204

MASTER

CGS-746-114

ALEUTIAN SEISMIC PROGRAM
SEISMOLOGICAL BULLETIN
DECEMBER 1970

12/70

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY
ROCKVILLE, MARYLAND 20852

JUNE 1971

PREPARED FOR THE U.S. ATOMIC ENERGY COMMISSION
NEVADA OPERATIONS OFFICE
UNDER CONTRACT AT(29-2)-746

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

NOTICE

THIS REPORT WAS PREPARED AS AN ACCOUNT OF WORK SPONSORED BY THE UNITED STATES GOVERNMENT. NEITHER THE UNITED STATES NOR THE UNITED STATES ATOMIC ENERGY COMMISSION, NOR ANY OF THEIR EMPLOYEES, NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR THEIR EMPLOYEES, MAKES ANY WARRANTY, EXPRESS OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS OR USEFULNESS OF ANY INFORMATION, APPARATUS, PRODUCT OR PROCESS DISCLOSED, OR REPRESENTS THAT ITS USE WOULD NOT INFRINGE PRIVATELY-OWNED RIGHTS.

AVAILABLE FROM THE
NATIONAL TECHNICAL INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VIRGINIA 22151

CGS-746-114

ALEUTIAN SEISMIC PROGRAM
SEISMOLOGICAL BULLETIN
DECEMBER 1970

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY
ROCKVILLE, MARYLAND 20852

JUNE 1971

PREPARED FOR THE U.S. ATOMIC ENERGY COMMISSION
NEVADA OPERATIONS OFFICE
UNDER CONTRACT AT(29-2)-746

This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor the United States Atomic Energy Commission, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

SEISMOLOGICAL BULLETIN

THE PURPOSE OF THIS BULLETIN IS TO COLLECT AND DISTRIBUTE PRELIMINARY DATA ACQUIRED FROM AN ALEUTIAN NETWORK OF SEISMIC STATIONS IN ORDER TO FACILITATE CURRENT STUDIES OF EARTHQUAKE OCCURRENCE IN THE ALEUTIAN ISLANDS. RECORD ARRIVAL TIMES AND AMPLITUDES ARE SCALED BY THE SPECIAL PROJECTS PARTY, LAS VEGAS, NEVADA. FINAL REDUCTION AND COLLATION OF DATA TO EVENT HYPOCENTERS AND DERIVATION OF RELATED PARAMETERS ARE PERFORMED BY THE SEISMOLOGY DIVISION, ROCKVILLE, MARYLAND. THIS COMPILATION IS PRELIMINARY AND MAY BE SUBJECT TO LATER REVISION ON THE BASIS OF CURRENT RESEARCH.

DESCRIPTION OF COLUMN HEADINGS

DATE - DAY, MONTH, AND YEAR IN GREENWICH MEAN TIME (GMT)
 STA - STATION CODE
 PHASE - NAME OF PHASE REPORTED
 I OR E INDICATES THE CHARACTER OF PHASE ARRIVAL
 C OR D IN THE FOURTH CHARACTER INDICATES DIRECTION OF FIRST MOTION
 TIME - ARRIVAL TIME OF PHASE IN HOURS, MINUTES, AND SECONDS (GMT)
 AMP - GROUND DISPLACEMENT OF PHASE IN MILLIMICRONS
 AMPLITUDES REPORTED WITH S PHASES ARE MAXIMUM SURFACE WAVE
 DISPLACEMENTS
 PER - PERIOD OF PHASE IN SECONDS
 MAG - STATION MAGNITUDE DEFINED BY

$$MB = -0.76 + \log_{10}(AMP/PER) + 0.91 \cdot \log_{10}(SLANT \text{ DISTANCE})$$
 FOR EVENTS OF EPICENTER DISTANCE LESS THAN
 200 KM FROM STATION
 DIST - GREAT CIRCLE DISTANCE TO EVENT IN KILOMETERS
 AZI - STATION TO EPICENTER AZIMUTH IN DEGREES TAKEN CLOCKWISE FROM NORTH
 RES - PHASE TRAVEL TIME RESIDUAL IN SECONDS (O-C)
 REMARKS- DESCRIPTIVE INFORMATION

DESCRIPTION OF HYPOCENTER INFORMATION

HYPOCENTER DATA ARE LISTED IN CHRONOLOGICAL ORDER AND ARE FOLLOWED BY ASSOCIATED PHASE ARRIVALS

FIRST LINE DATE
 ORIGIN TIME (GMT)
 GEOGRAPHIC COORDINATES
 DEPTH OF FOCUS IN KILOMETERS
 AVERAGE BODY WAVE (MB) AND SURFACE WAVE (MS) MAGNITUDES
 TYPE OF SOLUTION
 SECOND LINE GEOGRAPHIC REGION

ALEUTIAN SEISMIC NETWORK

CODE	STATION	PERIOD OF OPERATION	LATITUDE (DEG MIN SEC)	LONGITUDE (DEG MIN SEC)	ELEVATION (METERS)
ADK	ADAK OBSERVATORY		51 53 01.4 N	176 34 49.4 W	108
AG1	AMCHITKA GEOPHONE 1	02/10/69-04/10/69	51 24 58.2 N	179 10 49.8 E	
AG3	AMCHITKA GEOPHONE 3	02/10/69-04/10/69	51 25 25.8 N	179 11 24.6 E	
AMA	AMATIGNAK ISLAND	09/10/70-	51 17 17.5 N	179 06 33.5 W	503
AME	AMCHITKA EXPERIMENTAL	01/04/69-26/05/69	51 23 12.0 N	179 15 18.0 E	
ANA	AMCHITKA NORTH A	25/08/69-25/09/69 25/09/69-05/11/69 05/11/69-16/07/70 16/07/70-	51 37 39.8 N 51 37 34.9 N 51 37 39.8 N 51 37 34.9 N	178 39 22.7 E 178 39 41.8 E 178 39 22.7 E 178 39 41.8 E	177 133 177 133
ANB	AMCHITKA NORTH B	09/12/69-18/07/70	51 36 12.0 N	178 47 21.0 E	247
AND	AMCHITKA NORTH D	18/07/70-	51 33 44.4 N	178 57 12.4 E	187
ASB	AMCHITKA SOUTH B	25/05/69-	51 21 37.8 N	179 14 50.3 E	34
ASC	AMCHITKA SOUTH C	28/07/69-25/09/69 25/09/69-13/07/70 13/07/70-	51 27 44.9 N 51 27 41.9 N 51 27 44.9 N	179 09 53.9 E 179 07 29.9 E 179 09 53.9 E	40 36 40
ASD	AMCHITKA SOUTH D	29/05/69-06/06/69 06/06/69-	51 22 36.0 N 51 23 26.9 N	179 20 30.0 E 179 20 31.6 E	61
AWA	AMCHITKA WOOD-ANDERSON		51 22 28.5 N	179 15 09.6 E	
GSA	CAPE SARICHEF	22/11/70-	54 35 40.0 N	164 52 30.0 W	152
GMA	GRANITE MOUNTAIN	18/09/70-	65 25 43.0 N	161 13 55.0 W	856
LSI	LITTLE SITKIN ISLAND	16/08/69-18/09/69	51 55 10.8 N	178 32 01.8 E	145
OB3	OCEAN BOTTOM SEIS 3	30/09/69-17/10/69	50 59 00.0 N	179 21 30.0 E	-3317
OB5	OCEAN BOTTOM SEIS 5	27/09/69-17/10/69	51 19 00.0 N	178 27 30.0 E	-1234
OB6	OCEAN BOTTOM SEIS 6	26/09/69-18/10/69	51 46 30.0 N	179 06 30.0 E	-859
OB8	OCEAN BOTTOM SEIS 8	26/09/69-16/10/69	51 22 00.0 N	179 35 42.0 E	-1408
RAT	RAT ISLAND	14/10/70-	51 47 56.7 N	178 19 48.3 E	226
SMY	SHEMYA	17/11/70-	52 43 51.0 N	174 06 11.0 E	58
SSI	SEMISOPHOCHNOI ISLAND	13/08/69-04/11/69 17/10/70-	51 54 52.2 N 51 53 32.8 N	179 37 26.4 E 179 35 17.9 E	335 177

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
01	5 42	19.65	51.47 N 178.66 E	DEPTH = 40.9 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
01	AND	IPGD	05 42 27.3				23	243	.1	
01	RAT	IPGC	05 42 29.1				43	148	-.1	
01	ASB	IPGC	05 42 29.1	177.6	.1	4.10	43	286	.0	
		I(S)	05 42 35.8						-.2	
01	ASD	IPGC	05 42 29.8				48	280	.0	
01	SSI	IP C	05 42 33.8				80	234	-.0	
01	AMA	EP	05 42 43.3	110.0	.2	3.99	156	278	.0	
01	ADK	EP	05 43 4.7				332	264	-.3	
		ES	05 43 38.4						.4	
.....										
01	12 49	19.00	6.00 S 152.60 E	DEPTH = 34.0 KM MB = 5.4			TELESEISMIC SOLUTION			
NEW BRITAIN REGION										
01	ADK	EP	12 59 45.5				7048	215		
.....										
01	13 43	15.14	63.23 N 151.07 W	DEPTH = 31.0 KM			TELESEISMIC SOLUTION			
CENTRAL ALASKA										
01	GMA	EP	13 44 30.0				549	112		
.....										
01	18 14	38.60	10.97 S 163.39 E	DEPTH = 33.0 KM MB = 5.5 MS = 6.1			TELESEISMIC SOLUTION			
SOLOMON ISLANDS										
01	ADK	EP	18 25 20.0				7221	202		ER 1844110
		ES	18 34 2.0							
		EL	18 41 23.0							
.....										
01	19 29	16.60	52.42 N 169.08 W	DEPTH = 60.0 KM MB = 5.2			TELESEISMIC SOLUTION			
FOX ISLANDS, ALEUTIAN ISLANDS										
01	CSA	EP	19 30 8.4				370	231		
01	ADK	EP	19 30 24.3				517	80		
		ES	19 31 18.4							
01	AMA	EP	19 30 45.8				702	76		EP1930527,NICE
		EP	19 30 47.5							
		EP	19 30 48.4	191.6	.2					
01	SSI	EP	19 30 57.2				778	81		QP,REGIONAL
01	ASD	IP D	19 30 59.5				805	77		
		E(S)	19 32 36.7							
01	ASB	IP D	19 31 .2				812	77		
01	AND	IP D	19 31 2.2				827	79		
01	RAT	EP	19 31 8.0	118.0	.3		865	80		
01	SMY	EP	19 31 40.0				1139	85		
01	GMA	EP	19 32 11.3				1517	201		
.....										
01	19 40	33.78	51.05 N 179.95 W	DEPTH = 26.3 KM			FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
01	ASD	IPGD	19 40 44.9	26.3	.1	3.33	62	128	.1	
01	AMA	IPGD	19 40 45.1	20.4	.1	3.23	65	246	-.0	
01	ASB	EPG	19 40 45.4	7.5	.1	2.80	66	122	.1	
		IS	19 40 53.2						-.4	
01	SSI	IPGC	19 40 49.9	32.9	.1	3.59	99	161	-.3	
		IS	19 41 2.6						.4	
.....										

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
01	ASD	IPGC	19 43 51.6	29.1	.1	3.13				
01	ASB	IPGC	19 43 52.7	52.9	.2	3.16				
		IS	19 43 57.6							
01	AND	EP	19 43 57.2							V. POOR
01	AMA	E(P)	20 07 19.8	34.2	.1					MAY BE S WAVES
01	ASD	E(P)	20 07 32.2	23.8	.1					
01	ASB	E(P)	20 07 33.0	31.5	.1					

.....

01	21	9	37.20	51.40 N 175.30 W	DEPTH = 36.0 KM	MB = 5.6	MS = 5.8	TELESEISMIC SOLUTION		
ANDREANOF ISLANDS, ALEUTIAN IS.										
01	ADK	IP C	21 09 55.6			104	121	1.0		ML4.9 D1.2 FELT
		ES	21 10 11.0					3.7		
01	AMA	IP	21 10 13.2			265	86	-1.5		WHITE OUT
01	SSI	EP	21 10 26.4			357	97	.3		REGIONAL
01	ASD	IP	21 10 27.3			372	88	-6		
01	ASB	EP	21 10 28.6			379	87	-1		
01	AND	IP	21 10 31.0			399	90	-2		
01	RAT	EP	21 10 36.6			443	93	-0		
01	SMY	EP	21 11 15.0			740	97	1.7		
01	CSA	EP	21 11 24.0			783	247	5.3		
01	GMA	EP	21 13 20.6			1761	214	1.2		

.....

.....

01	21	29	54.80	51.41 N 175.30 W	DEPTH = 46.0 KM	MB = 4.6	TELESEISMIC SOLUTION			
ANDREANOF ISLANDS, ALEUTIAN IS.										
01	ADK	IP C	21 30 12.9			103	120	1.1		ML4.4 D1.2
		IS	21 30 28.1					4.0		
01	AMA	EP	21 30 30.8			265	86	-1.0		REGIONAL
01	SSI	EP	21 30 43.8			357	97	.7		QP
01	ASD	EP	21 30 44.7			372	88	-3		
01	ASB	EP	21 30 45.5	224.2	.3	379	87	-3		NOT PG TAMP
		I(L)	21 31 36.2							
01	AND	EP	21 30 48.3			399	90	.0		
		I	21 31 46.1							
01	RAT	EP	21 30 54.0	118.0	.3	443	93	.3		
01	SMY	EP	21 31 48.0			739	97	17.7		

.....

01	ADK	IP	21 32 10.9							ML4.2 D1.2
		IS	21 32 30.1							
01	AMA	EP	21 32 28.8							REGIONAL
		IP	21 32 34.0	255.5	.3					
01	ASD	EP	21 32 42.8							QP, POSS. O.L.
		EP	21 32 55.6							
		E(L)	21 33 31.1							
01	ADK	IP D	21 45 22.0							
		ES	21 45 37.3							
01	AMA	EP	21 45 40.1	119.3	.2					REGIONAL
		I(L)	21 46 22.0							
01	ASD	EP	21 45 54.0	76.2	.4					
01	ASB	EP	21 45 55.2	75.2	.3					
		E(L)	21 46 45.3							
01	AND	EP	21 45 57.7							
01	RAT	EP	21 46 3.4	55.3	.4					
01	ADK	EP	21 58 48.5							
		ES	21 59 3.9							
01	ADK	EP	22 02 55.8							
		ES	22 03 11.2							
01	ADK	EP	22 05 14.9							
		ES	22 05 29.0							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
01	ADK	EP	22 06 3.9							
		ES	22 06 19.8							
01	AMA	EP	22 06 21.9	139.3	.3					QP, REGIONAL
		I(L)	22 06 57.7							
.....										
02	0 37 55.90		51.24 N 174.16 E	DEPTH = 33.0 KM	MB = 4.2					TELESEISMIC SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
02	RAT	IP	00 38 38.1	40.2	.1		295	260	.7	
		IS	00 39 10.2						2.5	
02	AND	EP	00 38 42.3				335	266	.0	
		I	00 39 15.2							
02	ASB	EP	00 38 44.3	11.0	.1		354	270	-.4	
		IS	00 39 20.9						.6	
02	ASD	EP	00 38 45.1	8.5	.1		361	269	-.4	
02	SSI	EP	00 38 49.5	32.1	.1		382	261	1.4	
.....										
02	2 34 59.48		51.44 N 175.25 W	DEPTH = 57.0 KM	MB = 5.4					TELESEISMIC SOLUTION
			ANDREANOF ISLANDS, ALEUTIAN IS.							
02	ADK	IP D	02 35 16.8				104	118	-.1	ML5.1 D1.2 FELT
		ES	02 35 31.8						2.3	
02	AMA	EP	02 35 35.2				269	85	-1.8	LARGE REGIONAL
		IP	02 35 36.3							
02	SSI	EP	02 35 47.9				360	96	-.3	WHITE OUT
02	ASD	EP	02 35 49.4				376	87	-.7	
02	ASB	EP	02 35 50.8				382	87	-.2	
		E(L)	02 36 46.9							
02	AND	EP	02 35 52.9				402	90	-.5	
02	RAT	EP	02 35 58.6				446	93	-.2	
		IP	02 36 2.1							
02	SMY	EP	02 36 36.0				742	97	.7	
02	CSA	EP	02 36 43.4				778	247	3.7	
02	GMA	EP	02 38 40.8				1755	214	.4	
.....										
02	ADK	EP C	02 46 11.8							
		ES	02 46 28.3							
02	AMA	EP	02 46 29.9	75.0	.1					POOR REGIONAL
		E(S)	02 47 13.8							
02	ADK	EP	02 52 54.9							
		ES	02 53 11.2							
02	ADK	EP	03 14 11.1							
		ES	03 14 27.5							
.....										
02	3 34 17.70		51.37 N 175.18 W	DEPTH = 46.0 KM	MB = 4.3					TELESEISMIC SOLUTION
			ANDREANOF ISLANDS, ALEUTIAN IS.							
02	ADK	IP C	03 34 37.2				113	120	1.3	ML4.4 D1.2
		ES	03 34 53.4						4.3	
02	AMA	EP	03 34 55.6	290.6	.3		273	87	-.1	REGIONAL
		E(S)	03 35 31.4						8.0	
02	SSI	EP	03 35 8.8				366	97	1.7	
02	ASD	EP	03 35 9.6				380	88	.7	
02	ASB	EP	03 35 10.8	187.8	.3		387	88	1.1	POOR TAMP
02	AND	EP	03 35 13.4				407	91	1.2	QP
02	SMY	EP	03 35 55.5				749	97	1.1	
.....										
02	ADK	EP	03 37 12.1							
02	ADK	EP C	04 14 28.3							

DEC	STA	PHASE	TIME	AMP	PER	MAG	DIST	AZI	RES	REMARKS
1970			(GMT)	(MU)	(SEC)		(KM)	(DEG)	(SEC)	

ES 04 14 44.2

02	4 56	55.30	51.25 N 175.05 W	DEPTH = 38.0 KM	MB = 4.1					TELESEISMIC SOLUTION
ANDREANOF ISLANDS, ALEUTIAN IS.										
02	ADK	EP	04 57 16.5				127	123	.9	ML4.3 D1.1
		ES	04 57 31.1						.7	
02	AMA	EP	04 57 34.5	141.4	.2		283	89	-.3	REGIONAL
02	SSI	EP	04 57 46.8	341.8	.5		378	99	.3	VERY POOR P
02	ASD	EP	04 57 48.5				390	90	.4	
		E(S)	04 58 36.7						10.1	
02	ASB	EP	04 57 49.9	156.2	.4		397	90	1.0	
02	AND	EP	04 57 52.1				418	92	.6	
02	RAT	EP	04 57 58.0	100.2	.4		462	95	1.0	QP

02	ADK	EP	06 02 59.4							
		ES	06 03 15.1							
02	AMA	EP	06 03 13.2	20.8	.1					
		E(L)	06 04 47.7							
02	ASD	EP	06 03 25.6							
02	ASC	EP	06 03 26.4							
02	AND	EP	06 03 28.6							

02	ADK	EP	06 35 50.8							
		ES	06 36 7.4							

02	ADK	EP	06 49 59.4							
		ES	06 50 14.9							

02	ADK	EP	07 02 20.1							
		ES	07 02 36.1							

02	ADK	EP C	07 34 52.7							
		ES	07 35 9.0							

02	ADK	EP	07 43 15.9							
		ES	07 43 26.2							

02	ADK	EP	07 51 52.9							
		ES	07 52 9.1							

02	ADK	EP C	08 10 58.4							ML3.7 D1.1
		ES	08 11 13.4							

02	AMA	IP D	08 12 13.5	286.3	.3					MIN TAMP
----	-----	------	------------	-------	----	--	--	--	--	----------

02	8 11	37.20	51.42 N 175.29 W	DEPTH = 49.0 KM	MB = 4.3					TELESEISMIC SOLUTION
ANDREANOF ISLANDS, ALEUTIAN IS.										
02	ADK	IP C	08 11 55.2				103	119	1.0	ML4.3 D1.2
		ES	08 12 10.8						4.2	
02	AMA	EP	08 12 27.2				266	85	12.9	WHITED OUT

02	ADK	EP C	08 29 36.2							
		ES	08 29 51.6							
02	AMA	EP C	08 29 54.3	149.6	.3					
02	SSI	EP	08 30 7.5	261.4	.5					
02	ASD	EP	08 30 8.2	77.4	.3					
02	ASB	EP	08 30 9.8	101.4	.3					
		E(S)	08 30 51.0							
02	AND	EP	08 30 13.0							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
02	9 3	14.60	51.43 N 175.24 W	DEPTH = 52.0 KM		MB = 5.2	TELESEISMIC SOLUTION			
ANDREANOF ISLANDS, ALEUTIAN IS.										
02	ADK	IP C	09 03 32.7				106	118	.7	ML5.1 D1.2 FELT
		ES	09 03 48.8						4.1	
02	AMA	IP C	09 03 50.6				270	85	-1.5	WHITE OUT
02	SSI	EP	09 04 3.8				361	96	.4	REGIONAL
02	ASD	EP	09 04 4.7				376	87	-.6	
02	ASB	EP	09 04 5.5	763.0	.4		383	87	-.6	
		E(L)	09 05 7.5							
02	AND	EP	09 04 8.2				403	90	-.4	
02	RAT	EP	09 04 13.9				446	93	-.1	
02	SMY	EP	09 04 50.8				743	97	.3	
02	CSA	EP	09 05 2.3				778	247	7.5	
02	GMA	EP	09 06 57.3				1756	214	1.7	
.....										
02	ADK	EP	09 09 57.1							
		ES	09 10 13.1							
02	ADK	EP	09 15 26.3							
		ES	09 15 42.1							
02	ADK	EP	09 17 11.6							
		ES	09 17 28.0							
02	ADK	EP	09 30 31.8							
		ES	09 30 48.1							
.....										
02	10 15	2.60	8.50 S 155.28 E	DEPTH = 53.0 KM		MB = 4.8	TELESEISMIC SOLUTION			
SOLOMON ISLANDS										
02	GMA	E(P)	10 27 10.5				8940	224		
.....										
02	10 41	34.20	51.23 N 175.30 W	DEPTH = 59.0 KM		MB = 4.3	TELESEISMIC SOLUTION			
ANDREANOF ISLANDS, ALEUTIAN IS.										
02	ADK	EP C	10 41 53.0				115	129	.1	ML4.1 D1.2
		ES	10 42 9.1						2.6	
02	AMA	IP D	10 42 11.4	167.8	.1		265	90	.1	P SPIKE
02	SSI	EP	10 42 24.1	188.8	.3		361	100	1.0	REGIONAL
02	ASD	EP	10 42 25.2	155.7	.3		373	91	.7	
02	ASB	EP	10 42 26.2	302.7	.4		380	90	.9	
		I(S)	10 43 12.0						9.3	
02	AND	EP	10 42 29.0				401	93	1.1	
02	RAT	EP	10 42 34.7				445	96	1.2	
02	SHY	EP	10 43 7.7				745	99	-2.7	
.....										
02	ADK	EP C	12 54 25.5							
		ES	12 54 35.0							
02	AMA	IP C	12 54 44.0	255.5	.3					
		I(S)	12 55 12.2							
02	SSI	EP	12 54 57.0	92.2	.3					
02	ASD	EP	12 54 57.9	142.1	.3					
02	ASB	EP	12 54 59.3	236.3	.4					
		ES	12 55 39.5							
02	AND	EP	12 55 1.2							
		IP	12 55 4.7							
02	RAT	EP	12 55 7.0	82.6	.3					QP
02	AMA	IP D	13 15 49.3							AMA WHITED OUT
02	ASD	IP D	13 16 1.5	159.3	.2	4.10				POOR TAMP
		E(S)	13 16 17.2							
02	ASB	IP D	13 16 2.2	193.0	.3	4.02				

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
02	SSI	IP D	13 16 3.7							
02	AND	EP D	13 16 5.9							
		ES	13 16 25.0							
02	ADK	EP	13 16 9.9							
		ES	13 16 29.4							
02	RAT	IP D	13 16 12.8	108.2	.3					
02	AMA	IPGD	14 24 43.3							AMA WHITED OUT
02	ASD	EP	14 24 55.7	30.9	.2	3.41				
		IS	14 25 12.0							
02	ASB	EP	14 24 56.4	29.1	.2	3.39				
		IS	14 25 13.0							
02	SSI	IP D	14 24 57.7	47.7	.2					POOR TAMP
02	AND	EP	14 25 .3							
02	ADK	EP	14 25 3.7							
		ES	14 25 23.3							
02	RAT	EP	14 25 6.9							

02 15 25 46.70 10.86 S 163.46 E DEPTH = 36.0 KM MB = 5.3 MS = 6.5 TELESEISMIC SOLUTION
SOLOMON ISLANDS

02 ADK EP 15 36 32.2 7208 202 ER 1555220
ES 15 45 12.0
EL 15 52 50.0
02 GMA EP 15 37 57.0 8951 215

02 15 54 19.90 10.97 S 163.29 E DEPTH = 33.0 KM MB = 5.8 MS = 7.0 TELESEISMIC SOLUTION
SOLOMON ISLANDS

02 ADK EP 16 04 58.6 7224 202 ER 1624000
ES 16 13 50.0
EL 16 21 40.0

02 16 2 10.90 10.94 S 163.14 E DEPTH = 33.0 KM MB = 5.1 TELESEISMIC SOLUTION
SOLOMON ISLANDS

02 GMA E(P) 16 14 21.5 8968 215

02 RAT EP 17 27 3.3 9.6 .1 QP
02 AMA IPGC 17 27 44.1
02 ASD EP D 17 27 51.9 20.3 .1 3.36
02 ASB EP 17 27 52.6 13.6 .1 3.21
IS 17 28 4.0
02 SSI EP D 17 27 55.3 41.0 .1 3.75
IS 17 28 8.7
02 AND EP 17 27 56.9

02 18 14 51.50 56.00 N 164.00 W DEPTH = 232.0 KM MB = 4.8 TELESEISMIC SOLUTION
EERING SEA

02 CSA IP C 18 15 27.0 166 19
02 ADK EP 18 16 52.0 944 56
ES 18 18 25.8
02 AMA EP 18 17 11.6 1126 56 TELE
02 SSI EP 18 17 17.9 1168 61 POOR TAMP
02 ASB EP 18 17 22.3 1219 58
02 AND EP 18 17 23.2 1225 60
02 SMY EP 18 17 51.3 1464 67

02 AMA EP 18 17 12.1 187.3 .1 POOR TAMP
02 SSI EP 18 17 18.8 LOCAL

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

02	ASD	EP	18 17 22.0							
02	ASB	EP	18 17 22.8	32.6	.1					
02	AND	EP	18 17 24.0							
02	RAT	EP	18 17 28.4							

.....
 . 02 20 35 19.40 52.61 N 173.92 W DEPTH = 255.0 KM MB = 3.8 TELESEISMIC SOLUTION
 . ANDREANOF ISLANDS, ALEUTIAN IS.
 .

. 02	ADK	EP	20 36 .6				198	65	-.5	
		ES	20 36 32.2						.6	
. 02	AMA	IP C	20 36 17.9				385	66	-.8	REGIONAL
		I(S)	20 37 2.1						.0	
. 02	SSI	EP	20 36 24.8	23.5	.1		449	77	-.8	POSS.DEEP
. 02	ASD	EP	20 36 27.8				481	71	-1.3	
. 02	ASB	EP	20 36 28.5	361.0	.3		488	71	-1.4	
		I(S)	20 37 21.0						-.5	
. 02	AND	EP	20 36 29.6				501	74	-1.7	
. 02	RAT	EP	20 36 33.6				536	77	-1.7	

02	ADK	EP C	22 02 3.2							
		ES	22 02 19.0							
02	AMA	EP	22 02 21.7	36.7	.2					REGIONAL
02	SSI	EP	22 02 34.8	32.2	.2					
02	ASJ	EP	22 02 36.5	21.7	.2					QS
		E(S)	22 03 24.8							

02	ADK	EP	22 10 39.9							
		ES	22 10 56.1							

02	ADK	EP	23 31 17.4							
		ES	23 31 33.9							

.....
 . 03 0 0 34.38 52.15 N 176.89 E DEPTH = 75.0 KM FIXED DEPTH SOLUTION
 . RAT ISLANDS, ALEUTIAN ISLANDS
 .

. 03	RAT	EP	00 00 52.3	57.5	.1	3.92	106	292	-.4	
		IS	00 01 5.4						-.7	
. 03	AND	EP	00 00 58.1				156	295	-.4	
		IS	00 01 16.0						-.1	
. 03	ASB	EP	00 01 2.4	13.9	.1	3.47	184	299	.5	
		ES	00 01 22.5						.6	
. 03	ASD	EP	00 01 2.4	8.5	.1	3.27	189	297	.0	
. 03	SSI	EP	00 01 2.6	17.1	.1	3.57	187	280	.4	

03	ADK	EP	01 12 28.3							
		ES	01 12 43.7							

.....
 . 03 4 59 53.40 7.36 N 76.08 W DEPTH = 38.0 KM MB = 5.7 MS = 5.5 TELESEISMIC SOLUTION
 . NORTHERN COLOMBIA
 .

. 03	ADK	EP	05 12 54.2				10085	77		
------	-----	----	------------	--	--	--	-------	----	--	--

03	ADK	EP	06 45 50.8							
		ES	06 46 7.0							

.....
 . 03 10 25 6.85 51.99 N 178.38 E DEPTH = 134.8 KM FREE DEPTH SOLUTION
 . RAT ISLANDS, ALEUTIAN ISLANDS
 .

. 03	RAT	EP	10 25 25.2				22	8	-.1	
. 03	AND	EP	10 25 26.9				62	320	.1	
		ES	10 25 41.6						.2	
. 03	SSI	EP	10 25 28.2	56.9	.1	4.00	84	278	-.0	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
03	ASD	EP	10 25 29.1	9.5	.1	3.23	95	315	.1	
		ES	10 25 45.1						-.0	
03	ASB	EP	11 12 20.2	6.0	.1	3.02				
		E(S)	11 12 37.6							
03	AND	EP	11 12 20.4							
		IS	11 12 38.9							
03	ASD	EP	11 12 20.9	8.4	.1	3.18				
03	SSI	EP	11 12 28.6	21.4	.1					
		ES	11 12 53.0							
03	11 13 28.42	51.25 N 179.40 E DEPTH = 40.3 KM						FREE DEPTH SOLUTION		
		RAT ISLANDS, ALEUTIAN ISLANDS								
03	ASD	IPGC	11 13 35.4				16	165	.0	LOCAL
03	ASB	IPGC	11 13 35.4	289.7	.2	3.89	16	138	.0	
		ES	11 13 40.3						-.2	
03	AND	IP D	11 13 38.4				47	138	.1	
03	SSI	IP D	11 13 41.6				72	190	-.0	
03	RAT	IP C	11 13 44.6				96	129	-.1	
03	12 58 49.99	50.18 N 178.78 E DEPTH = 21.2 KM						FREE DEPTH SOLUTION		
		RAT ISLANDS, ALEUTIAN ISLANDS								
03	ASB	IP D	12 59 12.1	48.3	.1	3.87	136	194	.3	P SPIKE
		I	12 59 27.0							
03	ASD	IP D	12 59 12.6	10.8	.1	3.23	141	196	.1	
		ES	12 59 29.1						.1	
03	ASC	IP	12 59 13.1				145	191	-.2	
03	AND	IP D	12 59 14.3				154	184	-.3	
		ES	12 59 31.8						-.8	
03	AMA	EP	12 59 19.4	8.4	.1	3.25	193	231	-.5	QP
03	SSI	IP D	12 59 21.1	18.4	.1	3.60	199	197	.5	
03	13 51 32.24	51.39 N 179.29 E DEPTH = 54.7 KM						FREE DEPTH SOLUTION		
		RAT ISLANDS, ALEUTIAN ISLANDS								
03	ASD	IPGC	13 51 40.5	12.0	.1	2.90	4	267	-.1	
03	ASB	IPGC	13 51 40.6	14.9	.1	2.99	4	42	.0	
		IS	13 51 46.6						-.0	
03	ASC	IPG	13 51 40.8				12	133	.1	
03	AND	EP	13 51 41.7				30	129	.0	
03	SSI	EP	13 51 44.4	8.1	.1	2.88	60	200	.0	
03	RAT	EP	13 51 46.7	5.8	.1	2.81	81	124	-.0	
03	19 39 28.25	51.48 N 178.91 E DEPTH = 23.5 KM						FREE DEPTH SOLUTION		
		RAT ISLANDS, ALEUTIAN ISLANDS								
03	AND	IPGD	19 39 32.6				9	201	.1	LOCAL
03	ASB	EP	19 39 34.4	21.1	.1	2.98	27	300	.2	
		IS	19 39 38.5						-.1	
03	ASD	IPGD	19 39 34.9	8.3	.1	2.61	32	289	.1	
		ES	19 39 39.5						-.1	
03	RAT	EP	19 39 37.6	6.7	.1	2.67	53	131	-.2	QP,QTAMP
03	SSI	IPG	19 39 39.7	41.0	.1	3.53	65	226	.1	
		ES	19 39 47.7						-.1	
03	AMA	IPGC	21 50 53.0							AMA WHITED OUT.
03	ASD	EP	21 51 8.7	5.3	.1	2.94				
		ES	21 51 25.1							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
03	SSI	EP	21 51 9.6	17.1	.1	3.45				
		ES	21 51 26.1							
03	ASB	EP	21 51 9.7	6.7	.1	3.05				
		ES	21 51 26.4							
.....										
03	22 0 42.21		51.66 N 178.47 E	DEPTH = 71.7 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
03	RAT	IPGD	22 00 52.9				18	149	-.0	WHITE OUT
03	AND	IPGD	22 00 53.9				35	288	.1	NICE ONE
03	ASB	IPGD	22 00 55.9	139.7	.1	4.08	63	302	-.1	
		E(S)	22 01 6.0						-.0	
03	ASD	IPGD	22 00 56.3				68	297	-.1	
03	SSI	IP	22 00 57.7				81	252	-.0	
03	AMA	IP	22 01 8.3				173	285	.1	
03	ADK	EP	22 01 27.7				342	268	-1.2	
		ES	22 02 2.1						-.8	
.....										
04	0 0 14.60		51.41 N 179.40 E	DEPTH = 54.7 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
04	ASD	IPGC	00 00 23.0	4.5	.1	2.47	4	64	.1	
		ES	00 00 29.0						.0	
04	ASB	IPGD	00 00 23.1	7.7	.1	2.71	12	63	.0	
		IS	00 00 29.2						-.1	
04	ASC	IPGC	00 00 23.3				17	110	.0	
04	AND	EP	00 00 24.4				35	119	-.0	QP
04	ANA	EP	00 00 26.5				57	115	.1	
04	RAT	IP D	00 00 29.6	6.8	.1	2.90	86	120	-.1	
		IS	00 00 40.8						.1	
.....										
04	5 15 27.56		51.42 N 178.97 E	DEPTH = 55.0 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
04	AND	IP C	05 15 36.1				15	176	-.1	
		ES	05 15 42.4						-.1	
04	ASC	IP	05 15 36.2				14	253	.0	
04	ASB	IP	05 15 36.4	30.4	.1	3.33	21	290	-.0	
		ES	05 15 43.1						.2	
04	ASD	IP C	05 15 36.7	19.2	.1	3.14	26	278	-.1	
04	ANA	EP	05 15 37.2				31	136	.1	
04	SSI	EP	05 15 40.6				67	220	.0	
.....										
04	ADK	EP	05 39 34.5							
		ES	05 39 46.0							
.....										
04	8 36 28.07		51.20 N 178.13 E	DEPTH = 34.8 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
04	ANA	EP	08 36 39.2				60	218	.0	
04	AND	EP	08 36 40.5				70	236	-.1	
04	ASC	EP	08 36 41.7				78	249	.0	
04	ASB	EP	08 36 42.0				80	258	.0	
		ES	08 36 52.1						.0	
04	ASD	EP C	08 36 42.9				87	257	-.1	
04	SSI	IP C	08 36 48.6	29.9	.1	3.64	127	233	.0	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

04	9 51 16.12		9.78 N	79.68 W	DEPTH =	20.0 KM	MB = 5.3	MS = 5.2	TELESEISMIC SOLUTION	
			PANAMA							

04	GMA	EP	10 03 12.0				8634	94		
----	-----	----	------------	--	--	--	------	----	--	--

04	ADK	EP	18 13 39.4							
		ES	18 13 55.9							

04	AMA	IP C	18 19 42.5	37.5	.1					
04	RAT	E(P)	18 19 51.8	27.2	.3					

VERY NOISY

04	ASC	EP	18 19 53.4							
04	ASB	E(P)	18 19 54.0							
		ES	18 20 4.6							

04	ADK	IP C	18 38 47.9							
		ES	18 39 4.2							

04	AMA	EPN	18 39 6.0	37.7	.2					
		EP	18 39 7.9							
		ES	18 39 43.1							

04	ASD	E(P)	18 39 20.9							
04	ASC	EP	18 39 22.3							
04	RAT	EP	18 39 30.2							

04	21 58 26.82		60.96 N	151.22 W	DEPTH =	89.0 KM			TELESEISMIC SOLUTION	
			SOUTHERN ALASKA							

04	GMA	EP	21 59 31.3				708	130		
----	-----	----	------------	--	--	--	-----	-----	--	--

05	ADK	EP	01 49 19.5							
		ES	01 49 44.3							

05	ADK	EP	10 00 46.2							
		ES	10 01 2.7							

05	18 24 41.57		51.40 N	178.77 E	DEPTH =	46.8 KM			FREE DEPTH SOLUTION	
			RAT ISLANDS, ALEUTIAN ISLANDS							

05	AND	IP C	18 24 49.7				22	214	.0	
05	ANA	I(P)	18 24 50.2				27	163	.2	
05	ASC	IP	18 24 50.3				28	255	.2	
05	ASB	IP C	18 24 50.5				33	277	-.0	
		ES	18 24 56.6						-.4	
05	ASD	IP C	18 24 51.2				40	271	.1	
05	RAT	EP	18 24 52.4	71.9	.1	3.78	54	145	-.3	
05	SSI	IP C	18 24 55.6				79	226	.0	

05	21 35 59.90		52.31 N	174.25 W	DEPTH =	185.0 KM	MB = 3.9		TELESEISMIC SOLUTION	
			ANDREANOF ISLANDS, ALEUTIAN IS.							

05	ADK	EP	21 36 32.5				167	73	-.1	
		ES	21 36 57.0						.6	
05	AMA	IP	21 36 52.0	88.0	.2		354	69	.3	
		ES	21 37 30.0						.5	
05	SSI	IP	21 36 59.2	25.8	.2		424	81	-.6	
05	ASD	EP	21 37 2.5	52.6	.2		453	75	-.5	
05	ASB	EP	21 37 3.3	96.5	.2		460	74	-.6	
		ES	21 37 50.0						-.6	
05	ASC	EP	21 37 3.7				462	76	-.5	
05	AND	EP	21 37 4.6				474	77	-1.0	
05	ANA	EP	21 37 7.6				492	78	-.1	
05	RAT	EP	21 37 10.1				511	81	.2	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
06	0 53	1.80	51.38 N 175.42 W	DEPTH = 65.0 KM MB = 4.1		TELESEISMIC SOLUTION				
ANDREANOF ISLANDS, ALEUTIAN IS.										
06	ADK	IP D	00 53 19.1				98	124	.4	
		IS	00 53 34.7						3.7	
06	AMA	EP C	00 53 37.1	123.9	.3		257	86	-0.8	
06	SSI	EP	00 53 50.3				349	97	1.0	
06	ASD	E(P)	00 53 51.3				364	88	.3	
06	ASB	E(P)	00 53 52.8				370	88	.9	
		ES	00 54 36.9						8.5	
06	ASC	EP	00 53 53.2				376	89	.7	
06	AND	E(P)	00 53 54.8				390	91	.5	
06	RAT	E(P)	00 54 2.4				434	94	2.6	
.....										
06	2 2 46.70		51.93 N 178.39 E	DEPTH = 108.8 KM		FREE DEPTH SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS										
06	RAT	IP	02 03 1.7	19.1	.1	3.38	15	16	-0.1	
		ES	02 03 12.8						-0.0	
06	ANA	E(P)	02 03 2.8				39	331	.2	
06	AND	IP D	02 03 3.5				56	317	-0.0	
06	ASC	EP	02 03 5.0				75	314	.2	
06	SSI	EP	02 03 5.4	3.8	.1	2.76	82	273	.0	
		ES	02 03 15.7						-3.3	
06	ASB	EP	02 03 5.7	6.1	.1	2.97	87	317	-0.0	
06	ASD	EP	02 03 5.8				89	313	-0.1	
.....										
06	2 32 19.91		17.26 S 176.33 W	DEPTH = 48.0 KM MB = 4.9		TELESEISMIC SOLUTION				
FIJI ISLANDS REGION										
06	GMA	E(P)	02 44 42.0				9254	195		
.....										
06	ASB	IP	04 24 19.5	13.6	.2	3.03				
		EP	04 24 24.1							
		ES	04 24 35.1							
06	ASD	IP C	04 24 20.1	36.7	.1	3.77				
06	ASC	IP	04 24 21.6							
06	AND	EP	04 24 21.6							
06	AMA	EPG	04 24 21.8							
		EP	04 24 27.0							
06	RAT	E(P)	04 24 24.7							
06	SSI	EP	04 24 28.5	38.5	.1					
06	ADK	IP	06 25 41.4							
		IS	06 25 58.1							
.....										
06	7 6	.40	51.01 N 178.67 E	DEPTH = 25.0 KM MB = 3.9		TELESEISMIC SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS										
06	ASB	IP D	07 06 10.3				56	226	-0.1	
		ES	07 06 18.3						.6	
06	ASD	IP D	07 06 11.1				63	228	-0.3	
06	ASC	IP C	07 06 11.3				61	215	.2	
06	AND	IP D	07 06 11.9				64	198	.3	
06	ANA	EP	07 06 12.9				68	180	.7	
06	RAT	IP D	07 06 15.6	115.0	.1	4.10	91	165	.1	
06	SSI	EP	07 06 19.4				117	213	-0.0	
06	AMA	E(P)	07 06 25.0				158	260	-0.6	
.....										
06	ADK	IP C	07 11 46.9							
		IS	07 12 3.0							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

06	AMA	E(P)	07 12 5.8							
		ES	07 12 46.6							
06	ASD	E(P)	07 12 19.9							
06	ASC	E(P)	07 12 21.5							

06 8 36 53.30 51.68 N 169.18 W DEPTH = 147.0 KM MB = 3.8 TELESEISMIC SOLUTION
FOX ISLANDS, ALEUTIAN ISLANDS

06	ASD	IP C	08 38 36.4				797	83		
06	ASB	EP	08 38 37.4				804	83		
06	ASC	EP	08 38 38.2				808	84		
06	AND	EP	08 38 39.7				822	84		
06	RAT	EP	08 38 44.4	16.0	.3		863	86		

06	ADK	IP C	11 29 44.3							
		IS	11 30 .5							

06 14 15 37.65 51.22 N 179.43 E DEPTH = 41.5 KM FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

06	ASD	IP C	14 15 45.0				20	161	-.0	
06	ASB	IP C	14 15 45.0	139.9	.2	3.59	20	139	-.0	
		ES	14 15 50.0						-.4	
06	ASC	IP	14 15 46.3				32	145	.2	
06	AND	IP D	14 15 48.1				50	138	.0	
06	ANA	EP	14 15 50.7				70	130	.2	
06	SSI	IP	14 15 51.2				75	188	-.0	
06	RAT	EP	14 15 54.1	43.2	.1	3.72	100	129	-.1	
06	AMA	EP	14 15 54.5				102	267	.0	

06	ANA	IP	16 50 41.5							
06	AND	IP D	16 50 41.9							
		ES	16 51 5.9							
06	ASB	IP	16 50 42.5	143.7	.2					
		ES	16 51 5.9							
06	ASC	IP	16 50 42.6							
06	RAT	IP	16 50 42.9							
06	ASD	EP	16 50 43.2	31.8	.2					
06	SSI	EP	16 50 50.6							
06	AMA	EP	16 50 58.7							
06	AMA	IP D	17 26 49.6	68.8	.2					
06	SSI	IP	17 27 4.4							
06	ASD	IP	17 27 5.6							
		ES	17 27 22.5							
06	ASB	EP	17 27 6.6	21.1	.2	3.27				
		ES	17 27 24.1							
06	ASC	EP	17 27 7.7							
06	AND	EP	17 27 9.6							
06	RAT	E(P)	17 27 15.5	6.8	.2					

06 18 35 24.98 50.91 N 178.06 E DEPTH = 25.0 KM FIXED DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

06	ANA	IP	18 35 40.1				90	208	.1	
06	AND	EP	18 35 40.9				96	221	.1	
06	ASB	IP D	18 35 41.1	53.0	.2	3.48	97	240	.1	
		ES	18 35 52.7						-.0	
06	ASC	EP	18 35 41.4				99	232	.1	
06	RAT	IP	18 35 41.5	5.4	.1	2.81	101	191	-.1	
06	ASD	EP	18 35 41.9	12.0	.2	2.87	104	240	-.2	
06	SSI	EP	18 35 49.2	9.2	.1	3.20	152	225	-.2	

PAGE 70-12- 17

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS	
06	20 20	52.19	41.80 N 143.51 E	DEPTH = 48.0 KM MB = 5.7 MS = 6.1			TELESEISMIC SOLUTION				
HOKKAIDO, JAPAN REGION											
06	ADK	EP	20 26 46.5				3199	265	EL 203430.0		
		ES	20 31 34.0								
		ER	20 33 29.0								
06	ADK	IP D	23 06 43.0				FELT ML 4.3				
		IS	23 06 49.9								
06	AMA	E(P)	23 06 57.4	26.9	.2						
		EPG	23 06 58.6								
06	SSI	EP	23 07 9.6				WHITEOUT				
06	ASD	EP	23 07 11.3								
06	ASB	EP D	23 07 12.7								
		ES	23 07 43.0								
06	ASC	EP	23 07 13.3								
06	AND	EP	23 07 15.0								
06	ANA	EP	23 07 17.8								
06	RAT	EP	23 07 20.4								
07	2 8	24.20	51.26 N 178.36 E	DEPTH = 80.2 KM			FREE DEPTH SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS											
07	ANA	E(P)	02 08 37.3				46	207	-.1		
07	AND	E(P)	02 08 37.9				53	230	.0		
07	ASC	E(P)	02 08 38.4				60	248	-.0		
07	RAT	E(P)	02 08 38.5	4.8	.1	2.74	61	178	.0		
		ES	02 08 48.9								
07	ASB	E(P)	02 08 38.7	16.5	.1	3.28	63	260	.1		
		EP	02 08 49.4								
07	2 48	44.50	50.81 N 179.17 W	DEPTH = 23.0 KM MB = 3.9			TELESEISMIC SOLUTION				
DELAROF ISLANDS, ALEUTIAN ISLANDS											
07	AMA	IP D	02 48 54.1				54	184	-.0		
07	ASD	EP	02 49 4.3				123	121	-.1		
07	ASB	IP	02 49 5.0				127	118	-.0		
		ES	02 49 19.7								
07	ASC	EP	02 49 6.4				138	121	-.2		
07	SSI	IP D	02 49 7.7				149	144	-.6		
07	AND	EP	02 49 9.0				156	122	-.4		
07	ANA	E(P)	02 49 12.2				177	120	-.0		
07	RAT	E(P)	02 49 15.7				206	121	-.2		
07	ADK	EP	02 49 17.4				216	237	.3		
		ES	02 49 41.2								
07	6 9	25.68	51.34 N 179.79 E	DEPTH = 32.4 KM			FREE DEPTH SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS											
07	ASD	IP C	06 09 32.9				32	100	-.1		
07	ASB	IP C	06 09 33.9				38	93	.2		
		IS	06 09 39.4								
07	ASC	IP	06 09 34.9				45	107	.2		
07	AND	EP	06 09 37.1				63	113	.0		
07	SSI	EP D	06 09 37.1	132.6	.1	3.93	63	167	.0		
07	AMA	IP D	06 09 39.0	70.8	.1	3.84	77	275	-.0		
07	ANA	IP	06 09 40.2				84	112	.1		
07	RAT	EP	06 09 44.1				113	116	-.2		

DEC	STA	PHASE	TIME	AMP	PER	MAG	DIST	AZI	RES	REMARKS
1970			(GMT)	(MU)	(SEC)		(KM)	(DEG)	(SEC)	

07	10 35 34.18	51.59 N 180.00 W DEPTH = 83.2 KM					FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
07	SSI	E(P)	10 35 47.5				44	139	-0.0	
07	ASD	EP	10 35 47.9				51	64	-0.1	
07	ASB	EP	10 35 48.6				58	64	-0.1	
		ES	10 35 58.9						-0.1	
07	ASC	EP	10 35 48.9				60	76	-0.2	
07	AMA	IP	10 35 49.4	35.5	.2	3.77	70	299	-0.1	
		ES	10 36 .9						-0.2	
07	AND	E(P)	10 35 49.6				73	87	-0.2	
07	ANA	E(P)	10 35 51.8				93	92	-0.1	

07	16 44 15.63	51.34 N 179.61 E DEPTH = 60.1 KM					FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
07	ASD	IP C	16 44 25.0				19	106	-0.0	
07	ASB	IP C	16 44 25.3				25	94	-0.0	
		ES	16 44 32.4						-0.0	
07	ASC	EP	16 44 26.0				33	113	-0.1	
07	AND	IP C	16 44 27.2				51	118	-0.1	
		ES	16 44 35.9						-0.0	
07	SSI	EP	16 44 28.3				61	179	-0.0	
07	ANA	EP	16 44 29.6				73	115	-0.1	
07	AMA	EP	16 44 31.4				90	274	-0.0	
07	RAT	IP C	16 44 32.8	62.3	.1	3.92	102	119	-0.0	

07	AMA	IR D	20 05 47.8	31.4	.2	3.29	NOISY			
		E(S)	20 05 59.7							
07	ASD	E(P)	20 05 56.8							
07	ASC	EP	20 05 58.2							

07	21 35 21.40	29.67 N 140.01 E DEPTH = 179.0 KM MB = 5.9					TELESEISMIC SOLUTION			
SOUTH OF HONSHU, JAPAN										
07	RAT	EP	21 42 6.0				3992	247		TELESEISMIC
07	ANA	EP	21 42 7.7				4006	248		
07	AND	EP	21 42 8.3				4022	248		
07	ASB	E(P)	21 42 9.2				4033	249		
07	ASC	EP	21 42 5.8				4031	248		
07	ASD	EP	21 42 9.8				4040	249		
07	SSI	EP	21 42 12.4				4076	248		
07	AMA	E(P)	21 42 14.3				4137	250		
07	ADK	EP	21 42 29.8				4325	252		
		ES	21 48 10.0							
		ESS	21 52 24.2							

08	7 5 35.78	51.81 N 179.42 E DEPTH = 96.5 KM					FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
08	SSI	EPG	07 05 49.4	37.2	.1	3.62	15	233	-0.0	
08	ASD	IPG	07 05 50.5	33.9	.1	3.62	47	6	-0.2	
08	ASC	EPG	07 05 50.5				43	24	-0.0	
08	AND	IPG	07 05 50.5				42	49	-0.1	
08	ASB	EPG	07 05 51.1	20.5	.1	3.41	52	13	-0.1	
		IS	07 06 2.0						-0.1	
08	ANA	EPG	07 05 51.5				56	68	-0.2	
08	RAT	IPGC	07 05 52.5	59.5	.1	3.91	75	89	-0.2	
08	AMA	EP	07 05 56.7	15.0	.2	3.10	117	300	-0.0	

08	AND	EP	07 28 20.1							
----	-----	----	------------	--	--	--	--	--	--	--

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
08	ASC	EP	07 28 20.7							
08	ASD	EP	07 28 21.6	1.8	.1	2.11				QTAMP
		ES	07 28 28.0							
08	RAT	EP	07 28 23.1	5.7	.1	2.65				
		ES	07 28 30.3							

.....

08	8 18 36.13	51.40 N 179.29 E	DEPTH = 61.2 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
08	ASD	IPGD	08 18 45.2	75.0	.1	3.74	4	291	-.0	
08	ASB	IPGD	08 18 45.3	44.9	.1	3.52	6	30	.0	
		IS	08 18 51.9						-.0	
08	ASC	IPG	08 18 45.4				11	127	.0	
08	AND	IPG	08 18 46.1				29	127	-.1	
08	ANA	IPG	08 18 48.0				50	119	.2	
08	SSI	EP	08 18 48.6	40.6	.1	3.60	58	201	.0	
08	RAT	IPGD	08 18 50.7	29.7	.1	3.53	80	123	-.1	

.....

08	AMA	IPGC	12 02 17.8	75.0	.1	4.13				
		ES	12 02 35.9							
08	ASD	E(P)	12 02 32.2	2.2	.1					
08	ASC	E(P)	12 02 35.3							

.....

08	13 35 55.25	51.89 N 178.42 E	DEPTH = 110.4 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
08	RAT	IPGD	13 36 10.4	292.4	.1	4.57	11	32	-.1	
		IS	13 36 21.6						-.0	
08	ANA	IPGD	13 36 11.3				33	330	.2	
08	AND	IPGD	13 36 12.0				52	314	.0	
		ES	13 36 23.9						-.3	
08	ASC	EPG	13 36 13.2				70	313	.1	
08	SSI	IPGD	13 36 13.9	37.6	.1	3.76	81	270	-.0	
		IS	13 36 27.7						.1	
08	ASB	IPGD	13 36 14.0	51.9	.1	3.90	82	316	-.1	
		ES	13 36 27.9						.1	
08	ASD	IPGD	13 36 14.2				84	311	-.0	
08	AMA	EP	13 36 24.1				184	292	-.0	

.....

.....

08	15 45 42.57	51.83 N 179.66 E	DEPTH = 99.7 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
08	SSI	IPG	15 45 56.5	7.5	.1	2.93	9	146	.0	
		ES	15 46 6.6						-.0	
08	AND	IPG	15 45 58.2				57	59	-.3	
08	ASC	IPG	15 45 58.2				53	40	-.0	
08	ASB	IPG	15 45 58.6	8.4	.1	3.04	59	29	-.0	
08	AND	EPG	15 45 58.6				57	59	.1	
08	ANA	IP	15 45 59.9				72	72	.3	
08	RAT	IP	15 46 1.1				92	88	-.1	
		I	15 46 2.6							

.....

08	AMA	IPGD	16 26 56.1							AMA OL
08	ASD	EP	16 27 12.1	6.0	.1	2.92				
08	SSI	EP	16 27 13.1	15.8	.1					
08	ASB	EP	16 27 13.4	5.7	.1	2.93				
		ES	16 27 27.9							
08	ASC	EP	16 27 14.3							
08	AND	EPG	17 14 28.1							
08	ASC	EPG	17 14 28.8							
		ES	17 14 34.9							
08	ASB	EPG	17 14 29.3	1.5	.1	2.03				QTAMP

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
08	ASD	EPG	17 14 29.8	1.4	.1	1.99				
		ES	17 14 36.1							
08	CSA	EP	17 14 48.5							
08	AMA	EP	17 16 30.1	8.7	.2					V.EMERGENT SHK
		E(S)	17 17 15.5							
08	ASD	EP	17 16 32.7	2.1	.1					REGIONAL
08	ASB	EP	17 16 33.4	18.0	.3					
08	ASB	EP	19 07 12.4	6.1	.2	2.71				QP
08	ASD	EP	19 07 13.6	2.8	.1	2.70				
		E(S)	19 07 31.4							
08	ASC	EP	19 07 14.0							
08	AND	EP	19 07 14.4							
08	ANA	EP	19 07 15.0							
08	RAT	EP	19 07 16.9	6.4	.2					
08	SSI	EP	19 07 22.0	15.3	.2					
08	AMA	IPG	21 22 10.1							AMA WHITE OUT
08	ASD	IP	21 22 20.1	13.6	.1	3.30				QS
		E(S)	21 22 34.6							
08	ASB	IP	21 22 21.0	12.0	.1	3.24				QS
		E(S)	21 22 35.1							
08	SSI	IP	21 22 22.8							
08	AND	EP	21 22 24.7							
08	RAT	EP	21 22 31.2	23.1	.2					POOR TAMP
09	AMA	IPGD	00 49 44.2	23.1	.1					
		E	00 49 48.9							
09	ASD	EP	00 49 55.5	1.1	.1					QP
09	SSI	EP	00 49 57.5	5.0	.1					QP

09 2 42 7.45 51.92 N 178.41 E DEPTH = 114.7 KM FREE DEPTH SOLUTION
KAT ISLANDS, ALEUTIAN ISLANDS

09	RAT	IP	02 42 23.1				14	24	-0.2
		IP	02 42 23.7	13.0	.1	3.23			
		ES	02 42 34.8						-0.0
09	ANA	IP	02 42 24.2				36	332	.3
09	AND	EP	02 42 24.7				54	317	-0.1
09	ASC	EP	02 42 26.2				72	314	.3
09	SSI	EP	02 42 26.6	3.6	.1	2.75	81	272	.0
09	ASD	EP	02 42 26.7	2.5	.1	2.60	87	313	-0.3
09	ASB	EP	02 42 27.0				84	317	.1
		ES	02 42 41.0						-0.0

09 8 2 43.30 16.15 N 99.41 W DEPTH = 34.0 KM MB = 5.5 MS = 5.4 TELESEISMIC SOLUTION
NEAR COAST OF GUERRERO, MEXICO

09	ADK	EP	08 13 49.4				7735	90	
----	-----	----	------------	--	--	--	------	----	--

09 11 46 16.90 22.64 S 172.16 E DEPTH = 44.0 KM MB = 4.9 TELESEISMIC SOLUTION
LOYALTY ISLANDS REGION

09	ADK	EP	11 57 54.2				8324	191	
----	-----	----	------------	--	--	--	------	-----	--

09	ASD	IPG	12 02 4.3	2.5	.1	2.10				V.SM.LOCAL,POOR
		ES	12 02 8.7							
09	ASC	EPG	12 02 5.4							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
09	13 19	.10	52.33 N 175.44 W	DEPTH = 205.0 KM			TELESEISMIC SOLUTION			
ANDREANOF ISLANDS, ALEUTIAN IS.										
09	ADK	EP	13 19 29.6				93	57	.1	
		ES	13 19 50.6						-.4	
09	AMA	EP	13 19 44.8	39.8	.1		278	64	-.2	
		IS	13 20 15.3						-2.4	
09	SSI	P	13 19 51.5	4.2	.1		343	80	-.4	
		ES	13 20 27.5						-2.2	
09	ASD	EP	13 19 54.8	3.4	.1		374	72	-.4	
		ES	13 20 32.0						-3.5	
09	ASB	EP	13 19 55.3	9.5	.2		381	71	-.7	
09	ASC	EP	13 19 56.1				383	73	-.2	
.....										
09	RAT	EP	15 42 32.9	14.8	.1	3.41				
		ES	15 42 50.4							
09	ASC	EP	15 42 40.2							
09	ASD	EP	15 42 41.4	1.3	.1					QP.V.EMERGENT
		E	15 43 5.2							
09	AND	EP	17 12 50.5							
09	ASC	EP	17 12 50.9							
		ES	17 13 11.3							
09	RAT	EP	17 12 51.0	11.2	.1					QS
09	ASD	EP	17 12 51.2	5.7	.1	3.07				
		ES	17 13 11.8							
.....										
09	18 43 59.50		52.24 N 178.79 W	DEPTH = 203.0 KM			TELESEISMIC SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
09	AMA	IP	18 44 29.7	31.4	.2	3.58	108	11	.1	
		IS	18 44 52.0						.4	
09	SSI	EP	18 44 30.2				117	70	.0	
09	ASD	IP	18 44 33.1	29.3	.1	3.90	160	53	-.1	
		ES	18 44 58.0						.2	
09	ASC	EP	18 44 33.6				165	58	-.1	
09	ASB	IP	18 44 33.7	142.6	.2	4.29	167	53	-.1	
		IS	18 44 58.4						-.5	
09	AND	EP	18 44 34.1				172	63	-.2	
09	ANA	EP	18 44 35.5				188	68	-.1	
09	RAT	EP	18 44 36.8	35.9	.1		203	75	-.1	
.....										
09	ADK	EP	21 44 4.6							
		ES	21 44 21.0							
.....										
10	4 34 38.80		3.99 S 80.72 W	DEPTH = 25.0 KM			TELESEISMIC SOLUTION			
PERU-ECUADOR BORDER REGION										
10	ADK	EP	04 48 13.2				10757	88		ESKS 045848.0
		EPP	04 52 23.0							
		EPPP	04 54 35.0							
.....										
10	5 15 22.51		3.86 S 80.54 W	DEPTH = 33.0 KM			TELESEISMIC SOLUTION			
PERU-ECUADOR BORDER REGION										
10	GMA	EP	05 28 18.4				9965	100		
.....										
10	RAT	EP	08 17 18.2	238.4	.2					
		IP	08 17 19.3							
		E(S)	08 17 47.0							
10	ANA	EP	08 17 21.2							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
10	AND	EP	08 17 23.3							
		E(S)	08 17 54.7							
10	ASC	EP	08 17 26.6							QP
10	ASB	EP	08 17 28.4	47.6	.2					QP
		E(S)	08 18 2.9							
10	ASD	EP	08 17 28.7	33.5	.2					QP, POOR TAMP
10	SSI	EP	08 17 28.7	87.8	.3					
10	AMA	EP	08 17 41.3	7.5	.3					POOR TAMP
		E(S)	08 18 24.9							

10 9 46 29.00 63.07 N 151.37 W DEPTH = 117.0 KM MB = 4.3 TELESEISMIC SOLUTION
CENTRAL ALASKA

10 10 15 7.20 53.10 N 169.85 W DEPTH = 48.0 KM MB = 5.5 MS = 5.3 TELESEISMIC SOLUTION
FOX ISLANDS, ALEUTIAN ISLANDS

10	ADK	IP C	10 16 9.8				477	71		ML 5.6 D 4.7
		IS	10 17 3.9							
10	AMA	EP	10 16 32.7				665	69		WHITE OUT
		IP	10 16 33.7							
10	SSI	EP	10 16 41.7				730	75		REGIONAL
		EP	10 16 42.7							
10	ASD	EP	10 16 45.3				762	71		
		IP	10 16 47.0							
10	ASB	EP	10 16 46.5	425.8	.3		770	71		
		E(L)	10 18 7.4							
10	ASC	EP	10 16 47.1				771	72		
10	AND	EP	10 16 48.5				782	73		
10	ANA	EP	10 16 50.7				799	74		
10	SMY	EP	10 17 16.0				1079	81		
10	GMA	EP	10 18 15.7				1458	203		

10 13 46 .60 52.87 N 169.73 W DEPTH = 33.0 KM MB = 4.1 TELESEISMIC SOLUTION
FOX ISLANDS, ALEUTIAN ISLANDS

10 ADK EP 13 47 5.4 479 74

10 14 8 54.50 53.18 N 168.93 W DEPTH = 126.0 KM MB = 4.4 TELESEISMIC SOLUTION
FOX ISLANDS, ALEUTIAN ISLANDS

10	CSA	EP	14 09 34.8				310	241		
10	ADK	EP	14 09 45.7				539	71		
		E	14 10 40.0							
10	AMA	EP	14 10 9.1	25.2	.3		727	69		TELE
10	ASD	EP	14 10 22.2	21.3	.4		825	71		QP
10	ASB	EP	14 10 23.0	52.8	.4		832	71		QP
10	GMA	EP	14 11 55.3				1432	201		

10 19 18 36.80 53.42 N 171.41 W DEPTH = 156.0 KM MB = 4.0 TELESEISMIC SOLUTION
FOX ISLANDS, ALEUTIAN ISLANDS

10 ADK EP 19 19 31.4 390 62
E 19 20 33.6

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
11	2 14	35.42	51.91 N 179.65 W	DEPTH = 116.7 KM					FREE DEPTH SOLUTION	
			DELAROF ISLANDS, ALEUTIAN ISLANDS							
11	SSI	EP	02 14 52.8	6.7	.1	2.98	52	88	-.1	
11	AMA	EP	02 14 54.6	13.9	.1	3.34	79	331	.0	
		ES	02 15 8.6						.1	
11	ASD	EP	02 14 55.3	8.8	.1	3.16	90	50	-.2	
		IS	02 15 10.2						.1	
11	ASB	EP	02 14 56.0	19.0	.1	3.50	97	51	-.1	
		IS	02 15 11.2						.1	
11	ASC	EP	02 14 56.0				95	58	.1	
11	AND	EP	02 14 56.6				103	68	.0	
11	ANA	EP	02 14 58.4				120	74	.3	
11	RAT	EP	02 14 59.9	13.0	.1	3.41	139	84	-.1	
.....										
11	3 59	45.32	50.52 N 177.64 E	DEPTH = 3.8 KM					FREE DEPTH SOLUTION	
			RAT ISLANDS, ALEUTIAN ISLANDS							
11	ASB	EP	04 00 9.6	11.8	.1	3.28	147	231	.0	
		IS	04 00 27.3						.1	
11	AND	EP	04 00 9.9				148	219	.1	
11	RAT	EP	04 00 10.1	10.5	.1	3.24	150	199	.0	QP
11	ASC	EP	04 00 10.2				150	226	.2	
11	ASD	IP	04 00 10.4	11.9	.1	3.31	154	232	-.3	
		ES	04 00 28.8						-.3	
11	SSI	EP	04 00 18.1	42.5	.2		204	223	-.2	QP
		IS	04 00 42.3						-.1	
.....										
11	6 1	35.20	52.66 N 174.83 E	DEPTH = 33.0 KM MB = 3.7					TELESEISMIC SOLUTION	
			RAT ISLANDS, ALEUTIAN ISLANDS							
11	RAT	IP D	06 02 10.7	518.9	.4		258	293	-1.3	
		E(S)	06 02 37.2						-1.7	
11	ANA	EP	06 02 14.0				286	295	-1.6	
11	AND	EP	06 02 16.8				308	295	-1.4	
11	SSI	EP	06 02 21.2	177.8	.4		335	287	-.4	QP
11	ASD	EP	06 02 21.6	232.7	.4		340	296	-.6	
		E(S)	06 02 57.0						.5	
11	AMA	EP	06 02 37.6				443	293	2.7	
.....										
11	AMA	IP D	09 39 44.1	54.9	.1					
		E	09 39 52.2							
		I(S)	09 40 21.0							
11	ASD	EP	09 39 54.3	9.7	.1					
11	ASB	EP	09 39 55.0	8.1	.1					
11	ASC	EP	09 39 55.5							
.....										
11	9 53	38.49	52.17 N 179.49 W	DEPTH = 156.7 KM					FREE DEPTH SOLUTION	
			DELAROF ISLANDS, ALEUTIAN ISLANDS							
11	SSI	IP	09 54 1.4	7.8	.1	3.16	70	64	.1	
11	AMA	EP	09 54 3.3	9.7	.1	3.29	102	345	-.0	
		I(S)	09 54 21.4						-.0	
11	ASD	IP	09 54 4.4	10.8	.1	3.36	118	42	-.2	
11	ASC	EP	09 54 5.1				122	49	.3	
11	AND	EP	09 54 5.1				127	57	-.1	QP
11	ASB	EP	09 54 5.3	12.7	.1	3.44	125	44	.2	
11	ANA	EP	09 54 6.4				141	64	-.0	
11	RAT	EP	09 54 7.6	16.6	.1	3.59	155	74	-.1	
.....										
11	AMA	IPGD	12 45 10.9	58.3	.1	3.46				

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
11	ASD	ES	12 45 15.2							
		EP	12 45 19.4	2.9	.1	2.51				
		ES	12 45 30.0							
11	ASC	EP	12 45 21.9							
11	RAT	EPG	13 31 35.4	5.2	.1	2.67				
		ES	13 31 43.9							
11	ANA	EP	13 31 36.5							
11	AND	EP	13 31 38.5							
11	SSI	EP	13 31 46.3	8.2	.1					
11	14 24	9.38	51.15 N 179.68 E	DEPTH = 37.0 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
11	ASD	IPGD	14 24 17.6	166.5	.2	3.71	36	139	-.1	
11	ASB	IPGD	14 24 18.0	100.9	.2	3.51	38	128	.1	
		ES	14 24 23.9						-.3	
11	ASC	IPG	14 24 19.6				50	134	.2	
11	AND	IPGD	14 24 21.8				68	132	-.0	
11	SSI	IP D	14 24 23.9	31.6	.1	3.52	83	176	.0	
11	AMA	EP	14 24 24.2	14.6	.1	3.20	86	260	-.0	
11	ANA	EP	14 24 24.7				89	126	.1	
11	RAT	EP	14 24 28.6	35.0	.1	3.69	118	127	-.1	
11	14 45	3.13	51.19 N 178.89 E	DEPTH = 32.3 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
11	ASB	IPGD	14 45 10.5	3.5	.1	2.29	31	233	.1	
		IS	14 45 15.7						-.0	
11	ASC	IPGC	14 45 11.0				36	213	.1	
11	ASD	IPGD	14 45 11.1	5.5	.1	2.52	39	235	-.2	NEAR AMCHITKA
		ES	14 45 17.0						-.2	
11	AND	IPGC	14 45 11.7				41	186	.1	
		IS	14 45 17.9						.1	
11	RAT	EPG	14 45 16.6	5.4	.1	2.72	78	150	-.0	
		IS	14 45 26.4						-.1	
11	AMA	IPGD	17 05 58.0	60.4	.1	3.52				
		ES	17 06 2.9							
11	ASD	EP	17 06 6.3	4.2	.1	2.67				
		ES	17 06 16.9							
11	ASB	EP	17 06 7.3	4.2	.1	2.70				
11	ASC	IP	17 06 8.9							
11	SSI	EP	17 06 9.5	14.5	.1					
11	AND	EP	17 06 11.2							
11	RAT	EP	17 06 17.8	5.9	.1					
11	17 9	3.26	52.03 N 179.52 E	DEPTH = 186.2 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
11	AND	EP	17 09 29.2				65	37	-.0	QP
		ES	17 09 48.5						.3	
11	ASD	EP	17 09 29.5	6.6	.1	3.15	72	10	-.0	
		ES	17 09 49.0						.3	
11	ASC	EP	17 09 29.6				68	21	.3	
11	ANA	IP D	17 09 29.7				74	53	.1	
11	ASB	EP	17 09 29.9	10.1	.1	3.34	77	14	.1	
		ES	17 09 48.6						-.5	
11	RAT	IP C	17 09 30.0	17.8	.1	3.59	86	72	-.2	
11	AMA	EP	17 09 32.7	11.4	.2	3.14	125	312	-.1	

PAGE 70-12- 25

DEC	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
1970										
12	1 10	41.20	20.81 S	177.98 W			DEPTH = 411.0 KM	MB = 5.5		TELESEISMIC SOLUTION
			FIJI ISLANDS REGION							
12	AMA	EP	01 21 21.7				7982	179		TELE
12	ASD	EP	01 21 22.4				7997	177		
12	AND	EP	01 21 23.3				8018	177		
12	ADK	EP	01 21 24.2				8049	181		
12	SSI	EP	01 21 24.9				8052	178		
12	RAT	EP	01 21 26.1	43.6	.5		8047	176		QP
12	2 39	11.38	51.93 N	179.75 W			DEPTH = 124.2 KM			FREE DEPTH SOLUTION
			DELAROF ISLANDS, ALEUTIAN ISLANDS							
12	SSI	IP D	02 39 29.2	23.9	.1	3.55	46	85	-.2	
12	ASD	IP D	02 39 31.6	19.9	.1	3.52	87	46	-.3	
		ES	02 39 47.1						.2	
12	AMA	EP	02 39 31.9	24.5	.2	3.31	84	328	.3	POOR TAMP
12	ASC	EP	02 39 32.1				91	55	-.1	
12	ASB	IP	02 39 32.3	24.8	.1	3.63	94	48	-.1	
		ES	02 39 48.0						.2	
12	AND	EP	02 39 32.5				98	65	-.3	
12	ANA	EP	02 39 34.6				115	73	.4	QP
12	RAT	EP	02 39 36.2				133	83	.3	GPI
		IP	02 39 37.3	25.4	.1	3.70				
12	SSI	EP	05 11 3.5	11.3	.1					
12	ASD	IP	05 11 8.5	3.5	.1	2.70				
		IS	05 11 22.5							
12	ASB	IP	05 11 10.1	25.7	.2	3.30				QTAMP
12	ASC	EP	05 11 10.3							
12	5 37	24.11	51.90 N	179.21 W			DEPTH = 50.0 KM			FIXED DEPTH SOLUTION
			DELAROF ISLANDS, ALEUTIAN ISLANDS							
12	AMA	IP	05 37 36.3				68	354	-.6	WIPED OUT
12	SSI	IP	05 37 37.8				83	89	-.9	DO
12	ASD	IP	05 37 42.6				115	60	.5	DO
12	ASC	EP	05 37 43.5				122	66	.5	DO
12	ASB	EP	05 37 43.6				122	60	.1	DO
		ES	05 37 58.6						1.0	
12	AND	IP	05 37 44.7				132	73	.0	DO
12	ANA	EP	05 37 47.6				150	78	.7	DO
12	RAT	EP	05 37 49.1	111.2	.2	3.99	170	85	-.2	
12	ADK	EP D	05 37 50.7				181	271	.0	
		ES	05 38 10.7						.6	
12	5 55	32.46	52.06 N	178.45 E			DEPTH = 135.2 KM			FREE DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
12	RAT	IP D	05 55 51.1	47.9	.1	3.87	30	16	-.0	
		IS	05 56 4.4						-.4	
12	ANA	IP D	05 55 52.1				50	344	.2	
12	AND	IP D	05 55 52.6				65	328	-.1	
12	ASC	IP D	05 55 53.8				83	324	.0	
12	SSI	IP D	05 55 53.8				80	284	.2	
12	ASB	IP D	05 55 54.7	37.0	.1	3.83	95	325	.0	
		IS	05 56 11.1						.2	
12	ASD	IP D	05 55 54.8	64.4	.1	4.07	97	321	.0	
12	AMA	IP D	05 56 3.1	27.1	.1	3.83	189	298	-.3	</

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

12	7	39	52.01	52.17 N	178.08 E	DEPTH = 148.8 KM	FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
12	RAT	EP	07 40 12.2	22.1	.2	3.28	44	337	-.6	EMRGNT ALL STAS
		ES	07 40 27.3						-.6	
12	ANA	EP	07 40 14.9				72	326	-.8	
		ES	07 40 31.3						1.1	
12	AND	EP	07 40 15.2				90	318	-.0	
12	SSI	EP	07 40 16.6	3.7	.1	2.87	108	287	.1	
12	ASC	EP	07 40 16.9				108	317	.4	
12	ASD	EP	07 40 17.2	2.7	.1	2.74	123	315	-.5	
		IS	07 40 36.0						-.4	
12	ASB	EP	07 40 17.5	3.3	.1	2.83	120	318	-.0	

12	8	25	53.83	51.23 N	179.58 W	DEPTH = 25.0 KM	FIXED DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
12	ASD	EP	08 26 6.9	1.3	.1	2.08	77	103	-.1	
		ES	08 26 16.4						-.1	
12	ASC	EP	08 26 9.1				91	106	.1	
12	SSI	IP	08 26 9.3	8.9	.1	3.00	93	141	-.1	
		ES	08 26 20.7						.0	

12	9	16	11.79	51.74 N	179.91 W	DEPTH = 97.5 KM	FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
12	SSI	EP	09 16 26.4	1.5	.1	2.25	39	116	.0	V. POOR QUAKE
12	ASD	EP	09 16 27.8	1.5	.1	2.31	65	53	-.2	
		ES	09 16 40.0						.1	
12	ASB	EP	09 16 28.9				72	54	.3	
12	RAT	EP	09 16 33.2	4.7	.1	2.91	122	93	-.0	

12	11	20	16.69	51.89 N	179.87 W	DEPTH = 135.8 KM	FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
12	ASD	EP	11 20 37.8	5.6	.1	2.98	78	44	.1	
12	ASC	EP	11 20 38.0				82	54	.0	
12	ASB	IP	11 20 38.2	4.9	.1	2.93	85	46	.0	
		E(S)	11 20 53.9						-.0	

12	15	3	44.78	51.90 N	178.42 E	DEPTH = 5.4 KM	FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
12	RAT	IP D	15 03 47.3				13	28	-.1	
12	ANA	IP D	15 03 51.7				35	332	.5	
12	AND	IP	15 03 54.4				53	316	-.0	
		IS	15 04 1.1						-.4	
12	ASC	IP	15 03 57.4				71	314	-.0	
12	SSI	IP	15 03 59.1	98.3	.1	3.97	80	271	.3	
12	ASB	IP	15 03 59.2	78.8	.1	3.88	83	317	-.1	
		IS	15 04 10.2						.4	
12	ASD	IP	15 03 59.3				86	312	-.3	PRECURSOR
12	AMA	IP	15 04 14.2				184	293	-.3	

12	RAT	IP	15 05 9.5	20.5	.1	2.75	AFTERSHOCK			
		IS	15 05 11.8							
12	ASD	EP	15 12 49.4	2.0	.1		POOR			
12	ASB	IP	15 12 50.2	3.7	.1					

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
		ES	15 13 26.4							
12	ASC	EP	15 12 50.7							
12	RAT	IP	15 36 5.2	65.0	.2	2.94				LOCAL
		IS	15 36 7.4							
12	RAT	IP	17 34 23.3	187.8	.2	3.40				LOCAL
		IS	17 34 25.5							
12	RAT	IP C	23 47 39.1	195.0	.2	3.55				LOCAL
		IS	23 47 42.2							
12	ANA	EP	23 47 43.2							
		IS	23 47 49.0							
12	AND	IP	23 47 45.2							
12	SSI	IP	23 47 50.2							
12	ASB	EP	23 47 50.9							
12	ASD	EP	23 47 51.3							
		ES	23 48 3.0							

..... FREE DEPTH SOLUTION

13 1 11 32.98 51.97 N 178.78 E DEPTH = 160.4 KM
RAT ISLANDS, ALEUTIAN ISLANDS

13	RAT	EP	01 11 54.7	17.3	.1	3.49	36	59	-.1	
		ES	01 12 10.8						-.0	
13	ANA	EP	01 11 55.0				39	12	.1	
13	AND	EP	01 11 55.1				46	345	-.1	
13	SSI	EP	01 11 55.7	6.7	.1	3.09	56	279	.1	QP
13	ASC	EP	01 11 55.9				62	335	.1	
13	ASD	IP	01 11 56.5	8.4	.1	3.21	75	329	-.0	
13	ASB	EP	01 11 56.7	5.7	.1	3.04	75	334	.2	
		IS	01 12 13.6						-.1	
13	AMA	EP	01 12 3.2	10.2	.1	3.40	164	298	-.1	

.....

..... FREE DEPTH SOLUTION

13 2 20 3.14 51.87 N 179.62 W DEPTH = 91.4 KM
DELAROF ISLANDS, ALEUTIAN ISLANDS

13	SSI	EP	02 20 18.1	6.6	.1	2.90	54	92	.1	
		ES	02 20 28.6						-.2	
13	AMA	EP	02 20 19.7	14.4	.1	3.28	74	332	.1	POOR
13	ASD	EP	02 20 20.4	4.2	.1	2.78	89	53	-.5	
13	ASB	EP	02 20 21.4	3.6	.1	2.73	97	53	-.2	
13	ASC	EP	02 20 21.8				95	61	.3	
		ES	02 20 35.3						.4	
13	AND	EP	02 20 22.6				104	70	.2	

.....

..... FREE DEPTH SOLUTION

13 5 3 58.30 51.45 N 179.83 W DEPTH = 9.8 KM
DELAROF ISLANDS, ALEUTIAN ISLANDS

13	AMA	IP C	05 04 7.8	34.6	.2	3.05	53	290	.0	
13	ASD	EP C	05 04 8.4	8.0	.1	2.75	58	84	-.1	
13	SSI	IP C	05 04 9.4	86.4	.1	3.82	64	141	.0	
13	ASB	EP	05 04 9.5	24.3	.2	2.98	65	81	-.0	
		IS	05 04 17.7						-.0	
13	ASC	EP	05 04 10.5				70	91	.2	
13	AND	EP	05 04 12.5				85	98	-.1	
13	ANA	EP	05 04 15.8				106	100	-.0	
13	RAT	IP C	05 04 19.9	54.2	.2	3.61	133	106	.0	

.....

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

13	7 26	32.03	52.10 N 179.64 E	DEPTH = 154.0 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										

13	SSI	EP	07 26 52.8	13.0	.1	3.35	23	8	-.0	
13	AND	EP	07 26 55.0				76	38	.1	
13	ASC	EP	07 26 55.2				78	25	.2	
13	ASD	IP	07 26 55.2	4.3	.1	2.92	81	14	-.0	
13	ASB	EP	07 26 55.4	6.6	.1	3.10	86	18	-.1	
		IS	07 27 12.7						-.0	
13	ANA	IP	07 26 55.5				85	52	.0	
13	RAT	EP	07 26 56.1	14.4	.1	3.45	96	69	-.1	

13	8 7	3.84	51.41 N 180.00 W	DEPTH = 7.8 KM			FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										

13	ASD	IPG	08 07 12.3	3.5	.1	2.30	46	87	-.0	
13	ASB	EPG	08 07 13.4	9.3	.1	2.78	53	84	-.1	PRETTY IS
		IS	08 07 20.4						-.1	
13	ASC	IPG	08 07 14.4				59	95	.1	
13	SSI	IPG	08 07 14.7	6.8	.1	2.70	61	152	-.0	NICE LOCAL
		IS	08 07 22.5						-.1	
13	AMA	I(P)	08 07 15.0	8.7	.2	2.52	63	283	-.0	
13	AND	EP	08 07 17.3				75	103	.5	QP
13	ANA	EP	08 07 19.8				96	104	-.2	
13	RAT	EP	08 07 29.6				124	110	5.4	

13	10 48	20.93	52.29 N 176.48 E	DEPTH = 125.0 KM			FIXED DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										

13	RAT	IP	10 48 46.0	22.7	.1	3.66	138	294	-.0	
		E(S)	10 49 4.3						-.0	
13	ANA	EP	10 48 48.9				167	297	-.0	
13	AND	EP	10 48 51.2				188	296	.0	

13	10 53	9.51	51.83 N 179.71 E	DEPTH = 99.1 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										

13	SSI	EPG	10 53 23.3	6.7	.1	2.88	11	128	-.1	
		ES	10 53 33.5						.0	
13	ASD	EPG	10 53 24.9	1.8	.1	2.37	55	27	-.3	
		ES	10 53 36.7						-.0	
13	ASB	IPGD	10 53 25.6	4.5	.1	2.77	62	31	-.1	
		ES	10 53 37.4						-.1	
13	ASC	EPG	10 53 25.6				56	42	.3	
13	AND	EPG	10 53 26.2				60	60	.6	
13	ANA	EP	10 53 27.0				76	72	.2	
13	RAT	EP	10 53 27.9	5.1	.1	2.89	95	87	-.5	

13	AMA	IPGC	11 14 40.8	25.6	.1	3.12				
		IS	11 14 45.4							
13	SSI	EP	11 14 53.2	3.0	.1					
13	RAT	EP	11 24 31.2	140.0	.4					
		I	11 25 24.9							
13	ANA	EP	11 24 37.0							
13	AND	EP	11 24 37.7							
13	ASD	EP	11 24 41.7	15.5	.3					
13	SSI	EP	11 24 42.0	12.1	.3					
13	ASC	EP	11 24 44.7							
13	AMA	IPGD	12 15 8.3	63.3	.1	3.66				

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
13	ASD	I(S)	12 15 14.9							
		EPN	12 15 23.0							
		IPG	12 15 23.6	8.7	.2	2.91				
13	SSI	EPN	12 15 23.3							
		IPG	12 15 23.8	15.0	.1					
13	ASB	EP	12 15 24.3	9.8	.2	2.98				
		E(S)	12 15 44.2							
13	ASC	EP	12 15 25.6							
13	12 29	2.50	6.05 N 127.03 E	DEPTH = 38.0 KM	MB = 5.2					TELESEISMIC SOLUTION
			PHILIPPINE ISLANDS REGION							
13	GMA	EP	12 40 53.0				8560	256		
13	ASB	EPG	13 28 51.8	1.4	.1	1.98				
		ES	13 28 58.0							
13	ASD	EPG	13 28 52.9	1.3	.1	1.95				
		ES	13 28 59.3							
13	13 33	11.59	51.76 N 179.50 E	DEPTH = 130.7 KM						FREE DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
13	ASD	IP	13 33 30.1	4.3	.1	2.82	43	15	-.1	DEEP
		IS	13 33 43.9						.1	
13	AND	EP	13 33 30.2				44	59	-.0	
13	ASC	EP	13 33 30.3				41	35	.2	
13	ASB	IP	13 33 30.4	7.5	.1	3.06	48	22	-.0	
		IS	13 33 44.1						-.1	
13	ANA	EP	13 33 31.2				60	75	.2	
13	RAT	EP	13 33 32.2	5.1	.1	2.94	81	92	-.1	
13	14 1	30.84	51.39 N 179.89 E	DEPTH = 64.5 KM						FREE DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
13	ASD	EP	14 01 41.8	2.1	.1	2.27	38	90	-.0	
		ES	14 01 49.9						.0	
13	ASB	EP	14 01 42.3	2.2	.1	2.30	45	86	-.1	
		ES	14 01 50.7						-.0	
13	ASC	EP	14 01 43.1				51	99	.2	
13	SSI	EP	14 01 43.7	1.8	.1	2.26	60	160	-.0	QP
13	AND	EP	14 01 44.4				68	106	-.1	
13	AMA	EP	14 18 1.0	5.9	.1					POOR REGIONAL
		E(S)	14 19 44.2							
13	SSI	EP	14 18 9.1	2.5	.1					
13	ASD	EP	14 18 12.3	2.8	.1					
13	ASB	EP	14 18 13.1	8.5	.2					
13	14 37	54.57	52.39 N 179.86 E	DEPTH = 150.0 KM						FIXED DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
13	ASD	EP	14 38 19.8	1.7	.1	2.54	117	18	-.1	DEEP
13	ASC	EP	14 38 19.9				114	25	.3	
13	ASB	EP	14 38 20.3	2.3	.1	2.68	122	20	-.0	
		E(S)	14 38 39.1						-.0	
13	RAT	IP	14 38 20.4	13.5	.1	3.45	124	57	-.1	
13	AMA	IPG	15 41 11.0	22.3	.1	3.11				
		ES	15 41 16.2							
13	SSI	EP	15 41 25.3	9.5	.1					

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
13	AMA	IPGC	16 44 15.2	33.3	.1					
13	SSI	EP	16 44 29.1	6.9	.1					
13	ASD	EP	16 44 30.3	2.4	.1	2.61				
		IS	16 44 47.3							
13	ASB	EP	16 44 31.3	13.6	.2	3.09				
		ES	16 44 49.5							
13	ASC	EP	16 44 32.2							
13	ASD	IP	17 02 4.5	1.8	.1	2.53				DEEP
13	ASB	EP	17 02 4.6	1.9	.1	2.55				
		ES	17 02 23.4							
13	RAT	EP	17 02 5.5	3.9	.1					
13	ANA	EP	17 02 6.0							

.....

13	20 56 44.24	51.53 N 178.96 E	DEPTH = 61.9 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
13	AND	IPG	20 56 53.3				3	171	-.1	
13	ASC	IPG	20 56 53.8				16	299	.1	
13	ANA	IPG	20 56 54.1				23	117	.1	
13	ASB	IPG	20 56 54.2	10.8	.1	2.93	28	314	-.1	
		ES	20 57 1.5						-.1	
13	ASD	IPG	20 56 54.5	10.8	.1	2.94	31	301	.0	
		IS	20 57 2.0						.1	
13	SSI	IPG	20 56 56.8	20.1	.1	3.30	59	227	-.0	
		ES	20 57 6.0						.0	

.....

13	AMA	IPG	21 04 25.3	47.9	.1	3.44				
		ES	21 04 30.5							
13	ASD	EP	21 04 39.8	5.0	.1	2.90				
		ES	21 04 55.5							
13	ASB	EP	21 04 40.4	3.7	.1	2.78				
13	SSI	EP	21 04 40.7	17.5	.1					
13	ASC	EP	21 04 41.6							
13	AND	EP	21 04 43.8							QP
13	ANA	EP	21 04 47.3							QP
13	RAT	EP	21 04 50.0	12.7	.2					QP

.....

13	21 38 56.70	51.44 N 178.79 E	DEPTH = 43.7 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
13	AND	IPGC	21 39 4.3				18	220	.1	
13	ANA	IPGC	21 39 4.7				23	156	.2	
13	ASC	IPG	21 39 5.0				26	265	.2	
13	ASB	IPGC	21 39 5.2	61.1	.1	3.60	33	286	-.2	
		ES	21 39 11.3						-.4	
13	ASD	IPGC	21 39 5.8				39	278	-.1	
13	RAT	IPGC	21 39 7.0	32.1	.1	3.41	51	141	-.3	
13	SSI	IPGC	21 39 10.3				75	228	.1	
		ES	21 39 19.7						-.3	
13	AMA	EP	21 39 19.2	26.4	.2	3.35	147	277	.1	

.....

13	AMA	IPGD	23 53 30.7	11.3	.1	2.80				
		ES	23 53 35.7							
13	SSI	EP	23 53 43.5	4.4	.1					
14	ADK	EP C	01 31 12.8							
		ES	01 31 20.1							
14	AMA	EP	01 31 30.9	21.7	.2					
		IS	01 31 53.7							
14	SSI	IP C	01 31 39.6	14.6	.2					
14	ASB	EP	01 31 43.5							
		ES	01 32 14.0							
14	ASD	EP	01 31 43.6							
14	ASC	EP	01 31 45.6							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
14	SSI	EP	02 08 9.5							
14	ASB	EP	02 08 11.0							POOR
	ES		02 08 31.3							
.....										
14	4	6	29.90	9.97 N	72.74 W		DEPTH = 159.0 KM	MB = 5.2		TELESEISMIC SOLUTION
VENEZUELA										
14	GMA	EP	04 18 25.8				8939	87		
.....										
14	4	36	51.04	51.94 N	178.09 E		DEPTH = 168.6 KM			FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS										
14	RAT	EP	04 37 13.8				23	314	.2	
	ES		04 37 29.9						-.2	
14	ANA	EP	04 37 14.7				53	312	.3	
	ES		04 37 31.1						-.4	
14	AND	EP	04 37 15.3				73	306	-.1	
14	SSI	IP	04 37 16.2	4.8	.1	3.01	103	274	-1.0	
	ES		04 37 37.2						1.0	
14	ASD	EP	04 37 17.4				106	306	.0	
14	ASB	EP	04 37 17.6				103	309	.5	
	ES		04 37 35.8						-.4	
.....										
14	RAT	IP	06 00 34.8	23.9	.1	3.08				LOCAL
	IS		06 00 39.2							
14	SSI	IP	06 00 44.4	8.9	.2					
14	ANA	IP	06 39 57.1							
14	AND	IP	06 39 57.6							
14	RAT	IP	06 39 58.4							
	ES		06 40 5.7							
14	SSI	IP	06 40 6.1							
	ES		06 40 18.9							
.....										
14	7	23	1.67	2.02 N	126.46 E		DEPTH = 33.0 KM	MB = 5.2		TELESEISMIC SOLUTION
MOLUCCA PASSAGE										
14	GMA	EP	07 35 15.0				8992	255		
.....										
14	7	32	52.46	1.31 S	80.91 W		DEPTH = 33.0 KM	MB = 5.4	MS = 5.7	TELESEISMIC SOLUTION
NEAR COAST OF ECUADOR										
14	GMA	EP	07 45 37.5				9691	99		
.....										
14	8	3	3.71	50.92 N	178.30 E		DEPTH = 25.0 KM			FIXED DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS										
14	ASB	EP	08 03 17.5				82	234	-.1	
14	AND	EP	08 03 18.0				85	213	.0	
	ES		08 03 28.2						-.1	
14	ASD	IP	08 03 18.4	2.2	.1	2.38	90	235	-.3	
14	RAT	EP	08 03 19.8				98	181	-.1	
14	SSI	IP	08 03 26.7	2.2	.1	2.54	140	220	.4	
	IS		08 03 42.8						.0	
.....										
14	AMA	IP	09 05 .2	4.7	.1	2.45				
	IS		09 05 5.6							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

14	ASB	EP	12 56 54.4	1.8	.1	2.03				
		ES	12 56 59.7							
14	ASC	EP	12 56 55.2							
		ES	12 57 1.1							
14	ASD	EP	12 56 55.4							
		IS	12 57 1.2							
14	SSI	IP	12 57 3.2	3.6	.1					

..... TELESEISMIC SOLUTION

14	14 48 11.80	53.03 N 169.93 W	DEPTH = 50.0 KM	MB = 5.3						
		FOX ISLANDS, ALEUTIAN ISLANDS								
14	CSA	EP	14 49 3.7			376	244			
14	ADK	EP D	14 49 14.8			470	72			ML5.5 D4.5
		ES	14 50 7.5							
14	AMA	IP	14 49 38.5			658	69			TELESEISMIC
		I	14 49 40.8	101.1	.3					
14	SSI	EP	14 49 47.1			724	76			
14	ASD	EP	14 49 50.5			756	72			
14	ASB	EP	14 49 51.0			763	72			
14	ASC	EP	14 49 53.5			765	73			
14	AND	EP	14 49 54.3			776	73			
14	ANA	EP	14 49 55.8			794	74			
14	RAT	IP	14 49 58.3			811	76			
14	SMY	E(P)	14 50 30.0			1075	82			
14	GMA	EP	14 51 49.7			1466	204			

.....

..... TELESEISMIC SOLUTION

14	16 52 21.50	15.56 S 173.79 W	DEPTH = 95.0 KM	MB = 4.4						
		TONGA ISLANDS								
14	GMA	EP	17 04 28.5			9040	192			

.....

..... FREE DEPTH SOLUTION

14	17 30 33.94	51.84 N 179.05 E	DEPTH = 105.6 KM							
		RAT ISLANDS, ALEUTIAN ISLANDS								
14	AND	IP D	17 30 49.1			31	13	-0.0		
14	SSI	IP D	17 30 49.4			37	261	.0		LARGE LOCAL
14	ANA	IP D	17 30 49.5			36	49	.2		
14	ASC	IP	17 30 49.6			42	350	-0.0		
14	RAT	IP D	17 30 49.9			50	85	-0.1		
14	ASD	IP D	17 30 50.3			54	338	.1		
14	ASB	IP D	17 30 50.3	267.2	.1	4.55	55	346	-0.0	
		IS	17 31 2.2					-0.1		
14	AMA	IP C	17 30 57.9			141	296	-0.0		
14	ADK	EP	17 31 14.9			300	271	-1.3		

.....

..... TELESEISMIC SOLUTION

14	19 19 43.50	53.19 N 170.19 W	DEPTH = 76.0 KM	MB = 4.4						
		FOX ISLANDS, ALEUTIAN ISLANDS								
14	ADK	EP D	19 20 45.2			458	69			
		ES	19 21 40.2							

.....

..... TELESEISMIC SOLUTION

14	21 11 39.10	53.01 N 170.02 W	DEPTH = 54.0 KM	MB = 5.2						
		FOX ISLANDS, ALEUTIAN ISLANDS								
14	CSA	EP	21 12 32.2			382	245			
14	ADK	EP	21 12 40.8			464	72			ML5.5 D5.2
		ES	21 12 41.8							
14	AMA	IP D	21 13 5.5			651	69			TELESEISMIC
14	SSI	IP	21 13 13.1			717	76			NOISE FROM WIND
14	ASC	EP	21 13 19.8			759	73			

.....

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
14	SMY	E(P)	21 13 58.0				1069	82		
14	GMA	EP	21 14 46.0				1470	204		
.....										
14	ADK	EP	21 15 21.5							
		ES	21 16 15.8							
15	AMA	IP C	01 59 21.0							HIGH WIND NOISE
		IS	01 59 26.5							
.....										
15	3 44	1.50	52.43 N 176.23 W				DEPTH = 189.0 KM		MB = 4.8	TELESEISMIC SOLUTION
ANDREANOF ISLANDS, ALEUTIAN IS.										
15	ADK	IP	03 44 27.3				65	22	-0.5	ML4.5 D1.4 FELT
		ES	03 44 46.1						-0.9	
15	AMA	IP C	03 44 40.4				235	56	-0.5	REGIONAL. LARGE
15	SSI	IP	03 44 47.8				292	77	1.0	
15	ASD	IP	03 44 50.0				326	68	-0.4	
15	ASB	IP	03 44 50.9				333	67	-0.3	
		IS	03 45 26.3						-1.2	
15	ASC	IP	03 44 51.2				334	69	-0.2	
15	AND	IP	03 44 52.1				344	72	-0.4	
15	ANA	IP	03 44 54.4				361	74	0.0	
15	RAT	EP	03 44 56.1				379	77	-0.2	
15	GMA	EP	03 47 28.2				1681	217	-5.8	
.....										
15	RAT	IP	06 31 11.2	2.5	.1	2.36				OTHER STATIONS
		IS	06 31 20.0							
15	AND	IP	06 31 12.2							OBSURED BY
15	ANA	IP	06 31 13.9							HIGH NOISE
15	ASC	IP	06 31 18.4							LEVEL.
.....										
15	7 54	51.57	14.39 N 93.05 W				DEPTH = 33.0 KM		MB = 5.1	MS = 4.9 TELESEISMIC SOLUTION
NEAR COAST OF CHIAPAS, MEXICO										
15	GMA	EP	08 05 49.0				7559	104		
.....										
15	ADK	EP	09 38 59.8							
		ES	09 39 53.9							
.....										
15	10 32	58.96	14.35 N 93.13 W				DEPTH = 33.0 KM		MB = 5.2	TELESEISMIC SOLUTION
NEAR COAST OF CHIAPAS, MEXICO										
15	GMA	EP	10 43 56.8				7560	104		
.....										
15	10 53	19.48	14.46 N 93.07 W				DEPTH = 33.0 KM		MB = 4.8	TELESEISMIC SOLUTION
NEAR COAST OF CHIAPAS, MEXICO										
15	GMA	EP	11 04 16.7				7551	104		
.....										
15	13 20	5.17	5.68 S 145.24 E				DEPTH = 41.0 KM		MB = 5.2	TELESEISMIC SOLUTION
EAST NEW GUINEA REGION										
15	GMA	EP	13 32 17.5				8997	234		
.....										

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

15	15 24	37.38	14.39 S 167.34 E	DEPTH = 182.0 KM MB = 5.8			TELESEISMIC SOLUTION			
NEW HEBRIDES ISLANDS										
15	GMA	EP	15 36 43.5				9232	211		

15	ADK	EP	16 42 6.9							
		ES	16 43 2.0							

15	17 2	.70	53.06 N 170.06 W	DEPTH = 72.0 KM MB = 4.5			TELESEISMIC SOLUTION			
FOX ISLANDS, ALEUTIAN ISLANDS										
15	CSA	EP	17 02 53.7				382	245		
15	AMA	IP	17 03 29.0				650	69	WIND NOISE	
15	GMA	EP	17 05 6.0				1466	204		

15	18 57	51.28	51.35 N 179.62 E	DEPTH = 59.5 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
15	ASD	IP D	18 58 .5	21.6	.1	3.21	20	103	-.1	
15	ASB	IP D	18 58 1.0	48.3	.1	3.57	26	92	.0	
		IS	18 58 8.1							
15	ASC	IP	18 58 1.6				34	111	.1	
15	SSI	IP	18 58 3.8				60	178	-.0	
		IS	18 58 13.0							
15	AMA	IP C	18 58 6.9	25.0	.1	3.48	88	275	.0	

15	ADK	EP	19 03 2.0							
		ES	19 03 56.0							

16	1 0	46.94	6.04 N 77.53 W	DEPTH = 14.0 KM MB = 5.6 MS = 5.2			TELESEISMIC SOLUTION			
NEAR WEST COAST OF COLOMBIA										

16	GMA	EP	01 13 7.5				9109	93	
----	-----	----	-----------	--	--	--	------	----	--

16	ADK	EP C	05 43 53.1							
		ES	05 44 3.7							
16	AMA	IP	05 43 54.5							
16	ASC	IP	05 44 10.3							

16	6 29	8.55	51.40 N 179.78 E	DEPTH = 58.9 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										

16	ASD	IP C	06 29 18.4	51.5	.1	3.60	30	87	-.0
16	ASB	IP	06 29 18.9	40.6	.1	3.52	37	82	-.0
		IS	06 29 26.5						
16	ASC	IP	06 29 19.6				43	98	.2
16	SSI	IP D	06 29 20.6				56	166	-.0
16	AND	IP	06 29 20.9				60	107	-.1
16	RAT	IP	06 29 26.6				109	113	.0

16	8 44	22.00	8.70 N 83.15 W	DEPTH = 64.0 KM MB = 5.1			TELESEISMIC SOLUTION			
COSTA RICA										

16	ADK	EP	08 56 55.0				9489	82	
----	-----	----	------------	--	--	--	------	----	--

16	ADK	EP	11 58 4.3							
		ES	11 58 59.3							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
.....										
16	12 28	15.36	51.22 N 178.75 E DEPTH = 25.0 KM				FIXED DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
16	ASB	EP	12 28 22.8	9.8	.1	2.74	38	246	-.1	
		IS	12 28 28.1						-.2	
16	ASC	IP C	12 28 23.3				40	227	.2	
16	AND	IP	12 28 23.3				41	201	.1	
16	RAT	IP D	12 28 27.4				71	156	-.1	
.....										
16	16 0	.10	37.10 N 116.01 W DEPTH = 0.0 KM MB = 5.1				TELESEISMIC SOLUTION			
SOUTHERN NEVADA										
16	GMA	E(P)	16 07 26.3				4297	115		
.....										
16	16 24	34.80	51.28 N 174.89 W DEPTH = 37.0 KM MB = 4.9				TELESEISMIC SOLUTION			
ANDREANOF ISLANDS, ALEUTIAN IS.										
16	ADK	IP C	16 24 56.2				135	119	.1	ML4.0 D1.3
		ES	16 25 13.1						1.4	
16	AMA	IP	16 25 14.5				294	89	-1.2	TELESEISMIC
16	SSI	IP	16 25 28.2				388	98	.8	
16	ASD	EP	16 25 28.8				401	90	-.2	
16	ASC	EP	16 25 30.2				413	91	-.3	
16	ASB	EP	16 25 30.4				408	89	.6	
16	AND	EP	16 25 33.0				428	92	.6	
16	ANA	EP	16 25 38.3				449	92	3.4	
16	RAT	EP	16 25 40.4				473	94	2.6	
16	CSA	E(P)	16 26 17.0				766	245	2.9	
16	GMA	EP	16 28 19.8				1763	213	2.7	
.....										
16	ADK	EP	17 06 4.1							
		ES	17 06 20.2							
16	ADK	EP	17 46 51.0							
		ES	17 47 8.5							
16	RAT	IP	23 59 30.0							
		IS	23 59 59.7							
.....										
17	7 0	57.40	49.73 N 78.13 E DEPTH = 0.0 KM MB = 5.5				TELESEISMIC SOLUTION			
EASTERN KAZAKH SSR										
17	GMA	IP C	07 10 42.7				6275	318		
.....										
17	7 39	53.79	6.48 N 77.54 W DEPTH = 18.0 KM MB = 5.1				TELESEISMIC SOLUTION			
NEAR WEST COAST OF COLOMBIA										
17	GMA	EP	07 52 12.8				9064	93		
.....										
17	7 46	24.01	50.95 N 178.78 E DEPTH = 17.9 KM				FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
17	ASB	EP	07 46 33.7	12.9	.2	2.66	56	216	-.0	
		IS	07 46 40.7						-.1	
17	ASD	IP	07 46 34.5	16.4	.2	2.80	62	219	-.2	
17	ASC	IP C	07 46 34.8				63	205	.1	
17	AND	IP	07 46 35.7				69	190	.0	

DEC	STA	PHASE	TIME	AMP	PER	MAG	DIST	AZI	RES	REMARKS
1970			(GMT)	(MU)	(SEC)		(KM)	(DEG)	(SEC)	

. 17	ANA	EP	07 46 37.0				75	173	.3	
. 17	RAT	IP C	07 46 40.0				99	161	-.3	
. 17	SSI	E(P)	07 46 43.2				118	208	.0	

.....

. 17	8 42 21.49	56.01 S	27.46 W	DEPTH = 115.0 KM	MB = 5.9	TELESEISMIC SOLUTION
SOUTH SANDWICH ISLANDS REGION						

.....

. 17	GMA	PKP	09 01 59.5				17354	89		
------	-----	-----	------------	--	--	--	-------	----	--	--

.....

17	ADK	IP D	14 40 19.1							
		ES	14 40 27.1							
17	AMA	EP	14 40 38.9	15.0	.2					
		I	14 40 39.9							
		ES	14 41 5.4							
17	ASD	EP	14 40 51.9							
17	ASC	EP	14 40 53.8							
17	AND	EP	14 40 56.2							
17	ANA	EP	14 40 59.0							

.....

. 17	14 42 48.19	52.04 N	178.86 E	DEPTH = 112.5 KM		FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS						

.....

. 17	RAT	IP D	14 43 4.6				46	53	-.2	
		ES	14 43 17.1						.2	
. 17	ANA	EP	14 43 5.0				48	16	.0	
. 17	AND	EP	14 43 5.3				54	353	.0	
. 17	ASC	EP	14 43 6.4				68	342	.2	
. 17	ASB	EP	14 43 7.1				81	341	.0	
. 17	ASD	EP	14 43 7.1	5.5	.1	2.92	80	336	.1	
		ES	14 43 20.8						.0	
. 17	AMA	IP C	14 43 15.0	3.7	.1	2.90	163	302	-.0	

.....

17	CSA	EP	15 19 33.3							
17	ADK	EP	15 21 3.5							
		ES	15 21 26.3							
17	AMA	EP	15 21 25.4	18.2	.2	3.28				
		IS	15 21 46.6							
17	ASD	E(P)	15 21 37.3							
17	ASC	E(P)	15 21 38.7							
17	ADK	EP	15 22 19.9							

.....

. 17	15 25 13.02	51.28 N	178.67 E	DEPTH = 25.0 KM		FIXED DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS						

.....

. 17	AND	E(P)	15 25 20.2				37	212	-.2	
. 17	ASC	EP	15 25 21.0				40	240	.2	
		ES	15 25 26.7						.3	
. 17	ASD	EP	15 25 21.9	1.4	.1	1.97	48	255	-.0	
		ES	15 25 28.0						-.5	

.....

17	CSA	EP	15 29 59.6							
----	-----	----	------------	--	--	--	--	--	--	--

.....

. 17	16 5 .20	37.13 N	116.08 W	DEPTH = 0.0 KM	MB = 5.7	TELESEISMIC SOLUTION
SOUTHERN NEVADA						

.....

. 17	ADK	EP	16 13 12.1				4927	85		
. 17	AMA	E(P)	16 13 24.4				5109	82		TELESEISMIC
. 17	ASD	EP	16 13 32.1				5214	81		
. 17	ASB	EP	16 13 32.7				5221	81		

.....

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
17	ASC	EP	16 13 32.9				5225	81		
17	AND	E(P)	16 13 33.5				5238	81		
.....										
17	17 56 10.11		51.22 N 178.64 E	DEPTH = 38.0 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
17	AND	EP	17 56 19.5				44	210	.1	
17	ASB	EP	17 56 19.6				45	250	.1	
		ES	17 56 26.2						-.2	
17	ANA	EP	17 56 19.8				45	182	.2	
17	ASC	EP	17 56 19.8				45	234	.2	
17	ASD	EP	17 56 20.3				52	249	-.2	
17	RAT	EP	17 56 22.3	16.8	.1	3.18	68	161	-.3	
17	SSI	EP	17 56 27.0	17.1	.1	3.32	100	222	.0	
		ES	17 56 39.3						-.0	
.....										
17	AMA	IP C	19 55 39.5	31.4	.2	2.92				
		ES	19 55 44.2							
17	ASD	E(P)	19 55 50.7							
17	ASC	E(P)	19 55 52.7							
17	ADK	EP	20 15 21.1							
		ES	20 15 37.9							
17	ADK	EP	22 30 28.9							
		ES	22 30 45.7							
.....										
18	0 0 10.07		51.51 N 176.70 E	DEPTH = 3.8 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
18	RAT	IP C	00 00 30.4				117	255	.5	
		ES	00 00 44.1						-.2	
18	ANA	EP	00 00 33.7				137	265	.9	
18	AND	EP	00 00 36.3				156	269	.5	
18	ASC	E(P)	00 00 37.7				171	273	-.3	
18	ASD	EP	00 00 39.3				184	275	-.7	
18	ASB	E(P)	00 00 39.3				178	276	.3	
		E(S)	00 01 .1						-.0	
18	SSI	E(P)	00 00 42.2	12.4	.1		204	259	-.8	
18	AMA	EP	00 00 54.5				292	276	.4	
		ES	00 01 29.8						3.5	
18	ADK	EP	00 01 14.9				466	267	-.6	
		ES	00 02 3.6						.3	
.....										
18	ADK	EP D	01 12 4.6							
		ES	01 12 13.1							
.....										
18	3 50 22.11		50.99 N 176.97 E	DEPTH = 50.0 KM			FIXED DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
18	RAT	IP C	03 50 42.3				131	227	-.2	
		IS	03 50 57.0						-.4	
18	ANA	IP	03 50 44.2				137	240	.8	
		IS	03 50 59.8						.9	
18	AND	IP C	03 50 44.8				152	246	-.4	
		IS	03 51 1.3						-.7	
18	ASB	IP C	03 50 47.0	7.5	.1	3.15	164	256	.3	
		IS	03 51 4.7						.1	
18	ASD	IP C	03 50 47.0	5.2	.1	3.00	172	256	-.6	
.....										
18	ADK	EP	10 15 10.4							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
18	AMA	IP C	10 27 3.0							
18	SSI	IP	10 27 10.7							
		I(S)	10 27 19.9							
18	ASD	EP	10 27 11.5							
18	ASB	EP	10 27 13.1							
18	ASC	EP	10 27 13.6							
18	ADK	EP C	10 30 9.2							
		ES	10 30 16.5							
18	ADK	EP	10 31 56.9							
		ES	10 32 8.6							
18	ADK	EP C	10 34 48.9							
		ES	10 35 .8							
18	ADK	EP C	10 37 36.9							
		ES	10 37 46.9							
18	ADK	EP	10 45 36.1							
		ES	10 45 48.2							

.....

18	11 23 20.21	51.07 N 179.20 E	DEPTH = 19.0 KM	FREE DEPTH SOLUTION						
RAT ISLANDS, ALEUTIAN ISLANDS										
18	ASB	IP C	11 23 26.6	14.7	.1	2.84	33	186	.0	
		IS	11 23 31.2						-.0	
18	ASD	IP C	11 23 27.0				37	196	-.2	
		IS	11 23 32.0						-.4	
18	ASC	IP C	11 23 28.2				44	177	.0	

.....

.....

18	15 29 5.70	53.30 N 160.78 W	DEPTH = 33.0 KM	MB = 5.1	TELESEISMIC SOLUTION					
SOUTH OF ALASKA										
18	GSA	EP	15 29 47.1				305	116		
18	ADK	EP	15 31 23.4				1081	75		
18	AMA	EP	15 31 45.8				1268	73		
18	SSI	EP	15 31 50.7				1336	76		
18	ASB	EP	15 31 58.2				1375	73		
18	ASD	EP	15 31 58.5				1368	73		
18	ASC	EP	15 31 58.8				1377	74		

.....

18	ADK	IP C	22 28 56.9							
		IS	22 29 4.4							

.....

18	22 28 54.10	50.21 N 156.65 E	DEPTH = 61.0 KM	MB = 5.1	TELESEISMIC SOLUTION					
KURIL ISLANDS										
18	ADK	EP	22 32 47.2				1877	275		

.....

.....

18	23 50 12.20	5.12 N 123.55 E	DEPTH = 511.0 KM	MB = 5.5	TELESEISMIC SOLUTION					
MINDANAO, PHILIPPINE ISLANDS										
18	ADK	EP	24 00 20.8				7528	249		

.....

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

19	0 39 37.63	51.40 N 178.84 E DEPTH = 43.8 KM		FREE DEPTH SOLUTION						
		RAT ISLANDS, ALEUTIAN ISLANDS								
19	AND IP D	00 39 45.3					20	204	.1	
	IS	00 39 50.5							-.3	
19	ASC IP	00 39 45.7					24	253	.2	
19	ASB IP D	00 39 45.8					29	279	-.1	
19	ANA IP	00 39 46.2					28	154	.3	
19	ASD IP	00 39 46.4	38.4	.1	3.41		35	272	-.1	
19	RAT IP	00 39 48.6	33.6	.1	3.45		57	141	-.3	
	IS	00 39 57.1							.0	
19	SSI IP	00 39 51.3					75	224	.1	
	IS	00 40 1.0							-.1	

19	0 44 37.30	53.03 N 169.91 W DEPTH = 46.0 KM MB = 4.0		TELESEISMIC SOLUTION						
		FOX ISLANDS, ALEUTIAN ISLANDS								
19	ADK EP	00 45 41.0					471	72		
	ES	00 46 36.2								

19	1 47 16.27	52.35 N 179.84 E DEPTH = 150.0 KM		FIXED DEPTH SOLUTION						
		RAT ISLANDS, ALEUTIAN ISLANDS								
19	ASD IP C	01 47 41.1					112	18	-.1	
19	ASC IP	01 47 41.3					109	25	.3	
19	ASB IP	01 47 41.5					117	20	-.1	
	ES	01 48 .1							-.0	
19	ANA IP	01 47 41.5					114	45	.1	
19	RAT IP	01 47 41.7	81.4	.1	4.23		120	59	-.2	

19	2 35 32.68	3.05 S 148.29 E DEPTH = 5.0 KM MB = 4.7		TELESEISMIC SOLUTION						
		BISMARCK SEA								
19	GMA EP	02 47 30.5					8609	232		

19	2 45 31.11	3.06 S 148.34 E DEPTH = 3.0 KM MB = 4.7		TELESEISMIC SOLUTION						
		BISMARCK SEA								
19	GMA EP	02 57 29.0					8608	232		

19	AMA IP	04 17 21.6	33.3	.1	3.17					
	IS	04 17 25.5								
19	ASD IP	04 17 33.7								
19	SSI IP	04 17 35.5								
19	ASC IP	04 17 35.9								

19	10 38 5.20	1.63 S 99.90 E DEPTH = 46.0 KM MB = 5.8 MS = 6.2		TELESEISMIC SOLUTION						
		SOUTHERN SUMATRA								
19	ADK EP	10 50 50.6					9703	264		

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
19	17 36	39.97	51.57 N 178.59 E	DEPTH = 67.8 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
19	ANA	IP	17 36 50.2				8	216	.2	
19	AND	IP	17 36 50.5				25	271	-.0	
		IS	17 36 58.0						-.2	
19	RAT	IP	17 36 50.7				32	145	-.2	
		IS	17 36 58.8						-.0	
19	ASC	IP	17 36 51.6				42	286	.0	
19	ASD	IP	17 36 52.6	14.4	.1	3.16	56	291	-.1	
19	ASB	IP	17 36 52.6				51	297	.3	
19	SSI	I(P)	17 36 55.1				78	243	.2	
19	AMA	IP	17 37 4.4				163	282	-.3	
20	6 1	36.10	63.09 N 151.44 W	DEPTH = 130.0 KM			TELESEISMIC SOLUTION			
			CENTRAL ALASKA							
20	GMA	EP C	06 02 50.8				542	114		
20	7 48	22.80	51.69 N 179.83 E	DEPTH = 125.6 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
20	ASD	IP D	07 48 40.8	7.1	.1	3.03	47	46	-.2	
20	ASC	IP	07 48 41.2				53	61	-.1	
20	ASB	IP	07 48 41.5	11.6	.1	3.25	55	48	.1	
		IS	07 48 54.6						-.3	
20	AND	IP	07 48 41.8				62	77	.0	
		ES	07 48 55.9						.2	
20	AMA	IP	07 48 43.4				86	302	.0	
		I	07 48 44.8							
20	ANA	IP	07 48 43.9				81	85	.9	
20	RAT	IP	07 48 44.2				104	96	-.6	
20	10 41	3.07	4.84 S 144.14 E	DEPTH = 104.0 KM			TELESEISMIC SOLUTION			
			NEAR NORTH COAST OF NEW GUINEA							
20	GMA	EP	10 53 5.8				8951	235		
20	11 1	47.96	39.40 N 29.24 E	DEPTH = 38.0 KM			TELESEISMIC SOLUTION			
			TURKEY							
20	GMA	EP	11 13 28.1				8360	352		
20	11 55	56.68	17.83 S 179.96 W	DEPTH = 635.0 KM			TELESEISMIC SOLUTION			
			FIJI ISLANDS REGION							
20	GMA	EP	12 07 23.5				9364	198		
21	8 0	27.60	52.96 N 174.70 W	DEPTH = 223.0 KM			TELESEISMIC SOLUTION			
			ANDREANOF ISLANDS, ALEUTIAN IS.							
21	ADK	IP C	08 01 4.2				175	46	-.2	
		ES	08 01 31.1						-.2	
21	SSI	IP	08 01 27.2				405	71	-.0	
21	ASD	IP	08 01 30.4				442	65	-.9	
21	ASB	IP	08 01 31.1	486.6	.2		450	64	-1.1	

PAGE 70-12- 41

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
		ES	08 02 19.1						-.2	
21	AND	IP	08 01 31.4				459	68	-1.9	
21	ASC	IP	08 01 31.5				450	66	-.7	
21	ANA	IP	08 01 34.7				476	69	-.4	
21	RAT	IP	08 01 36.2				491	72	-.6	
21	10 52 54.91		43.83 N 151.03 E							TELESEISMIC SOLUTION
			KURIL ISLANDS REGION							
21	GMA	E(P)	10 59 37.2				3765	254		
21	14 40 45.00		9.12 S 116.42 E							TELESEISMIC SOLUTION
			SUMBAWA ISLAND REGION							
21	ADK	IP	14 53 3.2				9269	246		
21	ADK	EP	20 43 .5							
		E	20 44 55.5							
21	AMA	IP	21 19 19.1	16.2	.2	2.66				
		IS	21 19 24.2							
21	22 54 32.90		52.64 N 172.08 E							TELESEISMIC SOLUTION
			NEAR ISLANDS, ALEUTIAN ISLANDS							
21	RAT	IP	22 55 28.9				438	285		REGIONAL OR TEL
22	0 28 39.66		51.71 N 178.47 E							FREE DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
22	RAT	IP	00 28 51.0				14	134	.1	
		IS	00 28 59.0						-.2	
22	ANA	IP C	00 28 51.1				16	307	.1	
22	AND	IP C	00 28 52.0				37	297	.1	
		IS	00 29 1.0						.1	
22	ASC	IP	00 28 53.3				55	300	.1	
22	ASB	IP	00 28 54.2				66	306	.0	
22	ASD	IP	00 28 54.3	9.4	.1	3.05	70	301	-.2	
22	SSI	IP	00 28 55.4	38.5	.1	3.68	79	256	.0	
		IS	00 29 6.9						.0	
22	1 48 30.21		3.96 S 80.82 W							TELESEISMIC SOLUTION
			PERU-ECUADOR BORDER REGION							
22	GMA	IP	02 01 26.8				9962	100		
		I	02 01 36.8							
22	4 27 7.11		50.23 N 179.00 E							FIXED DEPTH SOLUTION
			RAT ISLANDS, ALEUTIAN ISLANDS							
22	ASD	IP	04 27 28.3	2.2	.1	2.57	131	191	-.0	
		ES	04 27 43.0						-.8	
22	ASC	EP	04 27 29.3				138	185	.2	
		ES	04 27 45.6						.5	
22	AND	EP	04 27 29.9				148	179	-.4	
22	RAT	E(P)	04 27 34.2				181	165	.0	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

22	5 15	41.72	51.93 N 178.35 E	DEPTH = 82.9 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
22	RAT	IP	05 15 53.9	15.1	.1	3.17	15	5	.2	
		IS	05 16 2.1						-.3	
22	AND	EP	05 15 56.0				58	315	-.0	
		I	05 15 56.5							
22	ASC	EP	05 15 57.9				77	313	.3	
22	SSI	IP	05 15 58.2	8.1	.1	3.03	85	273	-.2	
		IS	05 16 10.9						.3	
22	ASD	IP	05 15 58.9				91	311	-.1	

22	7 52	50.63	51.50 N 179.67 W	DEPTH = 70.5 KM			FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
22	AMA	EP	07 53 2.8	6.8	.1	2.82	45	301	.1	
22	ASD	EP	07 53 4.7	3.8	.1	2.63	70	80	-.2	
22	SSI	IP	07 53 4.8	14.5	.1	3.21	68	130	.1	
		IS	07 53 14.8						-.2	
22	ASB	EP	07 53 5.5	8.0	.1	2.98	77	78	-.1	
		IS	07 53 16.3						-.2	
22	ASC	EP	07 53 6.2				81	87	.2	
		ES	07 53 17.8						.5	

22	AMA	EP	10 02 11.2	7.1	.1					
22	SSI	EP	10 02 14.3	6.2	.1					
		IS	10 02 46.1							
22	ASD	EP	10 02 27.4							
22	ASC	EP	10 02 30.1							
22	AMA	IP C	11 41 38.7	14.9	.1	2.90				
		IS	11 41 43.4							

22	16 3	20.56	51.50 N 178.27 E	DEPTH = 62.5 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
22	RAT	IP	16 03 30.9	3.0	.1	2.40	33	187	-.1	
22	ANA	IP D	16 03 30.9				30	243	.1	
22	ASC	EP	16 03 33.7				62	275	.2	
		IS	16 03 43.0						.1	
22	ASB	EP	16 03 34.1	5.6	.1	2.78	69	284	-.1	
		IS	16 03 43.9						-.3	
22	ASD	EP	16 03 34.9				75	280	.1	
22	SSI	IP	16 03 37.6	5.7	.1	2.88	100	245	-.1	
		IS	16 03 50.2						.0	

22	17 59	40.90	62.49 N 149.07 W	DEPTH = 44.0 KM MB = 3.5			TELESEISMIC SOLUTION			
CENTRAL ALASKA										
22	GMA	E(P)	18 01 11.0				680	113		

22	18 2	1.71	51.49 N 179.49 E	DEPTH = 64.9 KM			FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
22	ASD	IP D	18 02 11.3	18.8	.1	3.17	15	43	-.2	
22	ASB	IP C	18 02 11.8				22	50	.0	
		IS	18 02 19.1						-.1	
22	ASC	IP D	18 02 11.9				23	82	.1	
22	AND	IP	18 02 12.9				38	102	.1	
22	SSI	IP	18 02 13.3				45	189	-.0	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
		IS	18 02 21.8						.0	
22	ANA	IP	18 02 14.8				59	105	.2	
22	RAT	IP	18 02 17.2				87	113	-.3	
		IS	18 02 28.9						-.0	
22	AMA	IP	18 02 18.9				100	283	.0	
22	ADK	EP	18 16 5.2							
		ES	18 16 40.8							
22	20 46 47.73		52.40 N 179.84 E							DEPTH = 160.2 KM RAT ISLANDS, ALEUTIAN ISLANDS FREE DEPTH SOLUTION
22	ASC	EP	20 47 13.9				114	24	.1	
22	ANA	EP	20 47 13.9				118	43	-.2	
22	AND	EP	20 47 14.2				111	33	.6	
22	ASB	EP	20 47 14.2				123	19	-.3	
		ES	20 47 33.9						-.1	
22	ASD	EP D	20 47 14.3	3.2	.1	2.84	117	17	.2	
22	RAT	IP C	20 47 14.3	12.0	.1	3.42	123	57	-.2	
22	AMA	EP	20 47 16.1	13.9	.1	3.51	143	330	-.1	
22	20 53 4.30		28.29 N 43.94 W							DEPTH = 33.0 KM MB = 5.4 NORTH ATLANTIC RIDGE TELESEISMIC SOLUTION
22	GMA	EP	21 04 44.5				8337	54		
22	22 57 15.39		52.15 N 178.31 E							DEPTH = 135.2 KM RAT ISLANDS, ALEUTIAN ISLANDS FREE DEPTH SOLUTION
22	RAT	IP	22 57 34.2	17.5	.1	3.44	39	358	-.2	
22	ANA	IP	22 57 35.7				63	337	.2	
		E(S)	22 57 50.1						-.0	
22	AND	IP	22 57 36.4				79	326	-.0	
22	ASC	EP	22 57 38.0				96	323	.3	
22	ASB	EP	22 57 38.6				109	324	-.1	
22	ASD	EP	22 57 38.7	5.9	.1	3.05	110	320	-.1	
23	1 31 29.74		51.53 N 178.40 E							DEPTH = 62.8 KM RAT ISLANDS, ALEUTIAN ISLANDS FREE DEPTH SOLUTION
23	ANA	IP	01 31 39.5				21	239	-.0	
23	AND	IP	01 31 40.7				39	264	.1	
23	ASB	IP	01 31 42.6				62	288	-.1	
		IS	01 31 52.1						.0	
23	SSI	IP C	01 31 45.9	8.6	.1	3.03	92	244	.0	
		IS	01 31 57.6						-.0	
23	7 0 57.30		43.84 N 54.84 E							DEPTH = 0.0 KM MB = 6.1 WESTERN KAZAKH SSR TELESEISMIC SOLUTION
23	GMA	EP	07 11 56.5				7507	333		
23	SSI	IP	11 30 37.0	4.8	.1	2.75				
		IS	11 30 48.1							
23	ASC	EP	11 30 39.9							
23	ASB	EP	11 30 40.2							
		ES	11 30 53.2							
23	AND	IP	11 30 44.5							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

23 11 42 47.40 12.33 N 142.93 E DEPTH = 49.0 KM MB = 5.7 MS = 4.9 TELESEISMIC SOLUTION
SOUTH OF MARIANA ISLANDS

23 ADK E(P) 11 51 41.7 5688 235

23 ASB IP 13 14 28.2 4.8 .1 2.52

IS 13 14 34.4

23 ASC IP 13 14 29.3

IS 13 14 36.3

23 AND IP 13 14 39.4

23 13 39 6.44 52.05 N 179.29 W DEPTH = 36.9 KM FREE DEPTH SOLUTION
DELAROF ISLANDS, ALEUTIAN ISLANDS

23 SSI IP C 13 39 20.6 5.7 .1 2.76 79 76 .2

IS 13 39 30.3 -.2

23 ASB EP 13 39 26.7 127 52 -.1

ES 13 39 41.7 -.0

23 ASC EP 13 39 26.9 125 58 .3

23 AND EP 13 39 27.2 133 65 -.3

ES 13 39 43.2 .3

23 AMA IP C 14 00 26.5

23 SSI IP 14 00 40.8

IS 14 00 55.0

23 ASB EP 14 00 41.9 13.9 .1 3.33

IS 14 00 57.1

23 ASC EP 14 00 43.0

IS 14 00 59.5

23 AND EP 14 00 45.0

23 ANA EP 14 00 48.8

23 14 33 26.32 51.57 N 179.01 E DEPTH = 18.8 KM FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

23 AND IP 14 33 29.6 4 80 .0

23 ASC IP D 14 33 30.5 16 317 -.0

IS 14 33 33.6 -.0

23 ANA IP C 14 33 31.6 25 105 .0

23 ASB IP C 14 33 32.1 8.4 .1 2.55 28 324 .0

IS 14 33 36.3 -.0

23 RAT IP D 14 33 35.7 11.5 .1 2.89 53 119 -.0

23 SSI IP 14 33 35.8 54 228 .0

23 AMA IP D 16 27 42.1

IS 16 27 45.3

23 ASB IP 16 27 55.6 8.6 .1 3.07

IS 16 28 8.9

23 SSI IP D 16 27 55.8 21.9 .2 3.19

IS 16 28 9.5

23 ASC EP 16 27 56.3

23 AND EP 16 27 58.6

23 ANA EP 16 28 1.7

23 RAT EP 16 28 4.9

23 18 52 48.57 52.01 N 178.44 E DEPTH = 124.5 KM FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

23 RAT EP 18 53 5.8 24 18 .0

ES 18 53 18.3 -.1

23 ANA IP 18 53 6.6 45 340 .1

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
		ES	18 53 19.7						.1	
23	AND	IP	18 53 7.3				61	325	-.1	
23	ASC	EP	18 53 8.5				78	321	.0	
23	SSI	IP	18 53 8.6	3.2	.1	2.72	80	280	.0	
23	ASB	EP	18 53 9.4	2.3	.1	2.59	91	322	-.0	
.....										
23	19 57	1.70	50.19 N 177.55 E	DEPTH = 33.0 KM			TELESEISMIC SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
23	ASB	EP	19 57 27.6	43.3	.3	3.45	177	223	-1.0	
23	ANA	EP	19 57 28.0				178	206	-.7	
23	AND	IP	19 57 28.3				182	213	-.9	
		IS	19 57 46.8						-2.5	
23	ASC	EP	19 57 28.5				182	219	-.7	
23	RAT	EP	19 57 29.3				188	197	-.6	
		ES	19 57 49.2						-1.3	
23	SSI	EP	19 57 36.3	41.4	.2		237	218	.3	
23	AMA	EP	19 57 39.4				265	244	-.1	
		IS	19 58 6.7						-.3	
.....										
23	19 58	23.21	50.46 N 177.76 E	DEPTH = 0.0 KM			FIXED DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
23	ASB	EP	19 58 47.6				144	227	.1	
23	ANA	EP	19 58 47.7				144	206	.2	
23	AND	IP C	19 58 48.0				148	215	-.1	
23	ASC	EP	19 58 48.3				149	222	.2	
23	RAT	EP	19 58 48.9				154	195	-.1	
23	SSI	EP	19 58 56.2				204	219	-.3	
		E(S)	19 59 20.8						.0	
.....										
23	21 55	1.08	50.88 N 179.22 W	DEPTH = 22.6 KM			FREE DEPTH SOLUTION			
			DELAROF ISLANDS, ALEUTIAN ISLANDS							
23	AMA	IP D	21 55 10.0				46	190	.4	
23	ASB	EP	21 55 20.8				120	116	.3	
		IS	21 55 34.4						-.2	
23	ASC	EP	21 55 22.2				130	119	.1	
23	SSI	EP	21 55 22.8				140	143	-.8	
23	ANA	EP	21 55 27.4				169	119	-.5	
23	RAT	EP	21 55 32.4				199	120	.9	
23	ADK	EP	21 55 33.0				215	240	-.6	
		ES	21 55 57.8						.5	
.....										
24	3 17	15.10	62.04 N 152.31 W	DEPTH = 125.0 KM MB = 3.5			TELESEISMIC SOLUTION			
			CENTRAL ALASKA							
24	GMA	EP	03 18 32.5				581	127		
24	ADK	EP	03 21 1.5				1843	43		
.....										
24	AMA	EP D	08 03 49.1							
24	SSI	IP	08 03 58.8	85.5	.1					
24	ASB	IP	08 03 59.4							
		IS	08 04 13.3							
24	ASC	IP	08 04 .3							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS	
24	8	0	37.60	16.10 N	93.56 W	DEPTH = 116.0 KM	MB = 5.6			TELESEISMIC SOLUTION	
				CHIAPAS, MEXICO							
24	ADK	EP	08 11 56.5				8141	85			
24	8	22	20.80	51.47 N	178.31 W	DEPTH = 53.0 KM	MB = 5.3			TELESEISMIC SOLUTION	
				DELAROF ISLANDS, ALEUTIAN ISLANDS							
24	AMA	IP D	08 22 30.5				59	70	-2.3	FELT ON ADAK.	
24	ADK	IP	08 22 41.5				128	250	.6	ML4.9 01.1 FELT	
		ES	08 22 56.1						.5		
24	SSI	IP	08 22 45.6				153	107	1.6		
24	ASB	IP	08 22 45.6				170	85	-5		
24	ASC	IP	08 22 46.7				175	89	-0		
24	AND	IP	08 22 49.3				190	92	.7		
24	RAT	IP	08 22 55.4				235	98	1.3		
24	SMY	EP	08 23 36.0				537	102	4.6		
24	CSA	EP	08 24 30.0				963	254	6.1		
24	GMA	EP	08 26 14.3				1840	220	2.1		
24	AMA	IP D	08 50 28.5			14.7	.1	3.12			
		IS	08 50 36.8								
24	SSI	IP	08 50 45.0								
24	AMA	IP C	09 08 46.1			47.9	.1	3.55		WIND INTERFEREN	
		IS	09 08 52.9								
24	10	0	45.92	50.45 N	177.39 E	DEPTH = 50.0 KM				FIXED DEPTH SOLUTION	
				RAT ISLANDS, ALEUTIAN ISLANDS							
24	ANA	IP C	10 01 9.9				158	215	.2		
24	AND	IP	10 01 10.3				165	222	-3		
24	ASB	IP	10 01 10.3			696.7	.3	4.64	-3		
		IS	10 01 27.5						-1.1		
24	RAT	IP	10 01 10.5				164	204	.1		
24	ASC	IP	10 01 10.8				168	229	-1		
24	SSI	IP	10 01 18.5				222	225	.9		
24	AMA	IP	10 01 22.6				263	251	-1		
		IS	10 01 50.4						.9		
24	ADK	EP	10 01 45.3				450	252	-4		
		ES	10 02 29.7						.3		
25	9	32	2.79	51.56 N	179.69 E	DEPTH = 27.7 KM				FREE DEPTH SOLUTION	
				RAT ISLANDS, ALEUTIAN ISLANDS							
25	SSI	IPGD	09 32 10.4			44.9	.1	3.41	38	169	-0
		ES	09 32 16.0						.0		
25	ASC	IPG	09 32 10.4						38	73	-1
25	ASB	IPGC	09 32 10.5			35.7	.1	3.31	38	54	.0
25	RAT	E(P)	09 32 19.0						97	105	.0
25	12	48	26.92	51.26 N	179.46 W	DEPTH = 29.8 KM				FREE DEPTH SOLUTION	
				DELAROF ISLANDS, ALEUTIAN ISLANDS							
25	AMA	IPGD	12 48 33.2				24	264	-0	AMPLITUDES HIGH	
25	ASB	EP	12 48 42.3			30.1	.1	3.52	91	96	.1
25	SSI	IPG	12 48 43.1						96	136	.1
		IS	12 48 54.7						-0		
25	ASC	IP	12 48 43.4				98	102	.1		
25	AND	EP	12 48 45.6				115	106	-2		

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
25	ADK	EP	13 55 57.2							
25	14 43 41.00		51.78 N 175.23 W				DEPTH = 64.0 KM		MB = 4.7	TELESEISMIC SOLUTION
										ANDREANOF ISLANDS, ALEUTIAN IS.
25	ADK	IP D	14 43 56.6				94	97	-0.8	ML4.6 D0.9 FELT
		IS	14 44 9.0						-0.4	
25	AMA	EP	14 44 20.5				274	77	1.3	AMPLS HIDDEN
25	SSI	E(P)	14 44 31.7				357	90	2.3	AMPLS HIDDEN
		E(S)	14 45 11.0						6.3	
25	ASB	EP	14 44 33.3	242.5	.2		385	81	.5	
25	ASC	EP	14 44 33.5				389	83	.2	V.POOR
25	AND	EP	14 44 35.5				402	84	.5	V.POOR
25	RAT	E(P)	14 44 41.1	236.0	.3		443	88	1.1	EXTREMELY POOR
25	GMA	EP	14 47 20.0				1720	214	2.5	
26	2 8 31.00		52.11 N 178.43 E				DEPTH = 7.2 KM			POOR SOLUTION
										RAT ISLANDS, ALEUTIAN ISLANDS
26	RAT	IP	02 08 37.6				35	11	.0	
26	ANA	IP	02 08 41.3				56	343	.1	
26	AND	IP C	02 08 44.0				71	329	.5	
26	ASC	EP	02 08 46.9				88	325	.8	
26	ASB	EP	02 08 47.8				101	326	-0.2	
		ES	02 08 58.2						-2.2	
26	SSI	IP C	02 08 50.2				83	287	4.9	
26	AMA	E(P)	02 09 3.8				193	299	1.8	
26	ADK	EP	02 17 1.6							
		ES	02 17 17.2							
26	5 47 47.00		52.11 N 178.43 E				DEPTH = 7.2 KM			POOR SOLUTION
										RAT ISLANDS, ALEUTIAN ISLANDS
26	RAT	IP	05 47 53.6				35	11	.0	
26	ANA	IP	05 47 57.3				56	343	.1	
26	AND	IP C	05 48 0.0				71	329	.5	
		IS	05 48 6.6						-1.9	
26	ASC	IP	05 48 3.0				88	325	.9	
26	ASB	EP	05 48 4.1	235.9	.2	4.14	101	326	.1	
		ES	05 48 14.1						-2.3	
26	SSI	IP	05 48 6.1				83	287	4.8	
		IS	05 48 17.6						5.9	
26	AMA	EP	05 48 20.1	31.4	.2	3.52	193	299	2.1	
26	ADK	IP	06 09 8.7							
		IS	06 09 23.8							
26	AMA	E(P)	06 09 30.1	10.7	.3					NOT A LOCAL
26	SSI	EP	06 09 39.1	17.3	.4					HIGH NOISE LEVL
26	ASB	E(P)	06 09 45.3							
26	AND	E(P)	06 09 46.5							
26	RAT	EP	06 09 50.6	24.3	.4					
26	7 29 17.64		51.63 N 179.28 E				DEPTH = 98.4 KM			FREE DEPTH SOLUTION
										RAT ISLANDS, ALEUTIAN ISLANDS
26	AND	E(P)	07 29 31.5				24	72	-0.2	
26	ASC	EP	07 29 31.7				20	24	.1	
		ES	07 29 41.9						.1	
26	ASB	EP	07 29 32.0	4.0	.1	2.67	30	4	.1	
		ES	07 29 42.3						-0.1	
26	ANA	E(P)	07 29 32.4				43	90	-0.1	

DEC 1970	STA	PHASE	TIME (GHT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
26	RAT	EP	07 29 34.4	8.4	.1	3.06	68	106	.2	
26	7 38	1.40	53.30 N 170.18 W	DEPTH = 76.0 KM	MB = 4.0					TELESEISMIC SOLUTION FOX ISLANDS, ALEUTIAN ISLANDS
26	ADK	EP	07 39 3.7				462	67		
26	10 2	47.86	9.28 N 94.06 E	DEPTH = 47.0 KM	MB = 5.4	MS = 5.5				TELESEISMIC SOLUTION NICOBAR ISLANDS REGION
26	GMA	EP	10 15 33.2				9748	287		
26	10 54	22.70	51.16 N 179.08 E	DEPTH = 30.1 KM						FREE DEPTH SOLUTION RAT ISLANDS, ALEUTIAN ISLANDS
26	ASB	IP D	10 54 29.0	197.5	.2	3.68	25	207	-.1	
		ES	10 54 33.7						-.1	
26	ASC	EP	10 54 30.3				34	190	.2	
26	AND	EP	10 54 31.7				46	169	.1	
26	RAT	IP C	10 54 37.5	11.8	.2	2.80	88	143	-.1	
26	SSI	IP	10 54 37.7	38.7	.2	3.32	89	204	-.0	
		ES	10 54 48.6						-.0	
26	12 23	38.44	51.52 N 179.68 W	DEPTH = 76.1 KM						FREE DEPTH SOLUTION DELAROF ISLANDS, ALEUTIAN ISLANDS
26	AMA	EP	12 23 51.3	9.4	.2	2.69	47	303	.0	
26	SSI	EP	12 23 52.7	11.4	.2	2.82	65	129	-.1	
26	ASB	EP	12 23 53.7	7.2	.1	2.95	77	76	-.1	
		ES	12 24 4.8						-.2	
26	ASC	EP	12 23 54.3				80	85	.1	
		ES	12 24 5.9						.2	
26	13 48	6.60	51.59 N 179.92 W	DEPTH = 84.6 KM						FREE DEPTH SOLUTION DELAROF ISLANDS, ALEUTIAN ISLANDS
26	SSI	EP	13 48 20.3	3.8	.1	2.63	47	134	.0	
		ES	13 48 30.3						.0	
26	ASB	EP	13 48 21.5	1.8	.1	2.33	63	66	.0	
		ES	13 48 32.3						-.0	
26	ASC	EP	13 48 21.6				65	77	-.0	
		ES	13 48 32.6						.0	
26	17 16	25.86	51.43 N 178.77 E	DEPTH = 44.9 KM						FREE DEPTH SOLUTION RAT ISLANDS, ALEUTIAN ISLANDS
26	AND	IP	17 16 33.6				19	220	.0	
		IS	17 16 39.0						-.2	
26	ANA	EP	17 16 34.1				23	161	.3	
26	ASC	IP	17 16 34.3				28	262	.1	
26	ASB	EP	17 16 34.5				34	283	-.2	
26	RAT	EP	17 16 36.3	4.8	.1	2.59	51	143	-.2	
26	SSI	EP	17 16 39.7	7.0	.1	2.86	76	228	.1	
		ES	17 16 49.4						-.1	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
27	0 47	29.10	57.03 N 149.10 W	DEPTH = 33.0 KM			TELESEISMIC SOLUTION			
			GULF OF ALASKA							
27	GMA	E(P)	00 49 56.9				1138	140		
27	2 6	45.10	16.20 S 178.79 E	DEPTH = 29.0 KM MB = 5.1			TELESEISMIC SOLUTION			
			FIJI ISLANDS							
27	GMA	EP	02 19 6.5				9204	199		
27	4 39	22.89	51.34 N 178.21 W	DEPTH = 75.0 KM			FIXED DEPTH SOLUTION			
			ANDREANOF ISLANDS, ALEUTIAN IS.							
27	ASB	IP	04 39 49.6	13.5	.1	3.45	177	90	.1	
		IS	04 40 8.9						-.0	
27	ASC	IP	04 39 50.0				183	93	-.2	
27	ANA	IP	04 39 54.7				219	97	.1	
27	7 35	39.76	51.36 N 179.32 E	DEPTH = 53.0 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
27	ASB	IP C	07 35 47.9	82.0	.1	3.72	5	94	.0	
27	ASC	IP	07 35 48.2				16	137	-.0	
27	ANA	IP	07 35 51.3				55	123	.0	
27	SSI	IP	07 35 52.1				62	197	.0	
		IS	07 36 1.1						.0	
27	10 13	42.53	20.40 S 178.52 W	DEPTH = 557.0 KM MB = 4.5			TELESEISMIC SOLUTION			
			FIJI ISLANDS REGION							
27	GMA	EP	10 25 27.0				9626	196		
27	11 29	23.80	51.76 N 176.20 E	DEPTH = 83.0 KM MB = 3.9			TELESEISMIC SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
27	RAT	IP	11 29 46.7	321.0	.4	4.17	146	269	-.4	
27	ANA	IP	11 29 49.7				170	276	-.2	
27	AND	EP	11 29 51.9				191	278	-.4	
		I(S)	11 30 24.1						10.9	
27	ASC	EP	11 29 54.5				207	280	.2	
27	ASB	EP	11 29 56.7	41.6	.1		215	283	1.5	
27	SSI	EP	11 29 58.4	118.5	.3		233	268	1.0	
27	12 15	33.16	18.18 N 145.65 E	DEPTH = 137.0 KM MB = 4.9			TELESEISMIC SOLUTION			
			MARIANA ISLANDS							
27	GMA	EP	12 25 17.5				6521	243		
27	19 2	6.26	51.92 N 178.64 E	DEPTH = 108.5 KM			FREE DEPTH SOLUTION			
			RAT ISLANDS, ALEUTIAN ISLANDS							
27	RAT	IP	19 02 21.6				25	57	.0	
		IS	19 02 32.6						-.2	
27	ANA	IP	19 02 22.1				33	357	.2	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
27	AND	IP D	19 02 22.4				46	332	-.0	
		IS	19 02 34.4						.2	
27	ASC	IP	19 02 23.4				63	325	-.1	
27	SSI	IP D	19 02 23.6	62.0	.1	3.94	65	273	-.0	
		IS	19 02 36.3						-.0	
27	ASB	IP	19 02 24.2	61.8	.1	3.96	75	326	-.2	
27	AMA	IP	19 02 33.7				171	295	.1	

27 21 31 4.23 51.15 N 178.26 E DEPTH = 50.0 KM FIXED DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

27	ANA	IP	21 31 16.0				60	208	-.1	
27	AND	EP	21 31 16.3				67	227	-.6	
27	ASC	IP	21 31 17.1				72	242	-.4	
		IS	21 31 24.7						-2.5	
27	RAT	IP D	21 31 17.5	15.1	.1	3.19	72	184	-.1	
27	SSI	IP	21 31 25.7	8.1	.1	3.08	124	229	1.9	
		IS	21 31 37.8						-.3	

27	AMA	IP D	23 36 26.2	39.5	.1					
		IS	23 37 24.0							
27	ASB	IP D	23 36 27.2	115.9	.1					
27	ASC	IP D	23 36 28.9							
27	AND	IP	23 36 31.2							
27	SSI	IP	23 36 32.1							
27	ANA	EP	23 36 33.8							
27	RAT	IP	23 36 37.9							
28	RAT	IP C	02 24 56.3	28.7	.1	3.63				
		IS	02 25 10.9							
28	ANA	IP	02 24 59.6							
28	AND	IP	02 25 1.9							
28	ASC	EP	02 25 3.9							
28	ASB	IP	02 25 6.2	12.1	.2					
28	SSI	IP C	02 25 8.2	19.6	.1					
		IS	02 25 32.5							

28 2 35 49.08 51.63 N 177.91 E DEPTH = 60.6 KM FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

28	RAT	IP	02 35 59.3	5.4	.1	2.65	34	237	-.1	
28	ANA	IP	02 36 1.1				52	271	.2	
28	AND	IP	02 36 2.9				72	276	-.0	
28	ASC	EP	02 36 4.8				89	283	.0	
28	ASB	IP	02 36 5.6	8.1	.1	3.02	97	288	-.1	
		ES	02 36 17.9						.0	
28	SSI	IP C	02 36 8.4	15.1	.1	3.35	119	256	.1	
		IS	02 36 22.3						-.1	

28 4 33 20.42 51.59 N 178.87 E DEPTH = 70.0 KM FREE DEPTH SOLUTION
RAT ISLANDS, ALEUTIAN ISLANDS

28	AND	EP	04 33 30.9				7	300	.3	
28	ASC	IP D	04 33 31.1				25	305	-.1	
		IS	04 33 39.0						-.1	
28	RAT	IP	04 33 32.3				44	121	-.1	
28	SSI	IP C	04 33 33.7	25.3	.1	3.43	60	236	-.0	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
28	5	5	24.83	52.26 N	179.71 E	DEPTH = 160.4 KM				FREE DEPTH SOLUTION
				RAT ISLANDS, ALEUTIAN ISLANDS						
28	AND	EP	05 05 49.5				94	34	-.0	
28	ASC	IP C	05 05 49.7				97	23	-.0	
28	ANA	EP	05 05 50.0				101	45	-.0	
28	ASB	IP C	05 05 50.3	7.7	.1	3.20	106	18	-.0	
		IS	05 06 8.9						-.0	
28	6	44	19.30	63.04 N	150.36 W	DEPTH = 116.0 KM				TELESEISMIC SOLUTION
				CENTRAL ALASKA						
28	GMA	EP	06 45 37.5				591	112		
28	9	39	10.60	53.93 N	166.49 W	DEPTH = 9.0 KM MB = 4.1				TELESEISMIC SOLUTION
				FOX ISLANDS, ALEUTIAN ISLANDS						
28	CSA	IP	09 39 32.8				129	236		
		IS	09 39 40.5							
28	ADK	EP	09 40 53.4				716	67		
28	SMY	EP	09 41 39.1				1297	76		
28	19	54	53.83	51.00 N	178.80 E	DEPTH = 25.0 KM				FIXED DEPTH SOLUTION
				RAT ISLANDS, ALEUTIAN ISLANDS						
28	ASB	IP D	19 55 3.0	17.9	.1	3.09	51	219	-.1	
		IS	19 55 9.8						-.0	
28	AND	IP C	19 55 4.8				63	190	-.1	
28	ANA	IP	19 55 5.9				70	172	.0	
28	SSI	IP	19 55 12.5				113	209	.2	
28	20	3	25.10	5.16 S	153.62 E	DEPTH = 61.0 KM MB = 6.0				TELESEISMIC SOLUTION
				NEW IRELAND REGION						
28	ADK	EP	20 13 43.4				6922	214		EL202922.0
		EPP	20 14 3.9							
		ES	20 22 6.4							
28	21	27	54.38	51.88 N	179.33 E	DEPTH = 111.7 KM				FREE DEPTH SOLUTION
				RAT ISLANDS, ALEUTIAN ISLANDS						
28	SSI	IP D	21 28 9.9	175.3	.1	4.35	18	266	.0	
28	AND	IP	21 28 10.8				44	36	-.0	
28	ASC	IP	21 28 11.1				48	14	.1	
28	ANA	IP D	21 28 11.5				54	58	.1	
28	ASB	IP C	21 28 11.6				58	6	-.0	
		IS	21 28 24.2						-.0	
28	RAT	IP D	21 28 12.3				70	82	-.1	
		I	21 28 13.2	110.2	.1	4.21				
28	AMA	IP	21 28 17.3				126	302	-.0	
29	ASB	IP	01 28 25.2							
		IS	01 28 32.4							
29	SSI	IP	01 28 34.3							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

29	2 26	12.20	10.55 S 161.40 E	DEPTH = 72.0 KM MB = 6.1		TELESEISMIC SOLUTION				
SOLOMON ISLANDS										
29	ADK	EP	02 36 46.9			7230	204	ER 025600.0		
		ES	02 45 30.0							
		EL	02 53 15.0							

29	5 29	28.30	52.16 N 178.96 E	DEPTH = 158.1 KM		FREE DEPTH SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS										
29	RAT	IP	05 29 50.7			59	47	-.1		
29	AND	IP	05 29 51.1			67	1	-.0		
29	ANA	IP	05 29 51.1			63	19	.1		
29	ASC	IP	05 29 51.9			79	350	.1		
29	ASB	IP	05 29 52.5	15.2	.1 3.48	91	348	-.1		
		IS	05 30 10.3	-.0						

29	6 4	5.78	51.46 N 179.26 E	DEPTH = 32.0 KM		FREE DEPTH SOLUTION				
RAT ISLANDS, ALEUTIAN ISLANDS										
29	ASC	IP	06 04 11.1			6	91	-.0		
		IS	06 04 17.9	2.9						
29	ASB	EP	06 04 11.3			11	4	-.0		
29	SSI	EP	06 04 15.8	7.5	.1 2.75	53	206	.0		
		IS	06 04 23.1	.0						

29	8 1	59.28	3.90 S 80.90 W	DEPTH = 47.0 KM MB = 5.8 MS = 5.2		TELESEISMIC SOLUTION				
NEAR COAST OF ECUADOR										
29	GMA	EP	08 14 53.7			9952	100			

29	RAT	IP D	08 40 .1	28.7	.1 2.88	APPROX. TIME				
		IS	08 40 2.3							
29	ANA	IP D	08 40 3.8							
29	AND	IP D	08 40 6.6							
29	ASC	IP	08 40 9.5							
29	SSI	IP	08 40 12.7	5.4	.1 2.80					
		IS	08 40 23.8							
29	AMA	IP D	08 56 .1	66.6	.1	APPROX TIME				
29	SSI	IP	08 56 14.6							
		IS	08 56 31.5							
29	ASB	IP C	08 56 16.8	18.7	.1 3.56					
		IS	08 56 36.4							
29	ASC	IP	08 56 17.4							
29	AND	EP	08 56 19.3							

29	10 24	31.40	51.24 N 168.44 W	DEPTH = 9.0 KM MB = 5.0		TELESEISMIC SOLUTION				
FOX ISLANDS, ALEUTIAN ISLANDS										
29	CSA	EP	10 25 34.0			444	214			
29	ADK	IP	10 25 49.9			570	94			
		I	10 25 59.2							
		IS	10 26 46.0							
29	AMA	IP	10 26 .1			745	86	APPROX TIME		
29	SSI	IP	10 26 10.9			833	90	REGIONAL		
29	ASB	EP	10 26 14.4			859	86			
29	ASC	IP	10 26 15.3			864	87			
29	AND	EP	10 26 16.7			878	87			
29	ANA	EP	10 26 19.5			898	88			

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
29	RAT	EP	10 26 21.9				920	89		
29	GMA	EP	10 28 2.0				1636	198		
.....										
29	11 44 27.08	5.25 S 152.71 E DEPTH = 49.0 KM MB = 5.1					TELESEISMIC SOLUTION			
NEW BRITAIN REGION										
29	GMA	EP	11 56 23.0				8683	227		
.....										
29	11 49 24.03	5.33 S 152.63 E DEPTH = 50.0 KM MB = 4.7					TELESEISMIC SOLUTION			
NEW BRITAIN REGION										
29	GMA	EP	12 01 20.5				8694	227		
.....										
29	13 7 56.21	51.37 N 179.30 E DEPTH = 25.0 KM					FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
29	ASB	IP C	13 08 .2	3.7	.1	2.08	4	82	-.2	
29	ASC	IP	13 08 1.4				14	139	.4	
29	AND	IP	13 08 2.8				33	132	-.2	
29	SSI	IP	13 08 7.2	3.8	.1	2.48	62	199	.1	
		IS	13 08 14.8						-.2	
.....										
29	13 25 46.73	51.66 N 179.93 W DEPTH = 85.5 KM					FREE DEPTH SOLUTION			
DELAROF ISLANDS, ALEUTIAN ISLANDS										
29	SSI	IP	13 26 .2	7.0	.1	2.88	42	128	.0	APPROX. TIME
		IS	13 26 10.0						-.0	
29	ASB	IP	13 26 1.8				66	60	-.1	
		ES	13 26 13.0						-.0	
29	ASC	IP	13 26 2.1				66	71	.1	
29	AND	IP	13 26 2.9				78	82	-.1	
29	ANA	IP	13 26 5.1				97	87	.2	
29	RAT	IP	13 26 7.2	9.9	.1	3.21	121	97	-.2	
.....										
29	16 43 52.26	51.42 N 178.79 E DEPTH = 45.3 KM					FREE DEPTH SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
29	AND	IP C	16 44 .2				20	215	.2	APPROX TIME
29	ASC	IP D	16 44 .7				27	259	.2	
29	ASB	IP D	16 44 .8	72.9	.1	3.69	32	281	-.2	
		IS	16 44 7.0						-.4	
29	ANA	IP D	16 44 .8				25	159	.4	
29	RAT	IP D	16 44 3.1	57.5	.1	3.68	53	143	-.1	
		IS	16 44 10.6						-.5	
29	SSI	IP D	16 44 6.0				77	226	.0	
.....										
29	17 17 51.40	51.56 N 177.65 E DEPTH = 58.0 KM MB = 4.4					TELESEISMIC SOLUTION			
RAT ISLANDS, ALEUTIAN ISLANDS										
29	RAT	IP C	17 18 3.0				54	240	-.2	
29	ANA	IP	17 18 5.1				70	264	.2	
29	AND	IP D	17 18 6.9				90	270	-.2	
29	ASC	IP	17 18 8.8				105	276	-.1	
29	ASB	IP D	17 18 9.2				113	282	-.6	
29	SSI	IP	17 18 13.6				139	255	.6	
29	AMA	IP	17 18 24.3				227	279	.6	
29	SMY	EP	17 18 30.5				275	117	.8	

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
29	ADK	IP	17 18 44.8				399	267	-0.2	
		IS	17 19 26.1						2.0	
29	CSA	EP	17 20 29.1				1214	261	3.6	
29	GMA	EP	17 21 57.0				1965	228	-1.3	
29	RAT	IP C	19 39 .2	98.2	.1	4.02				APPROX TIME
		IS	19 39 10.4							
29	ANA	IP	19 39 2.3							
29	AND	IP C	19 39 4.0							
29	ASC	IP	19 39 5.9							
29	ASB	IP	19 39 5.9							
		IS	19 39 22.0							
29	21 54 47.89	51.43 N 177.55 E DEPTH = 50.0 KM RAT ISLANDS, ALEUTIAN ISLANDS								FIXED DEPTH SOLUTION
29	RAT	IP C	21 55 .3	26.4	.1	3.41	68	233	-0.4	APPROX TIME
29	ANA	IP D	21 55 2.1				80	254	-0.0	
29	AND	IP	21 55 4.2				98	262	-0.1	
29	ASC	IP D	21 55 6.3				112	269	.3	
29	ASB	IP C	21 55 6.6				118	274	-0.1	
		IS	21 55 20.2						-0.3	
29	SSI	IP C	21 55 11.2	15.6	.1	3.43	150	251	.5	
		IS	21 55 27.4						.1	
29	RAT	IP	22 22 16.9							
30	1 45 5.66	51.35 N 177.78 E DEPTH = 0.0 KM RAT ISLANDS, ALEUTIAN ISLANDS								FIXED DEPTH SOLUTION
30	RAT	IP C	01 45 17.1	47.9	.1	3.56	63	217	.0	
30	ANA	IP	01 45 18.9				68	244	.8	
30	AND	IP	01 45 21.0				85	254	.1	
30	ASC	EP	01 45 23.0				97	263	.3	
30	ASB	EP	01 45 23.7				102	270	.2	
		ES	01 45 36.1						-0.4	
30	SSI	IP C	01 45 27.7	42.8	.1	3.82	139	245	-1.4	
		IS	01 45 44.0						-2.2	
30	2 26 10.40	51.77 N 178.26 E DEPTH = 156.7 KM RAT ISLANDS, ALEUTIAN ISLANDS								FREE DEPTH SOLUTION
30	RAT	E(P)	02 26 31.3				6	237	-0.0	
		ES	02 26 46.5						-0.1	
30	ANA	E(P)	02 26 31.8				32	300	.1	
30	AND	EP	02 26 32.4				53	296	-0.0	
		ES	02 26 48.5						-0.0	
30	ASC	E(P)	02 26 33.4				71	299	.1	
30	ASB	EP	02 26 33.8	6.2	.1	3.08	82	304	-0.1	
		ES	02 26 51.2						.1	
30	ASB	EP C	03 14 37.4	7.6	.1	3.04				
		ES	03 14 51.4							
30	ASC	EP	03 14 37.8							
		ES	03 14 52.3							

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
30	3 41	11.90	3.26 S 152.52 E	DEPTH = 29.0 KM	MB = 5.2	MS = 5.6	TELESEISMIC SOLUTION NEW IRELAND REGION			
30	ADK	EP	03 51 23.5				6770	216		
30	5 21	.50	3.32 S 152.45 E	DEPTH = 26.0 KM	MB = 4.9		TELESEISMIC SOLUTION NEW IRELAND REGION			
30	GMA	EP	05 32 49.5				8490	228		
30	8 11	9.70	1.44 N 99.09 E	DEPTH = 86.0 KM	MB = 5.5		TELESEISMIC SOLUTION NORTHERN SUMATRA			
30	GMA	EP	08 24 14.4				10311	279		
30	17 32	23.23	51.21 N 179.78 E	DEPTH = 36.9 KM			FREE DEPTH SOLUTION RAT ISLANDS, ALEUTIAN ISLANDS			
30	ASB	IP C	17 32 32.0	42.5	.1	3.45	41	113	-.1	
		ES	17 32 38.6						.1	
30	ASC	IP C	17 32 33.6				51	122	.3	
30	AND	EP	17 32 35.8				70	124	-.0	
30	SSI	EP	17 32 36.8				77	170	-.0	
30	ANA	EP	17 32 38.5				90	120	-.3	
30	RAT	EP	17 32 42.8				120	122	.1	
30	18 29	30.90	51.49 N 178.38 E	DEPTH = 57.3 KM			FREE DEPTH SOLUTION RAT ISLANDS, ALEUTIAN ISLANDS			
30	ANA	IP	18 29 40.4				25	232	.1	
30	RAT	E(P)	18 29 40.9				35	175	-.1	
30	AND	EP	18 29 41.3				41	258	-.1	
30	ASC	IP	18 29 42.8				55	273	.1	
30	ASB	IP	18 29 43.4				62	283	-.1	
		ES	18 29 52.6						-.0	
30	SSI	EP	18 29 47.2	29.9	.1	3.58	95	242	.0	
		ES	18 29 59.0						-.0	
30	ADK	IP	20 21 30.5							
		IS	20 21 44.2							
31	AMA	EP	01 03 8.8	28.8	.1	3.57				
		IP	01 03 10.9							
		I(S)	01 03 21.2							
31	SSI	EP	01 03 23.6	10.6	.1					REGIONAL
		E(S)	01 03 47.4							
31	ASB	EP	01 03 25.2	9.7	.2					
31	ASC	EP	01 03 26.2							
31	RAT	EP	01 43 13.1	27.3	.1	3.47				
		ES	01 43 23.5							
31	ANA	EP	01 43 16.2							
		ES	01 43 28.5							
31	AND	EP	01 43 18.6							
		ES	01 43 33.1							
31	ASC	EP	01 43 20.8							
31	ASB	EP	01 43 21.6	3.2	.1	2.72				
		ES	01 43 38.0							
31	SSI	EP	01 43 24.0	7.6	.1					

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
-------------	-----	-------	---------------	-------------	--------------	-----	--------------	--------------	--------------	---------

31	AMA	IPG	02 18 56.6	9.9	.1	2.64				
----	-----	-----	------------	-----	----	------	--	--	--	--

31	SSI	ES	02 19 .4							
		EP	02 19 8.3	13.4	.1					

31	AMA	EPG	07 02 20.3	15.2	.1					
----	-----	-----	------------	------	----	--	--	--	--	--

31	SSI	EP	07 02 33.3							QP
----	-----	----	------------	--	--	--	--	--	--	----

		IS	07 02 45.9							
--	--	----	------------	--	--	--	--	--	--	--

31	ASB	IP	07 02 35.1	6.9	.1	3.00				
----	-----	----	------------	-----	----	------	--	--	--	--

31	ASC	IP	07 02 36.1							
----	-----	----	------------	--	--	--	--	--	--	--

		ES	07 02 51.0							
--	--	----	------------	--	--	--	--	--	--	--

31	ANA	EP	07 02 37.0							
----	-----	----	------------	--	--	--	--	--	--	--

31	AND	EP	07 02 38.0							QP
----	-----	----	------------	--	--	--	--	--	--	----

.....
 . 31 12 10 27.12 51.69 N 179.88 W DEPTH = 21.7 KM FREE DEPTH SOLUTION
 . DELAROF ISLANDS, ALEUTIAN ISLANDS
 .

31	SSI	IPGC	12 10 35.1	79.5	.1	3.67	43	122	.0	
----	-----	------	------------	------	----	------	----	-----	----	--

		IS	12 10 40.9						-0	
--	--	----	------------	--	--	--	--	--	----	--

31	ASB	IP	12 10 39.1	30.4	.1	3.42	70	59	-0	
----	-----	----	------------	------	----	------	----	----	----	--

31	ASC	IP	12 10 39.2				70	69	.1	
----	-----	----	------------	--	--	--	----	----	----	--

31	AND	IP	12 10 40.7				82	80	-1	
----	-----	----	------------	--	--	--	----	----	----	--

31	ANA	IP	12 10 43.8				101	86	.1	
----	-----	----	------------	--	--	--	-----	----	----	--

31	RAT	IP	12 10 47.1	24.1	.1	3.53	124	95	-0	
----	-----	----	------------	------	----	------	-----	----	----	--

.....
 . 31 14 5 48.25 51.34 N 177.61 E DEPTH = 36.2 KM FREE DEPTH SOLUTION
 . RAT ISLANDS, ALEUTIAN ISLANDS
 .

31	RAT	IPG	14 06 .6	19.6	.1	3.26	71	225	-4	
----	-----	-----	----------	------	----	------	----	-----	----	--

		I(S)	14 06 11.2						.9	
--	--	------	------------	--	--	--	--	--	----	--

31	ANA	IP	14 06 2.4				80	247	.2	
----	-----	----	-----------	--	--	--	----	-----	----	--

		I(S)	14 06 11.7						-6	
--	--	------	------------	--	--	--	--	--	----	--

31	AND	IP	14 06 4.6				96	256	-0	
----	-----	----	-----------	--	--	--	----	-----	----	--

31	ASC	IP	14 06 6.6				109	263	.2	
----	-----	----	-----------	--	--	--	-----	-----	----	--

		E(S)	14 06 19.6						-1	
--	--	------	------------	--	--	--	--	--	----	--

31	ASB	EP	14 06 7.3				114	269	.2	
----	-----	----	-----------	--	--	--	-----	-----	----	--

31	SSI	EP	14 06 11.3	6.2	.1	3.02	150	247	-2	
----	-----	----	------------	-----	----	------	-----	-----	----	--

.....
 . 31 14 50 53.37 51.77 N 178.68 E DEPTH = 93.5 KM FREE DEPTH SOLUTION
 . RAT ISLANDS, ALEUTIAN ISLANDS
 .

31	ANA	EP	14 51 6.2				16	4	-4	
----	-----	----	-----------	--	--	--	----	---	----	--

31	AND	EP	14 51 7.0				30	320	-1	
----	-----	----	-----------	--	--	--	----	-----	----	--

31	RAT	EP	14 51 7.2	2.7	.1	2.48	24	98	.3	
----	-----	----	-----------	-----	----	------	----	----	----	--

31	ASB	EP	14 51 9.0	2.1	.1	2.42	60	319	.1	QP
----	-----	----	-----------	-----	----	------	----	-----	----	----

		E(S)	14 51 20.3						.1	
--	--	------	------------	--	--	--	--	--	----	--

31	AMA	IPG	15 53 19.0	7.2	.1	2.83				
----	-----	-----	------------	-----	----	------	--	--	--	--

		IS	15 53 27.8							
--	--	----	------------	--	--	--	--	--	--	--

31	SSI	EP	15 53 20.3	5.9	.1	2.80				P TO S CNVRSN-
----	-----	----	------------	-----	----	------	--	--	--	----------------

		IS	15 53 30.4							
--	--	----	------------	--	--	--	--	--	--	--

31	ASB	EP	15 53 26.8	6.8	.1	2.99				
----	-----	----	------------	-----	----	------	--	--	--	--

		IS	15 53 41.0							
--	--	----	------------	--	--	--	--	--	--	--

31	ASC	EP	15 53 27.4							
----	-----	----	------------	--	--	--	--	--	--	--

31	AMA	IPGD	16 44 24.4	28.0	.1					
----	-----	------	------------	------	----	--	--	--	--	--

		I	16 44 32.4							
--	--	---	------------	--	--	--	--	--	--	--

31	SSI	EP	16 44 38.3	4.5	.1					
----	-----	----	------------	-----	----	--	--	--	--	--

31	ASB	IP	16 44 41.0	6.8	.1					
----	-----	----	------------	-----	----	--	--	--	--	--

31	ASC	EP	16 44 41.8							QP
----	-----	----	------------	--	--	--	--	--	--	----

31	AND	EP	16 44 43.7							
----	-----	----	------------	--	--	--	--	--	--	--

31	RAT	EP	18 38 51.7	23.5	.1	3.55				
----	-----	----	------------	------	----	------	--	--	--	--

DEC 1970	STA	PHASE	TIME (GMT)	AMP (MU)	PER (SEC)	MAG	DIST (KM)	AZI (DEG)	RES (SEC)	REMARKS
		IS	18 39 6.6							
31	ANA	EP	18 38 55.1							
31	AND	EP	18 38 57.8							
31	SSI	EP	18 39 3.7	7.5	.1					
		I(S)	18 39 27.1							
31	RAT	EP	22 15 50.9	2.7	.1	2.46				
		ES	22 16 .9							
31	ANA	EP	22 15 52.0							
31	AND	EP	22 15 52.8							
		ES	22 16 4.0							

DEC HYPOCENTER SUMMARY

PAGE 70-12- 58

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
01	5 42 19.65	51.47 N	178.66 E	40.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
01	12 49 19.00	6.00 S	152.60 E	34.0 T	5.4		NEW BRITAIN REGION
01	13 43 15.14	63.23 N	151.07 W	31.0 T			CENTRAL ALASKA
01	18 14 38.60	10.97 S	163.39 E	33.0 T	5.5	6.1	SOLOMON ISLANDS
01	19 29 16.60	52.42 N	169.08 W	60.0 T	5.2		FOX ISLANDS, ALEUTIAN ISLANDS
01	19 40 33.78	51.05 N	179.95 W	26.3 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
01	21 9 37.20	51.40 N	175.30 W	36.0 T	5.6	5.8	ANDREANOF ISLANDS, ALEUTIAN IS.
01	21 29 54.80	51.41 N	175.30 W	46.0 T	4.6		ANDREANOF ISLANDS, ALEUTIAN IS.
02	0 37 55.90	51.24 N	174.16 E	33.0 T	4.2		RAT ISLANDS, ALEUTIAN ISLANDS
02	2 34 59.48	51.44 N	175.25 W	57.0 T	5.4		ANDREANOF ISLANDS, ALEUTIAN IS.
02	3 34 17.70	51.37 N	175.18 W	46.0 T	4.3		ANDREANOF ISLANDS, ALEUTIAN IS.
02	4 56 55.30	51.25 N	175.05 W	38.0 T	4.1		ANDREANOF ISLANDS, ALEUTIAN IS.
02	8 11 37.20	51.42 N	175.29 W	49.0 T	4.3		ANDREANOF ISLANDS, ALEUTIAN IS.
02	9 3 14.60	51.43 N	175.24 W	52.0 T	5.2		ANDREANOF ISLANDS, ALEUTIAN IS.
02	10 15 2.60	8.50 S	155.28 E	53.0 T	4.8		SOLOMON ISLANDS
02	10 41 34.20	51.23 N	175.30 W	59.0 T	4.3		ANDREANOF ISLANDS, ALEUTIAN IS.
02	15 25 46.70	10.86 S	163.46 E	36.0 T	5.3	6.5	SOLOMON ISLANDS
02	15 54 19.90	10.97 S	163.29 E	33.0 T	5.8	7.0	SOLOMON ISLANDS
02	16 2 10.90	10.94 S	163.14 E	33.0 T	5.1		SOLOMON ISLANDS
02	18 14 51.50	56.00 N	164.00 W	232.0 T	4.8		BERING SEA
02	20 35 19.40	52.61 N	173.92 W	255.0 T	3.8		ANDREANOF ISLANDS, ALEUTIAN IS.
03	0 0 34.38	52.15 N	176.89 E	75.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
03	4 59 53.40	7.36 N	76.08 W	38.0 T	5.7	5.5	NORTHERN COLOMBIA
03	10 25 6.85	51.99 N	178.38 E	134.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
03	11 13 28.42	51.25 N	179.40 E	40.3 F			RAT ISLANDS, ALEUTIAN ISLANDS
03	12 58 49.99	50.18 N	178.78 E	21.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
03	13 51 32.24	51.39 N	179.29 E	54.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
03	19 39 28.25	51.48 N	178.91 E	23.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
03	22 0 42.21	51.66 N	178.47 E	71.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
04	0 0 14.60	51.41 N	179.40 E	54.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
04	5 15 27.56	51.42 N	178.97 E	55.0 F			RAT ISLANDS, ALEUTIAN ISLANDS

DEC HYPOCENTER SUMMARY

PAGE 70-12- 59

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
04	8 36 28.07	51.20 N	178.13 E	34.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
04	9 51 16.12	9.78 N	79.68 W	20.0 T	5.3	5.2	PANAMA
04	21 58 26.82	60.96 N	151.22 W	89.0 T			SOUTHERN ALASKA
05	18 24 41.57	51.40 N	178.77 E	46.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
05	21 35 59.90	52.31 N	174.25 W	185.0 T	3.9		ANDREANOF ISLANDS, ALEUTIAN IS.
06	0 53 1.80	51.38 N	175.42 W	65.0 T	4.1		ANDREANOF ISLANDS, ALEUTIAN IS.
06	2 2 46.70	51.93 N	178.39 E	108.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
06	2 32 19.91	17.26 S	176.33 W	48.0 T	4.9		FIJI ISLANDS REGION
06	7 6 .40	51.01 N	178.67 E	25.0 T	3.9		RAT ISLANDS, ALEUTIAN ISLANDS
06	8 36 53.30	51.68 N	169.18 W	147.0 T	3.8		FOX ISLANDS, ALEUTIAN ISLANDS
06	14 15 37.65	51.22 N	179.43 E	41.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
06	18 35 24.98	50.91 N	178.06 E	25.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
06	20 20 52.19	41.80 N	143.51 E	48.0 T	5.7	6.1	HOKKAIDO, JAPAN REGION
07	2 8 24.20	51.26 N	178.36 E	80.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
07	2 48 44.50	50.81 N	179.17 W	23.0 T	3.9		DELAROF ISLANDS, ALEUTIAN ISLANDS
07	6 9 25.68	51.34 N	179.79 E	32.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
07	10 35 34.18	51.59 N	180.00 W	83.2 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
07	16 44 15.63	51.34 N	179.61 E	60.1 F			RAT ISLANDS, ALEUTIAN ISLANDS
07	21 35 21.40	29.67 N	140.01 E	179.0 T	5.9		SOUTH OF HONSHU, JAPAN
08	7 5 35.78	51.81 N	179.42 E	96.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
08	8 18 36.13	51.40 N	179.29 E	61.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
08	13 35 55.25	51.89 N	178.42 E	110.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
08	15 45 42.57	51.83 N	179.66 E	99.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
09	2 42 7.45	51.92 N	178.41 E	114.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
09	8 2 43.30	16.15 N	99.41 W	34.0 T	5.5	5.4	NEAR COAST OF GUERRERO, MEXICO
09	11 46 16.90	22.64 S	172.16 E	44.0 T	4.9		LOYALTY ISLANDS REGION
09	13 19 .10	52.33 N	175.44 W	205.0 T			ANDREANOF ISLANDS, ALEUTIAN IS.
09	18 43 59.50	52.24 N	178.79 W	203.0 T			DELAROF ISLANDS, ALEUTIAN ISLANDS
10	4 34 38.80	3.99 S	80.72 W	25.0 T	6.3	7.3	PERU-ECUADOR BORDER REGION
10	5 15 22.51	3.86 S	80.54 W	33.0 T	4.7		PERU-ECUADOR BORDER REGION
10	9 46 29.00	63.07 N	151.37 W	117.0 T	4.3		CENTRAL ALASKA

DEC HYPOCENTER SUMMARY

PAGE 70-12- 60

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
10	10 15 7.20	53.10 N	169.85 W	48.0 T	5.5	5.3	FOX ISLANDS, ALEUTIAN ISLANDS
10	13 46 .60	52.87 N	169.73 W	33.0 T	4.1		FOX ISLANDS, ALEUTIAN ISLANDS
10	14 8 54.50	53.18 N	168.93 W	126.0 T	4.4		FOX ISLANDS, ALEUTIAN ISLANDS
10	19 18 36.80	53.42 N	171.41 W	156.0 T	4.0		FOX ISLANDS, ALEUTIAN ISLANDS
11	2 14 35.42	51.91 N	179.65 W	116.7 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
11	3 59 45.32	50.52 N	177.64 E	3.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
11	6 1 35.20	52.66 N	174.83 E	33.0 T	3.7		RAT ISLANDS, ALEUTIAN ISLANDS
11	9 53 38.49	52.17 N	179.49 W	156.7 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
11	14 24 9.38	51.15 N	179.68 E	37.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
11	14 45 3.13	51.19 N	178.89 E	32.3 F			RAT ISLANDS, ALEUTIAN ISLANDS
11	17 9 3.26	52.03 N	179.52 E	186.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
12	1 10 41.20	20.81 S	177.98 W	411.0 T	5.5		FIJI ISLANDS REGION
12	2 39 11.38	51.93 N	179.75 W	124.2 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
12	5 37 24.11	51.90 N	179.21 W	50.0 D			DELAROF ISLANDS, ALEUTIAN ISLANDS
12	5 55 32.46	52.06 N	178.45 E	135.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
12	7 39 52.01	52.17 N	178.08 E	148.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
12	8 25 53.83	51.23 N	179.58 W	25.0 D			DELAROF ISLANDS, ALEUTIAN ISLANDS
12	9 16 11.79	51.74 N	179.91 W	97.5 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
12	11 20 16.69	51.89 N	179.87 W	135.8 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
12	15 3 44.78	51.90 N	178.42 E	5.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	1 11 32.98	51.97 N	178.78 E	160.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	2 20 3.14	51.87 N	179.62 W	91.4 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
13	5 3 58.30	51.45 N	179.83 W	9.8 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
13	7 26 32.03	52.10 N	179.64 E	154.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	8 7 3.84	51.41 N	180.00 W	7.8 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
13	10 48 20.93	52.29 N	176.48 E	125.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
13	10 53 9.51	51.83 N	179.71 E	99.1 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	12 29 2.50	6.05 N	127.03 E	38.0 T	5.2		PHILIPPINE ISLANDS REGION
13	13 33 11.59	51.76 N	179.50 E	130.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	14 1 30.84	51.39 N	179.89 E	64.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	14 37 54.57	52.39 N	179.86 E	150.0 D			RAT ISLANDS, ALEUTIAN ISLANDS

DEC HYPOCENTER SUMMARY

PAGE 70-12- 61

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
13	20 56 44.24	51.53 N	178.96 E	61.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
13	21 38 56.70	51.44 N	178.79 E	43.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
14	4 6 29.90	9.97 N	72.74 W	159.0 T	5.2		VENEZUELA
14	4 36 51.04	51.94 N	178.09 E	168.6 F			RAT ISLANDS, ALEUTIAN ISLANDS
14	7 23 1.67	2.02 N	126.46 E	33.0 T	5.2		MOLUCCA PASSAGE
14	7 32 52.46	1.31 S	80.91 W	33.0 T	5.4	5.7	NEAR COAST OF ECUADOR
14	8 3 3.71	50.92 N	178.30 E	25.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
14	14 48 11.80	53.03 N	169.93 W	50.0 T	5.3		FOX ISLANDS, ALEUTIAN ISLANDS
14	16 52 21.50	15.56 S	173.79 W	95.0 T	4.4		TONGA ISLANDS
14	17 30 33.94	51.84 N	179.05 E	105.6 F			RAT ISLANDS, ALEUTIAN ISLANDS
14	19 19 43.50	53.19 N	170.19 W	76.0 T	4.4		FOX ISLANDS, ALEUTIAN ISLANDS
14	21 11 39.10	53.01 N	170.02 W	54.0 T	5.2		FOX ISLANDS, ALEUTIAN ISLANDS
15	3 44 1.50	52.43 N	176.23 W	189.0 T	4.8		ANDREANOF ISLANDS, ALEUTIAN IS.
15	7 54 51.57	14.39 N	93.05 W	33.0 T	5.1	4.9	NEAR COAST OF CHIAPAS, MEXICO
15	10 32 58.96	14.35 N	93.13 W	33.0 T	5.2		NEAR COAST OF CHIAPAS, MEXICO
15	10 53 19.48	14.46 N	93.07 W	33.0 T	4.8		NEAR COAST OF CHIAPAS, MEXICO
15	13 20 5.17	5.68 S	145.24 E	41.0 T	5.2		EAST NEW GUINEA REGION
15	15 24 37.38	14.39 S	167.34 E	182.0 T	5.8		NEW HEBRIDES ISLANDS
15	17 2 .70	53.06 N	170.06 W	72.0 T	4.5		FOX ISLANDS, ALEUTIAN ISLANDS
15	18 57 51.28	51.35 N	179.62 E	59.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
16	1 0 46.94	6.04 N	77.53 W	14.0 T	5.6	5.2	NEAR WEST COAST OF COLOMBIA
16	6 29 8.55	51.40 N	179.78 E	58.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
16	8 44 22.00	8.70 N	83.15 W	64.0 T	5.1		COSTA RICA
16	12 28 15.36	51.22 N	178.75 E	25.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
16	16 0 .10	37.10 N	116.01 W	0.0 T	5.1		SOUTHERN NEVADA
16	16 24 34.80	51.28 N	174.89 W	37.0 T	4.9		ANDREANOF ISLANDS, ALEUTIAN IS.
17	7 0 57.40	49.73 N	78.13 E	0.0 T	5.5		EASTERN KAZAKH SSR
17	7 39 53.79	6.48 N	77.54 W	18.0 T	5.1		NEAR WEST COAST OF COLOMBIA
17	7 46 24.01	50.95 N	178.78 E	17.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
17	8 42 21.49	56.01 S	27.46 W	115.0 T	5.9		SOUTH SANDWICH ISLANDS REGION
17	14 42 48.19	52.04 N	178.86 E	112.5 F			RAT ISLANDS, ALEUTIAN ISLANDS

DEC HYPOCENTER SUMMARY

PAGE 70-12- 62

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
17	15 25 13.02	51.28 N	178.67 E	25.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
17	16 5 .20	37.13 N	116.08 W	0.0 T	5.7		SOUTHERN NEVADA
17	17 56 10.11	51.22 N	178.64 E	38.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
18	0 0 10.07	51.51 N	176.70 E	3.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
18	3 50 22.11	50.99 N	176.97 E	50.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
18	11 23 20.21	51.07 N	179.20 E	19.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
18	15 29 5.70	53.30 N	160.78 W	33.0 T	5.1		SOUTH OF ALASKA
18	22 28 54.10	50.21 N	156.65 E	61.0 T	5.1		KURIL ISLANDS
18	23 50 12.20	5.12 N	123.55 E	511.0 T	5.5		MINDANAO, PHILIPPINE ISLANDS
19	0 39 37.63	51.40 N	178.84 E	43.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
19	0 44 37.30	53.03 N	169.91 W	46.0 T	4.0		FOX ISLANDS, ALEUTIAN ISLANDS
19	1 47 16.27	52.35 N	179.84 E	150.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
19	2 35 32.68	3.05 S	148.29 E	5.0 T	4.7		BISMARCK SEA
19	2 45 31.11	3.06 S	148.34 E	3.0 T	4.7		BISMARCK SEA
19	10 38 5.20	1.63 S	99.90 E	46.0 T	5.8	6.2	SOUTHERN SUMATRA
19	17 36 39.97	51.57 N	178.59 E	67.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
20	6 1 36.10	63.09 N	151.44 W	130.0 T	5.3		CENTRAL ALASKA
20	7 48 22.80	51.69 N	179.83 E	125.6 F			RAT ISLANDS, ALEUTIAN ISLANDS
20	10 41 3.07	4.84 S	144.14 E	104.0 T	5.5		NEAR NORTH COAST OF NEW GUINEA
20	11 1 47.96	39.40 N	29.24 E	38.0 T	5.0		TURKEY
20	11 55 56.68	17.83 S	179.96 W	635.0 T	4.9		FIJI ISLANDS REGION
21	8 0 27.60	52.96 N	174.70 W	223.0 T	4.1		ANDREANOF ISLANDS, ALEUTIAN IS.
21	10 52 54.91	43.83 N	151.03 E	38.0 T	5.1		KURIL ISLANDS REGION
21	14 40 45.00	9.12 S	116.42 E	92.0 T	5.9		SUMBAWA ISLAND REGION
21	22 54 32.90	52.64 N	172.08 E	66.0 T	4.3		NEAR ISLANDS, ALEUTIAN ISLANDS
22	0 28 39.66	51.71 N	178.47 E	77.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
22	1 48 30.21	3.96 S	80.82 W	33.0 T	5.5		PERU-ECUADOR BORDER REGION
22	4 27 7.11	50.23 N	179.00 E	75.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
22	5 15 41.72	51.93 N	178.35 E	82.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
22	7 52 50.63	51.50 N	179.67 W	70.5 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
22	16 3 20.56	51.50 N	178.27 E	62.5 F			RAT ISLANDS, ALEUTIAN ISLANDS

DEC HYPOCENTER SUMMARY

PAGE 70-12- 63

DEC 1970	ORIGIN TIME (GNT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
22	17 59 40.90	62.49 N	149.07 W	44.0 T	3.5		CENTRAL ALASKA
22	18 2 1.71	51.49 N	179.49 E	64.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
22	20 46 47.73	52.40 N	179.84 E	160.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
22	20 53 4.30	28.29 N	43.94 W	33.0 T	5.4		NORTH ATLANTIC RIDGE
22	22 57 15.39	52.15 N	178.31 E	135.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
23	1 31 29.74	51.53 N	178.40 E	62.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
23	7 0 57.30	43.84 N	54.84 E	0.0 T	6.1		WESTERN KAZAKH SSR
23	11 42 47.40	12.33 N	142.93 E	49.0 T	5.7	4.9	SOUTH OF MARIANA ISLANDS
23	13 39 6.44	52.05 N	179.29 W	36.9 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
23	14 33 26.32	51.57 N	179.01 E	18.8 F			RAT ISLANDS, ALEUTIAN ISLANDS
23	18 52 48.57	52.01 N	178.44 E	124.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
23	19 57 1.70	50.19 N	177.55 E	33.0 T			RAT ISLANDS, ALEUTIAN ISLANDS
23	19 58 23.21	50.46 N	177.76 E	0.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
23	21 55 1.08	50.88 N	179.22 W	22.6 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
24	3 17 15.10	62.04 N	152.31 W	125.0 T	3.5		CENTRAL ALASKA
24	8 0 37.60	16.10 N	93.56 W	116.0 T	5.6		CHIAPAS, MEXICO
24	8 22 20.80	51.47 N	178.31 W	53.0 T	5.3		DELAROF ISLANDS, ALEUTIAN ISLANDS
24	10 0 45.92	50.45 N	177.39 E	50.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
25	9 32 2.79	51.56 N	179.69 E	27.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
25	12 48 26.92	51.26 N	179.46 W	29.8 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
25	14 43 41.00	51.78 N	175.23 W	64.0 T	4.7		ANDREANOF ISLANDS, ALEUTIAN IS.
26	2 8 31.00	52.11 N	178.43 E	7.2 T			RAT ISLANDS, ALEUTIAN ISLANDS
26	5 47 47.00	52.11 N	178.43 E	7.2 T			RAT ISLANDS, ALEUTIAN ISLANDS
26	7 29 17.64	51.63 N	179.28 E	98.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
26	7 38 1.40	53.38 N	170.18 W	76.0 T	4.0		FOX ISLANDS, ALEUTIAN ISLANDS
26	10 2 47.86	9.28 N	94.06 E	47.0 T	5.4	5.5	NICOBAR ISLANDS REGION
26	10 54 22.70	51.16 N	179.08 E	30.1 F			RAT ISLANDS, ALEUTIAN ISLANDS
26	12 23 38.44	51.52 N	179.68 W	76.1 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
26	13 48 6.60	51.59 N	179.92 W	84.6 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
26	17 16 25.86	51.43 N	178.77 E	44.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
27	0 47 29.10	57.03 N	149.10 W	33.0 T			GULF OF ALASKA

DEC HYPOCENTER SUMMARY

PAGE 70-12- 64

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
27	2 6 45.10	16.20 S	178.79 E	29.0 T	5.1		FIJI ISLANDS
27	4 39 22.89	51.34 N	178.21 W	75.0 D			ANDREANOF ISLANDS, ALEUTIAN IS.
27	7 35 39.76	51.36 N	179.32 E	53.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
27	10 13 42.53	20.40 S	178.52 W	557.0 T	4.5		FIJI ISLANDS REGION
27	11 29 23.80	51.76 N	176.20 E	83.0 T	3.9		RAT ISLANDS, ALEUTIAN ISLANDS
27	12 15 33.16	18.18 N	145.65 E	137.0 T	4.9		MARIANA ISLANDS
27	19 2 6.26	51.92 N	178.64 E	108.5 F			RAT ISLANDS, ALEUTIAN ISLANDS
27	21 31 4.23	51.15 N	178.26 E	50.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
28	2 35 49.08	51.63 N	177.91 E	60.6 F			RAT ISLANDS, ALEUTIAN ISLANDS
28	4 33 20.42	51.59 N	178.87 E	70.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
28	5 5 24.83	52.26 N	179.71 E	160.4 F			RAT ISLANDS, ALEUTIAN ISLANDS
28	6 44 19.30	63.04 N	150.36 W	116.0 T			CENTRAL ALASKA
28	9 39 10.60	53.93 N	166.49 W	9.0 T	4.1		FOX ISLANDS, ALEUTIAN ISLANDS
28	19 54 53.83	51.00 N	178.80 E	25.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
28	20 3 25.10	5.16 S	153.62 E	61.0 T	6.0		NEW IRELAND REGION
28	21 27 54.38	51.88 N	179.33 E	111.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
29	2 26 12.20	10.55 S	161.40 E	72.0 T	6.1		SOLOMON ISLANDS
29	5 29 28.30	52.16 N	178.96 E	158.1 F			RAT ISLANDS, ALEUTIAN ISLANDS
29	6 4 5.78	51.46 N	179.26 E	32.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
29	8 1 59.28	3.90 S	80.90 W	47.0 T	5.8	5.2	NEAR COAST OF ECUADOR
29	10 24 31.40	51.24 N	168.44 W	9.0 T	5.0		FOX ISLANDS, ALEUTIAN ISLANDS
29	11 44 27.08	5.25 S	152.71 E	49.0 T	5.1		NEW BRITAIN REGION
29	11 49 24.03	5.33 S	152.63 E	50.0 T	4.7		NEW BRITAIN REGION
29	13 7 56.21	51.37 N	179.30 E	25.0 F			RAT ISLANDS, ALEUTIAN ISLANDS
29	13 25 46.73	51.66 N	179.93 W	85.5 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
29	16 43 52.26	51.42 N	178.79 E	45.3 F			RAT ISLANDS, ALEUTIAN ISLANDS
29	17 17 51.40	51.56 N	177.65 E	58.0 T	4.4		RAT ISLANDS, ALEUTIAN ISLANDS
29	21 54 47.89	51.43 N	177.55 E	50.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
30	1 45 5.66	51.35 N	177.78 E	0.0 D			RAT ISLANDS, ALEUTIAN ISLANDS
30	2 26 10.40	51.77 N	178.26 E	156.7 F			RAT ISLANDS, ALEUTIAN ISLANDS
30	3 41 11.90	3.26 S	152.52 E	29.0 T	5.2	5.6	NEW IRELAND REGION

DEC HYPOCENTER SUMMARY

PAGE 70-12- 65

DEC 1970	ORIGIN TIME (GMT)	LAT	LONG	DEPTH* (KM)	MB	MS	GEOGRAPHIC REGION
30	5 21 .50	3.32 S	152.45 E	26.0 T	4.9		NEW IRELAND REGION
30	8 11 9.70	1.44 N	99.09 E	86.0 T	5.5		NORTHERN SUMATRA
30	17 32 23.23	51.21 N	179.78 E	36.9 F			RAT ISLANDS, ALEUTIAN ISLANDS
30	18 29 30.90	51.49 N	178.38 E	57.3 F			RAT ISLANDS, ALEUTIAN ISLANDS
31	12 10 27.12	51.69 N	179.88 W	21.7 F			DELAROF ISLANDS, ALEUTIAN ISLANDS
31	14 5 48.25	51.34 N	177.61 E	36.2 F			RAT ISLANDS, ALEUTIAN ISLANDS
31	14 50 53.37	51.77 N	178.68 E	93.5 F			RAT ISLANDS, ALEUTIAN ISLANDS

* F = FREE DEPTH SOLUTION
D = FIXED DEPTH SOLUTION
T = TELESEISMIC SOLUTION

SEISMICITY MAPS

ALEUTIAN EARTHQUAKES WHICH WERE LOCATED DURING THE MONTH BY THE ALEUTIAN SEISMIC NETWORK AND BY THE WORLD NETWORK OF SEISMOLOGICAL STATIONS REPORTING TO THE NATIONAL OCEAN SURVEY (NOS) ARE PLOTTED ON SIX MAPS COVERING THE ALEUTIAN ISLANDS FROM THE NEAR ISLANDS TO UNIMAK ISLAND (170 DEGREES EAST LONGITUDE TO 160 DEGREES WEST LONGITUDE).

THE BASE MAPS ARE MODIFIED VERSIONS OF LARGE PLATES PUBLISHED BY THE NOS AS PART OF ESSA MONOGRAPH NO. 3 (BATHYMETRY OF THE ALEUTIAN ARC). THE TRANSVERSE MERCATOR PROJECTION, IN WHICH AREAL DISTORTION IS SMALL AND BEARINGS REMAIN TRUE, WAS EMPLOYED.

EPICENTERS WERE PLOTTED AUTOMATICALLY BY A FLAT-BED INCREMENTAL PLOTTER TO PRODUCE PLATES WHICH WERE USED TO OVERPRINT THE BASE MAPS. REGISTRATION MARKS ALONG THE MARGINS OF THE MAPS ALLOW AN ESTIMATION OF THE PRECISION OF PRINTING REGISTRATION.

EACH PLOTTED SYMBOL, CENTERED UPON THE EPICENTRAL COORDINATES, REPRESENTS ONE EARTHQUAKE. THE TYPE OF SYMBOL DENOTES THE DEPTH-OF-FOCUS CLASS OF THE SEISMIC EVENT. THE BODY-WAVE MAGNITUDE (MB) IS INDICATED BY THE SYMBOL SIZE, WHICH VARIES CONTINUOUSLY ACCORDING TO THE RELATIONSHIP

$$\text{SYMBOL SIZE (INCHES)} = .07 + (\text{MB} - 2.5) \times .10$$

EVENTS WHOSE MAGNITUDES ARE UNDETERMINED OR LESS THAN 2.5 ARE PLOTTED AS .07 INCH SYMBOLS. A LEGEND BLOCK DEPICTING THE FIVE DEPTH-OF-FOCUS CLASSES AND A RANGE OF MAGNITUDES IS PROVIDED ON THE ATTU PLATE.

DEPTH OF FOCUS (km)

0-50

50-100

100-150

150-200

200-250

$m_B = 3.0$

*

□

×

◇

+

$m_B = 4.0$

*

□

×

◇

+

$m_B = 5.0$

*

□

×

◇

+

$m_B = 6.0$

*

□

×

◇

+

$m_B = 7.0$

*

□

×

◇

+