20	1.1	11	30	4.0	232	53	2.7
29	23	42	26.0	61	1.9	152	14.2	10.0	0.4A	6	5	170	19	0.42	2.1	0.7	B	105	11	4.0	197	13	0.8	336	73	1.2
30	0	37	21.4	61	34.1	151	15.2	4.1	1.4	11	9	107	29	0.79	0.3	0.7	A	176	8	0.6	84	13	0.5	297	75	1.3
30	3	26	39.5	60	17.2	140	48.0	10.5	1.6	8	4	269	53	0.20	1.1	1.9	B	134	3	2.1	44	6	1.3	261	83	3.5
30	3	35	52.8	62	1.1	148	8.0	37.4	2.4	30	12	174	26	0.58	0.7	0.4	A	172	13	1.3	81	37	0.5	279	61	0.9
30	4	51	43.1	62	21.2	148	39.3	51.8	2.5	25	5	205	63	0.59	1.7	2.5	B	81	2	1.0	350	31	1.8	174	59	5.3
30	5	1	15.5	60	58.3	147	17.2	29.6	2.1	27	10	47	12	0.52	0.3	0.6	A	223	4	0.5	314	14	0.5	117	75	1.1

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA NOVEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAQ	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km
30	5	13	44.3	60	8.6	141	52.0	9.4	0.4A	6	5	203	15	0.28	1.4	1.5	B	25	13	0.6	283	41	1.2	129	46	3.6
30	13	6	22.3	81	32.8	151	10.8	70.1	2.4	21	7	98	25	0.37	0.7	1.0	A	81	16	0.7	171	22	1.7	316	63	1.9
30	14	34	25.3	59	50.8	147	31.8	7.1	1.3	10	6	234	17	0.24	1.3	1.1	A	274	32	1.7	32	36	2.8	156	37	1.5
30	20	50	27.8	61	47.6	149	6.2	20.6	1.0	17	9	166	10	0.46	0.5	0.8	A	348	4	1.0	261	20	0.6	89	69	1.6
30	21	7	52.2	60	28.0	142	18.3	4.7	1.0	7	6	92	30	0.41	0.6	7.6	D	318	0	0.6	81	2	0.6	228	57	11.9

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA DECEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z		MAG		NP NS		GAP		DI RMS		SEH SEZ		Q AZ1		DP1		SE1 AX2		DP2		SE2 AZ3		DP3		SE3	
dy	hr	mn	sec	deg	min	deg	min	km								deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	deg	deg	km	
1	1	12	51.7	59	52.3	141	38.5	15.8	1.3	7	3	293	29	0.55	1.7	1.5	B	83	21	3.3	336	26	3.4	197	48	2.6							
1	5	32	18.7	58	52.7	150	39.6	90.3	2.7	11	5	177	156	0.51	4.1	9.5	D	123	5	7.6	213	6	3.1	353	82	17.9							
1	6	2	11.1	60	32.2	141	15.2	1.9	1.1	7	6	233	24	0.48	1.4	1.5	B	23	1	0.7	292	40	1.8	114	50	3.4							
1	8	35	55.8	60	24.4	147	49.4	26.1	1.8	19	9	82	8	0.39	0.4	0.6	A	30	11	0.6	286	18	0.6	140	69	1.3							
1	11	34	18.3	60	34.0	143	1.7	11.8	1.7	10	6	85	16	0.87	0.5	1.6	B	283	5	0.6	14	7	0.8	158	81	3.1							
1	13	37	38.6	60	26.6	142	50.4	9.1	0.6	3	3	211	1	0.19	1.7	1.5	B	145	1	1.7	261	36	3.9	54	46	1.1							
1	18	40	3.7	61	45.3	145	25.4	4.4	1.1	13	9	131	9	0.76	0.6	0.7	A	261	9	0.4	155	25	0.9	8	59	1.5							
1	19	45	35.6	60	29.2	152	1.4	92.7	2.4	19	10	92	23	0.27	1.2	2.5	B	139	11	1.5	81	20	1.2	261	51	4.1							
2	4	47	45.0	59	13.5	152	31.4	36.5	2.0	10	6	301	108	0.32	2.8	21.6	D	81	1	4.6	145	3	2.4	332	64	38.4							
2	8	23	34.8	62	16.2	149	15.5	43.5	2.5	25	13	198	56	0.47	1.1	1.8	B	286	5	0.9	18	26	1.4	185	64	3.7							
2	10	41	55.9	60	17.4	147	50.2	26.4	1.6	19	9	95	9	0.33	0.4	0.7	A	7	16	0.7	272	18	0.6	136	66	1.4							
2	11	46	21.4	60	7.5	153	10.1	127.4	3.0	15	6	216	21	0.53	1.9	1.5	B	265	9	3.1	169	30	3.8	10	58	2.2							
2	12	35	38.6	61	35.1	147	49.8	28.8	2.2	27	8	90	36	0.57	0.4	0.7	A	268	4	0.6	175	17	0.8	9	73	1.3							
2	18	39	6.3	60	15.6	142	15.0	15.0	0.6A	3	2	234	30	0.25	2.2	2.6	B	275	8	0.9	9	32	3.8	166	66	5.2							
2	18	49	24.1	60	26.9	141	23.3	8.0	0.8	4	2	240	22	0.03	2.5	2.7	C	33	16	0.7	292	36	3.7	143	51	5.9							
2	18	49	33.0	60	26.6	141	23.6	9.6	1.1	4	2	241	22	0.04	2.4	2.7	C	34	17	0.7	295	26	4.2	153	58	5.6							
2	18	52	53.7	60	26.4	141	23.5	10.1	0.7	4	2	242	22	0.04	2.4	2.6	B	34	18	0.7	298	25	4.3	156	59	5.3							
2	18	54	24.7	60	27.7	141	25.6	8.1	1.6	8	8	211	21	0.39	1.1	1.0	A	28	10	0.6	125	34	2.3	264	54	1.5							
2	21	58	56.1	60	3.6	147	56.0	23.9	0.9A	4	4	230	18	0.06	2.6	2.3	B	343	15	0.9	86	41	6.3	237	45	2.1							
3	1	26	43.2	61	28.5	146	39.1	34.0	2.3	30	12	63	39	0.70	0.3	0.4	A	296	17	0.5	200	19	0.5	65	64	0.8							
3	3	22	6.6	61	31.3	151	12.3	6.6	0.4A	8	4	100	25	0.50	0.8	1.3	A	266	11	0.6	359	19	1.2	147	68	2.6							
3	3	52	57.5	61	24.4	151	53.2	14.1	0.8A	4	3	184	13	0.52	6.3	2.3	D	281	16	12.2	21	39	0.7	166	56	2.9							
3	10	37	57.0	60	5.3	147	51.6	35.0	0.7A	5	5	157	16	0.64	1.9	1.4	B	366	12	1.2	94	31	4.1	248	56	2.0							
3	12	37	1.5	61	2.1	152	16.8	10.0	1.2	9	6	177	20	0.68	1.0	1.1	A	194	6	0.5	99	38	1.2	292	51	2.5							
3	14	42	21.0	59	58.2	140	43.9	1.5	1.1A	7	5	293	71	0.67	2.1	2.0	B	14	21	3.8	289	35	2.5	179	48	4.5							
3	14	43	37.7	60	7.7	141	30.8	16.6	0.7A	6	5	245	29	0.36	1.9	1.5	B	26	1	1.4	295	33	4.0	118	57	2.0							
3	16	28	30.7	61	10.0	149	35.5	36.5	0.5A	5	5	166	9	0.35	1.3	1.8	B	261	4	1.6	160	30	1.4	358	58	3.9							
3	17	41	7.3	60	24.7	147	43.3	20.7	1.5	21	11	84	7	0.33	0.3	0.6	A	261	11	0.5	340	15	0.5	131	69	1.1							
3	18	21	35.6	60	25.9	140	40.9	3.4	0.9A	5	3	271	59	0.33	2.2	2.6	B	24	7	1.5	288	36	2.6	123	53	6.8							
3	19	3	23.0	60	24.8	140	38.7	5.7	1.2	6	3	273	61	0.40	1.9	1.1	B	30	2	1.8	298	35	2.9	123	55	4.4							
3	21	6	8.1	60	27.3	143	11.3	19.5	0.6A	6	4	113	19	0.31	1.2	1.6	B	346	21	1.3	261	25	2.0	117	57	3.9							
3	22	43	5.0	60	38.4	143	1.8	10.9	0.6	5	3	91	23	0.30	1.6	5.2	C	265	8	2.3	357	11	0.9	140	76	9.9							
3	23	23	56.2	60	54.7	149	33.3	15.2	1.0	11	7	64	29	0.36	0.6	3.7	C	196	2	0.6	286	8	0.9	84	85	7.0							
4	4	28	25.6	59	20.2	152	24.8	78.5	2.8	12	2	165	97	0.24	1.9	4.4	C	176	7	2.6	268	18	2.0	66	71	8.6							
4	5	14	42.1	58	52.1	137	58.1	0.8	2.5	10	3	179	255	0.72	9.9	12.2	D	313	11	6.0	218	22	17.3	68	65	24.2							
S2 ML ATWC																																	
4	5	22	30.6	60	24.4	143	3.4	9.8	0.4A	5	4	125	12	0.51	1.1	2.0	B	331	6	1.7	261	20	1.3	78	61	3.7							
4	6	50	14.1	60	32.7	142	31.5	17.0	0.4A	3	4	131	21	0.27	0.9	2.6	B	351	10	1.1	83	12	0.8	222	74	5.1							
4	7	0	42.8	60	10.3	153	0.1	109.5	3.0	18	2	134	10	0.20	1.9	1.8	B	131	24	2.4	261	28	4.1	18	38	2.0							
4	8	17	51.3	60	31.7	152	35.7	20.0	0.9A	6	5	178	12	0.60	5.2	2.8	C	200	3	0.7	109	28	10.9	296	62	1.4							
4	8	58	18.2	60	7.8	141	4.8	16.0	1.7	8	5	268	45	0.47	1.3	1.1	A	316	2	1.9	81	17	1.1	221	52	1.8							
4	16	8	50.4	60	8.7	151	29.1	44.2	2.1	21	6	132	15	0.41	0.9	2.2	B	294	3	0.8	25	19	1.1	196	71	4.3							
4	21	48	50.9	60	7.6	148	4.8	20.1	0.9A	7	5	168	28	0.36	2.4	5.0	C	322	16	0.9	261	25	1.4	89	50	8.8							
5	1	18	4.8	60	29.0	142	54.0	1.7	-1A	4	3	128	5	0.32	3.0	5.5	D	356	9	0.8	264	25	2.7	106	63	11.4							
5	2	38	56.9	61	21.9	150	31.2	11.1	0.7A	7	6	99	16	0.50	0.8	0.7	A	116	11	0.6	16	43	1.6	217	45	1.2							
5	3	42	33.5	61	38.1	150	44.9	66.3	2.8	29	11	127	19	0.44	0.6	0.9	A	81	4	0.5	172	21	1.1	341	69	1.7							
5	3	52	30.0	61	42.8	150	7.9	54.2	2.3	28	6	143	13	0.45	0.8	1.1	A	270	4	0.6	179	21	1.4	10	69	2.2							
5	4	29	17.1	60	0.2	147	5.3	25.9	0.8A	5	3	231	31	0.08	1.7	3.0	C	26	16	1.3	122	21	1.8	261	63	6.3							
5	5	59	53.9	59	55.2	148	3.2	11.3	0.9	12	9	214	24	0																			

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA DECEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	D1	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3	
dy	hr	mn	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
5	6	37	12.4	59	56.7	143	56.5	8.3	1.2A	7	4	237	68	1.09	3.5	12.3	D	356	0	6.5	266	5	2.7	86	85	23.1	
5	7	18	10.1	61	29.3	140	43.1	9.6	1.6	6	5	292	67	0.37	2.9	17.4	D	328	3	2.3	81	5	3.1	214	66	30.3	
5	8	37	8.6	60	9.9	153	12.5	142.5	3.3	18	3	139	22	0.32	1.7	1.2	B	272	7	3.2	181	12	1.8	32	76	2.3	
5	13	32	50.8	60	19.1	141	30.0	10.6	1.6	8	4	216	43	0.16	2.3	3.5	C	27	8	0.6	292	30	2.2	130	59	7.7	
5	14	2	15.0	59	12.8	145	34.4	22.7	2.8	15	3	246	50	0.87	2.5	1.2	B	81	1	1.5	347	7	4.7	179	82	2.3	
2.8 ML ATWC																											
5	15	18	31.4	59	21.0	145	31.7	25.3	2.9	20	6	214	47	0.93	1.4	0.9	A	81	22	1.2	169	23	2.6	306	59	1.6	
3.4 ML ATWC																											
5	15	43	33.3	59	12.4	145	37.8	15.9	2.2	15	5	248	47	0.58	2.1	1.9	B	87	3	1.8	354	38	4.6	181	52	2.8	
5	16	4	6.2	61	6.3	152	20.9	4.1	0.6	6	5	207	18	0.46	1.1	1.7	B	201	2	0.5	110	18	1.8	297	72	3.3	
5	19	15	58.4	61	33.8	146	33.0	30.7	2.0	27	9	76	34	0.61	0.4	0.5	A	295	3	0.5	204	20	0.7	33	70	0.9	
5	19	37	50.4	59	58.0	147	35.7	25.9	0.7A	5	4	255	4	0.12	0.9	1.2	A	121	13	1.6	261	43	2.2	23	27	1.2	
5	19	46	24.1	61	3.5	149	42.5	40.0	2.0	34	9	35	22	0.42	0.3	1.1	A	282	1	0.6	192	2	0.6	39	88	2.0	
5	20	51	53.5	60	6.9	141	59.0	21.1	0.7	6	2	171	9	0.17	2.7	1.4	B	124	25	5.5	16	34	0.9	242	46	1.5	
5	21	44	16.2	60	7.4	143	24.7	34.2	1.3A	6	5	223	34	1.06	2.4	3.6	C	267	1	1.6	357	1	4.4	132	89	6.7	
6	0	17	50.2	61	10.7	140	37.4	12.0	1.4	4	3	293	94	0.12	1.7	3.0	C	330	5	1.6	81	16	2.5	226	63	5.5	
6	1	50	30.0	60	24.2	147	10.4	16.1	2.0	30	16	102	27	0.66	0.5	0.6	A	261	3	0.4	322	19	0.7	163	56	1.1	
6	2	15	53.8	62	8.2	148	46.1	43.0	2.4	26	11	186	41	0.50	1.0	1.2	A	81	19	0.9	327	21	1.4	202	54	2.4	
6	2	29	49.4	60	20.2	141	53.2	7.5	0.6	3	3	211	8	0.13	2.9	2.8	C	274	29	0.7	24	32	1.8	151	44	7.5	
6	12	50	1.4	60	9.0	141	8.9	10.2	1.0	4	2	289	40	0.17	1.8	1.4	B	329	3	1.7	81	20	3.2	232	60	2.2	
6	14	25	59.3	62	7.9	149	31.4	57.4	2.5	25	12	188	51	0.41	1.1	1.3	A	280	3	0.8	12	34	1.8	186	56	2.7	
6	15	7	57.8	60	27.4	140	39.1	0.9	1.3	5	4	314	61	0.81	2.8	2.5	C	261	3	1.8	140	36	6.0	354	44	2.5	
6	15	17	27.5	61	7.6	140	23.1	2.6	1.5	4	3	299	106	0.09	1.9	25.0	D	333	0	1.8	81	1	2.7	243	72	99.0	
6	17	20	9.9	59	54.2	140	44.6	4.9	1.4	5	3	320	75	0.19	7.0	4.1	D	320	12	2.5	261	17	11.1	93	53	6.3	
7	0	23	2.2	60	33.9	152	50.2	141.1	3.0	13	6	205	24	0.29	1.8	1.8	B	18	15	1.9	120	37	3.1	270	49	3.5	
7	5	28	10.0	60	27.6	147	45.3	18.2	1.2	19	14	88	6	0.66	0.3	0.5	A	209	2	0.5	300	33	0.4	116	57	1.0	
7	12	55	3.2	61	22.9	150	24.3	15.6	1.2	17	11	102	20	0.81	0.4	0.7	A	282	2	0.4	192	15	0.7	19	75	1.3	
7	20	0	16.4	60	15.6	140	56.3	14.6	1.0	6	4	309	46	0.44	1.4	1.4	B	333	10	2.3	81	41	1.7	233	45	3.2	
7	22	41	28.4	60	31.4	144	40.5	1.1	0.4	7	5	140	29	0.48	1.2	1.6	B	102	21	0.5	2	23	1.6	230	58	3.4	
8	3	30	1.2	60	14.3	141	42.8	8.3	1.1	6	1	226	13	0.13	2.7	1.7	C	99	25	5.4	206	32	1.3	339	47	2.7	
8	4	51	49.9	62	25.9	151	34.1	86.2	2.6	18	8	271	50	0.46	2.6	1.5	B	169	15	4.9	81	35	1.9	280	52	3.1	
8	5	54	24.1	61	51.9	147	23.4	26.8	2.0	29	15	152	5	0.82	0.6	0.7	A	273	0	0.6	183	16	1.0	3	74	1.3	
8	6	19	38.5	60	36.2	143	6.2	1.4	0.7	4	3	155	22	0.23	1.0	24.9	D	9	1	0.9	279	1	1.6	144	89	46.6	
8	6	50	59.4	61	3.3	150	29.2	65.1	2.4	28	15	47	48	0.59	0.4	1.1	A	272	0	0.6	182	1	0.7	2	89	2.1	
8	6	58	28.3	60	10.4	140	54.3	0.2	1.2	5	4	296	51	0.58	2.4	2.1	B	307	18	3.0	207	28	4.6	66	56	3.9	
8	7	32	23.3	59	52.9	150	14.6	39.1	3.6	29	8	151	38	0.63	0.8	1.2	A	81	7	0.7	329	15	1.3	191	63	2.2	
4.8 MB 4.2 ML ATWC FELT AT HOMER AND SEWARD.																											
8	8	9	44.8	60	20.0	141	9.1	12.2	1.1	7	5	276	33	0.40	1.0	1.1	A	135	24	1.7	31	29	1.4	258	51	2.2	
8	8	57	44.0	60	26.5	143	7.4	28.3	0.7	4	2	245	15	0.39	2.5	0.8	B	263	7	4.7	170	26	2.3	7	63	1.0	
8	9	47	49.8	62	17.6	151	8.5	73.3	2.7	18	9	259	40	0.54	1.7	1.5	B	81	26	1.3	331	27	3.4	205	49	2.8	
8	10	23	17.6	60	3.5	141	7.7	6.0	1.4	6	4	299	48	0.40	1.1	1.6	B	298	0	2.0	28	6	1.4	208	84	2.9	
8	12	57	7.8	60	15.7	140	49.8	8.0	1.3	4	3	325	52	0.11	3.1	1.8	C	180	21	6.2	81	22	1.9	309	59	2.8	
8	13	2	51.2	60	17.4	141	23.5	7.6	1.1	6	4	264	21	0.36	1.3	1.0	A	271	24	2.5	167	28	2.1	35	52	1.7	
8	14	26	33.2	60	38.4	142	38.5	36.0	0.8	6	5	102	24	0.30	0.9	2.2	B	317	6	1.3	261	7	0.9	101	55	3.5	
8	16	0	33.4	60	4.8	147	45.5	18.3	0.8	12	11	122	12	0.46	0.6	0.6	A	17	5	0.7	284	34	0.6	114	56	1.3	
8	16	24	14.5	60	40.3	143	12.8	13.2	2.9	18	6	69	32	0.66	0.5	1.3	A	23	1	0.9	293	9	0.7	119	81	2.5	
3.6 ML ATWC																											
8	17	12	13.1	60	32.4	143	17.3	3.3	0.6A	3	2	290	26	0.38	2.8	14.8	D	343	5	1.6	261	8	3.4	107	78	27.8	
8	17	45	6.0	59	3.0	151	34.4	44.8	2.4	9	3	287	89	0.22	2.9	5.2	C	277	9	3.0	184	19	4.4	31	69	10.3	

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA DECEMBER 1985

ORIGIN TIME				LAT N		LONG W		Z	MAG	NP	NS	GAP	DI	RMS	SEH	SE2	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min	km				deg	km	sec	km	km		deg	deg	km	deg	deg	km	deg	deg	km
8	19	9	25.9	60	10.2	151	0.2	43.4	2.2	25	8	77	22	0.46	0.7	1.7	B	271	0	0.8	1	12	1.2	181	78	3.3
9	2	58	51.3	61	17.4	152	11.8	8.8	0.7	3	4	196	3	0.18	1.5	0.8	B	108	17	2.9	211	35	1.8	357	50	0.9
9	9	58	45.1	60	33.5	152	29.7	13.4	1.3	8	5	170	5	0.84	4.5	1.2	C	112	13	8.7	206	18	1.0	348	68	1.1
9	21	17	2.7	60	3.1	147	51.7	22.1	0.9	11	3	153	14	0.27	1.1	1.3	A	220	4	1.7	313	37	1.2	125	53	3.0
9	23	50	36.2	60	5.9	141	0.3	7.0	1.6	4	3	326	50	0.14	4.4	2.8	C	115	8	5.9	209	25	8.8	9	64	3.9
10	1	18	17.3	61	43.3	150	30.0	50.3	2.1	21	13	146	32	0.43	0.8	1.2	A	264	0	0.8	174	13	1.5	354	77	2.2
10	1	28	50.7	60	17.3	141	17.7	18.0	0.9	4	3	284	26	0.14	2.6	2.3	B	81	26	1.7	311	27	5.2	195	38	3.7
10	5	49	6.3	60	42.8	147	22.7	10.5	1.2	15	7	80	24	0.39	0.8	1.8	B	324	6	1.2	261	7	0.9	105	62	2.9
10	5	56	43.8	61	46.9	147	42.2	29.6	1.9	25	11	147	21	0.70	0.7	0.9	A	261	3	0.8	167	23	1.2	358	66	1.9
10	9	4	59.3	61	49.3	149	0.5	9.0	0.6A	4	4	258	7	0.17	3.8	2.3	C	261	0	1.3	135	23	6.5	351	48	2.3
10	10	37	58.1	59	50.6	141	27.9	4.8	1.6	7	6	295	28	0.59	2.0	1.2	B	158	27	2.3	81	33	1.8	291	47	2.2
10	12	42	12.9	59	51.3	141	27.4	13.8	1.2	5	4	318	58	0.27	2.7	3.9	C	139	14	3.7	81	26	2.7	260	48	6.6
10	15	9	26.9	60	15.0	141	18.0	17.0	1.7	7	5	241	27	0.18	1.6	1.3	B	34	20	1.2	289	35	3.3	148	48	2.2
10	19	27	17.6	60	22.0	141	20.3	17.3	1.9	8	4	226	22	0.30	1.8	1.3	B	301	13	3.4	35	16	1.2	174	69	2.4
10	21	57	43.5	60	11.7	140	56.4	13.0	1.1	4	3	300	48	0.16	2.5	2.7	B	315	7	3.6	81	27	2.3	215	46	5.1
11	3	46	41.4	61	18.7	139	55.8	12.9	1.6A	3	3	326	85	0.18	4.8	24.5	D	346	4	7.3	81	7	3.9	228	81	46.2
11	11	50	25.0	60	3.8	151	9.2	53.6	2.1	20	12	101	8	0.70	0.8	1.6	B	275	2	1.0	6	16	1.3	179	74	3.1
11	14	31	27.5	61	26.1	146	64.8	15.6	2.3	27	17	109	46	0.51	0.4	0.8	A	210	3	0.8	301	14	0.5	108	76	1.6
11	15	26	51.8	59	56.4	141	40.4	9.2	2.0	7	5	286	23	0.19	2.0	1.2	B	81	11	1.4	175	23	4.1	327	64	1.7
11	15	29	43.5	59	51.7	141	35.3	14.6	1.2	7	6	293	32	0.39	1.9	1.3	B	175	6	3.6	84	7	2.1	305	81	2.5
11	15	41	4.7	59	50.8	141	40.1	20.9	1.3A	6	2	308	30	0.28	8.2	5.5	D	51	21	3.7	306	33	18.2	167	49	2.6
11	16	22	25.8	60	19.1	141	50.7	8.1	0.9A	5	4	148	7	0.26	1.6	1.6	B	358	22	1.2	261	41	1.1	112	44	4.1
11	16	26	4.2	60	11.6	140	54.8	9.6	1.1	5	3	301	50	0.17	2.9	3.4	C	311	8	3.6	81	25	2.2	210	43	6.3
11	20	50	10.3	60	12.2	140	44.4	8.2	1.2	6	5	292	58	0.12	2.1	2.5	B	261	1	2.3	322	11	3.1	166	59	4.2
11	21	16	52.0	60	12.9	140	47.6	5.3	1.2	6	3	290	55	0.22	3.0	2.9	C	29	2	2.3	121	43	6.9	297	47	3.8
11	23	31	0.8	61	53.6	140	44.6	9.5	1.3A	5	2	303	108	0.18	7.4	7.8	D	61	16	9.2	318	59	5.6	169	47	19.0
12	1	16	0.7	60	15.4	140	42.1	10.9	1.2	5	3	305	59	0.18	1.9	2.8	B	81	11	1.4	312	11	2.3	197	48	4.6
12	3	27	40.9	60	37.5	143	5.0	0.6	0.7	3	2	190	23	0.17	0.8	25.0	D	333	0	0.9	261	0	1.3	0	90	99.0
12	8	54	55.7	60	2.0	153	0.0	105.9	3.3	15	6	206	19	0.27	1.6	1.2	B	280	25	3.1	169	39	1.6	34	41	2.3
12	13	22	34.7	59	13.3	145	21.0	4.9	2.4	10	5	263	138	0.14	2.7	2.6	C	31	4	4.9	125	45	2.0	297	45	6.7
12	14	13	57.4	60	26.8	142	16.5	23.4	0.7	4	2	162	31	0.13	0.9	1.9	B	142	1	1.2	81	14	1.0	236	58	3.2
12	15	27	56.5	59	52.7	153	24.7	131.1	2.9	12	7	225	47	0.67	1.8	2.2	B	300	7	2.8	207	26	3.2	44	63	4.2
13	5	35	22.5	60	14.9	141	46.1	10.3	1.5	10	5	196	12	0.34	0.9	0.8	A	216	3	0.8	124	34	1.9	310	56	1.2
13	9	39	19.5	61	27.0	151	13.8	5.5	0.9A	6	6	101	26	0.55	0.7	1.0	A	161	2	1.2	261	4	0.8	47	79	1.9
13	9	47	13.8	61	23.7	150	28.5	15.1	0.8A	7	6	102	16	0.57	0.8	1.1	A	209	9	1.4	117	12	0.9	335	75	2.2
13	15	18	28.0	61	48.7	149	2.0	6.1	0.4	7	6	171	7	0.41	0.9	0.9	A	11	25	1.3	261	40	0.9	125	41	2.2
13	19	32	7.7	60	15.7	140	49.3	4.2	1.5	8	7	270	52	0.26	1.4	1.4	B	36	2	1.4	127	43	3.2	304	47	2.0
14	0	35	57.9	60	15.6	141	8.8	14.9	0.9	4	3	291	35	0.18	2.7	2.5	B	155	2	4.9	81	34	2.2	248	53	5.3
14	3	20	6.2	60	28.0	141	34.0	8.6	1.2	9	6	196	16	0.35	1.5	1.4	B	18	18	0.8	271	41	1.8	126	43	3.4
14	11	20	20.5	61	32.4	151	50.3	20.2	0.6A	3	3	178	35	0.28	9.7	25.0	D	21	1	1.0	111	9	9.6	285	81	99.0
14	13	50	12.0	58	28.1	155	45.0	147.7	3.5	11	8	140	208	0.26	5.4	14.5	D	355	0	4.0	265	17	6.1	85	73	28.3
4.2 ML ATWC												FELT AT KING SALMON AIR FORCE BASE														
15	12	1	3.8	61	4.9	149	17.3	16.9	1.1	12	8	99	23	0.38	0.7	1.3	A	182	9	0.7	274	13	1.2	58	74	2.5
15	22	19	53.5	61	46.8	149	53.4	46.7	2.4	25	12	156	18	0.49	0.8	1.2	A	270	0	0.7	180	11	1.5	0	79	2.3
15	22	38	7.5	61	56.3	148	56.9	0.2	0.6	9	5	201	19	0.40	1.2	1.7	B	13	18	1.3	275	24	1.1	136	59	3.7
16	0	7	22.4	60	16.0	140	41.0	4.9	1.4	8	6	276	60	0.33	1.6	1.7	B	33	2	1.7	302	37	2.6	126	53	3.4
16	2	38	4.1	60	39.4	140	38.3	11.5	1.5	5	3	289	51	0.53	2.3	2.7	C	187	10	1.8	284	34	3.2	83	54	5.9
16	7	35	45.1	62	3.2	147	11.7	30.0	2.3	17	9	174	25	0.61	1.0	1.0	A	265	6	0.8	0	40	1.8	168	49	1.9
16	8	50	22.2	60	40.2	143	1.5	1.2	1.0	6	5	92	26	0.50	0.9	25.0	D	261	0	1.5	348	1	0.9	171	87	78.7

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA DECEMBER 1985

ORIGIN TIME				LAT N		LONG W		S	MAG	NP	NS	GAP	DI	RMS	SEH	SEZ	Q	AZ1	DP1	SE1	AZ2	DP2	SE2	AZ3	DP3	SE3
dy	hr	mn	sec	deg	min	deg	min																			
16	16	56	49.9	61	51.7	151	7.8	60.1	2.3	19	9	149	25	0.60	1.1	1.4	B	83	7	1.0	176	23	1.9	337	66	2.8
16	16	57	45.1	61	54.8	148	41.4	16.5	1.2	14	11	166	30	0.47	1.0	1.2	A	4	17	1.7	268	19	0.9	133	64	2.5
16	17	5	22.6	60	10.5	141	14.4	6.0	1.3	7	5	254	25	0.38	1.4	2.0	B	133	7	2.5	42	9	1.2	260	79	3.9
16	20	8	6.8	60	14.1	141	20.0	15.8	1.8	4	4	318	27	0.30	4.2	1.9	C	172	4	8.0	61	11	3.9	282	78	3.5
17	2	34	19.8	60	17.8	140	51.8	8.4	1.2	5	4	297	49	0.22	1.7	1.5	B	81	11	1.3	155	35	3.1	236	61	2.4
17	4	10	60.0	61	26.2	148	10.7	24.6	3.2	24	8	80	24	0.62	0.6	0.8	A	266	11	0.6	172	22	0.9	21	65	1.7
3.5 ML ATWC												FELT (II) AT CHICKALOON AND SUTTON.														
17	9	17	16.1	60	25.6	142	17.4	12.3	0.2A	5	5	126	81	0.23	1.0	3.5	C	278	1	0.7	8	10	1.5	182	80	6.6
17	11	43	58.6	61	18.1	152	7.4	5.9	-1A	3	2	179	4	0.09	25.0	25.0	D	127	25	1.5	15	36	1.1	241	41	99.0
17	13	31	15.8	61	53.8	149	17.0	5.0	1.8	21	12	165	23	0.36	0.4	0.5	A	5	8	0.7	272	22	0.4	114	66	1.1
17	13	26	40.4	60	48.7	143	15.3	1.7	0.6A	3	3	186	46	0.21	0.7	26.0	D	335	0	0.6	261	0	1.2	0	90	67.2
17	16	31	42.3	60	13.3	143	24.3	21.8	2.7	13	10	136	32	1.19	0.7	0.7	A	262	6	0.6	357	43	1.2	166	46	1.5
17	19	53	34.6	60	50.9	141	20.7	8.3	0.1	4	3	199	13	0.07	3.6	5.3	C	300	20	1.2	200	26	0.7	63	56	11.9
17	22	0	27.0	61	11.3	149	29.4	40.9	1.5	16	8	45	7	0.39	0.5	0.7	A	172	1	0.7	82	11	0.9	267	79	1.4
18	1	1	50.8	60	22.6	141	23.5	10.1	0.9A	4	4	221	52	0.07	4.8	8.2	D	18	7	0.6	284	29	2.0	120	60	17.8
18	2	55	4.9	60	28.0	145	27.7	14.4	0.5	4	3	280	16	0.30	2.9	0.9	C	182	5	5.4	90	15	3.2	290	74	1.3
18	5	49	7.9	61	47.5	148	57.0	11.1	1.3	14	11	166	3	0.57	0.5	0.4	A	261	31	0.5	137	36	1.0	16	35	0.8
18	8	6	21.2	61	53.1	149	16.4	9.0	1.3	19	8	184	22	0.71	0.5	0.7	A	4	5	0.8	270	34	0.4	101	55	1.6
18	10	27	8.3	60	5.1	141	29.4	15.2	1.2	5	3	255	31	0.15	1.7	1.7	B	42	20	0.9	149	39	1.7	291	44	4.2
18	13	31	29.2	59	35.7	145	42.1	14.6	1.6A	10	5	230	100	0.82	7.4	3.3	D	98	19	4.1	359	20	14.6	226	62	4.0
18	14	4	47.1	59	5.1	138	55.9	26.0	1.6A	4	4	334	206	0.55	25.0	25.0	D	44	1	24.7	313	34	11.0	135	56	99.0
18	14	31	37.9	60	10.6	141	7.3	14.4	0.4A	5	4	261	40	0.34	1.8	3.0	C	139	10	3.0	45	21	1.7	253	67	6.1
18	15	29	22.1	60	37.1	142	24.0	14.0	1.2	7	5	106	46	0.84	0.7	2.5	B	335	2	0.6	261	8	1.1	79	72	4.6
18	15	58	52.7	60	8.5	141	0.7	17.5	0.7A	5	4	270	47	0.34	1.7	3.0	C	128	5	3.1	26	25	1.5	229	64	6.2
19	3	26	17.9	61	56.5	150	21.8	45.5	1.9	24	9	169	41	0.54	0.7	1.0	A	90	2	0.6	359	11	1.3	190	79	1.8
19	3	26	41.8	62	10.4	147	10.0	33.2	2.8	22	11	191	39	0.66	1.0	0.6	A	276	7	0.7	8	19	1.9	167	70	1.1
19	4	6	28.2	60	26.2	141	28.0	14.3	1.2	5	4	208	18	0.18	1.3	0.9	A	22	13	0.6	287	22	2.5	140	64	1.6
19	4	22	15.1	61	31.9	151	11.2	15.0	0.6A	8	4	127	25	0.89	0.5	3.2	C	127	2	0.8	217	2	1.0	352	87	6.1
19	4	39	16.8	61	50.7	149	9.9	3.0	0.7	13	7	177	15	0.70	0.6	0.9	A	188	10	0.9	283	27	0.6	79	61	1.8
19	10	33	53.9	60	14.8	141	31.0	13.0	0.5	3	3	308	18	0.13	2.8	1.4	B	324	16	2.9	261	31	4.5	82	47	1.2
19	14	32	16.1	60	10.7	141	2.1	7.8	1.1	5	4	265	44	0.13	1.0	1.6	B	135	1	1.8	45	16	1.2	228	74	3.2
19	22	41	6.3	60	3.4	147	55.8	18.8	0.5	6	6	155	16	0.28	1.2	1.4	B	191	2	1.0	283	38	0.8	98	52	3.4
20	2	41	9.7	61	27.3	151	12.2	0.2	0.8A	5	4	107	25	0.65	0.4	0.9	A	261	4	0.6	346	6	0.8	136	81	1.7
20	2	49	39.8	61	43.3	149	45.8	44.8	2.2	28	14	148	10	0.63	0.7	0.8	A	270	3	0.6	180	9	1.2	18	81	1.6
20	3	39	11.2	59	59.8	163	1.4	99.6	2.7	13	6	211	24	0.39	1.7	1.2	B	219	12	3.3	318	36	2.4	114	51	2.1
20	3	59	20.9	61	31.4	146	37.2	29.5	2.2	24	9	72	37	0.62	0.4	0.7	A	195	4	0.6	286	9	0.6	81	80	1.4
20	12	1	59.3	60	2.7	147	47.7	22.1	1.2	10	9	147	10	0.35	0.6	0.8	A	346	11	1.1	261	29	0.7	96	59	1.8
20	14	46	49.9	61	54.7	150	24.6	65.3	3.1	28	9	165	40	0.38	1.0	1.5	B	83	1	0.9	173	10	1.9	347	80	2.8
3.1 ML ATWC																										
20	14	52	56.0	60	11.5	152	28.9	91.1	2.5	15	7	149	19	0.45	1.5	1.8	B	161	6	1.6	81	35	2.2	260	53	3.8
20	23	42	36.9	59	27.4	147	50.1	29.1	2.4	13	4	233	60	0.49	2.0	1.2	B	339	26	4.1	86	32	2.1	218	47	1.4
20	23	45	5.8	60	55.7	147	30.7	20.7	2.5	27	10	71	23	0.44	0.3	0.8	A	9	6	0.5	278	14	0.5	122	75	1.6
21	2	40	17.4	60	34.9	141	19.5	10.0	1.4	3	3	270	34	0.40	2.9	3.9	C	0	20	1.2	261	24	4.3	126	58	8.4
21	16	42	39.1	60	16.2	151	4.0	55.7	2.2	21	11	69	28	0.48	0.7	1.6	B	92	2	0.9	2	14	1.0	190	76	3.1
21	19	5	19.9	61	45.5	149	57.0	41.1	2.1	24	12	150	47	0.58	0.7	1.0	A	267	3	0.6	357	9	1.3	169	81	2.0
22	9	21	3.5	60	29.8	140	50.8	0.0	1.9	6	3	259	62	0.39	3.5	2.7	C	32	0	1.5	112	10	6.6	292	80	4.9
22	9	43	0.9	59	5.4	153	13.9	65.5	2.5	9	5	207	124	0.15	3.1	8.7	D	180	4	2.0	89	7	5.5	299	82	16.5
22	13	29	44.4	61	18.2	152	7.3	4.2	0.4	3	3	178	4	0.11	25.0	25.0	D	13	32	0.5	126	34	1.4	252	40	76.0
22	20	2	18.1	60	58.4	146	59.0	18.3	1.9	23	9	68	12	0.62	0.4	0.5	A	261	19	0.5	358	20	0.6	131	62	1.1

PRELIMINARY DETERMINATION OF HYPOCENTERS IN SOUTHERN ALASKA DECEMBER 1985

ORIGIN TIME			LAT N		LONG W		Z		MAG		NP NS		CAP DI		RMS SEH SEZ		Q AE1 DP1		SE1 AE2 DP2		SE2 AE3 DP3		SE3				
dy	hr	min	sec	deg	min	deg	min	km					deg	km	sec	km	km	deg	deg	km	deg	deg	km	deg	deg	km	
30	5	41	42.7	60	38.7	143	11.8	3.5	0.9A	3	3	229	64	0.07	2.8	25.0	D	371	0	1.0	361	2	2.0	51	60	99.0	
30	5	59	55.8	60	8.6	151	23.2	43.5	2.4	31	7	118	12	0.52	0.6	1.1	A	288	7	0.8	20	23	0.9	182	66	2.1	
30	6	8	14.7	59	47.5	153	45.0	140.3	4.0	10	4	164	68	0.25	3.1	1.9	C	32	22	6.2	138	34	3.1	276	48	2.8	
3.9 ML ATWC																											
30	7	6	45.6	59	56.8	141	23.3	18.5	0.8A	4	3	285	28	0.65	2.3	2.7	B	166	26	2.5	81	36	1.7	291	46	6.0	
30	10	16	34.5	60	8.4	141	7.5	0.1	0.7A	4	4	265	42	0.22	1.1	2.1	B	328	3	1.9	81	6	1.6	224	75	3.9	
30	10	43	58.9	62	36.2	143	35.0	13.2	0.9A	5	3	270	180	0.12	3.9	3.5	C	81	1	6.0	318	17	3.4	174	53	5.7	
30	12	41	4.4	61	27.0	150	15.8	50.9	4.4	31	1	90	26	0.44	0.7	1.7	B	261	1	0.8	165	15	1.1	355	74	3.3	
5.5 MB 5.2 ML ATWC FELT (V) AT ANCHORAGE AND EAGLE RIVER. FELT (IV) AT OHUGIAK, COOPER LANDING. ELMENDORF AIR FORCE BASE GIRDWOOD, KENAI, PALMER, PETERS CREEK, SKWENTNA, SUTTON, TYONEK, WILLOW AND WASILLA. FELT (III) AT SEWARD.																											
30	13	35	42.4	60	14.9	140	49.5	12.8	1.8	7	3	271	53	0.10	2.0	1.7	B	25	10	0.9	124	39	4.4	283	49	2.2	
30	14	0	31.3	61	27.3	150	17.8	54.1	2.8	25	5	93	24	0.46	0.7	1.0	A	82	6	0.8	175	21	1.1	337	68	2.0	
2.0 ML ATWC FELT AT ANCHORAGE.																											
30	14	7	16.3	61	18.2	150	46.3	63.2	2.5	14	3	244	53	0.46	1.8	2.0	B	81	19	1.2	175	24	3.1	315	60	4.2	
1.9 ML ATWC																											
30	14	23	16.9	62	36.9	148	41.3	45.7	3.3	22	3	227	92	0.44	2.2	5.2	C	82	4	1.4	351	15	3.3	187	74	10.0	
3.7 ML ATWC FELT (III) AT TALKEETNA.																											
30	14	35	37.9	61	27.3	150	18.3	54.8	3.1	30	4	95	23	0.49	0.7	1.2	A	81	1	0.8	171	19	1.2	348	71	2.4	
2.4 ML ATWC																											
30	14	43	6.5	62	4.4	150	20.5	9.5	1.5	9	4	205	47	0.48	2.6	2.3	B	268	14	0.8	9	40	6.2	163	47	2.4	
30	15	18	45.1	61	36.9	150	18.5	54.5	1.2A	16	11	92	23	0.45	0.5	1.1	A	280	2	0.8	190	3	0.9	44	86	2.0	
30	16	9	27.9	61	28.3	150	17.5	50.8	1.8	17	10	96	24	0.37	0.6	1.0	A	122	3	0.7	213	5	1.1	1	84	2.0	
30	16	28	56.8	61	27.8	150	17.8	55.5	2.0	20	11	94	24	0.58	0.4	0.9	A	104	7	0.6	195	7	0.8	330	80	1.8	
30	16	32	1.6	61	27.5	150	17.6	45.3	2.0	21	9	93	24	0.55	0.4	1.0	A	122	7	0.6	213	10	0.7	357	78	2.0	
30	17	48	26.5	61	27.0	150	20.5	49.7	1.8A	14	10	110	21	0.48	0.5	0.9	A	25	0	1.0	115	7	0.6	296	83	1.7	
30	19	45	22.6	60	29.9	148	58.1	30.1	2.1	31	10	84	22	0.55	0.3	0.5	A	353	1	0.6	263	5	0.4	94	85	1.0	
30	20	35	36.8	61	27.8	150	18.0	54.1	1.1A	8	5	112	24	0.28	1.2	2.2	B	280	2	1.3	189	12	2.0	19	78	4.2	
30	21	23	37.1	61	27.4	150	19.4	52.2	1.1A	9	7	111	22	0.37	0.9	1.2	A	103	1	0.9	13	2	1.7	220	88	2.3	
30	21	35	5.1	60	28.3	147	43.9	18.1	1.4	15	10	78	5	0.30	0.4	0.5	A	226	11	0.6	322	27	0.5	116	60	1.0	
30	22	14	55.2	60	16.1	141	17.5	0.3	0.8A	4	2	340	48	0.05	11.3	13.1	D	21	14	1.2	280	37	6.2	128	50	31.9	
30	22	40	4.2	60	4.0	139	10.4	18.1	2.0	4	3	319	155	0.40	25.0	25.0	D	0	16	10.9	261	34	7.9	110	52	99.0	
30	23	6	8.3	61	27.5	150	18.3	56.9	1.7	19	13	116	23	0.38	0.5	1.0	A	109	1	0.6	199	2	0.9	352	88	1.9	
31	1	27	16.1	61	28.0	150	17.6	51.5	1.7	18	9	95	24	0.26	0.6	0.8	A	110	5	0.6	201	15	1.0	2	74	1.6	
31	2	4	59.7	59	39.2	152	18.4	4.4	3.5	15	3	130	65	0.39	3.1	3.4	C	112	11	1.4	13	40	1.9	214	48	8.5	
4.6 MB 4.4 ML ATWC FELT (IV) AT HOMER AND (III) AT ANCHOR POINT.																											
31	4	38	5.5	61	28.9	150	15.9	50.9	1.9	22	10	97	26	0.23	0.5	1.1	A	268	2	0.6	177	11	0.9	8	79	2.1	
31	4	47	52.2	60	24.2	147	42.6	22.0	1.8	20	9	86	6	0.44	0.4	0.4	A	7	15	0.6	268	29	0.5	121	57	0.9	
31	4	53	51.0	61	9.0	150	17.5	6.3	0.9A	9	6	107	41	0.61	0.6	1.1	A	298	1	0.7	207	28	0.7	30	82	2.2	
31	6	54	30.5	60	1.1	147	22.7	26.4	0.4A	4	3	274	16	0.16	4.8	2.8	C	10	20	1.1	268	29	10.3	129	54	2.2	
31	9	25	23.6	60	14.1	141	30.7	17.7	0.7A	4	3	240	44	0.04	4.4	4.1	C	35	14	0.9	138	42	10.1	291	45	4.9	
31	9	58	38.5	60	11.0	140	58.4	0.9	0.8A	4	3	268	61	0.15	4.3	3.0	C	39	4	1.5	131	34	9.5	303	56	2.3	
31	12	20	8.7	59	48.9	152	9.8	0.6	2.0	14	5	124	55	0.54	2.3	1.1	B	118	11	0.7	212	21	4.6	2	66	1.3	
31	12	24	30.4	59	45.5	152	14.6	1.6	2.0	14	5	127	57	0.51	2.9	1.1	C	123	14	0.8	217	16	5.7	354	69	1.6	
31	17	49	59.0	60	31.6	147	0.9	27.6	1.2	18	12	94	32	0.55	0.4	0.6	A	261	14	0.5	342	20	0.6	134	64	1.2	

Appendix B

List of Previously Published Catalogs

- Lahr, J. C., Page, R. A., and Thomas, J. A., 1984, Catalog of earthquakes in south central Alaska, April-June 1972, U.S. Geological Survey Open-File Report, 35 p.
- Fogleman, K. A., Stephens, Christopher, Lahr, J. C., Helton, S. M., and Allan, M. A., 1978, Catalog of earthquakes in southern Alaska, October-December 1977, U.S. Geological Survey Open-File Report 78-1097, 28 p.
- Stephens, C. D., Lahr, J. C., Fogleman, K. A., Allan, M. A., and Helton, S. M., 1979, Catalog of earthquakes in southern Alaska, January-March 1978, U.S. Geological Survey Open-File Report 79-718, 31 p.
- Stephens, C. D., Astrue, M. A., Pelton, J. R., Fogleman, K. A., Page, R. A., Lahr, J. C., Allan, M. A. and Helton, S. M., 1982, Catalog of earthquakes in southern Alaska, April-June 1978, U.S. Geological Survey Open-File Report 82-488, 36 p.
- Stephens, C. D., Lahr, J. C., Fogleman, K. A., Helton, S. M., Cancilla, R. S., Tam, Roy and Baldonado, K. A., 1980, Catalog of earthquakes in southern Alaska, October-December 1979, U.S. Geological Survey Open-File Report 80-2002, 53 p.
- Stephens, C. D., Fogleman, K. A., Lahr, J. C., Helton, S. M., Cancilla, R. S., Tam, Roy and Freiberg, J. A., 1980, Catalog of earthquakes in southern Alaska, January-March 1980, U.S. Geological Survey Open-File Report 80-1253, 55 p.
- Fogleman, K. A., Stephens, C. D., Lahr, J. C., Rogers, J. A., Helton, S. M., Cancilla, R. S., Tam, Roy, Freiberg, J. A., and Melnick, J. P., 1983, Catalog of earthquakes in southern Alaska, April-June 1980, U.S. Geological Survey Open-File Report 83-14, 54 p.
- Fogleman, K. A., Stephens, C. D., Lahr, J. C., Rogers, J. A., Cancilla, R. S., Tam, Roy, Helton, S. M., Freiberg, J. A., and Melnick, J. P., 1983, Catalog of earthquakes in southern Alaska, July-September 1980, U.S. Geological Survey Open-File Report 83-15, 54 p.
- Fogleman, K. A. Stephens, C. D., Lahr, J. C., and Rogers, J. A., 1986, Catalog of earthquakes in southern Alaska for 1984, U.S. Geological Survey Open-File Report 86-99, 106 p.