Seismological Bulletin
Stations BRG, CLL and MOX
German Democratic Republic

1978

Part 1: January, February, March

Edited by
Academy of Sciences of the German Democratic Republic
Central Institute for Physics of the Earth
and
Karl-Marx-University Leipzig, Department of Physics,
Collm Geophysical Observatory

Geophysikalisches Observatorium

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L 1319/87 - III/18/445

Preface

The Seismological Bulletin of the GDR stations BRG, CLL, and MOX (1978) continues in a new form the series

"Seismological Bulletin Station Moxa (MOX)"

and

"Geophysikalische Meßreihen des Geophysikalischen Observatoriums Collm der KMU Leipzig, Teil Seismische Registrierungen".

It includes for the first time the readings of the station Berggießhübel (BRG) in a final bulletin. The bulletin will come out in a quarterly sequence.

The computer routines necessary for compilation have been developed by S. WENDT.

The seismogram readings and the interpretation have been performed at station BRG by K. WYLEGALLA and R. MITTAG, at station CLL by B. TITTEL, S. WENDT and P. BUCHHOLZ and for MOX station by the Seismic Service Jena, especially by J. WEYRAUCH, K. REHM and B. HÄNSCH.

The edition of the bulletin is managed by H. NEUNHÖFER.

G. OLSZAK H. KAUTZLEBEN

Introduction

The quarterly bulletin of the GDR seismological stations contains the final interpretation of the seismic records of the stations Berggießhübel (BRG), Collm (CLL), and Moxa (MOX). The included data are arranged in files locked for each event. Within each file a distinction is made between data describing the event in general and additional readings or results derived therefrom. The general data are arranged at the top of the file. They include

- date,
- for located foci the geographical region of the epicenter after FLINN and ENGDAHL (1965) or the characterization as UNDERGROUND EXPLOSION taken from the data centre mentioned in the top line or the agency given immediately in brackets,
- mean body wave magnitude MB after NEIS or another estimation of MB if the value is indicated in parentheses,
- casually, more details about the geographical region or comments,
- quoted hypocenter data such as latitude, longitude, depth, and focal time from up to three data centers.

The results of interpretation as provided by the stations contributing to the bulletin are printed in the following way:

- station code,
- wave (group) interpretation, whereby the symbols are in accordance with ISC completed by some additional symbols, e.g. pP appears as AP, sP as XP, multiples as P(1), P(2) etc.,
- time of onset in U.T.C.,
- direction of the first ground motion for clear onsets according to the definitions described below,
- period and amplitude measurements as well as magnitudes for important wave groups. The periods are given in seconds and the amplitudes in nanometers or micrometers for short-period or mean- and long-period results, respectively. The arrangement of seismometer components is vertical (Z), north (N) and east (E), respectively in the short-period case and otherwise N, E, and V, as indicated.
- station magnitudes for selected wave groups, determined from electrodynamic records. Especially it is defined for body waves through the mantle MPV, MPPV, MSH etc., for short-period longitudinal core waves MC (only CLL), for the maximum of surface waves MLH and MLV, for SG and LG waves of near events MSGV, MLGH, and for strong events, in a few cases from the CLL Wiechert seismograms MAG.
- epicentral distance D in degrees or for near events in kilometers, and the azimuth AZ from station to focus, both calculated on the basis of the first quoted epicenter data. For comparison the first preliminary estimates of "DISTANCE" and "DEPTH" as determined by the individual stations on the basis of seismogram evaluations are given.

Convention on symbols valid for the first ground motion

C - short-period compression,
D - short-period dilatation,
U - long-period compression,
R - long-period dilatation,
A - both short- and long-period compression,
J - both short- and long-period dilatation,
B - a combination of C and R,
K - a combination of D and U.

Generally, round brackets indicate uncertainties. The time interval of eventual recording breaks is given.
The staff of each station is responsible for the extent and quality of its readings. The data sets of the contributing stations are grouped according to their epicentral distance if the focal coordinates are known, or otherwise according to the time of the first onset recorded.

FUNDAMENTAL DATA ON THE INCLUDED SEISMOLOGICAL STATIONS

STATION	GEOGRAPH. CO-ORDINATES LAT.	LONG.	ELEVATION ABOVE SEA LEVEL	BEDROCK
BRG	50.875 N	13.947 E	296 m	DEVONIAN HORNBLENDESLATE
CLL	51.309 N	13.004 E	230 m	ORDOVICIAN GREYWACKE
MOX	50.646 N	11.616 E	455 m	LOWER CARBONIFEROUS CLAY SLATE

SEISMOGRAPHS AND THEIR CONSTANTS:

BRG

Type of Seismograph		Comp.	T_s(s)	T_g(s)	D_s	D_g	V_o	σ^2
A	SSJ-II	N	2.17	0.294	0.564	1.474	51250	0.77
		E	2.18	0.295	0.579	1.474	53700	0.74
		Z	2.17	0.293	0.537	1.474	46000	0.77
B	SSJ-I	N	20.0	1.44	0.5	6.94	1100	0.050
		E	20.0	1.48	0.5	6.76	1000	0.039
		Z	20.0	1.24	0.5	8.06	1020	0.081

CLL

A	SSJ-II	N	2.17	0.29	0.54	1.47	60000	0.774
		E	2.17	0.29	0.54	1.47	58000	0.716
		Z	2.18	0.30	0.54	1.47	55000	0.809
	BENIOFF	Z	0.45	1.43	0.65	1	(38000)	
B	SSJ-I	N	20.0	1.10	0.50	9.09	1075	0.080
		E	20.0	1.21	0.51	8.24	1120	0.079
		Z	20.0	1.20	0.51	8.35	1090	0.058
	WIECHERT	N	10.0		0.28		370	
		E	10.0		0.34		340	

MOX

	SSJ-II	Z	0.23	0.065	0.33	1.2	300000	0.048
	SSJ-II	Z	1.0	1.0	0.5	0.5	47200	0.560
A	SKM-III	N	1.64	0.39	0.52	1.97	24000	0.047
		E	1.63	0.40	0.50	1.93	24700	0.047
		Z	1.64	0.39	0.52	1.96	23400	0.050
B	SSJ-I	N	20	1.15	0.51	8.70	1100	0.080
		N	20	1.125	0.51	8.89	110	0.080
		E	20	1.15	0.50	8.73	1060	0.082
		E	20	1.12	0.50	8.97	90	0.082
		Z	20	1.146	0.50	8.73	1020	0.091
		Z	20	1.175	0.50	8.51	130	0.091
C	SSJ-I/L	N	30	85.6	1.43	0.5	1030	0.104
		E	30	75.8	1.26	0.5	1080	0.056
		Z	30	87.7	1.46	0.5	1020	0.094

T_s - seismometer free period
T_g - galvanometer free period
D_s - seismograph damping
D_g - galvanometer damping
V_o - magnification factor
N - north-south component
E - east-west component
Z - vertical component
σ^2 - coupling coefficient
SKM - Seismograph Kirnos modified
SSJ - Seismic Station Apparatus Type Jena

A - seismograph with amplitude characteristic of type A (short-period)

B - seismograph with amplitude characteristic of type B (middle-period)

C - seismograph with amplitude characteristic of type C (long-period)

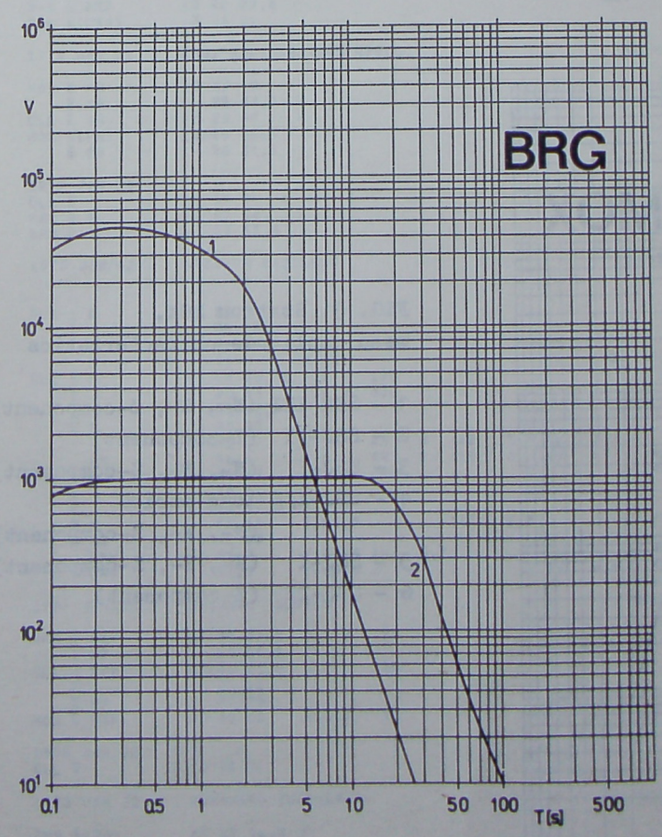

FIG. 1 Station BRG,
mean amplitude characteristics

1 - SSJ-II (N-, E-, Z-component)
2 - SSJ-I (N-, E-, Z-component)

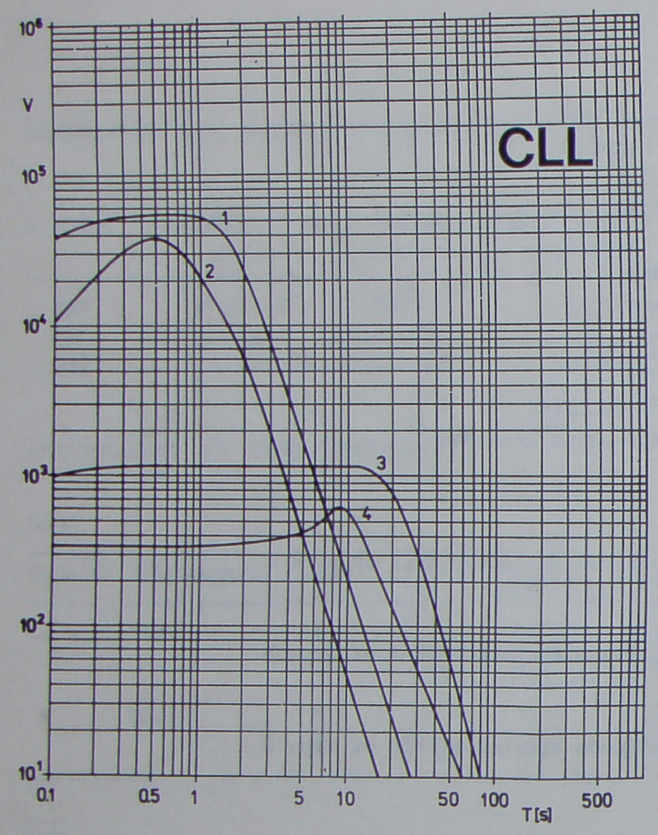

FIG. 2 Station CLL,
mean amplitude characteristics

1 - SSJ-II (N-, E-, Z-component)
2 - BENIOFF (Z-component)
3 - SSJ-I (N-, E-, Z-component)
4 - WIECHERT (N-, E-component)

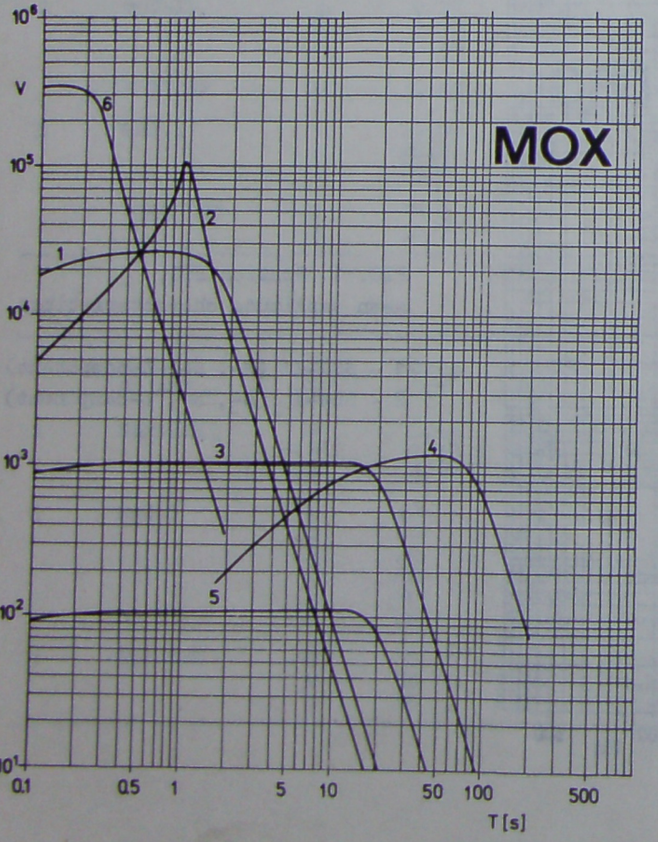

FIG. 3 Station MOX,
mean amplitude characteristics

1 - SKM-III (N-, E-, Z-component)
2 - SSJ-II (Z-component)
3 - SSJ-I (N-, E-, Z-component)
4 - SSJ-I/L long-period
(N-, E-, Z-component)
5 - SSJ-I (N-, E-, Z-component)
6 - SSJ-II (Z-component)

1978 JAN 01	LOYALTY ISLANDS REGION	/MB=4,2 (1)/	21,6S;169,3E 75KM H=00 30 26 (ISC)
BRG I PKP	00 49 52,8C 1,0 / 23		D=145,0 DEG AZ= 43 BRG
I	51 16,9		
CLL I PKP	00 49 54,4D		D=145,1 DEG AZ= 41 CLL
E	51 18		
1978 JAN 01	OFF EAST COAST OF KAMCHATKA	MB=4,5 (16)	52,9N;160,4E 33KM H=03 09 34,3 (NEIS)
CLL I P	03 21 00,5		D= 72,6 DEG AZ= 20 CLL
BRG E P	03 21 03,3		D= 72,8 DEG AZ= 21 BRG
1978 JAN 01	CENTRAL YUGOSLAVIA	MB=4,3 (1)	43,2N; 17,4E 33KM H=04 23 46,2 (NEIS)
			43,3N; 17,6E 10KM 04 23 46,3 (CSEM)
BRG E(PN)	04 25 42,5		D= 8,0 DEG AZ=162 BRG
I PG	26 18,8		
I SN	27 04,6		
I	27 38,5		
MOX E PN	04 25 47,5 1,0 / 24	MPV =4,4	D= 8,4 DEG AZ=150 MOX
E SN	27 49		
CLL E PN	04 25 55		D= 8,6 DEG AZ=158 CLL
E SN	27 33		
E SG	28 30		
1978 JAN 01	POLAND, UPPER SILESIA		
CLL E SG	06 55 57		
MOX E	06 56 21		
1978 JAN 01	ROMANIA	MB=4,7 (55)	45,7N; 26,5E 136KM H=07 40 14,6 (NEIS)
			45,8N; 26,6E 134KM 07 40 16,2 (CSEM)
			45,8N; 26,4E 130KM 07 40 15,5 (WDCB)
BRG I P	07 42 33,0C 1,6 / 54		D= 9,8 DEG AZ=117 BRG
CLL E P	07 42 43 1,6 / 38		D= 10,6 DEG AZ=117 CLL
MOX E P	07 42 50 1,2 / 55	MPV =5,1	D= 11,1 DEG AZ=111 MOX
E	45 28		
1978 JAN 01	ADRIATIC SEA	NO MB COMP.	42,9N; 15,8E 33KM H=09 25 55,7 (NEIS)
			43,1N; 15,9E 10KM 09 25 57,0 (CSEM)
BRG E(PN)	09 28 02,2		D= 8,1 DEG AZ=170 BRG
E	28 49,2		
E	29 54,1		
E SG	30 15,9		
MOX E PN	09 27 54,5		D= 8,3 DEG AZ=158 MOX
CLL E	09 30 08		D= 8,6 DEG AZ=166 CLL
E SG	30 33		
1978 JAN 01	VANUATU ISLANDS	MB=5,1 (23)	14,6S;167,1E 133KM H=13 07 18,6 (NEIS)
			14,7S;167,2E 33KM 13 07 06,9 (WDCB)
BRG E PKP	13 26 27,8		D=137,8 DEG AZ= 41 BRG
CLL E(PKP)	13 26 31		D=137,9 DEG AZ= 39 CLL
1978 JAN 01	FRG, SOUTHWESTERN REGION	NO MB COMP.	47,9N; 9,1E 33KM H=18 24 22,9 (NEIS)
			47,9N; 9,2E 27KM 18 24 22,0 (CSEM)
MOX E PG	18 25 17		D= 3,2 DEG AZ=212 MOX
E SG	25 54,5		
CLL E SG	18 26 29		D= 4,3 DEG AZ=218 CLL
BRG E(PN)	18 25 38,3		D= 4,3 DEG AZ=229 BRG
E SG	26 34,0		
1978 JAN 02			
CLL E	03 07 54		
MOX E P	03 07 54		
BRG E P	03 07 58,4		
1978 JAN 02	WESTERN CAUCASUS	MB=5,3 (59)	41,5N; 44,2E 10KM H=06 31 27,5 (NEIS)
			41,6N; 44,4E 56KM 06 31 34,9 (CSEM)
			41,4N; 44,2E 33KM 06 31 25,8 (WDCB)
BRG I P	06 36 32,6C 1,3 / 87		D= 22,8 DEG AZ=102 BRG
I	~~36 36,0~~		DISTANCE 25 DEG
I S	40 52,0		
LM	46 T 13 AV 6,1 MLV =5,3		
CLL I P	06 36 39,8C 1,7 / 190		D= 23,5 DEG AZ=102 CLL
I	36 43 1,4 / 330		DISTANCE 24 DEG
I	36 48,9		
E S	40 55		
L	45 T 16 AN 8 AE 3,5 AV 3,5		
LM	46 T 13 AN 8 AE 2 AV 4 MLH =5,4 MLV =5,3		
MOX E P	06 36 47 1,1 / 48	MPV =4,9	D= 24,2 DEG AZ=100 MOX
E	36 51		
E	36 57,5		
E S	41 10 T 10,5 AE 1,8 MSH =5,3		
E SS	42 28		
LMH	46,7 T 14,5 AN 5,7 MLH =5,2		
LMV	47,9 T 14,5 AV 4,9 MLV =5,3		
1978 JAN 02	VANUATU ISLANDS	MB=5,3 (26)	19,0S;169,3E 249KM H=07 11 06,5 (NEIS)
			20,1S;169,5E 33KM 07 10 31,0 (WDCB)
BRG I PKP	07 30 07,1 0,7 / 25		D=142,7 DEG AZ= 41 BRG
I PP	33 26,1		
CLL I PKP	07 30 06,8 1,1 / 26		D=142,7 DEG AZ= 39 CLL
E	32 17		
E PP	33 26		
MOX E PKP	07 30 10 1,5 / 91		D=143,8 DEG AZ= 37 MOX
1978 JAN 02			
CLL E	12 16 31		
1978 JAN 02	NORTHERN YUGOSLAVIA	NO MB COMP.	45,8N; 15,0E 6KM H=15 17 54,6 (NEIS)
			45,9N; 14,9E 10KM 15 10 57,2 (CSEM)
BRG E(PN)	15 12 11,6		D= 5,1 DEG AZ=172 BRG
E PG	12 32,0		
I SG	13 42,1		

(CONT.)

(CONT.)

CLL E   15 13 43   D= 5,7 DEG   AZ=166   CLL
    E SG   13 57

1978 JAN 02   ADRIATIC SEA   NO MB COMP.   42,7N; 16,2E 33KM H=18 05 20,1 (NEIS)
42,6N; 16,2E 10KM 18 05 20,4 (CSEM)
D= 8,3 DEG   AZ=168   BRG

BRG E PN   18 07 20,2
    E SN   08 53,0
    I   09 30,8
MOX E PN   18 07 24   D= 8,5 DEG   AZ=157   MOX
    E SN   08 56
    E SG   09 54
CLL E PN   18 07 28   D= 8,9 DEG   AZ=165   CLL
    E   07 49
    E   08 50
    E   09 30
    E SG   10 15

1978 JAN 02
BRG E(P)   19 31 35,0

1978 JAN 02   KERMADEC ISLANDS REGION   MB=5,2 (5)   29,4S;176,6W 33KM H=20 15 52,2 (NEIS)
29,5S;179,6E 33KM 20 15 52,4 (WDCB)

CLL E PKP2   20 36 14   1,8 /   33   D=157,0 DEG   AZ= 22   CLL
BRG E PKIKP   20 35 47,5   1,8 /   24   D=157,1 DEG   AZ= 24   BRG
    E PKP2   36 16,0
MOX E PKP2   20 36 19   TRACES   D=157,9 DEG   AZ= 19   MOX

1978 JAN 02   ANDREANOF ISLANDS, ALEUTIAN IS,   MB=5,1 (64)   51,1N;178,1W 33KM H=20 57 38,2 (NEIS)
50,9N;178,0W 40KM 20 57 37,3 (WDCB)

CLL E P   21 09 31   D= 77,5 DEG   AZ= 7   CLL
BRG I P   21 09 33,2D 1,3 /   22   D= 77,9 DEG   AZ= 8   BRG
MOX E P   21 09 36   1,5 /   25   MPV =5,0   D= 78,3 DEG   AZ= 6   MOX

1978 JAN 02   ADRIATIC SEA   NO MB COMP.   43,9N; 15,0E 33KM H=21 46 43,2 (NEIS)
44,1N; 15,1E 10KM 21 46 44,3 (CSEM)

BRG I(PG)   21 48 54,3   D= 7,0 DEG   AZ=174   BRG
    E SG   50 30,5
MOX E SG   21 50 30   D= 7,1 DEG   AZ=160   MOX
CLL E SG   21 50 40   D= 7,5 DEG   AZ=169   CLL

1978 JAN 03   FIJI ISLANDS REGION   MB=5,1 (20)   17,4S;178,6W 520KM H=01 35 14,5 (NEIS)
CLL I PKP   01 53 53,3   1,5 /   87   D=144,9 DEG   AZ= 20   CLL
BRG E PKP   01 53 53,0   1,3 /   39   D=145,1 DEG   AZ= 21   BRG
    E APKP   56 03,6
MOX E PKP   01 53 56   1,7 /   36   D=145,8 DEG   AZ= 18   MOX

1978 JAN 03
MOX E SG   11 08 05
BRG I(PG)   11 08 10,8
    I SG   08 31,0

1978 JAN 03   OFF EAST COAST OF HONSHU, JAPAN   MB=4,8 (20)   39,3N;143,3E 14KM H=12 27 18,8 (NEIS)
39,1N;143,4E 33KM 12 27 14,7 (WDCB)

BRG E P   12 39 29,0   D= 79,8 DEG   AZ= 38   BRG
CLL E P   12 39 26   D= 79,9 DEG   AZ= 37   CLL
MOX E P   12 39 32   D= 80,9 DEG   AZ= 36   MOX

1978 JAN 03
CLL E   22 27 10
    E   27 32

1978 JAN 04   HOKKAIDO, JAPAN, REGION   MB=5,0 (55)   42,6N;142,1E 103KM H=00 57 25,7 (NEIS)
43,1N;142,2E 130KM 00 57 30,4 (WDCB)

BRG E P   01 09 05,9   1,5 /   19   D= 76,5 DEG   AZ= 37   BRG
    E AP   09 33,2
CLL I P   01 ~~09 05,9~~   1,0 /   21   ~~D= 76,5 DEG   AZ= 36   CLL~~
    E AP   09 34
MOX E P   01 09 09   D= 77,6 DEG   AZ= 35   MOX

1978 JAN 04   RED SEA   MB=4,5 (8)   16,7N; 40,8E 33KM H=05 04 43,1 (NEIS)
BRG E P   05 12 20,0   1,3 /   16   D= 40,3 DEG   AZ=138   BRG
CLL E P   05 12 24   D= 41,0 DEG   AZ=137   CLL

1978 JAN 04   ROMANIA   NO MB COMP.   45,3N; 21,0E 33KM H=05 31 48,5 (NEIS)
45,4N; 21,1E 10KM 05 31 48,6 (CSEM)

BRG E(PN)   05 33 55,0   D= 7,3 DEG   AZ=137   BRG
CLL E SN   05 35 08   D= 8,0 DEG   AZ=135   CLL

CLL INTERRUPTION OF ONE SHORTPERIODIC RECORD FROM 13H 03M TO 05H 59M (AT JAN 05)

1978 JAN 04   LOMONOSOV RIDGE   MB=5,0 (53)   85,7N; 23,8W 33KM H=14 52 09,3 (NEIS)
85,3N; 27,0W 10KM 14 52 09,4 (CSEM)
85,8N; 24,0W 33KM 14 52 04,2 (WDCB)

CLL E P   14 59 04   D= 35,5 DEG   AZ=356   CLL
    E PPP   15 00 48
BRG E P   14 59 08,8   D= 36,0 DEG   AZ=355   BRG
MOX E P   14 59 10   D= 36,1 DEG   AZ=356   MOX

1978 JAN 04
CLL E   21 03 22

1978 JAN 04   COSTA RICA   MB=5,0 (42)   9,5N; 84,1W 68KM H=22 52 15,9 (NEIS)
MOX E P   23 04 52,5   1,8 /   57   MPV =5,5   D= 86,3 DEG   AZ=280   MOX
    E AP   05 04   DEPTH 43 KM
CLL I P   23 04 55,7   1,6 /   53   D= 87,1 DEG   AZ=281   CLL
    E   05 08
BRG I P   23 04 59,0C 1,3 /   29   D= 87,7 DEG   AZ=282   BRG
    I AP   05 12,4

1978 JAN 05   POLAND, UPPER SILESIA   /NO MB COMP./   50,4N; 19,0E 0KM H=02 13 24   (ISC)
BRG E(PG)   02 14 24,1   D= 3,3 DEG   AZ= 96   BRG
    E(SG)   15 11,2

1978 JAN 05   PAKISTAN   MB=5,0 (7)   29,6N; 68,8E 33KM H=03 26 39,1 (NEIS)
BRG I P   03 34 58,4   D= 45,7 DEG   AZ= 96   BRG
MOX E P   03 35 11   D= 47,2 DEG   AZ= 94   MOX

1978 JAN 05   SOUTH PACIFIC OCEAN   MB=5,5 (28)   20,8S;126,9W 33KM H=03 23 26,1 (NEIS)
CLL E PKP   03 42 47   D=136,4 DEG   AZ=299   CLL
BRG E PKP   03 42 47,2   0,9 /   12   D=137,1 DEG   AZ=300   BRG
    E   45 32,1

1978 JAN 05   SOUTHEASTERN AUSTRIA   47,1N; 14,2E   H=04 31,0   (VKA)
CLL E SG   04 33 31   D= 4,3 DEG   AZ=169   CLL
    E   34 15

1978 JAN 05   TONGA ISLANDS REGION   MB=5,2 (3)   18,6S;172,1W 33KM H=15 56 55,3 (NEIS)
CLL I PKP1   16 16 38,6   1,2 /   20   D=147,1 DEG   AZ= 9   CLL
    I APKP   16 49,0
BRG E PKP   16 16 38,6   D=147,4 DEG   AZ= 11   BRG
MOX E PKIKP   16 16 41   TRACES   D=147,9 DEG   AZ= 7   MOX
    E PKHKP   16 45
    E PKP2   16 51

1978 JAN 05   SOUTHERN IRAN   MB=4,7 (38)   27,6N; 53,8E 56KM H=19 30 21,3 (NEIS)
27,9N; 53,7E 92KM 19 30 29,4 (CSEM)
27,2N; 53,8E 33KM 19 30 11,8 (WDCB)

BRG E P   19 37 35,2   D= 38,0 DEG   AZ=112   BRG
CLL E P   19 37 42   D= 38,7 DEG   AZ=112   CLL
MOX E P   19 37 48   D= 39,3 DEG   AZ=110   MOX
    LMH   55,6

1978 JAN 06   LUZON, PHILIPPINE ISLANDS   MB=5,8 (64)   18,8N;121,9E 33KM H=04 41 22,2 (NEIS)
19,0N;122,0E 33KM 04 41 17,6 (WDCB)

BRG I P   04 54 03,3D 1,7 /   183   D= 86,4 DEG   AZ= 65   BRG
    E PP   57 25,9   DISTANCE 90 DEG
    E SKS   05 04 35
    E S   04 56
    E PS   06 02
    LMV   40   T 15   AV 14,8   MLV =6,6
CLL I P   04 54 05,0   1,6 /   150   D= 86,7 DEG   AZ= 64   CLL
    E   54 16   DISTANCE 85 DEG
    E   57,0
    E PP   57 29
    E   58 44
    E SKS   05 04 33
    E(S)   04 58
    E   07,1
    LMH   34   T 16   AN 11   AE 7,5 AV 7   MLH =6,4
    LMV   39   T 14   AN 8,5 AE 7,5 AV 19   MLV =6,6
    FINAL   07
MOX I P   04 54 11,5   1,6 /   77   MPV =5,8   D= 87,8 DEG   AZ= 63   MOX
    E PP   57 40   DISTANCE 90 DEG
    E SKS   05 04 40
    E SS   11 08
    LMH   41,4   T 15,5 AN 7,9 AE 10,5   MLH =6,5
    LMV   41,8   T 15   AV 14,5   MLV =6,6

1978 JAN 06   ANDREANOF ISLANDS, ALEUTIAN IS,   MB=5,3 (55)   51,8N;176,0W 63KM H=07 08 43,8 (NEIS)
51,2N;175,6W 33KM 07 08 36,8 (WDCB)

CLL E P   07 20 29   D= 77,0 DEG   AZ= 6   CLL
    E   20 58
BRG E P   07 20 32,8   1,2 /   17   D= 77,4 DEG   AZ= 6   BRG
MOX E P   07 20 35   D= 77,7 DEG   AZ= 5   MOX

1978 JAN 06
CLL E   17 32 46

1978 JAN 06   HOKKAIDO, JAPAN, REGION   MB=5,1 (46)   41,5N;142,0E 66KM H=19 42 19,6 (NEIS)
42,0N;141,8E 50KM 19 42 20,5 (WDCB)

BRG E P   19 54 09,1   1,2 /   12   D= 77,4 DEG   AZ= 37   BRG
CLL I P   19 54 09,6   1,5 /   30   D= 77,5 DEG   AZ= 37   CLL
MOX E P   19 54 15,5   1,0 /   16   MPV =4,9   D= 78,5 DEG   AZ= 36   MOX

1978 JAN 06   KURILE ISLANDS   MB=4,6 (4)   44,4N;148,4E 33KM H=21 33 20,9 (NEIS)
CLL E P   21 45 13   D= 77,1 DEG   AZ= 31   CLL
BRG I P   21 45 10,4   D= 77,2 DEG   AZ= 32   BRG

1978 JAN 06   KENAI PENINSULA, ALASKA   MB=4,6 (7)   60,9N;149,4W 45KM H=21 59 01,1 (NEIS)
59,8N;152,2W 33KM 21 59 02,7 (WDCB)

CLL E AP   22 10 05   D= 67,3 DEG   AZ=351   CLL
MOX E P   22 10 06   D= 67,8 DEG   AZ=350   MOX
BRG E P   22 10 06,3   D= 67,8 DEG   AZ=351   BRG

1978 JAN 07
CLL E   01 04 54   TRACES
BRG E P   01 04 54,0

1978 JAN 07   EASTERN SEA OF JAPAN   MB=4,1 (1)   44,0N;139,0E 280KM H=01 03 36,9 (NEIS)
CLL E P   01 16 45   TRACES   D= 74,2 DEG   AZ= 37   CLL

1978 JAN 07   AZORES ISLANDS   NO MB COMP.   38,6N; 30,1W 33KM H=02 09 42,0 (NEIS)
MOX E P   02 16 04   D= 31,6 DEG   AZ=264   MOX
CLL E P   02 16 12   D= 32,6 DEG   AZ=264   CLL
BRG E P   02 16 17,3   D= 33,1 DEG   AZ=266   BRG

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1978 JAN 07     POLAND, UPPER SILESIA
CLL E SG        03 40 06

1978 JAN 07     SCOTIA SEA
BRG E PKP       03 57 09,5
CLL E PKP       03 57 10

1978 JAN 07     TIBET-INDIA BORDER REGION
BRG E P         07 32 27,2  0,8 /   15
MOX E P         07 32 38

1978 JAN 07     MINDANAO, PHILIPPINE ISLANDS

BRG E P         09 02 24,9
CLL E P         09 02 26

1978 JAN 07     KERMADEC ISLANDS
CLL I PKP2      10 57 18,7

1978 JAN 07     EASTERN TURKEY

BRG E(P)        16 53 54,0
CLL E P         16 53 51

1978 JAN 07
BRG E(P)        20 21 04,4

1978 JAN 08     NEAR WEST COAST OF COLOMBIA
MOX E P         01 09 20
CLL I(P)        01 09 26,6  1,2 /   18
BRG I P         01 09 30,1  1,3 /   18

1978 JAN 08     IRAN
BRG E(P)        03 02 33,0
CLL E P         03 02 39    1,6 /   22

1978 JAN 08     MALAWI
BRG I P         06 42 31,6  0,9 /   15
MOX E P         06 42 34,5  1,2 /   18
CLL I P         06 42 36,6  1,5 /   25

1978 JAN 08     TONGA ISLANDS
CLL I PKP1      13 08 19,7C 1,0 /   27
BRG I PKP       13 08 20,3  0,7 /   13
MOX E PKP       13 08 21

1978 JAN 08     POLAND, UPPER SILESIA
BRG E(PG)       19 26 39,1
    E SG        27 22,0
CLL E PG        19 26 51
    E SG        27 46
MOX E SG        19 28 02

1978 JAN 08     KODIAK ISLAND REGION
BRG E P         22 25 19,0  1,2 /   12
MOX E P         22 25 20

1978 JAN 08     NORTH ATLANTIC RIDGE

MOX E P         23 19 45    TRACES
CLL E P         23 19 50    TRACES
BRG E P         23 19 56,2

1978 JAN 09
CLL E           02 29 18

1978 JAN 09
CLL E P         04 39 56
MOX E P         04 39 57
BRG E P         04 40 06,9

1978 JAN 09     ICELAND
CLL E P         09 20 28    2,0 /   70
    LM          30
MOX E P         09 20 29
    E           20 34       2,0 /   51
      LMV       32,5        T 14        AV  1,5  MLV =4,7
      LMH       33,5        T 14  AN    0,8      MLH =4,3
BRG E P         09 20 35,4  1,8 /   47

1978 JAN 09     ICELAND
CLL E P         13 58 52    2,5 /   135
    LM          14 08
MOX E P         13 58 54    2,8 /   193
    E           59 00
    E           59 26
      LMH       14 10,3     T 10,5      AE  1,2      MLH =4,6
      LMV       10,9        T 13            AV  1,6  MLV =4,7
BRG E P         13 59 00,0  2,0 /   88

1978 JAN 09
MOX E P         15 07 20
CLL E P         15 07 21
BRG E P         15 07 26,4  1,9 /   37
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MB=5,2 ( 4)   60,2S; 49,0W  33KM H=03 38 19,6 (NEIS)
                    D=121,8 DEG   AZ=212       BRG
                    D=121,8 DEG   AZ=211       CLL

MB=4,7 (19)   30,6N; 79,4E  33KM H=07 23 20,5 (NEIS)
                    D= 51,8 DEG   AZ= 87       BRG
                    D= 53,3 DEG   AZ= 85       MOX

MB=5,2 (25)    6,1N;126,8E  86KM H=08 48 50,0 (NEIS)
               6,6N;126,6E  33KM    08 48 46,9 (WDCB)
                    D= 99,4 DEG   AZ= 68       BRG
                    D= 99,8 DEG   AZ= 67       CLL

/MB=4,2 ( 1)/ 30,4S;177,6W  33KM H=10 36 47    (ISC)
                    D=157,7 DEG   AZ= 25       CLL

MB=4,7 ( 7)   40,1N; 42,3E  33KM H=16 48 43,6 (NEIS)
              39,6N; 42,2E  33KM    16 48 41,7 (WDCB)
                    D= 22,5 DEG   AZ=108       BRG
                    D= 23,2 DEG   AZ=107       CLL

MB=5,0 (19)    6,0N; 77,5W  33KM H=00 56 42,4 (NEIS)
                    D= 84,8 DEG   AZ=273       MOX
                    D= 85,7 DEG   AZ=274       CLL
                    D= 86,3 DEG   AZ=275       BRG

MB=4,8 ( 3)   30,2N; 50,9E  33KM H=02 55 48,0 (NEIS)
                    D= 34,4 DEG   AZ=113       BRG
                    D= 35,1 DEG   AZ=112       CLL

MB=5,1 (29)   12,1S; 34,3E  33KM H=06 31 52,8 (NEIS)
                    D= 65,2 DEG   AZ=158       BRG
  MPV =5,0          D= 65,5 DEG   AZ=156       MOX
                    D= 65,8 DEG   AZ=157       CLL

MB=5,0 ( 5)   18,2S;175,2W 288KM H=12 49 10,8 (NEIS)
                    D=146,3 DEG   AZ= 14       CLL
                    D=146,6 DEG   AZ= 16       BRG
                    D=147,2 DEG   AZ= 12       MOX

              50,3N; 19,0E       H=19 25 36,2  (WAR)
                    D=  3,3 DEG   AZ= 98       BRG

                    D=  3,9 DEG   AZ=103       CLL

                    D=  4,7 DEG   AZ= 91       MOX

MB=4,8 (27)   57,1N;153,4W  26KM H=22 13 57,1 (NEIS)
                    D= 71,9 DEG   AZ=353       BRG
                    D= 71,9 DEG   AZ=351       MOX

MB=4,0 (15)   49,3N; 28,5W  33KM H=23 14 15,6 (NEIS)
              49,3N; 29,4W  10KM    23 14 09,2 (CSEM)
                    D= 25,6 DEG   AZ=283       MOX
                    D= 26,3 DEG   AZ=282       CLL
                    D= 27,0 DEG   AZ=283       BRG

MB=4,3 (15)   66,0N; 16,8W  10KM H=09 15 41,8 (NEIS)
              66,1N; 17,3W  10KM    09 15 41,8 (CSEM)
              66,0N; 16,1W  33KM    09 15 43,1 (WDCB)
                    D= 21,1 DEG   AZ=326       CLL

                    D= 21,1 DEG   AZ=327       MOX

                    D= 21,8 DEG   AZ=326       BRG

MB=4,4 (15)   66,0N; 16,8W  10KM H=13 54 06,1 (NEIS)
                    D= 21,1 DEG   AZ=326       CLL

  MPV =5,0          D= 21,1 DEG   AZ=327       MOX
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1978 JAN 09
CLL E           17 37 38

1978 JAN 09     ICELAND

CLL E P         19 07 57    2,2 /   140
    LM          17
MOX E P         19 07 58
    E           08 32
      LMH       17,3        T 14,5 AN   1,8      MLH =4,6
      LMV       20,8        T 12           AV   1,9  MLV =4,8
BRG E P         19 08 04,0  2,2 /   140

1978 JAN 09     ICELAND

CLL E P         20 07 34  D 1,8 /   40
MOX E(P)        20 07 34,5  1,8 /   32
    E           07 39
BRG E P         20 07 41,1  1,7 /   39

1978 JAN 09     NORTHERN ITALY          FRIULI

MOX E PN        21 51 02
    E PG        51 20
    E SN        51 53
    E SG        52 17
BRG E PN        21 51 04,0
    I PG        51 20,1
    I SN        51 55,0
    E SG        52 19,3
CLL E PN        21 51 10
    E SN        52 07
    E SG        52 32

1978 JAN 10     KURILE ISLANDS

CLL I P         01 01 59,7C 1,0 /   96
    E AP        02 19
    E           04 35
      LH        35
BRG I P         01 02 00,5C 1,0 /   30
    E           02 24,6
MOX I P         01 02 06,0C 1,2 /   69
    E AP        02 22
    E S         11 40
    E SS        16 45

1978 JAN 10     ICELAND
CLL E P         02 01 10
    LM          10
MOX E P         02 01 13    2,8 /   172
    E PP        01 33
    E S         05 05
      LMH       10,5        T 15   AN   1,4      MLH =4,5
      LMV       12,4        T 10           AV   1,8  MLV =4,9
BRG E P         02 01 22,3

1978 JAN 10     POLAND, UPPER SILESIA
CLL E SG        03 04 15

1978 JAN 10     ICELAND
CLL E P         03 30 45
BRG E P         03 30 51,0  2,1 /   55

1978 JAN 10     CENTRAL YUGOSLAVIA

BRG E(PN)       04 58 59,0
    E           05 00 32,0
CLL E SG        05 01 07    TRACES

1978 JAN 10     ICELAND REGION
BRG E P         07 07 28,4

1978 JAN 10     SOUTH OF FIJI ISLANDS
CLL I PKP1      10 38 32,6  1,0 /   32
BRG I PKP1      10 38 33,1  1,0 /   24
    I PKP2      38 44,0
    I APKP      40 44,8
MOX E PKHKP     10 38 35,5  TRACES

1978 JAN 10     ICELAND
CLL E P         10 43 41
MOX E P         10 43 46    TRACES
BRG E P         10 43 50,8

1978 JAN 10     ICELAND

CLL E P         12 49 56    1,7 /   45
MOX E P         12 49 57    1,6 /   33
BRG I P         12 50 03,8D 1,8 /   66

1978 JAN 10     ICELAND

CLL I P         17 46 58,3C 2,5 /   340
    LM          56
MOX E P         17 47 00
      LMH       56,5        T 15   AN   2,1      MLH =4,7
      LMV       18 00,0     T 14           AV   2,7  MLV =4,9
BRG E P         17 47 05,2C 2,2 /   212
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MB=4,6 (22)   66,0N; 17,0W  10KM H=19 03 10,8 (NEIS)
              65,9N; 17,2W  10KM    19 03 13,2 (CSEM)
              66,1N; 15,9W  33KM    19 03 17,6 (WDCB)
                    D= 21,1 DEG   AZ=325       CLL

                    D= 21,2 DEG   AZ=327       MOX

                    D= 21,8 DEG   AZ=326       BRG

MB=4,3 (13)   66,0N; 17,0W  10KM H=20 02 46,9 (NEIS)
              66,7N; 22,0W  10KM    20 02 30,4 (CSEM)
                    D= 21,1 DEG   AZ=325       CLL
  MPV =4,3          D= 21,2 DEG   AZ=327       MOX
                    D= 21,8 DEG   AZ=326       BRG

NO MB COMP.   46,3N; 13,1E  10KM H=21 49 55,3 (CSEM)
              46,3N; 13,0E  20KM    21 49 55,2 (NEIS)
                    D=  4,5 DEG   AZ=167       MOX

                    D=  4,6 DEG   AZ=187       BRG

                    D=  5,0 DEG   AZ=179       CLL

MB=5,6(104)   46,8N;152,3E  61KM H=00 50 17,1 (NEIS)
              47,5N;151,6E  70KM    00 50 22,7 (WDCB)
                    D= 76,2 DEG   AZ= 27       CLL

                    D= 76,3 DEG   AZ= 28       BRG

  MPV =5,5          D= 77,2 DEG   AZ= 27       MOX
                                    DEPTH  65 KM

MB=4,4 (10)   66,0N; 16,9W  10KM H=01 56 24,6 (NEIS)
                    D= 21,1 DEG   AZ=326       CLL

  MPV =4,9          D= 21,2 DEG   AZ=327       MOX

                    D= 21,8 DEG   AZ=326       BRG

/MB=4,5 ( 2)/ 66,0N; 17,0W   0KM H=03 26 00    (ISC)
                    D= 21,1 DEG   AZ=325       CLL
                    D= 21,8 DEG   AZ=326       BRG

NO MB COMP.   44,7N; 17,3E  11KM H=04 57 16,6 (NEIS)
              44,8N; 17,6E  10KM    04 57 15,4 (CSEM)
                    D=  6,6 DEG   AZ=159       BRG

                    D=  7,2 DEG   AZ=155       CLL

MB=4,1 ( 2)   66,1N; 17,1W  10KM H=07 02 29,8 (NEIS)
                    D= 21,9 DEG   AZ=326       BRG

MB=5,1 ( 6)   23,7S;179,8E 620KM H=10 19 47,6 (NEIS)
                    D=150,6 DEG   AZ= 25       CLL
                    D=150,7 DEG   AZ= 27       BRG

                    D=151,6 DEG   AZ= 23       MOX

MB=4,3 ( 4)   66,0N; 16,9W  10KM H=10 33 56,6 (NEIS)
                    D= 21,1 DEG   AZ=326       CLL
                    D= 21,2 DEG   AZ=327       MOX
                    D= 21,8 DEG   AZ=326       BRG

MB=4,5 (21)   66,1N; 16,4W  10KM H=12 45 11,4 (NEIS)
              66,0N; 16,8W  10KM    12 45 12,9 (CSEM)
              66,5N; 11,4W  33KM    12 45 24,5 (WDCB)
                    D= 21,0 DEG   AZ=326       CLL
  MPV =4,5          D= 21,1 DEG   AZ=328       MOX
                    D= 21,7 DEG   AZ=326       BRG

MB=4,8 (26)   66,0N; 16,9W  10KM H=17 42 13,3 (NEIS)
              66,2N; 17,2W  10KM    17 42 13,2 (CSEM)
              66,1N; 16,0W  33KM    17 42 13,6 (WDCB)
                    D= 21,1 DEG   AZ=326       CLL

                    D= 21,2 DEG   AZ=327       MOX

                    D= 21,8 DEG   AZ=326       BRG
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1978 JAN 10 ICELAND
CLL E P 19 30 19 1.6 / 38
E 30 39
MOX E P 19 30 19
BRG I P 19 30 24,9C 1.6 / 37

1978 JAN 10 ICELAND — MB=4.4 (6) — 66.0N; 16.9W 10KM H=19 25 31.3 (NEIS)
D= 21.1 DEG AZ=326 CLL
D= 21.2 DEG AZ=327 MOX
D= 21.8 DEG AZ=326 BRG

MB=4.8 (24) — 65.9N; 16.9W 10KM H=20 44 47.7 (NEIS)
65.7N; 18.5W 10KM 20 44 46.9 (CSEM)
66.2N; 15.8W 33KM 20 44 48.8 (WDCB)
D= 21.1 DEG AZ=325 CLL
MPV =4.8
D= 21.1 DEG AZ=327 MOX
D= 21.8 DEG AZ=325 BRG

CLL I P 20 49 35,0D 1.9 / 91
E 51 35
MOX E P 20 49 35 2.2 / 87
BRG E P 20 49 40,7C 2.0 / 127

1978 JAN 10 FRG, SOUTHWESTERN REGION
MOX E PG 22 24 32
E SG 25 07
CLL E SG 22 25 42
E 26 08

48.2N; 9.3E 10KM H=22 23 33.8 (CSEM)
D= 2,9 DEG AZ=213 MOX
D= 3,9 DEG AZ=219 CLL

1978 JAN 11 KIRGHIZ-SINKIANG BORDER REGION — MB=4.7 (20) — 40.2N; 77.2E 36KM H=01 45 02.5 (NEIS)
40.3N; 77.2E 33KM 01 45 03.4 (WDCB)
D= 44,3 DEG AZ= 78 BRG
D= 44,8 DEG AZ= 78 CLL
D= 45,8 DEG AZ= 77 MOX

BRG I P 01 53 10,3
CLL I(P) 01 53 18,9 0.8 / 14
MOX E P 01 53 22 TRACES

1978 JAN 11 WESTERN TURKEY — MB=4.5 (10) — 37.5N; 28.8E 7KM H=03 57 45.4 (NEIS)
37.5N; 28.6E 10KM 03 57 47.2 (CSEM)
37.6N; 28.7E 33KM 03 57 50.2 (WDCB)
D= 17,0 DEG AZ=136 BRG
D= 17,8 DEG AZ=135 CLL
D= 18,0 DEG AZ=130 MOX

BRG E P 04 01 48,9 1.5 / 21
CLL E PP 04 02 03
MOX E(P) 04 02 08

1978 JAN 11
CLL E 04 16 14 TRACES

CLL INTERRUPTION OF ALL RECORDS FROM 05H 51M TO 10H 11M

1978 JAN 11 SOUTH OF HONSHU, JAPAN — MB=5.3 (55) — 30.0N;138.7E 410KM H=08 10 12.4 (NEIS)
D= 85,9 DEG AZ= 46 BRG
D= 87,1 DEG AZ= 44 MOX
DEPTH 470 KM

BRG I P 08 22 08,1C 1.0 / 12
E AP 23 50,1 1.3 / 38
MOX E AP 08 23 57

1978 JAN 11 ICELAND — MB=4.8 (30) — 66.0N; 16.8W 10KM H=10 58 12.9 (NEIS)
65.9N; 17.1W 10KM 10 58 14.3 (CSEM)
66.2N; 16.2W 33KM 10 58 13.1 (WDCB)
D= 21.1 DEG AZ=326 CLL
MPV =4.8
D= 21.1 DEG AZ=327 MOX

CLL I P 11 02 59,0D 2.2 / 180
LM 13
MOX E P 11 03 00 1.9 / 91
E PP 03 25
LMH 14,5 T 12 AE 1,4 MLH =4.6
LMV 14,7 T 10,5 AV 1.7 MLV =4.8
BRG E P 11 03 06,0D 1.9 / 113
D= 21,8 DEG AZ=326 BRG

1978 JAN 11
BRG E(PG) 12 08 28,0
E(SG) 08 54,7

1978 JAN 11 OFF EAST COAST OF HONSHU, JAPAN — MB=4.9 (9) — 39.2N;143.1E 33KM H=13 29 09.1 (NEIS)
39.4N;143.2E 33KM 13 29 09.8 (WDCB)
D= 79,9 DEG AZ= 38 BRG
D= 79,9 DEG AZ= 37 CLL
D= 80,9 DEG AZ= 36 MOX

BRG I P 13 41 16,4
CLL I P 13 41 16,0
MOX E P 13 41 22

1978 JAN 11 ICELAND — MB=4.6 (1) — 66.0N; 17.0W 10KM H=16 41 01.6 (NEIS)
D= 21,1 DEG AZ=325 CLL
D= 21,2 DEG AZ=327 MOX
D= 21,8 DEG AZ=326 BRG

CLL E P 16 45 48
MOX E P 16 45 50 TRACES
BRG E P 16 45 54,7 1.9 / 51

1978 JAN 11 POLAND, UPPER SILESIA
BRG E(PG) 19 21 01,8
E(SG) 21 44,7
CLL E 19 21 22
E SG 22 07
MOX E(SG) 19 22 33

1978 JAN 11 HOKKAIDO, JAPAN, REGION — MB=5.4 (67) — 43.0N;145.4E 54KM H=20 26 56.1 (NEIS)
43.2N;145.4E 33KM 20 26 54.2 (WDCB)
D= 77,4 DEG AZ= 34 CLL
D= 77,4 DEG AZ= 34 BRG
MPV =5.3
D= 78,4 DEG AZ= 33 MOX
DEPTH 40 KM

CLL I P 20 38 46,5C 1.0 / 90
I AP 38 58,0
I XP 39 02,7
BRG I P 20 38 47,0C 1.1 / 29
I AP 38 58,6
I XP 39 04,4
MOX E P 20 38 52,5 1.0 / 35
E AP 39 03
E XP 39 09

1978 JAN 12 POLAND, UPPER SILESIA
BRG E 00 54 25,0
E(SG) 54 57,0
CLL E SG 00 55 20

1978 JAN 12 ICELAND — MB=4.9 (4) — 66.0N; 16.9W 10KM H=09 07 02.6 (NEIS)
D= 21,1 DEG AZ=326 CLL
D= 21,8 DEG AZ=326 BRG

CLL I P 09 11 48,3C 1.9 / 66
BRG E P 09 11 55,6 1.8 / 52

1978 JAN 12
CLL I P 09 54 30 C

1978 JAN 12 SOUTH OF FIJI ISLANDS — MB=4.8 (3) — 22.8S;179.6E 592KM H=10 23 50.9 (NEIS)
D=149,7 DEG AZ= 23 CLL
D=149,8 DEG AZ= 27 BRG

CLL I PKP1 10 42 40,0 0.9 / 17
BRG I PKP 10 42 40,6 0.5 / 9

1978 JAN 12
MOX E(P) 11 24 39

1978 JAN 12 POLAND, UPPER SILESIA — /NO MB COMP./ — 50.2N; 19.0E 0KM H=18 11 08 (ISC)
D= 3,3 DEG AZ=100 BRG
D= 4,0 DEG AZ=104 CLL
D= 4,7 DEG AZ= 93 MOX

BRG E(PG) 18 12 11,7
E SG 12 54,2
CLL E SN 18 12 55
E SG 13 16
MOX E SG 18 13 41

1978 JAN 12 TONGA ISLANDS REGION — MB=5.2 (24) — 17.5S;172.1W 23KM H=18 05 03.8 (NEIS)
17.5S;172.9W 33KM 18 05 03.7 (WDCB)
D=146,0 DEG AZ= 9 CLL
D=146,4 DEG AZ= 10 BRG
D=146,8 DEG AZ= 6 MOX

CLL I PKP 18 24 43,3D 1.7 / 155
I APKP 24 54,6
BRG E PKP 18 24 43,8 1.5 / 94
MOX E PKHKP 18 24 46 1.6 / 154
E APKP 24 56

1978 JAN 12 MEDITERRANEAN SEA — MB=4.6 (27) — 35.8N; 22.2E 53KM H=20 08 36.9 (NEIS)
36.0N; 22.3E 49KM 20 08 40.6 (CSEM)
35.5N; 21.9E 33KM 20 08 31.4 (WDCB)
D= 16,2 DEG AZ=155 BRG
D= 16,7 DEG AZ=149 MOX

BRG I P 20 12 21,1
MOX E P 20 12 30
E 12 44,5
LMH 18,3 T 21 AN 1,4 AE 1,9 MLH =4.4
LMV 19,8 T 9 AV 1.0 MLV =4.6
CLL I(P) 20 12 34,2C 2.6 / 170
I 12 41,7
LM 18
D= 16,9 DEG AZ=153 CLL

1978 JAN 12 POLAND, UPPER SILESIA
CLL E 22 19 36

1978 JAN 13 ICELAND — MB=4.7 (11) — 66.0N; 16.9W 10KM H=00 31 22.0 (NEIS)
66.0N; 17.4W 10KM 00 31 22.7 (CSEM)
66.1N; 15.9W 33KM 00 31 23.9 (WDCB)
D= 21.1 DEG AZ=326 CLL
D= 21.2 DEG AZ=327 MOX
D= 21.8 DEG AZ=326 BRG

CLL E P 00 36 08 1.8 / 46
MOX E P 00 36 09
LMH 44,2 T 24 AE 0,4 MLH =3.7
LMV 45,7 T 19 AV 0.5 MLV =4.1
BRG I P 00 36 15,7D 1.4 / 31

1978 JAN 13 POLAND, UPPER SILESIA — /NO MB COMP./ — 50.5N; 18.9E 0KM H=05 42 12.3 (ISC)
D= 3,8 DEG AZ=100 CLL

CLL E 05 44 20

1978 JAN 13 QUEEN CHARLOTTE ISLANDS REGION — MB=5.0 (31) — 52.7N;132.1W 33KM H=08 25 31.6 (NEIS)
52.7N;132.1W 33KM 08 25 26.0 (WDCB)
D= 72,3 DEG AZ=339 CLL
D= 72,6 DEG AZ=338 MOX
D= 72,9 DEG AZ=339 BRG

CLL E P 08 36 54
MOX E P 08 36 57
BRG I P 08 36 58,9C

1978 JAN 13 KURILE ISLANDS — MB=5.1 (41) — 44.5N;149.8E 33KM H=09 58 50.6 (NEIS)
44.9N;149.8E 33KM 09 58 52.2 (WDCB)
D= 77,5 DEG AZ= 30 CLL
D= 77,6 DEG AZ= 31 BRG
MPV =5.3
D= 78,5 DEG AZ= 29 MOX

CLL I P 10 10 43,6C 1.4 / 97
E PP 13 29
BRG I P 10 10 44,4D 1.3 / 31
MOX E P 10 10 49 1.6 / 55

1978 JAN 13 ICELAND — MB=4.2 (10) — 66.0N; 17.1W 10KM H=17 08 42.3 (NEIS)
66.0N; 17.4W 10KM 17 08 44.2 (CSEM)
D= 21.2 DEG AZ=325 CLL
D= 21.2 DEG AZ=327 MOX
D= 21.9 DEG AZ=326 BRG

CLL E P 17 13 29 1.7 / 42
MOX E P 17 13 30
BRG I P 17 13 36,0 1.6 / 28

1978 JAN 13 KURILE ISLANDS — MB=6.0 (93) — 44.7N;149.7E 52KM H=20 03 03.8 (NEIS)
45.1N;149.6E 33KM 20 03 03.4 (WDCB)
D= 77,3 DEG AZ= 30 CLL
DISTANCE 76 DEG
D= 77,4 DEG AZ= 31 BRG
DISTANCE 77 DEG
D= 78,3 DEG AZ= 29 MOX

CLL I P 20 14 54,3C 1.6 / 1050 1.6 / 440 1.2 / 85
E S 24 40
LMH 48 T 16 AN 7,5 AE 8,3 MLH =6.3
LMV 52 T 17 AN 10 AE 6,5 AV 9,5 MLV =6.2
BRG I P 20 14 54,6C 1.6 / 478
I AP 15 08,6
I 15 19,7
E S 24 45
LMH 48 T 17 AN 6,2 AE 14,2 MLH =6.4
LMV 52 T 17 AV 12,4 MLV =6.3
MOX I P 20 15 00,0C 1.7 / 727 MPV =6.4
E S 24 54
E SS 29 40
E SSS 33 38
LMH 51,9 T 16,5 AN 7,1 AE 9,0 MLH =6.3
LMV 54,2 T 18 AV 7,2 MLV =6.1

1978 JAN 13 KURILE ISLANDS — MB=5.0 (36) — 44.4N;149.7E 51KM H=21 39 40.3 (NEIS)
44.7N;149.9E 33KM 21 39 38.5 (WDCB)
D= 77,6 DEG AZ= 30 CLL
D= 77,6 DEG AZ= 31 BRG
D= 78,6 DEG AZ= 29 MOX

CLL I P 21 51 31,4C 1.2 / 50
E 53 48
BRG E P 21 51 32,1 1.1 / 25
MOX E P 21 51 37,5 1.2 / 29

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1978 JAN 13
CLL I P         21 57 11,8D 1.0 /   15

1978 JAN 14     CRETE                                          /NO MB COMP./  35.1N; 23.5E    0KM H=00 30 12    (ISC)
                                                                              35.1N; 23.2E          00 30 11    (ATH)
                                                                                    D= 17.9 DEG   AZ=151        CLL

CLL E           00 34 36

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=4.9 ( 6)  34.7N;139.2E  18KM H=00 36 14.8 (NEIS)
                                                                              35.5N;139.2E  33KM   00 36 23.3 (WDCB)
                                                                                    D= 82.1 DEG   AZ= 43        BRG
BRG E P         00 48 39.0                                                          D= 82.2 DEG   AZ= 42        CLL
CLL E(P)        00 48 40

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      NO MB COMP.  35.0N;139.4E  10KM H=00 38 43.3 (NEIS)
CLL I(P)        00 51 10.9D                                                         D= 82.0 DEG   AZ= 42        CLL

1978 JAN 14
CLL E           00 53 20

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=5.2 ( 8)  34.7N;139.3E  18KM H=00 45 33.8 (NEIS)
CLL E P         00 57 57                                                            D= 82.2 DEG   AZ= 42        CLL
    I AP            58 04.7
MOX E P         00 58 03   TRACES                                                  D= 83.3 DEG   AZ= 41        MOX
    E               58 09

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=5.2 (11)  34.8N;139.2E   7KM H=00 47 38.4 (NEIS)
BRG I P         01 00 02,9D 1.8 /   31                                              D= 82.0 DEG   AZ= 43        BRG
CLL E P         01 00 01    1.6 /   38                                              D= 82.1 DEG   AZ= 42        CLL
    E               00 18
MOX E(P)        01 00 07,5 TRACES                                                   D= 83.2 DEG   AZ= 41        MOX
      LMH           38.0      T 15   AN   1.3 AE   1.3                MLH  =5.6
      LMV           42.7      T 14                        AV   1.5     MLV  =5.6

1978 JAN 14     KURILE ISLANDS                                      MB=4.7 ( 2)  44.5N;149.5E  52KM H=01 30 02.0 (NEIS)
                                                                              44.4N;149.9E  33KM   01 29 58.1 (WDCB)
                                                                                    D= 77.4 DEG   AZ= 30        CLL
CLL I P         01 41 52,4D 1.5 /   32                                              D= 77.5 DEG   AZ= 31        BRG
    E               41 58                                                         D= 78.4 DEG   AZ= 29        MOX
BRG I P         01 41 53,0D 1.0 /   14
MOX E P         01 41 58   TRACES

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=6.2 (82)  34.8N;139.3E  14KM H=03 24 39.0 (NEIS)
                MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE                     35.7N;139.1E  33KM   03 24 47.6 (WDCB)
BRG I P         03 37 02,9D 2.2 / 1510                MPV  =6.7               D= 82.1 DEG   AZ= 43        BRG
    I PP            40 15.0                                                   DISTANCE  81 DEG
    E S             47 23
    E SS            52 37
    E PKPPKP    04 03 36.6
      LM            16        T 16   AN  35.0 AE 179.0 AV 125.0   MLH  =7.5 MLV  =7.5
CLL I P(1)      03 37 00,6C 0.8 /   23                                              D= 82.2 DEG   AZ= 42        CLL
    I P(2)          37 04.9                                                       DISTANCE  82 DEG
    I PM            37 07,3  1.9 / 1150  1.8 /  390  1.8 /  130   MPMV =6.7 MPMH =6.6
                             T  3.0 AN   1.3 AE   0.9 AV   2.9   MPMH =6.9 MPMV =6.9
    E               37 16
    I               37 30.8
    E               37 49
    I               38 09.8
    I PP            40 14,3  2.9 / 1900  3.0 /  970  3.2 /  620   MPPV =6.9 MPPH =6.9
                             T  5.0 AN   2.3 AE   1.5 AV   3.1   MPPH =7.0 MPPV =6.9
    E S             47 20    T 15   AN   9.5 AE   9.9            MSH  =6.9
    E               50 07
    E SS            52.5
    E PKPPKP    04 03 36     2.7 /  175
    E(SKPPKP)       06 50
      LH            11       T 18   AN  65   AE  97
      LMH           14       T 15   AN( 94)  AE  89   AV( 34)    MLH  =7.4
      LMV           19       T 16                     AV( 71)   (MLV  =7.2)
      FINAL     06 30
MOX E P(1)      03 37 08                                                          D= 83.2 DEG   AZ= 41        MOX
    E P(2)          37 10,5  2.3 / 1770                          MPV  =6.8
                             T  3.2                    AV   3.8  MPV  =6.9
    I               37 20.5
    E PP            40 23    2.7 /  845                          MPPV =6.6
                             T  5.6                    AV   3.6  MPPV =6.9
    E S             47 26    T 15.5 AN   8.9 AE   7.3            MSH  =6.8
    E PS            48 10
    E PPS           48 35
    E SS            52 52
    E SSS           56 26
    E PKPPKP    04 03 31
      LMH           12.2     T 17.5 AN  60.6 AE 100.0            MLH  =7.3
      LMV           19.7     T 14                     AV  84.0   MLV  =7.3

1978 JAN 14
BRG E(P)        04 16 08.4
CLL E P         04 16 28
MOX E(P)        04 16 36   TRACES

1978 JAN 14
MOX E(P)        04 35 31   TRACES
CLL E P         04 35 40

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=5.2 (23)  34.8N;138.8E    5KM H=04 41 58.3 (NEIS)
                                                                              35.3N;138.8E   33KM   04 41 59.5 (WDCB)
BRG I P         04 54 23,7  1.0 /   14                                              D= 81.9 DEG   AZ= 43        BRG
CLL I P         04 54 19,6C                                                         D= 81.9 DEG   AZ= 42        CLL
MOX E P         04 54 25,5                                                          D= 83.0 DEG   AZ= 41        MOX

1978 JAN 14     POLAND, UPPER SILESIA
CLL E           07 24 39   TRACES
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1978 JAN 14     KURILE ISLANDS                                      MB=5.4 (45)  44.5N;149.7E  51KM H=09 03 16.6 (NEIS)
                                                                              45.2N;149.2E  40KM   09 03 19.6 (WDCB)
CLL I P         09 15 07,3  1.5 /  260                                            D= 77.5 DEG   AZ= 30        CLL
    LM              52      T 16   AN   1.5 AE   1   AV   1.5   MLH  =5.5 MLV  =5.5
BRG I P         09 15 08,3C 1.6 /  127                                            D= 77.5 DEG   AZ= 31        BRG
    LMH             47      T 20   AN   0.7 AE   2.2
    LMV             53      T 19                    AV   3.6
MOX I P         09 15 13,7C 1.5 /  161                MPV  =5.8               D= 78.5 DEG   AZ= 29        MOX
    E AP            15 26                                                     DEPTH  50 KM
      LMH           52.1    T 15   AN   1.1 AE   1.4            MLH  =5.5
      LMV           53.9    T 17.5                  AV   1.8   MLV  =5.5

1978 JAN 14     KURILE ISLANDS                                      MB=5.0 (35)  44.5N;149.8E  53KM H=09 20 28.3 (NEIS)
                                                                              44.6N;150.0E  33KM   09 20 25.8 (WDCB)
CLL I P         09 32 19,0C 0.9 /   38                                            D= 77.5 DEG   AZ= 30        CLL
BRG E P         09 32 19.0                                                        D= 77.6 DEG   AZ= 31        BRG
MOX E P         09 32 25                                                          D= 78.5 DEG   AZ= 29        MOX

1978 JAN 14     POLAND                                         /NO MB COMP./  51.3N; 16.8E    0KM H=10 59 30    (ISC)
MOX I PN        11 00 26.0                                                          D=  3.3 DEG   AZ= 77        MOX
    I PG            00 31.0
    I SN            01 01.0
    I SG            01 10.0

1978 JAN 14     MOLUCCA PASSAGE                                     MB=5.5 (40)   1.7N;126.4E  45KM H=13 49 42.9 (NEIS)
                                                                               2.2N;126.3E  33KM   13 49 39.3 (WDCB)
BRG E PDIF      14 03 34.0                                                        D=102.7 DEG   AZ= 71        BRG
    E               07 14.5
CLL E           14 07 02                                                          D=103.1 DEG   AZ= 70        CLL
    E               08 21

1978 JAN 14     KERMADEC ISLANDS                                    MB=5.8 (28)  30.1S;177.5W  44KM H=15 20 54.2 (NEIS)
                                                                              29.9S;178.2W  33KM   15 20 49.3 (WDCB)
                                                                                    D=157.4 DEG   AZ= 24        CLL
                                                                                    DISTANCE 157 DEG
CLL E PKIKP     15 40 48
    E PKP1          40 57
    E               41 09
    E               41 14
    E PKP2          41 19    1.6 /  160                MC   =5.8
    I APKP2         41 30.4
    E PP            44 56
    E               45 09
    E PSKS          55.1
    E SS        16 04.9
    E SSS           11.1
      LMH           45       T 24   AN   4.5 AE   2.5 AV   3.5   MLH  =6.1
      LMV       17 04        T 20   AN   2.5 AE   2.5 AV   3     MLV  =6.1
BRG I PKIKP     15 40 48.0                                                        D=157.5 DEG   AZ= 27        BRG
    I PKP1          40 59.2                                                     DISTANCE 157 DEG
    I PKP2          41 21.3
    E PP            44 55.0
    E PPP           48 40
    E SKKS          51 54
    E SKSP          55 20
    E SS        16 05 05
      LM            49       T 22   AN   4.8 AE   6.3 AV   7.1   MLH  =6.4 MLV  =6.4
MOX E PKIKP     15 40 49                                                          D=158.4 DEG   AZ= 22        MOX
    E               40 59
    E PKP2          41 23.5  1.6 /  104
    E PP            45 00    T 11.2                  AV   2.0   MPPV =6.1
    E SKSP          55 20
    E PPS           58 20
    E SS        16 05 00
      LMH           55.9     T 19.5 AN   2.7 AE   2.4            MLH  =6.1
      LMV       17 03        T 19                    AV   5.0   MLV  =6.4

1978 JAN 14     KERMADEC ISLANDS REGION                        /MB=4.2 ( 1)/ 31.6S;179.1W 250KM H=16 25 40     (ISC)
CLL E PKP2      16 45 42  D 1.2 /   20                                          D=158.4 DEG   AZ= 29        CLL
BRG E PKP2      16 45 39.2                                                      D=158.4 DEG   AZ= 32        BRG
    I               45 52.2

1978 JAN 14
CLL E           17 30 48

1978 JAN 14     NEAR S. COAST OF HONSHU, JAPAN                      MB=5.0 (16)  34.7N;138.8E  11KM H=18 46 20.0 (NEIS)
                                                                              35.3N;138.6E  33KM   18 46 26.5 (WDCB)
BRG E(P)        18 58 54.6                                                        D= 81.9 DEG   AZ= 43        BRG
CLL E P         18 58 44                                                          D= 82.0 DEG   AZ= 42        CLL
    LM          19 39
MOX   LMH       19 36.7      T 15   AN   0.5 AE   0.4            MLH  =5.1      D= 83.1 DEG   AZ= 41        MOX
      LMV           40.1     T 14                    AV   0.6   MLV  =5.1

1978 JAN 14     ICELAND                                        /NO MB COMP./  66.1N; 17.3W  33KM H=19 08 30    (ISC)
CLL E           19 13 30                                                            D= 21.3 DEG   AZ=326        CLL
BRG E(P)        19 13 18.4                                                          D= 22.0 DEG   AZ=326        BRG

1978 JAN 14     KERMADEC ISLANDS                               /NO MB COMP./  30.2S;177.8W  33KM H=18 55 58    (ISC)
CLL E PKP2      19 16 17     1.8 /   33                                             D=157.4 DEG   AZ= 25        CLL
BRG E PKP2      19 16 18,3   1.4 /   12                                             D=157.6 DEG   AZ= 27        BRG

1978 JAN 14     SOUTHEASTERN AUSTRIA                            NO MB COMP.  47.6N; 16.0E    8KM H=19 43 59.8 (NEIS)
                                                                              47.7N; 16.0E    5KM   19 44 00.8 (CSEM)
BRG E PN        19 44 55.2                                                          D=  3.5 DEG   AZ=157        BRG
    I PG            45 05.0                                                     DISTANCE   3.3DEG
    I SG            45 49.0
MOX I PN        19 45 06.0                                                          D=  4.2 DEG   AZ=135        MOX
    I PG            45 18.5
    E SN            45 48
    I SG            46 09.5
CLL E(PN)       19 45 06                                                            D=  4.2 DEG   AZ=151        CLL
    E PG            45 19                                                       DISTANCE   4.0DEG
    E(SN)           45 50
    E               46 08
    I SG            46 10.0
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1978 JAN 14 KERMADEC ISLANDS MB=5.4 (4) 30.3S;177.4W 47KM H=19 45 34.9 (NEIS)
CLL E PKP2 20 05 57 2.0 / 58 D=157.6 DEG AZ= 24 CLL
I 06 02.4
I 06 09.7 D=157.8 DEG AZ= 27 BRG
BRG E PKIKP 20 05 34.7 D=158.6 DEG AZ= 22 MOX
E PKP2 05 57.4
MOX E PKP2 20 06 07

1978 JAN 14 KERMADEC ISLANDS REGION /MB=5.0 (2)/ 30.3S;176.7W 33KM H=19 54 50 (ISC)
CLL E PKP2 20 15 17 D=157.8 DEG AZ= 23 CLL
E 15 24
E 15 32
BRG E PKP2 20 15 20.1 0.9 / 12 D=158.0 DEG AZ= 25 BRG
MOX E PKP2 20 15 34 D=158.7 DEG AZ= 20 MOX

1978 JAN 14 KERMADEC ISLANDS MB=5.1 (2) 30.0S;177.5W 35KM H=20 02 42.8 (NEIS)
CLL E 20 22 54 D=157.3 DEG AZ= 24 CLL
I PKP2 23 06.8
I 23 12.5 1.1 / 25 D=157.5 DEG AZ= 27 BRG
BRG E 20 22 54.4 1.0 / 18
I PKP2 23 07.6 D=158.3 DEG AZ= 22 MOX
MOX E PKP2 20 23 11
E 23 17
E 23 31

1978 JAN 14 UNIMAK ISLAND REGION MB=4.8 (15) 54.2N;164.1W 40KM H=20 30 38.7 (NEIS)
MOX E P 20 42 20 D= 75.5 DEG AZ=357 MOX

1978 JAN 14 NEAR S. COAST OF HONSHU, JAPAN MB=5.5 (60) 34.8N;138.8E 10KM H=22 31 46.0 (NEIS)
35.9N;138.5E 33KM 22 31 50.8 (WDCS)
BRG E P 22 44 09.2 1.3 / 34 D= 81.9 DEG AZ= 43 BRG
E S 54 26 DISTANCE 82 DEG
LM 23 25 T 13 AN 9.0 AE 10.2 AV 12.0 MLV =6.5
OLL I P 22 44 06.60 1.5 / 25 D= 81.9 DEG AZ= 42 OLL
I 44 09.4 1.2 / 63 DISTANCE 82 DEG
E PP 47 04
E S 54 20
LM 23 23 T 17 AN 6.3 AE 8.5 AV 4.5 MLR =6.2 MLV =6.0
MOX E P 22 44 15 2.0 / 86 MPV =5.6 D= 83.0 DEG AZ= 41 MOX
E PP 47 17
E S 54 30
E SS 59 40
LMR 23 22.0 T 15.5 AN 7.0 AE 7.1 MLR =6.3
LMV 25.6 T 14 AV 7.7 MLV =6.3

1978 JAN 14 NEAR S. COAST OF HONSHU, JAPAN MB=5.3 (33) 34.8N;138.9E 13KM H=22 36 09.9 (NEIS)
35.8N;138.4E 33KM 22 36 19.8 (WDCS)
BRG I P 22 48 32.20 1.3 / 25 D= 81.9 DEG AZ= 43 BRG
OLL I P 22 48 32.30 1.2 / 45 D= 82.0 DEG AZ= 42 OLL
E 51 24
LM 23 27 T 16 AN 7.3 AE 3.5 AV 6.5 MLR =6.2 MLV =6.1
MOX E P 22 48 38 1.3 / 26 MPV =5.3 D= 83.1 DEG AZ= 41 MOX
E PP 51 44.5

1978 JAN 14 SOUTHEASTERN AUSTRIA (VKA)
OLL E SQ 22 56 56

1978 JAN 15
MOX I PG 00 07 03.0
E SQ 07 18
OLL E 00 07 19 2.0 / 60

1978 JAN 15 FIJI ISLANDS REGION MB=5.4 (6) 21.6S;178.8W 619KM H=01 06 27.6 (NEIS)
OLL I PKP1 01 25 11.60 1.2 / 43 D=148.9 DEG AZ= 22 OLL
I PKP2 25 18.10 1.1 / 21 MC =4.7 DISTANCE 149 DEG DEPTH 600 KM
E APKP 27 30
BRG E PKIKP 01 25 06.9 D=149.1 DEG AZ= 24 BRG
I PKP1 25 12.2
I PKP2 25 19.2
E APKP 27 29.4
MOX E PKAKP 01 25 14 D=149.9 DEG AZ= 20 MOX
E PKP2 25 22

1978 JAN 15 SOUTHEASTERN AUSTRIA (VKA)
BRG E(PG) 03 03 56.2
E SQ 04 40.1
OLL E SQ 03 05 00
MOX E(SQ) 03 05 01.5

1978 JAN 15 NORTHERN ITALY NO MB COMP; 44.3N; 10.9E 33KM H=04 05 18.8 (NEIS)
44.4N; 10.9E 33KM 04 05 20.9 (CSEM)
MOX E 04 08 22 D= 0.2 DEG AZ=185 MOX
E SQ 08 52
BRG E 04 08 09.7 D= 6.7 DEG AZ=199 BRG
E(SQ) 09 05.9
OLL E 04 08 56 D= 7.0 DEG AZ=193 OLL
E SG 09 13

1978 JAN 15 IRAN MB=4.7 (8) 30.2N; 50.6E 33KM H=07 03 18.6 (NEIS)
OLL E P 07 10 10 D= 34.9 DEG AZ=113 OLL

1978 JAN 15 KERMADEC ISLANDS MB=5.6 (13) 30.2S;177.6W 17KM H=06 56 34.8 (NEIS)
30.1S;177.5W 33KM 06 56 37.6 (WDCS)
OLL E(PKIKP) 07 16 35 D=157.5 DEG AZ= 25 OLL
E PKP1 16 45 1.8 / 46 DISTANCE 157 DEG
E 16 54 1.1 / 28
E PKP2 17 02 1.2 / 50 MC =5.4
E PP 20 34
E 25 54
E 30.6
LM 08 21 T 24 AN 3.2 AE 2.5 AV 3 MLR =6.1 MLV =6.1
(CONT.)

(CONT.)

BRG E PKIKP 07 16 31.8 D=157.6 DEG AZ= 27 BRG
E 16 41.0 DISTANCE 157 DEG
I PKP2 17 05.6
E PP 20 39.6
E SS 40 46
LM 08 24 T 22 AN 3.8 AE 3.1 AV 4.7 MLR =6.2 MLV =6.2
MOX E PKIKP 07 16 32 D=158.4 DEG AZ= 22 MOX
E PKAKP 16 44
E PKP2 17 08
E PP 20 46 T 9.5 AV 1.4 MPR =6.0
E SKSP 31 08
E PPS 34 05
E SS 40 34
LMR 08 21.6 T 25 AN 3.9 AE 3.1 MLR =6.1
LMV 38 T 19 AV 3.5 MLV =6.2

1978 JAN 15 SOUTH OF FIJI ISLANDS MB=5.0 (6) 22.3S;176.2W 33KM H=07 41 10.3 (NEIS)
OLL I(PKP1) 08 00 58.9 1.0 / 21 D=150.2 DEG AZ= 17 OLL
I PKP2 01 04.9
I 01 13.2
BRG I PKP1 08 00 59.6 1.2 / 34 D=150.4 DEG AZ= 19 BRG
E PKP2 01 05.5
MOX E PKAKP 08 01 04 D=151.1 DEG AZ= 15 MOX
E APKP 01 15

1978 JAN 15 NORTH ATLANTIC OCEAN NO MB COMP, 49.0N; 5.9W 33KM H=09 22 20.3 (NEIS)
49.0N; 5.8W 10KM 09 22 21.9 (CSEM)
MOX E(S) 09 27 22 D= 11.4 DEG AZ=268 MOX
OLL E LQ1 09 28 51 D= 12.3 DEG AZ=267 OLL

1978 JAN 15 ROMANIA MB=4.6 (39) 45.8N; 26.7E 141KM H=10 26 43.8 (NEIS)
45.8N; 26.8E 130KM 10 26 44.9 (CSEM)
BRG E P 10 29 02.30 1.5 / 21 D= 9.9 DEG AZ=116 BRG
OLL I P 10 29 11.7 D= 10.6 DEG AZ=116 OLL
E 32 24
MOX E P 10 29 21.5 1.5 / 35 MPV =4.8 D= 11.2 DEG AZ=110 MOX

1978 JAN 15 KERMADEC ISLANDS MB=5.6 (1) 30.3S;177.3W 33KM H=13 17 12.2 (NEIS)
OLL E PKP2 13 37 39 D 1.3 / 28 D=157.8 DEG AZ= 24 OLL
BRG I PKP2 13 37 39.1 1.4 / 33 D=158.0 DEG AZ= 27 BRG
MOX E PKP2 13 37 43 1.3 / 13 D=158.8 DEG AZ= 22 MOX

1978 JAN 15
OLL I PKP 16 28 34.10 1.0 / 21
BRG I PKP 16 28 34.8 0.7 / 14
MOX E PKP 16 28 36

1977 JAN 16 KERMADEC ISLANDS MB=4.7 (2) 29.4S;178.8W 33KM H=01 16 37.4 (NEIS)
OLL I PKP2 01 37 02.90 0.8 / 13 D=156.8 DEG AZ= 25 OLL
E 37 08
BRG I PKP2 01 37 03.4 0.7 / 15 D=156.9 DEG AZ= 27 BRG
MOX E PKP2 01 37 12.5 D=157.8 DEG AZ= 25 MOX

1978 JAN 16 KURILE ISLANDS MB=5.2 (63) 44.0N;149.6E 33KM H=01 34 21.9 (NEIS)
48.0N;149.4E 33KM 01 34 24.8 (WDCS)
OLL I P 01 46 14.90 1.3 / 120 D= 77.4 DEG AZ= 30 OLL
BRG I P 01 46 14.90 1.2 / 45 D= 77.4 DEG AZ= 31 BRG
MOX I P 01 46 20.30 1.3 / 50 MPV =5.4 D= 78.4 DEG AZ= 29 MOX

1978 JAN 16 HINDU KUSH REGION MB=5.3 (90) 36.4N; 70.7E 221KM H=03 20 05.3 (NEIS)
36.7N; 70.7E 220KM 03 20 06.9 (WDCS)
BRG I P 03 27 41.10 0.9 / 89 D= 42.5 DEG AZ= 87 BRG
I AP 28 28.7
E PP 29 29.2
OLL I P 03 27 45.40 1.2 / 62 D= 43.1 DEG AZ= 87 OLL
E AP 28 32
E PP 29 32
MOX I P 03 27 53.00 1.5 / 70 MPV =4.9 D= 44.0 DEG AZ= 85 MOX

1978 JAN 16 POLAND, UPPER SILESIA
OLL E SQ 03 56 09

1978 JAN 16 OFF EAST COAST OF HONSHU, JAPAN MB=5.1 (27) 39.2N;143.1E 9KM H=05 32 43.6 (NEIS)
39.6N;142.9E 33KM 05 32 49.2 (WDCS)
BRG I P 05 44 53.20 1.1 / 15 D= 79.9 DEG AZ= 38 BRG
I 45 26.1
OLL I P 05 44 53.30 1.3 / 28 D= 80.9 DEG AZ= 37 OLL
MOX E(P) 05 44 59 D= 80.9 DEG AZ= 36 MOX

1978 JAN 16 POLAND, UPPER SILESIA 50.3N; 19.0E H=10 38 56.6 (WAR)
BRG E(PG) 10 39 59.4 D= 3.3 DEG AZ= 98 BRG
I SG 40 42.2

1978 JAN 16 FRG, SOUTHWESTERN REGION NO MB COMP, 48.3N; 9.0E 20KM H=14 31 14.8 (NEIS)
48.3N; 9.0E 8KM 14 31 14.7 (CSEM)
MOX I PN 14 31 59.3 D= 2.9 DEG AZ=217 MOX
I PQ 32 09.5
E SN 32 33
E SQ 32 46
LM 33.1 T 6 AN 1.4 AE 3.2 AV 2.1 MLR =3.6
OLL E PN 14 32 13 D= 4.0 DEG AZ=222 OLL
E 32 21 DISTANCE 4.0DEG
I PQ 32 29.5
E 33 03
E SQ 33 22
E L 33 44
BRG I PN 14 32 17.0 D= 4.1 DEG AZ=233 BRG
I PQ 32 31.9 DISTANCE 4.0DEG
E SN 33 07.8
E SQ 33 24.0

1978 JAN 16 FRG, SOUTHWESTERN REGION NC MB COMP., 48.0N, 9.0E 14KM H=14 33 12.9 (NEIB)
48.2N) 9.0E 10KM 14 33 10.9 (GSEM)
D= 2.9 DEG AZ=217 MOX

MOX I PN 14 33 58.5 AE 1.3 MLR =3.3
I PD 34 07.2C
E SN 34 32 D= 4.0 DEG AZ=222 CLL
E SG 34 46 D= 4.1 DEG AZ=233 BRG
LMR 34.9 T 0
CLL E SG 14 35 24 48.3N, 9.0E 7KM H=14 38 53.9 (NEIS)
BRG E(PGY 14 34 19.1 D= 2.9 DEG AZ=217 MOX
E SG 35 28.5

1978 JAN 16 FRG, SOUTHWESTERN REGION
MOX E PN 14 39 43
E PD 39 54
E SN 40 16
E SG 40 28

1978 JAN 16 FRG, SOUTHWESTERN REGION NO MB COMP., 48.3N, 9.1E 12KM H=15 10 09.8 (NEIS)
MOX E PN 15 10 55 D= 2.9 DEG AZ=216 MOX
E PD 11 05
E SN 11 29
E SG 11 40
CLL E SG 15 12 17 D= 3.9 DEG AZ=222 CLL
BRG E SG 15 12 20.2 D= 4.1 DEG AZ=233 BRG

1978 JAN 16 FRG, SOUTHWESTERN REGION NO MB COMP., 48.3N, 9.0E 23KM H=15 39 35.9 (NEIS)
48.3N) 9.0E 20KM 15 39 35.8 (GSEM)
D= 2.9 DEG AZ=217 MOX
MOX E PN 15 40 21
E PD 40 29
E SN 40 55
E SG 40 57
CLL E SG 15 41 43 D= 4.0 DEG AZ=222 CLL
BRG E(PG) 15 40 51.6 D= 4.1 DEG AZ=233 BRG
E SG 41 47.3

1978 JAN 16 NORTH ATLANTIC RIDGE MB=5.0 (4B) 25.1N, 46.0W 23KM H=18 00 09.9 (NEIS)
24.9N) 45.9W 33KM 18 00 09.8 (WDC@)
D= 50.6 DEG AZ=262 MOX
DEPTH 27 KM
MOX E PN 18 09 08.5
E AP 09 15
CLL E P 18 09 16 D= 51.6 DEG AZ=263 CLL
I 09 22.2 1.2 / 25
BRG E P 18 09 19.0 1.5 / 24 D= 52.1 DEG AZ=264 BRG
I AP 09 26.2

1978 JAN 16 FRG, SOUTHWESTERN REGION NO MB COMP., 48.3N, 9.0E 15KM H=18 09 33.9 (NEIS)
48.3N) 9.0E 10KM 18 09 33.7 (GSEM)
D= 2.9 DEG AZ=217 MOX
MOX I PN 18 10 18.5
E PD 10 29
E SN 10 53
E SG 10 57
I SD 11 06.5
CLL E SD 18 11 39 D= 4.0 DEG AZ=222 CLL
BRG E PD 18 10 51.6 D= 4.1 DEG AZ=233 BRG
E SD 11 43.2

1978 JAN 16
MRG E 02 32 23.5
CLL E 02 31 47
E 32 26
E SN 32 58
E SD 33 50
(CONT.)

1978 JAN 17 ROMANIA
CLL E P 00 14 28
1978 JAN 17 EASTERN TURKEY MB=4.6 (3) 38.6N, 40.7E 43KM H=00 09 21.9 (NEIS)
38.7N) 40.8E 33KM 00 09 18.9 (WDC@)
D= 23.2 DEG AZ=112 CLL
NO MB COMP., 43.7N, 21.0E 27KM H=02 29 32.8 (NEIS)
45.9N, 21.1E 12KM 02 29 32.9 (CSEM)
46.0N) 20.1E 33KM 02 29 37.9 (WDC@)
D= 7.0 DEG AZ=135 BRG
D= 7.7 DEG AZ=134 CLL

1978 JAN 16 FRG, SOUTHWESTERN REGION
MOX E PN 21 06 58
E PD 07 30
E SN 08 03
E SG 08 49
BRG E(PNY 21 07 12.5
I PD 07 44.6
E SN 08 23.9
E SG 09 02.6
CLL E PD 21 07 41 D= 6.0 DEG AZ=203 CLL
E SN 08 28
E SD 09 18

1978 JAN 16 FIJI ISLANDS REGION /NO ME CMP./ 23.2S,179.1W 596KM H=21 08 19 (ISC)
CLL E PKP1 21 26 55 D=148.5 DEG AZ= 22 CLL

1978 JAN 16 FRG, SOUTHWESTERN REGION
MOX E PN 22 57 33
E PD 57 44
E SN 58 07.5
I SD 58 21.0
CLL E SD 22 58 52 NO MB COMP., 48.3N, 9.0E 13KM H=22 56 47.9 (NEIS)
BRG E(PD) 22 58 06.0 48.3N) 9.0E 3KM 22 56 47.9 (GSEM)
E SD 58 59.3 D= 2.9 DEG AZ=217 MOX

1978 JAN 17 EASTERN TURKEY MB=4.6 (3) 38.6N, 40.7E 43KM H=00 09 21.9 (NEIS)
38.7N) 40.8E 33KM 00 09 18.9 (WDC@)
D= 4.0 DEG AZ=222 CLL
D= 4.1 DEG AZ=233 BRG
CLL E P 00 14 28

1978 JAN 17 ROMANIA

1978 JAN 16
MRG E 02 32 23.5
CLL E 02 31 47
E 32 26
E SN 32 58
E SD 33 50
(CONT.)

(CONT.)
MOX E PN 02 31 30
E SG 33 53 D= 8.0 DEG AZ=125 MOX

1978 JAN 17 CRETE MB=4.1 (9) 34.9N, 26.3E 92KM H=04 05 59.9 (NEIS)
34.4N) 26.3E 10KM 04 05 53.9 (CSEM)
BRG E P 04 10 12.9 D= 18.3 DEG AZ=146 BRG
CLL E P 04 10 19 D= 19.0 DEG AZ=145 CLL
MOX E P 04 10 20 D= 19.0 DEG AZ=140 MOX

1978 JAN 17 TONGA ISLANDS MB=5.2 (19) 16.9S,173.6W 44KM H=07 33 18.9 (NEIS)
CLL I PKP 07 52 52.5 1.0 / 27 D=145.3 DEG AZ= 11 CLL
E 53 19
BRG I PKP 07 52 53.9 0.9 / 16 D=145.8 DEG AZ= 13 BRG
E 53 19.0
MOX E PKKP 07 52 56 D=146.1 DEG AZ= 9 MOX
E APKP 53 19

1978 JAN 17 KURILE ISLANDS MB=4.9 (49) 46.4N, 150.1E 172KM H=07 59 28.8 (NEIS)
CLL I P 08 10 47.9 1.0 / 40 46.5N, 150.0E 105KM 07 59 21.8 (WDC@)
BRG E P 08 10 48.2 1.0 / 34 D= 79.9 DEG AZ= 29 CLL
MOX E P 08 10 55 D= 76.9 DEG AZ= 30 BRG
D= 76.9 DEG AZ= 28 MOX

1978 JAN 17 SAN JUAN PROVINCE, ARGENTINA MB=5.8 (4B) 31.3S, 67.9W 24KM H=11 33 14.8 (NEIS)
31.6S, 68.8W 33KM 11 33 11.9 (WDC@)
D=187.4 DEG AZ=242 MOX
MOX E PP 11 31 32 HPSV =6.1
E PP 32 04 2.2 / 109
E SG 12 07 00
CLL I PP 11 32 09.3P 1.0 / 73 1.6 AE 3.2 AV 3.4 MLE =5.9 MLV =5.9
LM 34 T 19.5 AN D=106.5 DEG AZ=243
E PKKP 12 03 11
BRG I PP 11 32 12.6 1.8 / 94 1.3 AE 4.5 AV 3 MME =6.1 MLV =P.9
LM 34 T 19
E PKKP 12 03 11.8 0.9 / 12
MOX E PKP2 10 15 28 1.6 / 24 D=108.0 DEG AZ=244 BRG
MOX E PKP2 10 15 22.0 DISTANCE 109 DEG
BRG E PKP2 10 15 22.0 43.0S,173.2E 69KM H=09 54 27.9 (NEIS)
CLL E PKP2 10 15 24 1.6 / 24 D=163.9 DEG AZ= 69 CLL
MOX E PKP2 10 15 28 D=164.3 DEG AZ= 66 MOX
D=165.3 DEG AZ= 65

1978 JAN 18
BRG E(PG) 12 33 32.3
E SD 34 18.4
CLL E SG 12 34 41
E 34 51
MOX E 12 35 03

1978 JAN 18 OFF E. COAST OF S. ISLAND, N.Z. MB=4.6 (1)

1978 JAN 18 OFF EAST COAST OF KAMCHATKA MB=4.8 (24) 53.8N,161.3E 46KM H=08 47 50.6 (NEIS)
53.8N,161.5E 33KM 08 47 49.6 (WDC@)
CLL I P 08 59 09.4 1.0 / 21 D= 74.9 DEG AZ= 19 CLL
BRG E P 08 59 11.2 1.1 / 12 D= 72.2 DEG AZ= 20 BRG
MOX E P 08 59 15.3 0.9 / 12 D= 72.9 DEG AZ= 18 MOX

1978 JAN 18
CLL E 04 11 35
BRG E P 04 11 34.7
MOX E P 04 11 32

1978 JAN 18 ORETE 35.2N, 23.5E 10KM H=03 48 39.2 (CSEM)
CLL E P 03 52 42 D= 17.8 DEG AZ=131 CLL

1978 JAN 18 MEDITERRANEAN SEA MB=4.1 (2) 34.5N, 23.0E 33KM H=13 39 50.8 (NEIS)
34.3N) 23.0E 10KM 13 39 49.3 (CSEM)
CLL E 13 44 21 D= 18.3 DEG AZ=153 CLL

1978 JAN 17 RED SEA MB=5.2 (35) 16.2N, 40.3E 12KM H=19 00 27.9 (NEIS)
16.2N) 40.2E 33KM 19 00 24.9 (WDC@)
BRG I P 15 08 05.8D 1.2 / 66 D= 40.3 DEG AZ=139 BRG
CLL I P 15 08 11.3D 1.3 / 92 D= 41.0 DEG AZ=138 CLL
E 37 LM
MOX E P 15 08 12.5 1.3 / 37 MPV =5.1
LMR 39.0 T 16 AN 0.4 MLR =4.7
LMV 40.6 T 33 AV 0.9 MLV =4.9 D= 41.1 DEG AZ=136 MOX

1978 JAN 17 TURKEY-USSR BORDER REGION MB=4.7 (6) 40.9N, 44.1E 14KM H=19 12 09.9 (NEIS)
40.9N) 44.2E 10KM 19 12 07.9 (CSEM)
CLL E P 19 17 21 TRACES D= 33.8 DEG AZ=104 CLL
MOX E P 19 17 26 49.2N) 44.2E 33KM 19 12 05.9 (WDC@)
D= 24.5 DEG AZ=101 MOX

1978 JAN 18 SOUTH OF KERMADEC ISLANDS MB=5,2 (6) 33,7S;179,4W 26KM H=19 07 16,8 (NEIS)
OLL E(PKP2) 19 27 54 TRACES D=160.2 DEG AZ= 32 CLL

1978 JAN 18 GANSU PROVINCE, CHINA MB=4,7 (9) 39,7N; 95,3E 33KM H=20 37 29,5 (NEIS)
40,3N; 94,1E 53KM 20 37 42,8 (WDCB)
CLL E P 20 47 07 D= 55,9 DEG AZ= 67 CLL

1978 JAN 18 KERMADEC ISLANDS MB=5,1 (4) 30,5S;177,3W 33KM H=21 12 37,6 (NEIS)
30,4S;177,2W 53KM 21 12 38,8 (WDCB)
D=157.8 DEG AZ= 24 CLL
CLL E PKP1 21 32 45
I PKP2 33 04,5 1,3 / 23
E APKP2 33 17
LM 22 52
BRG E PKP1 21 32 42,4 D=158.0 DEG AZ= 27 BRG
I PKP2 33 05,1
I APKP 33 21,1
MOX E PKP2 21 33 09 D=158.8 DEG AZ= 22 MOX
E APKP 33 20,5 DEPTH 45 KM
LM 22 58 T 18 AE 0,8 AV 0.8 MLB =5,5 MLV =5,6

1978 JAN 19 OFF EAST COAST OF HONSHU, JAPAN MB=4,9 (15) 39,3N;143,1E 16KM H=01 45 59,8 (NEIS)
39,5N;143,0E 33KM 01 46 04,0 (WDCB)
BRG E P 01 58 08,5 D= 79.8 DEG AZ= 38 BRG
OLL E P 01 58 08 D= 79.8 DEG AZ= 37 CLL

1978 JAN 19 SICILY 37,6N; 14,1E 30KM H=05 15 23,8 (ING)
MOX LMR 05 23,2 D= 13.2 DEG AZ=171 MOX
CLL E 05 19 16 D= 13.7 DEG AZ=176 CLL

1978 JAN 19 KERMADEC ISLANDS /NO MB COMP,/ 30,6S;177,2W 48KM H=05 48 27,2 (ISC)
BRG I PKP2 06 08 43,0 D=158.1 DEG AZ= 27 BRG

1978 JAN 19 FIJI ISLANDS REGION MB=5,1 (21) 17,7S;178,8W 585KM H=10 44 14,6 (NEIS)
18,3S;177,9W 53KM 10 43 09,4 (WDCB)
OLL I PKP1 11 02 50,6C 0.9 / 100 D=145.2 DEG AZ= 20 CLL
I 02 53,8
BRG I PKP 11 02 50,0 D=145.4 DEG AZ= 22 BRG
I 02 51,2 1,1 / 69
MOX E PKP 11 02 51 1,6 / 60 D=146.1 DEG AZ= 18 MOX
E APKP 05 07 DEPTH 600 KM

1978 JAN 19 WESTERN TURKEY NO MB COMP, 38,9N; 27,9E 10KM H=12 08 17,8 (NEIS)
38,9N; 27,9E 18KM 12 08 18,7 (CSEM)
BRG E P 12 12 03,6 D= 15.5 DEG AZ=135 BRG
CLL E 12 12 11 TRACES D= 16.2 DEG AZ=134 CLL
MOX E(P) 12 12 15 D= 16.4 DEG AZ=129 MOX

1978 JAN 19
OLL I 12 17 42,3

1978 JAN 19
OLL E 13 07 25
BRG I(P) 13 07 29,0 1,2 / 32

1978 JAN 19 CHAGOS ARCHIPELAGO REGION NO MB COMP, 5,9S; 68,5E 33KM H=16 19 22,8 (NEIS)
OLL I P 16 30 55,5 TRACES D= 73.8 DEG AZ=121 CLL

1978 JAN 19
OLL E P 17 31 08 1,2 / 12

1978 JAN 20 SOLOMON ISLANDS MB=5,5 (28) 9,8S;159,5E 73KM H=00 24 26,9 (NEIS)
10,0S;159,7E 33KM 00 24 14,8 (WDCB)
BRG E PKP 00 43 36,8 1,4 / 17 D=130.2 DEG AZ= 47 BRG
CLL E 00 43 37 D=130.4 DEG AZ= 46 CLL
E(PP) 45 58
LMR 01 41
LMV 47

1978 JAN 20 NEAR COAST OF CHIAPAS, MEXICO MB=5,0 (36) 14,3N; 92,1W 84KM H=02 12 41,5 (NEIS)
MOX E P 02 25 22 1.7 / 42 MPV =5,2 D= 87.5 DEG AZ=290 MOX
OLL E P 02 25 25 D= 88.1 DEG AZ=291 CLL
E PPP 30 49

1978 JAN 20 CHILE-ARGENTINA BORDER REGION MB=5,7 (41) 34,3S; 70,2W 132KM H=04 42 57,8 (NEIS)
34,5S; 71,0W 33KM 04 42 46,6 (WDCB)
MOX E PKP 05 01 17 1,6 / 28 D=110.9 DEG AZ=241 MOX
E APKP 01 51 DEPTH 172 KM
CLL E PKP 05 01 19 D=112.0 DEG AZ=242 CLL
E PKKP2 12 18
E SPP 12 47
E 13 29
BRG E PKP 05 01 19,5
E PP 02 06,8 D=112.4 DEG AZ=243 BRG
E PKKP 12 10,0 1,2 / 13

1978 JAN 20 CENTRAL MID-ATLANTIC RIDGE MB=4,8 (7) 4,0N; 31,4W 33KM H=13 33 09,2 (NEIS)
BRG E P 13 43 25,0 D= 60.1 DEG AZ=235 BRG

1978 JAN 20 LOYALTY ISLANDS REGION MB=4,9 (1) 22,3S;169,7E 33KM H=18 58 24,2 (NEIS)
BRG I PKP 19 18 03,4 1,9 / 54 D=145.8 DEG AZ= 43 BRG
CLL I PKP1 19 18 03,3 2,4 / 110 D=145.8 DEG AZ= 41 CLL
E 18 35
MOX E 19 18 13 D=146.9 DEG AZ= 39 MOX

1978 JAN 20
MOX E 20 18 56

1978 JAN 20 KURILE ISLANDS MB=4,7 (6) 46,5N;153,4E 44KM H=20 39 28,4 (NEIS)
46,8N;153,3E 80KM 20 39 32,6 (WDCB)
CLL E P 20 51 17 D= 76.8 DEG AZ= 27 CLL

1978 JAN 20 BANDA SEA MB=5,8 (44) 4,2S;123,4E 52KM H=21 31 16,7 (NEIS)
3,5S;123,2E 50KM 21 31 20,8 (WDCB)
BRG E PKP 21 49 36,0 D=105.5 DEG AZ= 77 BRG
OLL E PKP 21 49 34 D=106.0 DEG AZ= 76 CLL
E APKP 49 53

1978 JAN 20
OLL E 23 37 09

1978 JAN 21 KURILE ISLANDS MB=5,0 (41) 47,4N;154,1E 33KM H=05 12 38,2 (NEIS)
CLL I P 05 24 24,3C 0.8 / 35 D= 76.1 DEG AZ= 26 CLL
BRG I P 05 24 24,9C D= 76.3 DEG AZ= 27 BRG
MOX E P 05 24 30 0.8 / 19 MPV =5,2 D= 77.1 DEG AZ= 25 MOX

1978 JAN 21 NORTHERN COLOMBIA MB=5,1 (46) 6,4N; 72,4W 42KM H=08 19 30,2 (NEIS)
5,2N; 72,4W 33KM 08 19 29,8 (WDCB)
MOX E P 08 31 45 1,6 / 33 MPV =5,1 D= 81,3 DEG AZ=269 MOX
E AP 32 00 DEPTH 68 KM
E XP 32 11
CLL I P 08 31 49,2C 1,6 / 40 D= 82.2 DEG AZ=270 CLL
BRG E P 08 31 52,3 1,4 / 26 D= 82,8 DEG AZ=271 BRG

1978 JAN 21 FIJI ISLANDS REGION MB=4,4 (6) 17,5S;178,7W 638KM H=10 02 53,5 (NEIS)
CLL I PKP1 10 21 23,7D 1.3 / 53 D=145.0 DEG AZ= 20 CLL
BRG I PKP 10 21 24,5 1.2 / 27 D=145.2 DEG AZ= 21 BRG
MOX E PKP 10 21 26 1,8 / 54 D=145.9 DEG AZ= 18 MOX

1978 JAN 21
CLL I P 10 22 11,6 1,0 / 17

1978 JAN 21
CLL E 14 58 20

1978 JAN 21 LOYALTY ISLANDS REGION MB=4,2 (1) 22,6S;171,8E 78KM H=14 44 41,6 (NEIS)
BRG E PKP 15 04 15,6 D=146.9 DEG AZ= 40 BRG
CLL E-PKP1 15 04 16 ~~D=147.0 DEG~~ AZ= 38 CLL
MOX E 15 04 47 D=148.0 DEG AZ= 36 MOX

1978 JAN 21
CLL E 15 05 05
E 06 17

1978 JAN 21
CLL I P 16 23 44,8

1978 JAN 21 FIJI ISLANDS REGION /MB=4,4 (2)/ 19,4S;177,4W 539KM H=19 59 03,9 (ISC)
CLL E PKP1 20 17 46 D=147.1 DEG AZ= 18 CLL

1978 JAN 21 HOKKAIDO, JAPAN, REGION MB=5,1 (58) 42,3N;143,0E 82KM H=20 09 17,4 (NEIS)
42,6N;143,2E 90KM 20 09 18,4 (WDCB)
OLL I P 20 21 03,1C 1,0 / 35 D= 77.1 DEG AZ= 36 CLL
BRG I P 20 21 03,4C 0.9 / 14 D= 77.1 DEG AZ= 36 BRG
MOX E P 20 21 09,5 0.9 / 18 MPV =5,0 D= 78.2 DEG AZ= 35 MOX

1978 JAN 21 NEAR S. COAST OF HONSHU, JAPAN MB=4,5 (14) 33,2N;137,7E 335KM H=23 22 44,3 (NEIS)
31,0N;138,2E 33KM 23 22 00,4 (WDCB)
BRG E(P) 23 34 32,6 D= 82.7 DEG AZ= 45 BRG
CLL E P 23 34 33 TRACES D= 82.8 DEG AZ= 44 CLL

1978 JAN 22 TONGA ISLANDS REGION MB=4,8 (3) 18,1S;172,5W 33KM H=23 57 26,9 (NEIS)
CLL I PKP1 00 17 07,1 1.4 / 39 D=146.6 DEG AZ= 10 CLL
I APKP 17 15,8
BRG E PKP1 00 17 07,4 1.6 / 31 D=146.9 DEG AZ= 11 BRG
I APKP 17 17,0

1978 JAN 22 TONGA ISLANDS MB=5,1 (10) 15,3S;173,5W 33KM H=00 33 51,8 (NEIS)
15,1S;173,3W 33KM 00 33 53,3 (WDCB)
OLL E PKP 00 53 23 D=143.7 DEG AZ= 11 CLL
BRG E PKP 00 53 23,4 D=144.0 DEG AZ= 12 BRG
MOX E PKP 00 53 26 1.4 / 28 D=144.5 DEG AZ= 9 MOX

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1978 JAN 22     SOUTHEASTERN AUSTRIA                                  47,8N; 16,6E       H=08 07 16    (VKA)
CLL E SG        08 09 26                                                    D=  4.2 DEG   AZ=145        CLL

1978 JAN 22     RAT ISLANDS, ALEUTIAN ISLANDS             MB=5,2 (60)  51,3N;177,9E  32KM H=08 09 28,9 (NEIS)
                                                                       51,0N;177,9E  33KM   08 09 21,9 (WDCB)
                                                                            D= 77.0 DEG   AZ= 10        CLL
CLL I P         08 21 16,5D
    I AP          .21 29,7
BRG I P         08 21 20,6D 0.9 /   16                                      D= 77.3 DEG   AZ= 10        BRG
MOX E P         08 21 23    1.1 /   22                  MPV =5.1            D= 77.8 DEG   AZ=  9        MOX

1978 JAN 22
BRG E(PG)       10 40 43,5
    E SG           41 26,1
OLL E           10 40 57
    E SG           41 45

1978 JAN 22     FRG, CENTRAL REGION                    /NO MS COMP./ (51,7N; 6,2E  0KM H=13 08 24 ) (ISC)
MOX E           13 09 23                                                    D=  3.6 DEG   AZ=289        MOX
    E(SG)          09 53
CLL E PG        13 09 36                                                    D=  4.3 DEG   AZ=278        CLL
    E SG           10 20

1978 JAN 22
CLL E           17 46 44

1978 JAN 22
CLL E           21 17 10   TRACES

1978 JAN 22     NEAR COAST OF PERU                        MB=5,4 (24)  16,1S; 73,7W  49KM H=21 19 42,9 (NEIS)
BRG E(P)        21 33 41,6  1,6 /   21                                      D=100.8 DEG   AZ=258        BRG

1978 JAN 23     SOUTHEASTERN AUSTRIA                      NO MS COMP,  47,5N; 16,0E  18KM H=06 33 32,8 (NEIS)
BRG E(PG)       06 34 38,0                                                  D=  3.8 DEG   AZ=157        BRG
    E SG           35 22,9
MOX E PN        06 34 38,5                                                  D=  4.3 DEG   AZ=136        MOX
    E PG           34 51
    E              35 30
    E SG           35 44
OLL E(PG)       06 34 51                                                    D=  4.3 DEG   AZ=152        CLL
    E              35 31                                                    DISTANCE   4,1DEG
    E SG           35 43

1978 JAN 23     GDR, VOGTLAND                                          50,37N;12,41E                   (JENA)
MOX I PG        18 33 20,2                                                  D=   64 KM    AZ=118        MOX
    I SG           33 28,5
OLL I SG        18 33 45,6                                                  D=  113 KM    AZ=202        CLL
    I              33 50,2
BRG I PG        18 33 31,0                                                  D=  122 KM    AZ=243        BRG
    I SG           33 46,6

1978 JAN 23     GDR, VOGTLAND                                          50,36N;12,44E                   (JENA)
MOX I PG        18 33 49,0                                                  D=   67 KM    AZ=118        MOX
    I SG           33 57,0
OLL I PG        18 33 58,3                                                  D=  113 KM    AZ=201        CLL
    I              34 00,5
    I              34 02,6
    I SG           34 13,9
BRG I PG        18 33 59,6                                                  D=  121 KM    AZ=242        BRG
    I              34 03,6
    I SG           34 15,9

1978 JAN 23
CLL E           21 22 46

1978 JAN 24
MOX E           01 10 41
    E SG           11 21
OLL E SG        01 10 47

1978 JAN 24
OLL E           02 40 12

1978 JAN 24     KURILE ISLANDS                            MB=5,7(108)  44,7N;149,7E  56KM H=05 54 23,2 (NEIS)
                                                                       45,2N;149,3E  33KM   05 54 24,0 (WDCB)
OLL I P         06 06 13,2C 1,4 /  370                                      D= 77.3 DEG   AZ= 30        CLL
    E AP           06 24                                                    DISTANCE  76 DEG
    E S            16 10
    E              16 40
    I SS           21 26
      LMH          40        T 16   AN   2,2 AE   6,5       MLH =6,2  (NO DEPTH CORRECTION)
      LMV          48        T 16   AN   6   AE   4,5 AV  6  MLV =6,1  (NO DEPTH CORRECTION)
BRG I P         06 06 13,3C 1,3 /  146                                      D= 77.4 DEG   AZ= 31        BRG
    E              06 25,2                                                  DISTANCE  77 DEG
    E S            16 16
    E PS           16 49
      LMH          40        T 18   AN   6,9 AE  10,3                MLH =6,2  (NO DEPTH CORRECTION)
      LMV          44        T 19                      AV  11,2      MLV =6,2  (NO DEPTH CORRECTION)
MOX I P         06 06 19,0C 1,4 /  195                               MPV =5,9       D= 78.3 DEG   AZ= 29   MOX
    E AP           06 30                                                                  DEPTH  39 KM
    E PP           09 06,5
    E PPP          10 55
    E S            16 20
    E SS           21 20
      LMH          39,7      T 20   AN   4,3 AE   6,8                MLH =6.0  (NO DEPTH CORRECTION)
      LMV          45,5

1978 JAN 24
OLL E           06 44 33   TRACES
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1978 JAN 24     ICELAND REGION                            MB=4,3 ( 2)  66,0N; 16,9W  10KM H=09 35 19,8 (NEIS)
BRG E P         09 40 10,3                                                  D= 21.8 DEG   AZ=326        BRG

1978 JAN 24     HOKKAIDO, JAPAN, REGION                   MB=4,9 (37)  41,1N;140,0E 165KM H=10 26 41,7 (NEIS)
                                                                       41,5N;140,1E 200KM   10 26 46,9 (WDCB)
BRG E P         10 38 18,0                                                  D= 77.8 DEG   AZ= 39        BRG
OLL I P         10 38 17,8                                                  D= 77.0 DEG   AZ= 38        CLL

1978 JAN 24     NEW BRITAIN REGION                        MB=5,7 (45)   6,0S;148,9E  98KM H=15 32 24,7 (NEIS)
                                                                        5,9S;148,3E 100KM   15 32 25,9 (WDCB)
BRG E PKP       15 51 09,1                                                  D=121.7 DEG   AZ= 56        BRG
    E APKP         51 33,7
    E XPKP         51 48,5
    E PP           52 48,0
    E APP          53 07,8
    E PKKP      16 01 09,0
OLL E PKP       15 51 09                                                    D=121.9 DEG   AZ= 55        CLL
    E              51 30
    E              51 54
    E PP           52 42
    E XPP          53 18
    I PKKP2     16 01 07,5  1,4 /   23
    E              01 50
    E SKKP         04 52
      LMH          35        T 20   AN   2,3 AE   2                  MLH =5,9  (NO DEPTH CORRECTION)
      L            47
MOX E PKP       15 51 12                                                    D=123.0 DEG   AZ= 54        MOX
    E              51 51
    E PP           52 25
      LMH       16 35,8      T 19   AN   2,4 AE   1,8                MLH =5,9  (NO DEPTH CORRECTION)
      LMV          42,5      T 20                      AV   1,3      MLV =5,6  (NO DEPTH CORRECTION)

1978 JAN 24     KURILE ISLANDS                            MB=4,5 ( 5)  44,5N;149,9E  53KM H=16 00 30,6 (NEIS)
CLL E P         16 12 25   TRACES                                           D= 77.5 DEG   AZ= 30        CLL

1978 JAN 24     LOYALTY ISLANDS REGION                    MB=5,1 ( 3)  22,7S;171,8E  53KM H=16 07 32,9 (NEIS)
BRG I PKP1      16 27 11,1  1,0 /   36                                      D=146.8 DEG   AZ= 41        BRG
    I              27 17,1
CLL E PKP1      16 27 11    1,0 /   28                                      D=146.9 DEG   AZ= 39        CLL
MOX E PKP       16 27 14    1,0 /   18                                      D=147.9 DEG   AZ= 37        MOX

1978 JAN 24     SOUTHEASTERN AUSTRIA                                   47,7N; 15,9E       H=17 25 09   (VKA)
MOX E(SG)       17 27 15                                                    D=  4.1 DEG   AZ=135        MOX
OLL E           17 26 36                                                    D=  4.1 DEG   AZ=151        CLL
    E SG           27 14

1978 JAN 25
OLL E           03 17 24

1978 JAN 25
MOX E           06 20 04

1978 JAN 25
CLL E           18 43 48

1978 JAN 25     FOX ISLANDS, ALEUTIAN ISLANDS             MB=5,0 (44)  52,1N;169,8W  21KM H=21 43 03,6 (NEIS)
                                                                       52,6N;169,9W  33KM   21 43 02,5 (WDCB)
OLL E P         21 54 54                                                    D= 76.9 DEG   AZ=  2        CLL
BRG I P         21 54 57,7C 1,2 /   17                                      D= 77.4 DEG   AZ=  2        BRG
MOX E P         21 55 00                                                    D= 77.6 DEG   AZ=  1        MOX

1978 JAN 25     SOUTH OF FIJI ISLANDS                   /MB=4,8 ( 4)/  24,4S;179,5W 525KM H=22 53 06,2  (ISC)
OLL E PKP1      23 12 03   TRACES                                           D=151.5 DEG   AZ= 24        CLL

1978 JAN 25 /   NEW BRITAIN REGION                        MB=6,1 (45)
    JAN 26                                                               5,3S;151,7E  44KM H=23 18 56,6 (NEIS)
                                                                         5,1S;151,8E  33KM   23 18 53,4 (WDCB)
BRG I PKP       23 37 49,0C 1,9 /  191                                      D=122.5 DEG   AZ= 53        BRG
    E PP           39 28,0                                                  DISTANCE 123 DEG
    E PKKP         47 42,2
    E PS           49 23
    E SS           56 21
    E SSS       00 01 18
      LM           33        T 23   AN   7,0 AE  16,6 AV  11.6   MLH =6,5 MLV =6,[illegible]
CLL I PKP       23 37 49,4C 1,8 /  140                                      D=122.7 DEG   AZ= 51        CLL
    E PP           39 28                                                    DISTANCE 122 DEG
    E              39 47
    E              41 37
    E              42 26
    E PKKP2        47 52
    E PS           49 20
    E PPS          50 58
    E PCPPKP       51 42
    E SS           56.3
    E SSS       00 01,4
      LM           33        T 20   AN   9   AE  10   AV  11     MLH =6,5 MLV =6,5
MOX I PKP       23 37 52,0  2,2 /  196                                      D=123.8 DEG   AZ= 50        MOX
    E PP           39 36
    E PPP          42 20
    E PS           49 28
    E PPS          51 10
    E SS           56 36
    E SSS       00 01 28
      LMH          33,1      T 22   AN  11,5                         MLH =6,4
      LMV          35        T 20                      AV  12,3      MLV =6,6
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1978 JAN 26 POLAND, UPPER SILESIA
OLL E 05 36 05
E SQ 36 34

1978 JAN 26
OLL E 08 55 49

1978 JAN 26 POLAND, UPPER SILESIA NO MB COMP, 50,1N; 19,1E 10KM H=12 35 00,0 (CSEM)
50,5N; 19,4E 10KM 12 34 59,9 (NEIS)
D= 3.4 DEG AZ=101 BRG
BRG E PG 12 35 57,0
E SQ 36 39,8
D= 4.1 DEG AZ=105 OLL
OLL E PG 12 36 08
E SQ 37 04
D= 4.8 DEG AZ= 94 MOX
MOX E PN 12 36 06
E PG 36 26
E SQ 37 25

1978 JAN 26
OLL E 14 36 06 TRACES

1978 JAN 26
OLL I P 15 49 51,3 TRACES

1978 JAN 26
OLL I P 22 07 06,9D
BRG I P 22 07 07,0 0,8 / 15

1978 JAN 26 EAST PAPUA NEW GUINEA REGION MB=5,5 (13) 5,0S;145,0E 60KM H=21 49 31,0 (NEIS)
BRG I PKP 22 08 14,8 D=118.8 DEG AZ= 59 BRG
OLL E XPKP 22 08 38 D=119.1 DEG AZ= 58 OLL
E PKKP2 18 28
MOX E PKP 22 08 18 D=120.2 DEG AZ= 57 MOX
E 08 33,5

1978 JAN 27 POLAND, UPPER SILESIA /NO MB COMP,/ 50,2N; 18,8E 0KM H=00 56 26 (ISC)
BRG E PG 00 57 25,0 D= 3.2 DEG AZ=100 BRG
E SQ 58 08,8
D= 3.8 DEG AZ=105 OLL
OLL E PG 00 57 40
E SQ 58 30
D= 4.8 DEG AZ= 93 MOX
MOX E 00 57 55
E(SQ) 58 57

1978 JAN 27 POLAND, UPPER SILESIA
OLL E SQ 03 23 22
MOX E 03 23 47

1978 JAN 27 MARIANA ISLANDS MB=5,2 (28) 13,5N;144,8E 41KM H=07 22 08,8 (NEIS)
15,9N;144,8E 33KM 07 22 21,8 (WDCB)
D=103.1 DEG AZ= 48 OLL
OLL E APP 07 40 29
LM 08 26
MOX LMR 08 25,8 T 16 AN 0,8 MLB =5,3
LMV 25,9 T 18 AV 1,0 MLV =5,4 D=104.2 DEG AZ= 47 MOX

1978 JAN 27
OLL E 08 01 01

1978 JAN 27 POLAND, UPPER SILESIA
BRG E PG 19 51 51,6
E SG 52 30,0
OLL E SG 19 52 54

1978 JAN 27 NICOBAR ISLANDS REGION MB=4,7 (16) 8,1N; 94,0E 113KM H=19 40 03,2 (NEIS)
4,9N; 94,5E 33KM 19 39 33,5 (WDCB)
OLL E P 19 51 57 D= 78.1 DEG AZ= 92 OLL
MOX E(P) 19 52 03 D= 79.0 DEG AZ= 91 MOX
E 52 33
E 53 17

1978 JAN 28 CENTRAL MID-ATLANTIC RIDGE MB=5,0 (10) 0,7N; 27,1W 10KM H=02 02 37,5 (NEIS)
0,4N; 28,8W 33KM 02 02 28,4 (WDCB)
MOX E P 02 12 44 2,0 / 60 MPV =5,4
LMR 37,2 T 16 AN 2,3 AE 0,4 MLB =5,4
LMV 37,2 T 20 AV 0,8 MLV =4,9 D= 59,6 DEG AZ=226 MOX
OLL E P 02 12 51
BRG E P 02 12 54,0 D= 60.7 DEG AZ=228 OLL
D= 60.8 DEG AZ=229 BRG

1978 JAN 28 CRETE MB=4,9 (57) 34,8N; 23,7E 53KM H=03 29 35,5 (NEIS)
34,9N; 23,8E 34KM 03 29 39,2 (CSEM)
34,8N; 23,6E 53KM 03 29 34,2 (WDCB)
BRG I P 03 33 39,0 0,7 / 52 D= 17,6 DEG AZ=152 BRG
I 33 41,7
I 35 25,0
MOX E P 03 33 47 0,9 / 43 MPV =4,6
E 33 54 D= 18.1 DEG AZ=146 MOX
LMV 42,3 T 16 AV 2,0 MLV =4,6
LMR 42,4 T 12,5 AN 1,9 AE 1,3 MLB =4,6
OLL I P 03 33 47,8 1,0 / 120
I 33 56,0 0,9 / 58 D= 18.2 DEG AZ=151 OLL
I PP 33 59,8 DISTANCE 19 DEG
E 34 32
E S 37 12
E 37 28
E 39 47
LM 42

1978 JAN 28
OLL E 04 25 04
E SG 25 49

1978 JAN 28 NEAR COAST OF OAXACA, MEXICO MB=5,0 (27) 15,0N; 95,7W 45KM H=10 14 34,6 (NEIS)
MOX E AP 10 27 35,5 D= 89.1 DEG AZ=293 MOX
DEPTH 33 KM
OLL I 10 27 38,6C D= 89.7 DEG AZ=294 OLL
BRG E(P) 10 27 42,0 D= 90.4 DEG AZ=294 BRG

1978 JAN 28 SOUTH OF HONSHU, JAPAN MB=5,2 (38) 30,9N;142,6E 45KM H=13 18 57,3 (NEIS)
31,2N;142,5E 33KM 13 18 53,0 (WDCB)
BRG E(P) 13 31 50,5 D= 86.8 DEG AZ= 42 BRG
OLL E P 13 31 40 D= 86.9 DEG AZ= 42 OLL
E 31 53

1978 JAN 28
OLL E 15 22 05 TRACES

1978 JAN 28 SOUTH OF FIJI ISLANDS MB=6,0 (42) 25,9S;177,3W 102KM H=19 36 30,6 (NEIS)
25,9S;177,6W 100KM 19 36 39,8 (WDCB)
OLL I PKIKP 19 56 18,0 1,8 / 90 D=153.4 DEG AZ= 21 OLL
I PKP1 56 26,5C 1,4 / 215 DISTANCE 152,5DEG
I PKP2 56 39 1,4 / 270
I 56 44,3
I PP 20 00 10,8
E 01,5
E SKKS 06,8
E PSKS 10,3
E SS 19,7
LM 37 T 24 AN 1 AE 2 AV 4 MLB =6,1 MLV =6,2 (NO DEPTH CORRECTION)
BRG I PKIKP 19 56 18,1C D=153.6 DEG AZ= 23 BRG
I PKP1 56 26,9 DISTANCE 153 DEG
I 56 36,2
I PKP2 56 40,5
I 56 46,7
E PP 20 00 06,6
LM 59 T 24 AN 2,9 AE 4,5 AV 3,8 MLB =6,2 MLV =6,1 (NO DEPTH CORRECTION)
MOX I PKIKP 19 56 19,0 2,5 / 200 D=154.4 DEG AZ= 19 MOX
I PKAKP 56 28,0 2,0 / 145
I PKP2 56 43,5C 1,8 / 236
E APKIKP 56 47
E APKP2 57 10
E PP 20 00 15 T 8 AV 3,2 MRBV =6,5
E SKKS 07 00
E SKSP 10 40
E SS 19 52
E PSPS 21 20
LMR 37 T 26 AN 1,9 AE 2,8 MLB =6,2 (NO DEPTH CORRECTION)
LMV 37 T 24 AV 3,3 MLV =6,0 (NO DEPTH CORRECTION)

1978 JAN 28 NEAR EAST COAST OF KAMCHATKA MB=5,0 (19) 53,9N;159,3E 13KM H=22 38 04,7 (NEIS)
53,4N;159,7E 33KM 22 38 04,2 (WDCB)
OLL E P 22 49 28 D= 71.4 DEG AZ= 20 OLL

1978 JAN 28 BANDA SEA MB=5,6 (31) 7,2S;129,5E 19KM H=23 20 30,9 (NEIS)
MOX E PP 23 40 04 D=113.8 DEG AZ= 72 MOX

1978 JAN 29 KURILE ISLANDS MB=5,5 (78) 46,0N;149,2E 146KM H=02 05 01,7 (NEIS)
46,2N;148,9E 150KM 02 05 03,4 (WDCB)
OLL I P 02 16 33,2C 0,7 / 145 D= 76.0 DEG AZ= 30 OLL
I 16 35,8
I 16 40,5
BRG I P 02 16 33,9C 1,1 / 53 D= 76.1 DEG AZ= 30 BRG
MOX E P 02 16 39 1,4 / 116 MPV =5,4 D= 77.0 DEG AZ= 29 MOX
I 16 44

1978 JAN 29
MOX E(P) 02 35 37,5
OLL E 02 35 40
BRG E(P) 02 35 41,0

1978 JAN 29 NEAR EAST COAST OF KAMCHATKA MB=4,9 (9) 54,1N;159,2E 33KM H 02 32 19,2 (NEIS)
OLL E P 02 43 35 D= 71.2 DEG AZ= 20 OLL

1978 JAN 29 MID-INDIAN RISE MB=5,1 (8) 15,3S; 67,2E 33KM H 02 32 17,8 (NEIS)
BRG E P 02 44 30,9 1,4 / 31 D= 80.8 DEG AZ=129 BRG
OLL E P 02 44 31 1,7 / 98 D= 81.5 DEG AZ=128 OLL
MOX E P 02 44 35 D= 81.8 DEG AZ=127 MOX
E AP 44 41 DEPTH 22 KM

1978 JAN 29
BRG E(P) 04 40 30,1

1978 JAN 29 KERMADEC ISLANDS MB=5,3 (17) 29,8S;177,2W 45KM H=05 00 42,8 (NEIS)
28,7S;177,8W 33KM 05 00 38,9 (WDCB)
OLL E PKP1 05 20 47 D D=157.2 DEG AZ= 23 OLL
I PKP2 21 04,5
BRG E PKIKP 05 20 35,0 D=157.3 DEG AZ= 26 BRG
E PKP1 20 45,6
I PKP2 21 05,3
MOX E PKP2 05 21 08,5 D=158.1 DEG AZ= 21 MOX
I APKP2 21 23,5 DEPTH 32 KM
LMH 06 28 T 28 AE 0,8 MLB =5,2
LMV 33 T 21 AV 1,0 MLV =5,6

1978 JAN 29 HOKKAIDO, JAPAN, REGION MB=5,1 (20) 42,8N;145,6E 57KM H=10 05 13,5 (NEIS)
42,8N;145,4E 33KM 10 05 13,2 (WDCB)
OLL I P 10 17 06,9 0,9 / 17 D= 77.8 DEG AZ= 34 OLL
I AP 17 19,4
BRG E P 10 17 07,0 D= 77.7 DEG AZ= 34 BRG
I AP 17 19,6
MOX E P 10 17 12 D= 78.7 DEG AZ= 33 MOX
E AP 17 26 DEPTH 56 KM

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1978 JAN 29    CRETE                                          MB=5.1 (64)   34.9N; 25.7E  35KM H=10 23 43.5 (NEIS)
                                                                            34.9N; 25.7E  46KM   10 23 43.7 (CSEM)
                                                                            34.7N; 25.5E  33KM   10 23 36.9 (WDCA)
BRG E P        10 27 50,9  1.5 /  56                                        D= 18.1 DEG   AZ=147       BRG
    E S           31 20                                                    DISTANCE 18 DEG
    E SS          31 35
      LM          36        T 12    AN   4.7 AE   2.8 AV   4.7  PLR  =5.1 MLV  =5.2
MOX E P        10 28 01,5  1.0 /  59                                  MPV  =4.7  D= 18.8 DEG   AZ=142       MOX
    E S           31 42
      LMR         34.4      T 15.5  AN   2.9 AE   2.7              PLR  =4.8
      LMV         37.1      T 12                    AV   3.0  MLV  =5.0
OLL I P        10 28 00,2  1.2 / 120                                        D= 18.8 DEG   AZ=146       OLL
    E             30 29                                                    DISTANCE 16 DEG
    E S           31 30
    E SS          31 46
      LH          37.2      T 12    AN   3.2 AE   2.5 AV   2.2  MLR  =4.9 MLV  =4.9

1978 JAN 29    NEW BRITAIN REGION                             MB=5.7 (42)   4.3S;152.8E  20KM H=14 17 30.5 (NEIS)
                                                                            5.2S;154.2E  33KM   14 17 29.4 (WDCA)
BRG I PKP      14 36 25,2D 0.8 /  41                                        D=122.1 DEG   AZ= 51       BRG
    I             36 31,0                                                  DISTANCE 122 DEG
    I SKP         40 02,9
    E SS          54 52
      LM          15 34     T 17    AN   2.9 AE   2.0 AV   2.0  MLR  =6.0 MLV  =6.0
OLL E PKP      14 36 25    1.0 /  60                                        D=122.3 DEG   AZ= 50       OLL
    I             36 31,0
    E             38 53
    E SKKP        50 29
      LM          15 34     T 20    AN   1.3 AE   1.5 AV   3    MLR  =5.8 MLV  =5.9
MOX E PKP      14 36 27                                                    D=123.4 DEG   AZ= 49       MOX
    E APKP        36 33,5                                                                  DELTA  21 KM
    E             40 06
      LMV         15 34.8   T 16                    AV   1.6  MLV  =5.8
      LMR         35.8      T 18    AN   1.9 AE   1.5       MLR  =5.8

1978 JAN 29    SOUTH OF PANAMA                                MB=5.1 (20)   4.4N; 78.5W  33KM H=18 10 06.5 (NEIS)
MOX E P        18 22 49,5                                                   D= 86.7 DEG   AZ=273       MOX
OLL E P        18 22 53                                                     D= 87.3 DEG   AZ=274       OLL
BRG I P        18 22 56,6C 1.0 /  18                                        D= 88.2 DEG   AZ=275       BRG

1978 JAN 29
BRG E P        19 13 00,0

1978 JAN 29    SOUTH OF TONGA ISLANDS                         MB=5.6 (22)   24.8S;175.4W  39KM H=21 34 01.9 (NEIS)
                                                                            24.9S;175.8W  33KM   21 34 02.6 (WDCA)
OLL E PKIKP    21 53 49    2.4 /  90                                        D=152.8 DEG   AZ= 17       OLL
    I PKP1        53 57,4C 1.4 /  72                                  PC   =5.6  DISTANCE 152 DEG
    I PKP2        54 07,6D
    E             54 27
    E             55 38
BRG E PKIKP    21 53 49,8                                                  D=153.0 DEG   AZ= 19       BRG
    I PKP1        53 57,7
    I PKP2        54 08,2
MOX E PKIKP    21 53 59    1.9 /  76                                        D=153.8 DEG   AZ= 14       MOX
    E             54 03
    E PKP2        54 10,5

1978 JAN 29    NEAR EAST COAST OF KAMCHATKA                   MB=5.3 (34)   53.9N;159.2E  20KM H=21 51 28.8 (NEIS)
                                                                            53.8N;159.4E  33KM   21 51 28.8 (WDCA)
OLL I P        22 02 48,4C                                                  D= 71.4 DEG   AZ= 20       OLL
    E             03 06
    E             03 46
    E             05 09
      LM          40
BRG E P        22 02 49,8                                                  D= 71.6 DEG   AZ= 21       BRG
MOX E P        22 02 53                                                    D= 72.5 DEG   AZ= 19       MOX
      LMR         35.3      T 15    AN   1.1 AE   1.3              MLR  =5.5
      LMV         40.7      T 13                    AV   1.3  MLV  =5.4

1978 JAN 30    NEAR EAST COAST OF KAMCHATKA                   MB=5.0 (22)   53.9N;159.3E  32KM H=05 00 20.6 (NEIS)
                                                                            54.0N;159.3E  33KM   05 00 16.9 (WDCA)
OLL E P        05 11 39                                                     D= 71.4 DEG   AZ= 20       OLL

1978 JAN 30    NEAR EAST COAST OF KAMCHATKA                   MB=5.0 (14)   53.9N;159.1E  17KM H=06 03 52.9 (NEIS)
                                                                            54.0N;159.2E  33KM   06 03 59.0 (WDCA)
OLL E P        06 15 12                                                     D= 71.4 DEG   AZ= 20       OLL

1978 JAN 30    KERMADEC ISLANDS                               MB=5.6 (18)   29.8S;177.2W  39KM H=06 51 13.6 (NEIS)
                                                                            29.9S;177.8W  33KM   06 51 08.8 (WDCA)
OLL E PKIKP    07 11 06                                                     D=157.2 DEG   AZ= 23       OLL
    E             11 20                                                    DISTANCE 157 DEG
    E PKP2        11 36     1.6 / 105                                PC   =5.6
    E PP          15 13
      LM          08 22     T 20    AN   1.3 AE   1    AV   2    MLR  =5.8 MLV  =5.9
BRG E PKIKP    07 11 06,9                                                   D=157.3 DEG   AZ= 26       BRG
    E PKP2        11 38,2
MOX E PKIKP    07 11 07    1.8 /  84                                        D=158.1 DEG   AZ= 21       MOX
    E PKP2        11 40     2.0 / 111
    E PP          15 30
    E SKKS        22 20
    E SS          35 10
      LMV         08 34.5   T 19.5                  AV   1.3  MLV  =5.8
      LMR         35.8      T 20            AE   1.2       MLR  =5.6

1978 JAN 30    CYPRUS                                         MB=4.5 (11)   34.7N; 33.8E  37KM H=07 52 48.2 (NEIS)
                                                                            34.7N; 33.9E  43KM   07 52 50.9 (CSEM)
BRG E P        07 57 37,8  1.8 /  63                                        D= 21.7 DEG   AZ=131       BRG
OLL I P        07 57 45,1C 1.7 /  42                                        D= 22.4 DEG   AZ=130       OLL
    I             57 54,9
    E S           08 01 55
    E L           08 06
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MOX E P        07 57 48,5  1.6 /  98                                  MPV  =4.8  D= 22.7 DEG   AZ=126       MOX
    E             58 03

1978 JAN 30
OLL I P        11 04 54,3D

1978 JAN 30    MINDANAO, PHILIPPINE ISLANDS                   MB=5.3 (47)   6.9N;126.9E  69KM H=13 14 54.5 (NEIS)
                                                                            7.1N;126.6E  30KM   13 14 54.3 (WDCA)
BRG E P        13 28 31,1                                                   D= 98.9 DEG   AZ= 68       BRG
    I             28 41,8
OLL E          13 28 37                                                    D= 99.3 DEG   AZ= 67       OLL
MOX E          13 28 45                                                    D=100.3 DEG   AZ= 66       MOX
    E             29 29

1978 JAN 30
OLL I P        14 16 22,6C
BRG I P        14 16 23,1D

1978 JAN 30
OLL E          16 52 29

1978 JAN 31    KAMCHATKA                                      MB=4.7 (40)   53.6N;157.1E 285KM H=05 39 52.8 (NEIS)
                                                                            53.9N;156.7E 250KM   05 39 51.8 (WDCA)
OLL I P        05 50 41,2  1.1 /  17                                        D= 71.2 DEG   AZ= 22       OLL
BRG I P        05 50 42,0                                                  D= 71.4 DEG   AZ= 22       BRG
MOX E P        05 50 47                                                    D= 72.1 DEG   AZ= 21       MOX

1978 JAN 31    GREECE                                         MB=4.5 ( 8)   38.3N; 22.9E  38KM H=06 39 18.2 (NEIS)
                                                                            38.3N; 23.0E  40KM   06 39 21.8 (CSEM)
BRG E(P)       06 42 35,9                                                   38.4N; 23.0E  83KM   06 39 19.2 (WDCA)
MOX E          06 43 11                                                    D= 13.2 DEG   AZ=148       BRG
      LMR         47.4      T 8     AN   0.8                             D= 13.9 DEG   AZ=141       MOX
      LMV         48.5      T 8                     AV   0.6  MLR  =4.1
OLL E          06 42 45                                                    D= 13.9 DEG   AZ=146       OLL
      LH          47

1978 JAN 31    TAIWAN                                         MB=5.0 (11)   23.9N;121.7E  83KM H=07 18 51.9 (NEIS)
BRG I P        07 31 09,0                                                   D= 82.5 DEG   AZ= 62       BRG
OLL I P        07 31 10,0  0.7 /  14                                        D= 82.8 DEG   AZ= 61       OLL
MOX E P        07 31 16                                                    D= 83.9 DEG   AZ= 60       MOX

OLL  INTERRUPTION OF SOME RECORDS FROM 10H 15M TO 15H 24M

1978 JAN 31
OLL E          20 33 40
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1978 FEB 01
OLL E 03 23 09

1978 FEB 01 POLAND, UPPER SILESIA
OLL E SG 05 37 35
MOX E SG 05 37 56

1978 FEB 01
MOX E 06 02 04
E 02 21
E 02 48

1978 FEB 01 SOUTH OF HONSHU, JAPAN MB=4,8 (15) 30,9N;142,5E 33KM H=13 57 33,5 (NEIS)
30,8N;143,0E 83KM 13 57 26,9 (WDCB)
OLL E 14 10 26 D= 86,9 DEG AZ= 42 CLL

1978 FEB 01 KURILE ISLANDS MB=5,1 (64) 42,0N;153,6E 161KM H=14 58 41,2 (NEIS)
49,9N;152,4E 70KM 14 58 44,8 (WDCB)
OLL I P 15 10 09,4C 1,5 / 44 D= 74,5 DEG AZ= 26 CLL
BRG E P 15 10 10,4 D= 74,7 DEG AZ= 26 BRG
MOX E P 15 10 15 1,8 / 54 MPV =5,1 D= 75,5 DEG AZ= 25 MOX

1978 FEB 01 TONGA ISLANDS MB=4,9 (13) 16,7S;174,0W 380KM H=17 09 21,8 (NEIS)
OLL I PKP 17 28 24,4D 1,4 / 72 D=144.9 DEG AZ= 13 CLL
I 29 24,6
MOX E PKP 17 28 26,5 1,4 / 70 D=145.7 DEG AZ= 11 MOX

1978 FEB 01 GREENLAND SEA MB=5,2 (36) 79,9N; 0,8E 33KM H=18 05 33,8 (NEIS)
79,9N; 0,6E 33KM 18 05 30,3 (WDCB)
OLL E P 18 11 33 D= 29.0 DEG AZ=356 CLL
E 11 40
MOX E P 18 11 40 1,4 / 21 MPV =4,7 D= 29.6 DEG AZ=356 MOX
LMA 23,0

1978 FEB 01 TONGA ISLANDS MB=5,2 (13) 17,9S;175,0W 252KM H=23 19 41,8 (NEIS)
OLL I PKP1 23 38 53,3D 1,1 / 60 D=146.1 DEG AZ= 14 CLL
E APKP 39 50
BRG I PKP 23 38 53,9D 0,8 / 29 D=146.8 DEG AZ= 15 BRG
MOX E PKP 23 38 56 1,3 / 22 D=146.9 DEG AZ= 12 MOX
E APKP 39 57

1978 FEB 01 / KURILE ISLANDS MB=5,5 (69)
FEB 02 45,1N;150,2E 33KM H=23 36 49,6 (NEIS)
45,3N;150,3E 83KM 23 36 49,7 (WDCB)
OLL I P 23 48 40,3C 1,1 / 165 D= 77.1 DEG AZ= 30 CLL
I AP 48 55,6 DEPTH 60 KM
E XP 49 02
E(PKKP1) 00 07 54
LM 26
BRG I P 23 48 40,6C 1,1 / 56 D= 77.2 DEG AZ= 30 BRG
MOX I P 23 48 45,5C 1,2 / 85 MPV =5,6 D= 78,1 DEG AZ= 29 MOX
LMA 00 25,9 T 20 AN 1,4 MLH =5,3
LMV 26,8 T 18 AV 1,2 MLV =5,3

1978 FEB 02
OLL E 03 09 50

1978 FEB 02 NORTHWEST OF KURILE ISLANDS MB=4,9 (7) 47,7N;148,7E 462KM H=06 51 34,8 (NEIS)
OLL I P 07 02 26,6 D= 73.7 DEG AZ= 31 CLL

1978 FEB 02 NEW BRITAIN REGION MB=5,6 (29) 5,5S;151,7E 33KM H=07 58 03,6 (NEIS)
5,1S;151,7E 33KM 07 58 07,8 (WDCB)
BRG E PKP 08 16 59,6 D=122.7 DEG AZ= 53 BRG
E PKKP 26 38,6
E PS 28 37
E SSS 40 26
LM 09 12 T 20 AN 1,2 AE 3,0 AV 2,9 MLH =6,0 MLV =5,9
OLL E PKP 08 17 00 D=122.9 DEG AZ= 52 CLL
LM 09 12 T 20 AN 2 AE 1,5 AV 2 MLH =5,9 MLV =5,8
MOX E PKP 08 17 03 D=124.0 DEG AZ= 50 MOX
LMA 09 14,2 T 18 AN 1,3 AE 1,1 MLH =5,8
LMV 14,8 T 18 AV 1,7 MLV =5,8

1978 FEB 02 SOUTHEASTERN AUSTRIA (VKA)
OLL E SG 09 46 48

1978 FEB 02 GREECE MB=4,1 (2) 39,9N; 21,3E 33KM H=11 11 40,5 (NEIS)
39,9N; 21,6E 41KM 11 11 43,7 (CSEM)
MOX E 11 15 05 D= 12,7 DEG AZ=144 MOX
E 17 46
OLL E 11 15 01 D= 12,8 DEG AZ=150 CLL
E(SS) 17 30
E L 18 55

1978 FEB 02 KURILE ISLANDS MB=5,2 (20) 44,2N;149,3E 33KM H=12 52 21,7 (NEIS)
44,7N;149,5E 33KM 12 52 24,5 (WDCB)
BRG E P 13 04 16,6 1,2 / 17 D= 77,7 DEG AZ= 31 BRG
OLL I P 13 04 16,3 1,1 / 28 D= 77,8 DEG AZ= 31 CLL
MOX E P 13 04 22 D= 78,6 DEG AZ= 30 MOX

1978 FEB 02
OLL I SG 17 26 13,0
(CONT.)

(CONT.)
BRG E(PG) 17 26 13,2
E(SG) 26 33,4

1978 FEB 03
OLL E 05 46 22
MOX E(P) 05 46 28

CLL INTERRUPTION OF ALL LONGPERIODIC RECORDS FROM 05H 55M TO 05H 57M (AT FEB 04)

1978 FEB 03 FIJI ISLANDS REGION MB=4,8 (7) 20,5S;178,0W 596KM H=07 40 29,9 (NEIS)
OLL E PKIKP 07 59 16 D=148.1 DEG AZ= 20 CLL
I PKP1 59 20,5D 0,9 / 75
I PKP2 59 24,9C 0,7 / 30 MC =5,0
E 59 47
BRG I PKIKP 07 59 16,8 D=148,3 DEG AZ= 22 BRG
I PKP1 59 20,9
I PKP2 59 25,8
MOX E PKIKP 07 59 18 D=149.8 DEG AZ= 18 MOX
E PKAKP 59 22

1978 FEB 03
OLL E 08 08 19

1978 FEB 03
MOX E PG 14 20 32
E SG 20 51,5
OLL E 14 21 20

1978 FEB 03 TALAUD ISLANDS MB=5,7 (55) 4,8N;126,7E 180KM H=14 33 36,2 (NEIS)
5,4N;125,5E 180KM 14 33 39,2 (WDCB)
BRG E P 14 47 01,0 0,8 / 26 D= 99,8 DEG AZ= 70 BRG
E AP 47 54,0
E PP 51 07,8
OLL E P 14 47 03 1,0 / 16 D=100.2 DEG AZ= 69 CLL
E 47 26
E 50 54
E SKS 57 20
E S 58 08
MOX E P 14 47 09 D=101.2 DEG AZ= 68 MOX
LMA 15 31

1978 FEB 03 FIJI ISLANDS REGION MB=4,5 (1) 20,9S;178,5W 624KM H=21 53 43,2 (NEIS)
OLL E PKP1 22 12 23 D=148.3 DEG AZ= 21 CLL
BRG E PKP 22 12 19,0 D=148.5 DEG AZ= 23 BRG

1978 FEB 03 POLAND, UPPER SILESIA 50,3N; 19,0E 10KM H=23 49 33,9 (CSEM)
BRG E PG 23 50 37,8 D= 3.2 DEG AZ= 95 BRG
E SN 50 59,4
E SG 51 17,2
OLL E 23 50 56 D= 3.9 DEG AZ=100 CLL
E SN 51 11
E SG 51 38
MOX E SG 23 52 10 D= 4.7 DEG AZ= 89 MOX

1978 FEB 03 BURMA-INDIA BORDER REGION MB=5,1 (57) 23,0N; 94,7E 105KM H=23 46 43,9 (NEIS)
22,6N; 94,7E 100KM 23 46 40,8 (WDCB)
BRG I P 23 57 25,8 1,8 / 38 D= 66.8 DEG AZ= 82 BRG
OLL I P 23 57 30,3 1,0 / 15 D= 67.3 DEG AZ= 81 CLL
E AP 57 57
MOX E P 23 57 34,5 D= 68.3 DEG AZ= 80 MOX

1978 FEB 04 SANTA CRUZ ISLANDS /MB=4,8 (10)/ 11,0S;166,1E 96KM H=00 14 18 (ISC)
OLL E APKP 00 33 42 D=134.7 DEG AZ= 39 CLL

1978 FEB 04
OLL E 09 41 14

1978 FEB 04
OLL E 11 53 03
E 53 48

1978 FEB 04 NEAR COAST OF CHIAPAS, MEXICO MB=4,8 (14) 14,8N; 93,9W 33KM H=14 29 54,8 (NEIS)
BRG E P 14 42 49,2 0,8 / 10 D= 89.5 DEG AZ=293 BRG

1978 FEB 04 NEPAL /MB=4,4 (4)/ 29,3N; 81,4E 36KM H=21 30 14 (ISC)
BRG I P 21 39 36,9 0,7 / 10 D= 53.9 DEG AZ= 86 BRG

1978 FEB 04 VANUATU ISLANDS MB=5,0 (4) 13,8S;167,2E 200KM H=21 43 22,8 (NEIS)
BRG E PKP 22 02 23,5 D=137.1 DEG AZ= 40 BRG
OLL E PKP 22 02 25 D=137.2 DEG AZ= 38 CLL

1978 FEB 05 KURILE ISLANDS MB=4,7 (17) 40,8N;153,2E 48KM H=01 39 01,4 (NEIS)
40,8N;153,5E 33KM 01 39 00,1 (WDCB)
OLL I P 01 50 47,8 0,9 / 14 D= 76.4 DEG AZ= 27 CLL
BRG E P 01 50 46,0 D= 76.6 DEG AZ= 27 BRG
MOX E P 01 50 52 D= 77.4 DEG AZ= 26 MOX

1978 FEB 05 KURILE ISLANDS /MB=4,5 (5)/ 44,7N;149,4E 33KM H=02 15 37,9 (ISC)
OLL E P 02 27 29 0,6 / 12 D= 77.2 DEG AZ= 30 CLL

1978 FEB 05 QUEEN ELIZABETH ISLANDS MB=5,0 (17) 78,4N;108,1W 33KM H=16 07 14,2 (NEIS)
78,8N;109,0W 33KM 16 07 17,0 (WDCB)
OLL E P 16 15 35 2,0 / 37 D= 45.8 DEG AZ=346 CLL
MOX E P 16 15 42 D= 46.5 DEG AZ=346 MOX
E 16 28
LMA 39
BRG E P 16 15 39,0 D= 46.4 DEG AZ=346 BRG

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1978 FEB 05    MEDITERRANEAN SEA                 MB=3,9 ( 3)   34,6N; 22,6E  53KM H=21 27 31,5 (NEIS)
BRG E P        21 31 37,2                                             D= 17.4 DEG   AZ=156     BRG
CLL E(P)       21 31 49   TRACES                                      D= 18.1 DEG   AZ=154     CLL

1978 FEB 06    SOUTHERN GREECE                                 37,9N; 23,6E  19KM H=00 12 59,9 (CSEM)
CLL E(P)       00 16 43                                               D= 15.4 DEG   AZ=147     CLL
    E             16 54

1978 FEB 06
CLL E          01 30 30

1978 FEB 06
CLL E          02 14 44   TRACES

1978 FEB 06    KAMCHATKA                         MB=5,2 (46)   56,2N;160,8E  53KM H=03 22 40,8 (NEIS)
                                                               56,4N;160,2E  33KM   03 22 41,8 (WDCB)
                                                                      D= 69.8 DEG   AZ= 19     CLL
CLL I P        03 33 51,6C 1,4 /   50
    I             33 57,8
    E             34 25
      LM       04 10
BRG I P        03 33 53,3C 1,3 /   27                                 D= 69.8 DEG   AZ= 19     BRG
MOX E P        03 33 58    1,6 /   38                    MPV =5,1     D= 70.5 DEG   AZ= 18     MOX
    E             34 04
      LMV      04 07,7     T 22                 AV  0,6  MLV =4,8
      LMR         12.1     T 12   AN  3,4                MLR =5,8

1978 FEB 06
BRG E P        05 34 16,0

1978 FEB 06    FRG, SOUTHWESTERN REGION                        48,3N;  9,0E   5KM H=06 55 06,8 (CSEM)
MOX E PN       06 55 53                                               D=  2.9 DEG   AZ=217     MOX
    E PG          56 02                                               DISTANCE  2,8DEG
    E SN          56(25)
    E SG          56 38
CLL E SG       06 57 12                                               D=  4.8 DEG   AZ=222     CLL

1978 FEB 06    TYRRHENIAN SEA                                  39,0N; 15,3E 289KM H=16 27 23,8 (CSEM)
MOX E P        16 30 12                                               D= 11.9 DEG   AZ=166     MOX

1978 FEB 06    SOUTH OF FIJI ISLANDS             MB=5,1 (15)   22,1S;178,2W 385KM H=20 43 51,2 (NEIS)
                                                               21,1S;178,0W  33KM   20 43 13,8 (WDCB)
CLL I PKP1     21 02 56,5  1,0 /   60                                 D=149.8 DEG   AZ= 21     CLL
    E APKP        04 36
BRG E PKIKP    21 02 52,0                                             D=149.7 DEG   AZ= 23     BRG
    I PKP1        02 57,0  0,9 /   41
    E APKP        04 32,3
MOX E PKIKP    21 02 53                                               D=150.5 DEG   AZ= 19     MOX
    E PKAKP       02 59    0,9 /   31
    E PKP2        03 08

1978 FEB 07    TONGA ISLANDS                     MB=4,6 ( 1)   21,5S;175,7W  33KM H=03 27 28,8 (NEIS)
CLL E PKP1     03 47 15                                               D=149.5 DEG   AZ= 16     CLL
    E             47 27
BRG E PKP1     03 47 16,1                                             D=149.7 DEG   AZ= 18     BRG
    E             47 29,2
MOX E(PKP2)    03 47 27                                               D=150.3 DEG   AZ= 14     MOX

1978 FEB 07    NORTHERN ITALY         FRIULI                   46,3N; 13,8E   4KM H=06 12 24,5 (BGS)
CLL E SG       06 15 05                                               D=  5.8 DEG   AZ=178     CLL

1978 FEB 07    MOLUCCA SEA                       MB=5,9 (52)    0,1S;124,1E  81KM H=07 01 38,5 (NEIS)
                                                                0,3S;124,1E  70KM   07 01 37,5 (WDCB)
BRG E P        07 15 29,6                                             D=102.7 DEG   AZ= 74     BRG
    E PP          19 55,5
      LM       08 02       T 25   AN  6,0 AE  3,6 AV  2.6  MLR =6,0 MLV =5,7 (NO DEPTH CORRECTION)
CLL E(P)       07 15 38                                               D=103.1 DEG   AZ= 73     CLL
    E PP          19 50                                               DISTANCE 102 DEG
    E             25 25
    E(S)          27,3
    E(PPS)        30,1
    E PKKP2       31 42
    E             44 33
      LM       08 01       T 18   AN  2,5 AE( 6) AV  1.5  MLR =5,9 MLV =5,7 (NO DEPTH CORRECTION)
MOX E P        07 15 42                                               D=104.2 DEG   AZ= 72     MOX
    E S           27 28
    E PPS         30 05
    E SS          35 08
      LMR      08 02,6     T 17   AN  1,9 AE  1,8
      LMV         08,7     T 19               AV  2,6

1978 FEB 07
CLL E          11 20 03

1978 FEB 07    ANDAMAN ISLANDS REGION            MB=5,5 (78)   12,8N; 93,0E  33KM H=12 30 40,4 (NEIS)
                                                               12,7N; 93,1E  33KM   12 30 39,4 (WDCB)
BRG I P        12 42 10,7C 1,3 /   96                                 D= 73.3 DEG   AZ= 90     BRG
    E PPP         46 40,0
    E S           51 44,0
    E PS          52 10,0
      LM       13 19       T 18   AN  1,3 AE  1,8 AV  1.5  MLR =5,5 MLV =5,3
CLL I P        12 42 13,7C 1,6 /   98                                 D= 73.9 DEG   AZ= 90     CLL
      LM       13 19.7
MOX E P        12 42 19    1,4 /   88                      MPV =5,6   D= 74.8 DEG   AZ= 88     MOX
    E PS          52 30
      LMR      13 19,8     T 17          AE  1,1           MLR =5,2
      LMV         20       T 18                   AV  1,2  MLV =5,3
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1978 FEB 07    ANDAMAN ISLANDS REGION            MB=5,0 (29)   12,7N; 93,0E  33KM H=13 34 10,8 (NEIS)
                                                               12,8N; 93,1E  33KM   13 34 10,6 (WDCB)
BRG E P        13 45 41,0  1,0 /   24                                 D= 73.4 DEG   AZ= 90     BRG
CLL E P        13 45 44    1,3 /   21                                 D= 74.0 DEG   AZ= 90     CLL
MOX E P        13 45 49    1,2 /   24                  MPV =5,1       D= 74.8 DEG   AZ= 88     MOX

1978 FEB 07    ANDAMAN ISLANDS REGION         /NO MB COMP./    13,3N; 93,6E   0KM H=13 36 56,2 (ISC)
BRG I P        13 48 31,1                                             D= 73.3 DEG   AZ= 89     BRG
CLL E P        13 48 35                                               D= 73.9 DEG   AZ= 89     CLL
MOX E P        13 48 38                                               D= 74.8 DEG   AZ= 88     MOX

1978 FEB 07    FIJI ISLANDS REGION               MB=5,4 (20)   21,1S;178,2W 578KM H=15 33 00,2 (NEIS)
CLL E PKIKP    15 51 38                                               D=147.8 DEG   AZ= 20     CLL
    I PKP1        51 41,2  0,9 /  140                                 DISTANCE 147 DEG  DEPTH 600 KM
    I PKP2        51 45,0  0,9 /   95              MC  =5,2
    E             52 02
    E APKP        53 58
    E(SKP)        54 16
    E PP          55 17
BRG E PKIKP    15 51 38,2                                             D=147.8 DEG   AZ= 22     BRG
    I PKP1        51 42,0                                             DISTANCE 148 DEG
    I PKP2        51 46,4
    E APKP        54 04,0
MOX E PKAKP    15 51 43,5D 1,7 /  103                                 D=148.5 DEG   AZ= 18     MOX
    E PKP2        51 48

1978 FEB 07    ANDAMAN ISLANDS REGION            MB=5,6 (76)   12,9N; 93,1E  33KM H=20 31 54,4 (NEIS)
                                                               12,9N; 93,1E  33KM   20 31 54,9 (WDCB)
BRG I P        20 43 24,6C 1,6 /  141                                 D= 73.3 DEG   AZ= 90     BRG
    E PP          46 05,5
    E PPP         47 55
    E S           52 51
    E PS          53 28,8
      LM       21 21       T 17   AN  2,3 AE  3,7 AV  3,0  MLR =5,8 MLV =5,7
CLL I P        20 43 27,7  1,7 /  145                                 D= 73.9 DEG   AZ= 89     CLL
    I             44 17,5
    E             44 37
    E(PPP)        48,2
    E(S)          53,1
      LM       21 20       T 20   AN  2   AE  3   AV  3    MLR =5,7 MLV =5,6
MOX E P        20 43 33    1,4 /  107                      MPV =5,7   D= 74.8 DEG   AZ= 88     MOX
    E S           53 15
      LMR      21 21,2     T 17           AE  2,0          MLR =5,5
      LMV         28       T 17                   AV  2.5  MLV =5,6

1978 FEB 07
CLL E P        21 06 08

1978 FEB 07    ANDAMAN ISLANDS REGION            MB=4,9 (12)   12,7N; 93,1E  33KM H=21 00 29,8 (NEIS)
                                                               14,1N; 93,1E  33KM   21 00 37,2 (WDCB)
BRG E P        21 11 59,6                                             D= 73.4 DEG   AZ= 90     BRG
CLL E(P)       21 12 09    1,4 /   20                                 D= 74.0 DEG   AZ= 90     CLL
MOX E P        21 12 14    1,5 /   25                  MPV =5,0       D= 74.9 DEG   AZ= 88     MOX

1978 FEB 07    ANDAMAN ISLANDS REGION            MB=4,8 (12)   12,7N; 93,1E  33KM H=21 23 39,4 (NEIS)
                                                               12,6N; 93,2E  33KM   21 23 34,8 (WDCB)
BRG E P        21 35 06,1  1,3 /   17                                 D= 73.4 DEG   AZ= 90     BRG
CLL E P        21 35 09                                               D= 74.6 DEG   AZ= 90     CLL
MOX E P        21 35 14                                               D= 74.9 DEG   AZ= 88     MOX

1978 FEB 07
CLL E          22 12 39   TRACES

1978 FEB 08    TAIWAN REGION                     MB=5,5 (68)   24,1N;122,7E  40KM H=00 15 34,9 (NEIS)
                                                               24,6N;122,8E  33KM   00 15 39,2 (WDCB)
BRG E P        00 27 58,0C                                            D= 82.6 DEG   AZ= 61     BRG
    E PP          31 08
    E S           38 13
    E SS          43 48
      LM       01 10       T 17   AN  5,7 AE  4,9 AV  8,4  MLR =6,1 MLV =6,2
CLL E P        00 28 00    2,1 /  100                                 D= 82.9 DEG   AZ= 60     CLL
    E             28 38
    E PP          31 01
    E(SCS)        38,6
    E SKPPKP      57 48
      LH       01 09       T 16   AN  2,5 AE  3   AV  6    MLR =5,9 MLV =6,0
MOX I P        00 28 06,5  2,2 /  131                      MPV =5,7   D= 84.0 DEG   AZ= 59     MOX
                           T  5                   AV  0.8  MPV =6,1
    E S           38 26
      LMR      01 09,9     T 14   AN  5,8 AE  2,4          MLR =6,0
      LMV         09,9     T 16                   AV  6,1  MLV =6,1

1978 FEB 08    SOUTH PACIFIC CORDILLERA          MB=5,3 ( 2)   55,9S;144,6W  33KM H=03 25 30,6 (NEIS)
CLL E(PKP2)    03 46 42   TRACES                                      D=166.0 DEG   AZ=242     CLL

1978 FEB 08    SOUTHERN ITALY                    MB=5,0 ( 2)   41,1N; 14,9E  95KM H=04 10 31,8 (NEIS)
                                                               41,1N; 14,9E  10KM   04 10 31,4 (CSEM)
BRG E PN       04 12 49,6                                             D=  9.8 DEG   AZ=176     BRG
    E             14 48,7
MOX E P        04 12 51                                               D=  9.8 DEG   AZ=165     MOX
CLL I P        04 12 58,7                                             D= 10.3 DEG   AZ=172     CLL
    E(S)          15 09
    E             16 22

1978 FEB 08    ANDAMAN ISLANDS REGION         /MB=4,5 ( 4)/    13,0N; 93,0E  33KM H=04 06 05,6 (ISC)
CLL E AP       04 17 47   TRACES                                      D= 73.7 DEG   AZ= 89     CLL

1978 FEB 08    WEST OF MACQUARIE ISLAND          MB=5,2 ( 3)   53,7S;140,6E  33KM H=09 29 10,5 (NEIS)
BRG E PKP      09 48 51,0  1,2 /   12                                 D=147.9 DEG   AZ=116     BRG
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OLL E PKP1      09 48 59                                                            D=148.6 DEG   AZ=115        CLL
MOX E           09 49 04,5                                                          D=149.1 DEG   AZ=116        MOX

1978 FEB 08     CZECHOSLCVAKIA
OLL E           12 13 40
    E              13 48
    E SG           13 54

1978 FEB 08     SOUTHERN SUMATERA                                  MB=5,4 (39)   4,2S;102,9E  83KM H=13 05 26,6 (NEIS)
                                                                                 3,8S;102,8E  33KM   13 05 23,9 (WDCB)
                                                                                      D= 92.6 DEG   AZ= 93        BRG
BRG E P         13 18 30,5   0.9 /   16                                               D= 93.2 DEG   AZ= 93        CLL
OLL E P         13 18 34                                                              D= 94.0 DEG   AZ= 92        MOX
MOX E P         13 18 37,5

1978 FEB 08     TUNISIA                                            MB=4,9 (34)   34,3N;  9,1E  23KM H=16 14 38,9 (NEIS)
                                                                                 34,1N;  9,3E  10KM   16 14 38,0 (CSEM)
                                                                                 34,3N;  9,0E  33KM   16 14 39,2 (WDCB)
MOX E P         16 18 29     1,0 /   32                             MPV  =4,4          D= 16.4 DEG   AZ=187        MOX
     LMR           24,5      T 19,5 AN   0,7 AE   0,9               MLR  =4,1
     LMV           25,2      T 19                     AV   1.5      MLV  =4,4          D= 16.9 DEG   AZ=194        BRG
BRG E P         16 18 35,0   1,2 /   83
    E(S)           21 43
     LH            26        T 14   AN   0,7 AE   1,0 AV   1.4      MLR  =4,3 MLV =4,5
OLL I P         16 18 39,6   1,8 /   58                                                D= 17.2 DEG   AZ=191        CLL
    E              19 27
     LH            25        T 15   AN   1   AE   1   AV   1.5      MLV  =4,5

1978 FEB 08     POLAND, UPPER SILESIA
OLL E SG        18 47 13

1978 FEB 09
CLL E           02 48 28

1978 FEB 09     TONGA ISLANDS REGION                               MB=5,2 ( 4)   22,4S;175,1W  33KM H=04 24 30,0 (NEIS)
OLL E PKP1      04 44 20     1,5 /   37                                               D=150.5 DEG   AZ= 15        CLL
    E APKP         44 32
BRG E PKIKP     04 44 17,2   1,3 /   22                                               D=150.7 DEG   AZ= 17        BRG
    I PKP1         44 23,7
    I PKP2         44 33,2
MOX E PKRKP     04 44 24                                                              D=151.3 DEG   AZ= 13        MOX

1978 FEB 09     BURMA-INDIA BORDER REGION                          MB=4,9 (20)   23,9N; 94,8E 103KM H=05 36 02,6 (NEIS)
BRG E P         05 46 40,6                                                            D= 66.2 DEG   AZ= 81        BRG
    I AP           47 08,2   0,8 /    7

1978 FEB 09     KURILE ISLANDS                                     MB=5,7 (84)   44,4N;149,9E  45KM H=08 02 02,0 (NEIS)
                                                                                 46,0N;148,9E  33KM   08 02 10,9 (WDCB)
OLL I P         08 13 54,6C  1,9 /  400                                               D= 77.8 DEG   AZ= 30        CLL
    I AP           14 06,5                                                            DISTANCE 77 DEG  DEPTH  40 KM
    E S            23 44
     LMR           47        T 16   AN   3   AE   4,5               MLR  =5,9
     LMV           51        T 18                 AV   5            MLV  =5,9
BRG I P         08 13 55,1C  2,0 /  258                                               D= 77.7 DEG   AZ= 31        BRG
    I AP           14 08,0                                                            DISTANCE 78 DEG
    E PP           16 45,6
    E S            23 55,0
     LH            47        T 20   AN   3,3 AE   4,7               MLR  =5,9
     LH            55        T 18                 AV   3,8          MLV  =5,8
MOX I P         08 14 00,0C  1,9 /  276                             MPV  =5,9          D= 78.6 DEG   AZ= 29        MOX
    E              14 12
    E S            23 55
     LMR           47,8      T 20   AN   3,1 AE   5,5               MLR  =6,0
     LMV           52,9      T 17                 AV   3,3          MLV  =5,8

1978 FEB 09     KURILE ISLANDS REGION                              MB=4,6 ( 9)   44,3N;150,1E  33KM H=08 12 42,2 (NEIS)
OLL E AP        08 24 45                                                              D= 77.8 DEG   AZ= 30        CLL
BRG E P         08 24 40,0                                                            D= 77.9 DEG   AZ= 31        BRG

1978 FEB 09     KURILE ISLANDS                                     MB=4,6 ( 4)   43,1N;147,4E  51KM H=14 46 32,6 (NEIS)
                                                                                 42,9N;147,5E  33KM   14 46 24,8 (WDCB)
CLL E(P)        14 58 30                                                              D= 78.0 DEG   AZ= 32        CLL
BRG E P         14 58 29,0                                                            D= 78.0 DEG   AZ= 33        BRG

1978 FEB 09     POLAND, UPPER SILESIA
OLL E SG        14 59 30

1978 FEB 09     CENTRAL YUGOSLAVIA                                 MB=3,8 ( 1)   44,1N; 16,9E  20KM H=16 30 37,9 (NEIS)
                                                                                 44,2N; 17,0E  10KM   16 30 39,2 (CSEM)
                                                                                 44,2N; 16,9E  33KM   16 30 36,6 (WDCB)
BRG E PN        16 32 21,0                                                            D=  7.1 DEG   AZ=162        BRG
    E SN           33 37,6
MOX E PN        16 32 27                                                              D=  7.5 DEG   AZ=149        MOX
    E SN           33 49
    E SG           34 40
OLL E PN        16 32 26                                                              D=  7.7 DEG   AZ=159        CLL
    E              32 44                                                              DISTANCE   7,7DEG
    E(SN)          33 40
    E              34 24
    I SG           34 46,9
     LM            35.4      T 8    AN   1   AE   0.5 AV   1        MLR  =3,9
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1978 FEB 09
CLL E           16 53 51
    E              54 15

1978 FEB 09     FIJI ISLANDS REGION                                MB=5,3 ( 5)   20,1S;176,9W  71KM H=17 40 03,0 (NEIS)
CLL I PKP1      17 59 37,8D  0.9 /   35                                               D=147.9 DEG   AZ= 18        CLL
BRG E PKIKP     17 59 34,5                                                            D=148.1 DEG   AZ= 20        BRG
    I PKP1         59 38,4
MOX E PKP       17 59 40     1,6 /   28                                               D=148.8 DEG   AZ= 16        MOX

1978 FEB 09     SOUTH OF FIJI ISLANDS                              MB=5,1 (12)   22,1S;179,5W 576KM H=19 28 18,6 (NEIS)
CLL I PKP1      19 47 04,0D  0.9 /   48                                               D=149.3 DEG   AZ= 23        CLL
    I PKP2         47 10,8   0.9 /   25                            MC  =4,8
BRG E PKIKP     19 46 59,5                                                            D=149.4 DEG   AZ= 25        BRG
    I PKP1         47 04,6   0.9 /   37
    I PKP2         47 11,8
MOX E PKRKP     19 47 06,5                                                            D=150.2 DEG   AZ= 21        MOX
    E PKP2         47 15

1978 FEB 09     EASTERN TURKEY                                     MB=4,5 (21)   37,2N; 36,8E  38KM H=21 10 36,2 (NEIS)
                                                                                 37,1N; 36,8E  33KM   21 10 31,3 (WDCB)
BRG E P         21 15 21,5                                                            D= 21.3 DEG   AZ=121        BRG
    I              15 29,8
OLL E P         21 15 29                                                              D= 22.0 DEG   AZ=121        CLL
    I              15 37,1
    I              16 12,9
MOX E P         21 15 36                                                              D= 22.4 DEG   AZ=117        MOX
    E              15 42

1978 FEB 09     KERMADEC ISLANDS                                   MB=5,7 (15)   30,7S;177,4W  33KM H=21 35 12,7 (NEIS)
                                                                                 29,9S;176,5W  33KM   21 35 13,4 (WDCB)
CLL E PDIF      21 53 07                                                              D=158.0 DEG   AZ= 25        CLL
    E PKIKP        55 13     2,3 /   75                                               DISTANCE 158 DEG
    E              55 30
    I PKP2         55 48,0   2,5 /  430                            MC  =5,8
    I              56 03,4
    I              56 11,0
    E              57,3
    E              58 23
    E PP           59 35
    E           22 05 12
    E SKKS         06,3
    E PSKS         10,0
    E SS           19,4
     LMR        23 09        T 21   AN  45,5 AE  30,5 AV  45        MLR  =7,2
     LMV           13        T 20   AN  35,5 AE   9   AV  45        MLV  =7,3
BRG E PKIKP     21 55 05,8                                                            D=158.1 DEG   AZ= 27        BRG
    E PKP2         55 49,2                                                            DISTANCE 159 DEG
    I              56 17,2
    I PP           59 34,0
    E SKSP      22 10 07,0
    E SS           19 35,0
     LM         23 05        T 21   AN  66,0 AE  11,8 AV  64,7      MLR  =7,3 MLV =7,4
MOX E           21 55 14,5   2,0 /   43                                               D=159.0 DEG   AZ= 22        MOX
    E PKP2         55 47,5
    E PP           59 25
     LMV        23 13        T 20                 AV  53,6          MLV  =7,4
     LMR           21        T 20           AE  44,5                MLR  =7,2

1978 FEB 09     KERMADEC ISLANDS                                                                                  (UPP)
BRG E(PKP2)     22 07 46,0
OLL I(PKP2)     22 07 46,9
    I              08 08,0

1978 FEB 09     KERMADEC ISLANDS                               /NO MB COMP./  30,8S;177,1W  33KM H=22 06 20     (ISC)
OLL E PKP2      22 26 49                                                              D=158.2 DEG   AZ= 24        CLL
BRG E PKP2      22 26 48,5                                                            D=158.3 DEG   AZ= 27        BRG

OR ANOTHER POSSIBILITY

1978 FEB 09     KYUSHU, JAPAN                                  /NO MB COMP./  32,3N;130  E  33KM H=22 14 41     (ISC)
CLL E P         22 26 49                                                              D= 80  DEG   AZ= 50        CLL

1978 FEB 09     KERMADEC ISLANDS                                NO MB COMP.   30,7S;177,3W  33KM H=22 11 59,0 (NEIS)
CLL E PKP2      22 32 34                                                              D=158.0 DEG   AZ= 24        CLL
    E              35 56
BRG E           22 32 12,0                                                            D=158.2 DEG   AZ= 27        BRG
    I PKP2         32 27,3
    E PP           36 10,0
MOX E PKP2      22 32 28                                                              D=159.0 DEG   AZ= 22        MOX

1978 FEB 09     KERMADEC ISLANDS                                                                                  (UPP)
CLL E           22 38 11

1978 FEB 09     KERMADEC ISLANDS                                                                                  (UPP)
CLL E           22 40 19   TRACES

1978 FEB 09     KERMADEC ISLANDS                                   MB=5,5 ( 5)   30,6S;177,4W  33KM H=22 21 45,6 (NEIS)
                                                                                 30,1S;178,7W  33KM   22 21 43,3 (WDCB)
OLL E PKIKP     22 41 40   D 2,3 /   70                                               D=157.9 DEG   AZ= 24        CLL
    E PKP1         41 54     1,3 /   27                                               DISTANCE 158 DEG
    I PKP2         42 13,8   1,5 /   50                            MC  =5,4
    E PP           46 06
BRG E PKIKP     22 41 40,3                                                            D=158.0 DEG   AZ= 27        BRG
    I PKP2         42 15,0
MOX E PKIKP     22 41 42                                                              D=158.9 DEG   AZ= 22        MOX
    E PKP2         42 18

1978 FEB 09
CLL E           22 56 08   TRACES
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1978 FEB 09     KERMADEC ISLANDS                                            NO MB COMP,   30,7S;177,0W  33KM H=22 43 55,7 (NEIS)
OLL E           23 04 19                                                                          D=158.1 DEG   AZ= 24       CLL
    E PKP2         04 30
BRG E PKP2      23 04 27,5                                                                        D=158.3 DEG   AZ= 26       BRG

1978 FEB 09     KERMADEC ISLANDS                                            MB=4,1 ( 1)   30,7S;177,2W  33KM H=22 54 55,8 (NEIS)
OLL E           23 15 23                                                                          D=158.1 DEG   AZ= 24       CLL
    I PKP2         15 32,1D
BRG E           23 15 24,0  1,6 /   28                                                            D=158.2 DEG   AZ= 27       BRG
    I PKP2         15 32,2
MOX E PKP2      23 15 37                                                                          D=159.0 DEG   AZ= 22       MOX

1978 FEB 09     KERMADEC ISLANDS                                            MB=5,1 ( 1)   30,6S;177,6W  33KM H=22 58 15,6 (NEIS)
OLL E PKP2      23 18 43                                                                          D=157.9 DEG   AZ= 25       CLL
BRG E PKIKP     23 18 09,3                                                                        D=158.0 DEG   AZ= 27       BRG
    E PKP2         18 44,8

1978 FEB 09     GREENLAND SEA                                               /NO MB COMP,/ 72,1N;  2,9E   0KM H=23 12 29,9 (ISC)
OLL E P         23 18 32                                                                          D= 28.1 DEG   AZ=356       CLL
MOX E P         23 18 31                                                                          D= 28.7 DEG   AZ=357       MOX

1978 FEB 09     AUSTRIA                                                     NO MB COMP,   47,2N; 11,4E   4KM H=23 50 56,9 (NEIS)
MOX E SN        23 52 30                                                                          D=  3.5 DEG   AZ=182       MOX
    E SG           52,46
BRG E(PG)       23 52 13,2                                                                        D=  4.0 DEG   AZ=205       BRG
    E(SG)          53 11,8

1978 FEB 10     KERMADEC ISLANDS REGION                                     /MB=5,5 ( 1)/ 30,9S;179,7W  33KM H=23 47 47   (ISC)
OLL E PKP2      00 08 12                                                                          D=157.5 DEG   AZ= 30       CLL
BRG E PKP1      00 07 57,0                                                                        D=157.6 DEG   AZ= 32       BRG
    E PKP2         08 16,6

1978 FEB 10     KERMADEC ISLANDS REGION                                     /MB=4,3 ( 1)/ (30,6S;175,0W 136KM H=00 44 40  ) (ISC)
OLL E           01 05 22                                                                          D=158.5 DEG   AZ= 19       CLL
BRG E PKP2      01 05 14,0                                                                        D=158.7 DEG   AZ= 22       BRG

1978 FEB 10     KERMADEC ISLANDS                                            MB=5,6 (15)   30,7S;177,5W  33KM H=00 56 21,8 (NEIS)
                                                                                          30,4S;177,3W  33KM   00 56 23,0 (WDCA)
OLL I PKIKP     01 16 16,0D 2,4 /  105                                                            D=158.0 DEG   AZ= 25       CLL
    I PKP2         16 49,1D 2,4 /  230                                      MC   =5,8             DISTANCE 157 DEG
    E PP           20 22
      LM        02 38        T 17   AN   1   AE   1,5 AV   3                MLH  =5,9 MLV  =6,2
BRG E PKIKP     01 16 15,4   2,0 /   88                                                           D=158.1 DEG   AZ= 27       BRG
    I PKP2         16 50,0                                                                        DISTANCE 158 DEG
    E PP           20 27
    E SS           40 45
      LM           41        T 18   AN   2,2 AE   3,5 AV   3,5              MLH  =6.2 MLV  =6,2
MOX E PKIKP     01 16 17     2,0 /   68                                                           D=158.9 DEG   AZ= 22       MOX
    E PKAKP        16 54
    E PP           20.32     2,0 /   60                                     MPPV =5,4
    E              20 48
      LMH       02 43        T 17   AN   1,5 AE   2,2                       MLH  =6.0
      LMV          51        T 16,5                        AV   4,4         MLV  =6,4

1978 FEB 10     KERMADEC ISLANDS                                                                                             (UPP)
BRG E           04 34 27,0
    E(PKP2)        34 49,9
OLL E(PKP2)     04 34 47    TRACES

1978 FEB 10     KERMADEC ISLANDS                                            MB=4,9 ( 4)   30,4S;177,4W  33KM H=05 35 42,2 (NEIS)
                                                                                          31,1S;174,4E  33KM   05 35 46,8 (WDCA)
OLL E PKP2      05 56 10                                                                          D=157.7 DEG   AZ= 24       CLL
BRG E PKIKP     05 55 40,0                                                                        D=157.9 DEG   AZ= 27       BRG
    E PKP2         56 12
MOX E(PKP2)     05 56 16                                                                          D=158.7 DEG   AZ= 22       MOX
      LMH       07 21        T 16,5 AN   0,9 AE   0,4                       MLH  =5,5
      LMV          22        T 17                          AV   0,7         MLV  =5,5

1978 FEB 10     CENTRAL ITALY                                               NO MB COMP,   43,7N; 13,1E  33KM H=07 19 38,9 (NEIS)
                                                                                          43,7N; 13,1E  10KM   07 19 36,6 (CSEM)
MOX E PN        07 21 18,5                                                                        D=  7.0 DEG   AZ=171       MOX
    E SN           22 35
BRG I PN        07 21 22,0                                                                        D=  7.2 DEG   AZ=185       BRG
    I SN           22 38,5
OLL I PN        07 21 28,0                                                                        D=  7.8 DEG   AZ=179       CLL
    E SN           22 49                                                                          DISTANCE    7,7DEG
    E              23 21
    E SG           23 45

1978 FEB 10     KERMADEC ISLANDS                                            MB=4,7 ( 1)   30,4S;177,1W  33KM H=09 17 39,6 (NEIS)
BRG I PKP2      09 38 18,1                                                                        D=157.9 DEG   AZ= 26       BRG

1978 FEB 10     CRETE                                                       MB=4,0 ( 4)   35,6N; 26,8E  95KM H=15 53 57,8 (NEIS)
                                                                                          35,9N; 26,8E  75KM   15 53 59,9 (CSEM)
BRG E P         15 57 58,6                                                                        D= 17.9 DEG   AZ=144       BRG
    E              58 24,0
OLL E P         15 58 09                                                                          D= 18.6 DEG   AZ=142       CLL
MOX E P         15 58 11                                                                          D= 18.8 DEG   AZ=138       MOX

1978 FEB 10     KURILE ISLANDS                                              MB=4,7 (26)   47,4N;152,5E 144KM H=15 58 03,8 (NEIS)
                                                                                          47,2N;153,8E  33KM   15 57 47,8 (WDCA)
OLL I P         16 09 33,6  0,8 /   28                                                            D= 75.7 DEG   AZ= 27       CLL
BRG I P         16 09 33,8                                                                        D= 75.8 DEG   AZ= 28       BRG
MOX E P         16 09 39                                                                          D= 76.7 DEG   AZ= 26       MOX

1978 FEB 10     NEPAL                                                       MB=5,2 (42)   28,1N; 84,6E  33KM H=17 29 52,8 (NEIS)
                                                                                          28,4N; 84,7E  33KM   17 29 49,8 (WDCA)
BRG I P         17 39 36,0C 1,2 /   26                                                            D= 56.8 DEG   AZ= 85       BRG
OLL E P         17 39 36                                                                          D= 57.3 DEG   AZ= 85       CLL
    E              43 21
MOX E P         17 39 46    1,2 /   20                                      MPV  =5,1             D= 58.3 DEG   AZ= 83       MOX
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1978 FEB 10
BRG E P         18 38 02,2

1978 FEB 10     KERMADEC ISLANDS                                            MB=5,7 (23)   30,1S;177,8W  33KM H=19 32 37,6 (NEIS)
                                                                                          30,0S;178,5W  33KM   19 32 39,0 (WDCA)
OLL I PKIKP     19 52 31,8                                                                        D=157.5 DEG   AZ= 24       CLL
    E PKP2         53 03                                                                          DISTANCE 156 DEG
    E(PKS)         56 12
    E              58 33
    E SKKS      20 03.4
    E(PKKS)        04,4
    E PSKS         07,1
    E(PS)          08,0
    E SS           16,7
      L         21 02
      LM           15        T 17   AN   2,3 AE   2   AV   4,5              MLH  =6,1 MLV  =6,3
      FINAL     22
BRG E PKIKP     19 52 32,0                                                                        D=157.6 DEG   AZ= 26       BRG
    I PKP2         53 04,3                                                                        DISTANCE 158 DEG
    E SKKS      20 03 44,8
    E SKSP         07 16
    E SS           16 52,8
      LMH          22        T 17   AN   2,1 AE   6,1                       MLH  =6,4
      LMV          30        T 17                          AV   5,3         MLV  =6,4
MOX E PKIKP     19 52 33     2,2 /  109                                                           D=158.4 DEG   AZ= 21       MOX
    E PKP2         53 06
    E PP           56 44     T  8                          AV   1,6         MPPV =6,2
    E PCPPKP    20 00 48
    E SKKS         03 40
    E SCSPKP       08 00
    E SS           16 44
    E SSS          22 52
      LMH       21 18        T 17   AN   3,3 AE   4,9                       MLH  =6,4
      LMV          18        T 17                          AV   6,0         MLV  =6,5

1978 FEB 10     PAKISTAN                                                    MB=5,1 (57)   25,3N; 62,4E  33KM H=20 50 47,2 (NEIS)
                                                                                          25,5N; 62,4E  33KM   20 50 44,9 (WDCA)
BRG E P         20 59 00,7                                                                        D= 44.8 DEG   AZ=106       BRG
    I AP           59 11,0
OLL I P         20 59 06,5C 1,1 /   65                                                            D= 45.5 DEG   AZ=106       CLL
    I              59 14,7
    I AP           59 17,3
    E           21 00 08
MOX E P         20 59 11,5  1,8 /   41                                      MPV  =5,0             D= 46.2 DEG   AZ=104       MOX
    E              59 22,5

1978 FEB 11
OLL E PKP       00 11 23    1,3 /   22
BRG E PKP       00 11 23,6
MOX E PKP       00 11 27,5

1978 FEB 11     KERMADEC ISLANDS                                            MB=5,5 (14)   30,4S;177,1W  33KM H=00 05 23,8 (NEIS)
                                                                                          29,6S;178,6W  33KM   00 05 27,9 (WDCA)
OLL E(PKIKP)    00 25 25                                                                          D=157.8 DEG   AZ= 24       CLL
    E              25 34
    E              25 45
    I PKP2         25 49,7  1,6 /   56
    E              29 16
    E              30 00
    E              33 29
    E SKKS         36,2
    E(PKKS)        37,3
    E              38,7
    E              44,1
    E SS           49,4
      LM        01 40        T 20   AN   7   AE   3,5 AV  10,5              MLH  =6,4 MLV  =6,7
      FINAL     03
BRG E PKIKP     00 25 19,4                                                                        D=157.9 DEG   AZ= 26       BRG
    I PKP2         25 51,3                                                                        DISTANCE 158 DEG
    E PP           29 38
    E SKKS         36 40
    E SS           49 36
      LM        01 39        T 20   AN   9,2 AE   8,5 AV  10.2              MLH  =6,6 MLV  =6,6
MOX E PKAKP     00 25 34                                                                          D=158.7 DEG   AZ= 21       MOX
    E PKP2         25 54
    E PP           29 35
    E              30 15
    E SKSP         40 00
    E SS           49 35
      LMH          51        T 18             AE  10,1                      MLH  =6,6
      LMV          51        T 18                          AV   8.7         MLV  =6,6

1978 FEB 11     KERMADEC ISLANDS                                            MB=5,2 ( 3)   30,7S;177,1W  33KM H=00 16 18,9 (NEIS)
OLL E           00 36 44                                                                          D=158.1 DEG   AZ= 24       CLL
BRG E PKIKP     00 36 15,6                                                                        D=158.2 DEG   AZ= 26       BRG
    E PKP2         36 47,4
MOX E PKP2      00 36 51,5                                                                        D=159.0 DEG   AZ= 21       MOX

1978 FEB 11     KERMADEC ISLANDS REGION                                     /NO MB COMP,/ 30,3S;176,2W  33KM H=01 04 54   (ISC)
OLL E           01 25 37     0,9 /   14                                                           D=158.1 DEG   AZ= 22       CLL
BRG E PKIKP     01 25 05,2                                                                        D=158.3 DEG   AZ= 24       BRG
    I PKP2         25 38,5
MOX E PKP2      01 25 42                                                                          D=159.0 DEG   AZ= 19       MOX

1978 FEB 11     CENTRAL MID-ATLANTIC RIDGE                                  MB=5,1 (20)    5,7N; 32,9W  33KM H=01 26 26,7 (NEIS)
                                                                                           5,9N; 32,8W  33KM   01 26 27,7 (WDCA)
MOX E P         01 36 19,5  1,8 /   34                                      MPV  =5,1             D= 58.1 DEG   AZ=235       MOX
OLL E           01 36 34                                                                          D= 59.2 DEG   AZ=236       CLL
    E              37 20
BRG E P         01 36 28,5  1,6 /   28                                                            D= 59.5 DEG   AZ=237       BRG
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1978 FEB 11 CENTRAL ITALY — NO MB COMP. — 43,8N; 13,1E 33KM H=01 42 02,6 (NEIS); 43,9N; 13,2E 10KM 01 42 03,6 (CSEM)

MOX	E	PN	01 43 45							D= 6,9 DEG	AZ=171 MOX
	E		45 02								
	E	(SN)	45 11,5								
BRG	E	PN	01 43 46,6							D= 7,1 DEG	AZ=185 BRG
	I	SN	45 03,9								
CLL	E	PG	01 44 29							D= 7,5 DEG	AZ=179 CLL
	E	SN	45 15							DISTANCE 7,5DEG	
	E	SG	46 13								

1978 FEB 11 KERMADEC ISLANDS — MB=5,7 (5) — 30,4S;177,5W 33KM H=04 12 33,6 (NEIS); 29,5S;175,2W 33KM 04 12 33,4 (WDCB)

CLL	E		04 32 46							D=157,7 DEG	AZ= 25 CLL
	E	PKP2	32 59								
	E		33 13								
BRG	E	PKIKP	04 32 38,6							D=157,8 DEG	AZ= 27 BRG
	I	PKP2	33 13,0								
MOX	E	PKP2	04 33 11							D=158,7 DEG	AZ= 22 MOX
	E		33 17								

1978 FEB 11 KERMADEC ISLANDS REGION — MB=5,2 (22) — 30,7S;176,8W 33KM H=05 03 35,9 (NEIS)

BRG	E	PKP2	05 24 05,4							D=158,3 DEG	AZ= 26 BRG

1978 FEB 11 KERMADEC ISLANDS — NO MB COMP. — 30,4S;177,0W 33KM H=05 55 18,9 (NEIS)

CLL	E	PKP2	06 15 51 TRACES							D=157,8 DEG	AZ= 23 CLL
BRG	I	PKP2	06 15 47,4							D=158,0 DEG	AZ= 26 BRG

1978 FEB 11 NORTH OF SEVERNAYA ZEMLYA — MB=4,6 (12) — 84,3N;107,8E 33KM H=06 24 23,3 (NEIS); 84,1N;107,1E 33KM 06 24 19,2 (WDCB)

CLL	E	XP	06 32 08							D= 39,7 DEG	AZ= 9 CLL
MOX	E	P	06 32 01,5 1,6 / 22							D= 40,5 DEG	AZ= 9 MOX
										MPV =4,7	

1978 FEB 11 AFGHANISTAN-USSR BORDER REGION — MB=5,0 (53) — 36,5N; 71,5E 122KM H=07 17 07,8 (NEIS); 36,4N; 71,6E 100KM 07 17 05,6 (WDCB)

BRG	I	P	07 24 57,0C 1,6 / 76							D= 42,9 DEG	AZ= 87 BRG
	I		26 45,2								
CLL	I	P	07 25 01,1C 1,7 / 60							D= 43,5 DEG	AZ= 86 CLL
	E		26 32								
MOX	E	P	07 25 09 C 1,5 / 50							D= 44,4 DEG	AZ= 85 MOX
										MPV =5,0	

1978 FEB 11 KERMADEC ISLANDS — MB=5,1 (3) — 30,4S;177,3W 33KM H=11 52 13,6 (NEIS)

CLL	E(PKP2)		12 12 52							D=157,7 DEG	AZ= 24 CLL
BRG	E	PKIKP	12 12 10,0							D=157,9 DEG	AZ= 27 BRG
	E	PKP2	12 46,8								

1978 FEB 11 NEAR ISLANDS, ALEUTIAN ISLANDS — MB=5,2 (67) — 53,1N;171,0E 33KM H=12 10 27,6 (NEIS); 52,9N;170,7E 33KM 12 10 27,6 (WDCB)

CLL	I	P	12 22 03,0C 1,4 / 28							D= 74,3 DEG	AZ= 14 CLL
BRG	I	P	12 22 04,8C 1,2 / 33							D= 74,6 DEG	AZ= 14 BRG
MOX	E	P	12 22 08,5 1,1 / 20							D= 75,2 DEG	AZ= 13 MOX
										MPV =5,0	

1978 FEB 11 EASTERN GULF OF ADEN — MB=5,3 (51) — 13,2N; 50,9E 33KM H=12 54 21,6 (NEIS); 13,1N; 51,1E 33KM 12 54 15,9 (WDCB)

BRG	I	P	13 03 00,0C 2,2 / 97												D= 48,0 DEG	AZ=128	BRG
	E	PP	04 55,8												DISTANCE 49 DEG		
	E	S	10 00,0														
	E	SS	13 50,0														
	LM		28	T 17	AN	1,5	AE	1,3	AV	1,5	MLH =5,2	MLV =5,1					
CLL	E	P	13 03 05 2,5 / 280												D= 48,8 DEG	AZ=127	CLL
	E		05 16												DISTANCE 50 DEG		
	E	S	10 12														
	E	SS	14,1														
	LM		26	T 18	AN	1	AE	1	AV	1	MLH =5,0	MLV =4,9					
MOX	E	P	13 03 08 2,2 / 184								MPV =5,7				D= 49,1 DEG	AZ=125	MOX
	E	PP	05 05 2,2 / 109								MPPV =5,4						
	E	S	10 14														
	E	SS	14 00														
	LMH		29	T 15	AN	1,0	AE	1,0			MLH =5,1						
	LMV		29	T 14					AV	0,7	MLV =4,9						

1978 FEB 11 EASTERN GULF OF ADEN — /MB=4,4 (1)/ — 12,9N; 51,2E 33KM H=13 24 01 (ISC)

BRG	E	P	13 32 44,0							D= 48,4 DEG	AZ=128 BRG
CLL	E	P	13 32 49							D= 49,2 DEG	AZ=127 CLL
MOX	E	P	13 32 51							D= 49,5 DEG	AZ=125 MOX

1978 FEB 11 SOUTH OF PANAMA — MB=4,8 (14) — 7,5N; 82,3W 33KM H=13 58 11,5 (NEIS)

MOX	E	P	14 10 58												D= 86,7 DEG	AZ=278	MOX
	E	S	21 34														
	LMV		45,3	T 20					AV	0,5	MLV =4,9						
	LMH		45,6	T 20	AN	0,5	AE	0,9			MLH =5,2						
CLL	E(P)		14 11 02														
	LM		48												D= 87,5 DEG	AZ=279	CLL
BRG	E	P	14 11 08,0												D= 88,2 DEG	AZ=280	BRG

1978 FEB 11 FRANCE — NO MB COMP. — 46,3N; 3,3E 17KM H=14 13 13,5 (CSEM); 46,3N; 3,3E 33KM 14 13 12,8 (NEIS)

MOX	E	SG	14 16 56							D= 7,0 DEG	AZ=235 MOX
CLL	E	SG	14 17 28							D= 8,1 DEG	AZ=236 CLL
BRG	E(PN)		14 15 14,5							D= 8,4 DEG	AZ=241 BRG
	E	SG	17 46,6								

1978 FEB 11 SOUTHERN IRAN — MB=5,2 (74) — 28,2N; 55,4E 50KM H=21 40 13,1 (NEIS); 28,3N; 55,4E 68KM 21 40 17,6 (CSEM); 27,9N; 55,5E 33KM 21 40 09,3 (WDCB)

BRG	I	P	21 47 31,6C 1,2 / 47												D= 38,5 DEG	AZ=110	BRG
CLL	I	P	21 47 37,8C 1,8 / 130												D= 39,2 DEG	AZ=110	CLL
	I		47 47,6														
	L		22 04														
MOX	E	P	21 47 43 1,4 / 56												D= 39,8 DEG	AZ=107	MOX
	E	S	53 52								MPV =5,2						
	LMH		22 04,7	T 19	AN	0,6	AE	0,4			MLH =4,5						
	LMV		07,7	T 17					AV	0,4	MLV =4,4						

1978 FEB 11 EAST PAPUA NEW GUINEA REGION — MB=5,3 (27) — 6,2S;147,6E 89KM H=21 57 45,6 (NEIS); 6,1S;147,0E 33KM 21 57 40,5 (WDCB)

BRG	I	PKP	22 16 29,9 1,0 / 10							D=121,2 DEG	AZ= 57 BRG
CLL	I	PKP	22 16 30,3D							D=121,4 DEG	AZ= 56 CLL
MOX	E	PKP	22 16 33							D=122,5 DEG	AZ= 55 MOX

1978 FEB 12 TIMOR — MB=5,8 (49) — 8,7S;124,0E 106KM H=03 34 29,1 (NEIS); 8,4S;123,9E 110KM 03 34 31,0 (WDCB)

BRG	E	PKP	03 52 49,4							D=109,3 DEG	AZ= 80 BRG
	E		53 21,6								
	E	PKKP	04 04 08,4							D=109,8 DEG	AZ= 79 CLL
CLL	E	(PKP)	03 52 54								
	E	PP	53 28							D=110,8 DEG	AZ= 78 MOX
MOX	E	PKP	03 52 50								
	E	PP	53 32								
	LMH		04 32								
	LMV		32								

1978 FEB 12 WESTERN AUSTRIA — NO MB COMP. — 47,2N; 11,4E 10KM H=06 21 23,5 (NEIS); 47,3N; 11,5E 10KM 06 21 25,2 (CSEM)

MOX	E	PN	06 22 15							D= 3,5 DEG	AZ=182 MOX
	E	PG	22 29,5								
	E	SN	22 57							D= 4,0 DEG	AZ=205 BRG
	E	SG	23 12								
BRG	E(PN)		06 22 18,8							D= 4,2 DEG	AZ=195 CLL
	I		23 09,2								
	E	SG	23 28,5								
CLL	E	SG	06 23 38								

1978 FEB 12 SOUTHERN ALASKA — MB=5,4 (77) — 59,4N;152,6W 72KM H=08 56 38,9 (NEIS); 59,1N;152,6W 75KM 08 56 37,3 (WDCB)

CLL	I	P	09 07 37,1C 1,4 / 91							D= 69,0 DEG	AZ=352 CLL
BRG	I	P	09 07 40,9C 1,2 / 111							D= 69,5 DEG	AZ=353 BRG
MOX	I	P	09 07 41,5C 1,1 / 141							D= 69,6 DEG	AZ=351 MOX
										MPV =5,8	

1978 FEB 12
CLL E 14 30 21 TRACES

1978 FEB 12 FRANCE — /NO MB COMP./ — 47,7N; 1,7W 6KM H=18 34 03 (ISC)
CLL E 18 38 50 TRACES — D= 10,2 DEG AZ=255 CLL

1978 FEB 12 KERMADEC ISLANDS — MB=5,3 (7) — 30,8S;177,6W 91KM H=19 18 18,9 (NEIS); 31,3S;176,8W 33KM 19 18 06,1 (WDCB)

CLL	E	PKIKP	19 38 04							D=158,0 DEG	AZ= 25 CLL
	I	PKP2	38 39,6D 1,8 / 46								
	E		38 51								
	E	PP	42 23								
	LM		20 57								
BRG	E	PKIKP	19 38 06,0							D=158,2 DEG	AZ= 28 BRG
	I	PKP2	38 40,4								
	I		38 52,4								
	E	PP	42 19,8								
MOX	E	PKP2	19 38 44							D=159,0 DEG	AZ= 23 MOX
	LMV		21 05	T 17					AV	0,9							
	LMH		05	T 18			AE	0,8									

1978 FEB 13 SOUTHERN ALASKA — MB=4,9 (17) — 59,9N;153,8W 131KM H=01 16 54,3 (NEIS); 59,9N;153,7W 33KM 01 16 43,8 (WDCB)

CLL	E	P	01 27 45 TRACES							D= 68,6 DEG	AZ=353 CLL
BRG	E	P	01 27 48,6 1,0 / 17							D= 69,1 DEG	AZ=353 BRG
MOX	E	P	01 27 49							D= 69,2 DEG	AZ=352 MOX
	E	AP	28 20								

1978 FEB 13 KERMADEC ISLANDS — MB=5,3 (7) — 30,2S;177,1W 33KM H=06 15 15,4 (NEIS); 29,1S;175,5W 33KM 06 15 16,3 (WDCB)

CLL	E	PKIKP	06 35 09							D=157,6 DEG	AZ= 23 CLL
	E	PKP2	35 41								
	E		35 51 1,3 / 28							D=158,6 DEG	AZ= 21 MOX
MOX	E	PKP2	06 35 45								
	LMH		08 01	T 17	AN	0,2	AE	0,4		MLH =5,3	
	LMV		01	T 16					AV	0,5	MLV =5,4						

1978 FEB 13
CLL I P 07 36 09,8 1,0 / 14
BRG E P 07 36 10,0

1978 FEB 13 ALBANIA — NO MB COMP. — 40,8N; 19,9E 33KM H=07 35 45,2 (NEIS); 41,8N; 20,7E 10KM 07 35 53,6 (CSEM)

BRG	E	P	07 38 09,1							D= 10,9 DEG	AZ=155 BRG
CLL	E	P	07 38 30							D= 11,5 DEG	AZ=153 CLL

1978 FEB 13
CLL I P 09 08 11,6 0,9 / 14
BRG I P 09 08 12,0 0,8 / 17

1978 FEB 13 NEAR EAST COAST OF KAMCHATKA — MB=5,3 (74) — 56,1N;162,8E 33KM H=13 02 46,1 (NEIS); 56,5N;161,9E 33KM 13 02 44,6 (WDCB)

CLL	I	P	13 13 55,6C 1,5 / 73							D= 70,1 DEG	AZ= 17 CLL
	LM		45	T 17	AN	1,5	AE	1,5	AV	0,5	MLH =5,5						
BRG	I	P	13 13 57,7C 1,4 / 41							D= 70,3 DEG	AZ= 18 BRG
	E	S	23 09														
	LM		45	T 16	AN	0,0	AE	2,4			MLH =5,5						
	LM		49	T 16					AV	1,4	MLV =5,4						
MOX	E	P	13 14 02 1,4 / 37								MPV =5,2				D= 71,0 DEG	AZ= 17 MOX	
	LMH		45,1	T 16	AN	0,9	AE	0,9			MLH =5,3						
	LMV		51	T 12					AV	0,8	MLV =5,2						

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1978 FEB 13     KERMADEC ISLANDS REGION                  MB=5,3 (12)   30,0S;179,3W 331KM H=17 08 59,3 (NEIS)
                                                                       30,6S;179,2W  33KM   17 08 22,9 (WDCB)
                                                                             D=156,8 DEG   AZ= 28       CLL
                                                                             DISTANCE 157 DEG

CLL I PKIKP     17 28 15,5
    I PKP1         28 26,5  1,2 /   15
    I PKP2         28 47,6C 1,3 /   90
    E(PP)          32 21
BRG E PKIKP     17 28 15,6                                                   D=156,9 DEG   AZ= 30       BRG
    E PKP1         28 28,4
    I PKP2         28 48,3
    E PP           32 24,6
MOX I PKP2      17 28 52,0C 1,3 /   52                                       D=157,8 DEG   AZ= 26       MOX

1978 FEB 13     OFF EAST COAST OF KAMCHATKA              MB=5,0 (40)   52,6N;160,2E  46KM H=18 19 08,3 (NEIS)
                                                                       52,8N;159,2E  80KM   18 19 15,1 (WDCB)
                                                                             D= 72,8 DEG   AZ= 20       CLL
CLL I P         18 30 33,7D 1,2 /   24                                       D= 73,0 DEG   AZ= 21       BRG
BRG E P         18 30 35,5  1,0 /   11                                       D= 73,8 DEG   AZ= 19       MOX
MOX E P         18 30 39                                                                  DEPTH  48 KM
    E AP           30 52

1978 FEB 13
BRG E P         18 39 54,2

1978 FEB 13     KERMADEC ISLANDS                        /MB=4,7 ( 2)/  30,4S;178,8W 213KM H=19 25 19     (ISC)
CLL E PKP2      19 45 19   TRACES                                            D=157,3 DEG   AZ= 27       CLL
BRG E PKP2      19 45 20,0                                                   D=157,4 DEG   AZ= 30       BRG

1978 FEB 14
CLL E           02 42 21

1978 FEB 14     SAMOA ISLANDS REGION                     MB=5,2 (13)   15,8S;172,5W  33KM H=02 24 32,0 (NEIS)
                                                                       14,5S;172,2W  33KM   02 24 37,9 (WDCB)
                                                                             D=144,3 DEG   AZ=  9       CLL
CLL E PKP       02 44 06                                                     D=144,6 DEG   AZ= 11       BRG
BRG E PKP       02 44 06,8                                                   D=145,1 DEG   AZ=  7       MOX
MOX E PKP       02 44 07    1,2 /   20
     LMH        03 51
     LMV           56

1978 FEB 14     KERMADEC ISLANDS                         MB=4,8 ( 2)   29,9S;177,3W  55KM H=11 18 59,7 (NEIS)
CLL E           11 39 31   TRACES                                            D=157,3 DEG   AZ= 24       CLL
BRG E PKP2      11 39 31,9                                                   D=157,4 DEG   AZ= 26       BRG

1978 FEB 14
BRG E(PKP2)     14 19 48,0

1978 FEB 14
CLL E P         21 44 19   TRACES

1978 FEB 14     VANUATU ISLANDS                          MB=5,4 (23)   15,6S;168,1E  33KM H=23 16 48,0 (NEIS)
BRG E PKP       23 36 13,6                                                   D=139,1 DEG   AZ= 40       BRG

1978 FEB 15     SOUTH OF FIJI ISLANDS                    MB=4,8 ( 3)   22,5S;176,1W  42KM H=23 50 04,0 (NEIS)
CLL E PKP1      00 09 51                                                     D=150,4 DEG   AZ= 17       CLL
BRG I PKP1      00 09 51,6  0,8 /   17                                       D=150,6 DEG   AZ= 19       BRG
    E PKP2         10 00,5

1978 FEB 15     LEEWARD ISLANDS                          MB=4,9 (11)   19,0N; 62,8W  33KM H=02 44 00,7 (NEIS)
CLL E(P)        02 54 56                                                     D= 66,6 DEG   AZ=271       CLL
BRG E P         02 54 54,2  1,5 /   17                                       D= 67,2 DEG   AZ=272       BRG

1978 FEB 15     EASTERN TURKEY                           MB=4,8 (34)   39,7N; 39,8E  33KM H=03 17 37,3 (NEIS)
                                                                       39,8N; 39,7E  10KM   03 17 37,6 (CSEM)
                                                                       39,8N; 39,9E  33KM   03 17 38,4 (WDCB)
BRG E P         03 22 22,1                                                   D= 21,2 DEG   AZ=112       BRG
CLL E P         03 22 29  D 1,8 /   51                                       D= 21,9 DEG   AZ=111       CLL
     LM            31
MOX E P         03 22 37                                                     D= 22,5 DEG   AZ=108       MOX
    E              22 44,5
     LMH           32,4     T 18,5 AN   0,8 AE   0,8          MLH  =4,3
     LMV           34,2     T 15                  AV   0,7    MLV  =4,3

1978 FEB 15     EASTERN TURKEY                           MB=4,6 (10)   39,7N; 39,8E  33KM H=03 27 41,3 (NEIS)
                                                                       40,3N; 39,3E  10KM   03 27 47,8 (CSEM)
                                                                       40,1N; 40,0E  33KM   03 27 40,5 (WDCB)
BRG E P         03 32 30,1                                                   D= 21,2 DEG   AZ=112       BRG
CLL E P         03 32 33    1,6 /   24                                       D= 21,9 DEG   AZ=111       CLL
    E              32 41
MOX E           03 33 00                                                     D= 22,5 DEG   AZ=108       MOX

1978 FEB 15     KERMADEC ISLANDS REGION                  MB=4,3 ( 1)   29,7S;176,9W  35KM H=05 17 35,4 (NEIS)
CLL E           05 38 12   TRACES                                            D=157,2 DEG   AZ= 23       CLL
BRG E PKP2      05 38 14,1                                                   D=157,3 DEG   AZ= 25       BRG

1978 FEB 15     EASTERN TURKEY                           MB=4,5 (14)   39,7N; 39,7E  20KM H=05 47 50,9 (NEIS)
                                                                       39,6N; 39,4E  10KM   05 47 52,2 (CSEM)
                                                                       39,6N; 39,7E  33KM   05 47 46,9 (WDCB)
BRG E P         05 52 36,7                                                   D= 21,2 DEG   AZ=112       BRG
CLL E P         05 52 41                                                     D= 21,9 DEG   AZ=112       CLL
    E              52 48
MOX E P         05 52 50                                                     D= 22,5 DEG   AZ=108       MOX

1978 FEB 15     ANDAMAN ISLANDS REGION                   MB=4,9 (30)   12,8N; 93,1E  33KM H=08 19 21,7 (NEIS)
                                                                       12,7N; 93,2E  33KM   08 19 21,2 (WDCB)
BRG E P         08 30 52,3  1,1 /   20                                       D= 73,3 DEG   AZ= 90       BRG
CLL E P         08 30 56  D                                                  D= 73,9 DEG   AZ= 90       CLL
MOX E P         08 31 01                                                     D= 74,8 DEG   AZ= 88       MOX
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1978 FEB 15     TONGA ISLANDS                            MB=4,8 ( 2)   17,3S;173,2W  33KM H=15 46 08,6 (NEIS)
CLL E PKP       16 05 47    1,1 /   31                                       D=145,7 DEG   AZ= 11       CLL
    E APKP         05 58
BRG I PKP       16 05 48,1D 1,3 /   18                                       D=146,0 DEG   AZ= 12       BRG
    I              06 06,8
MOX E PKP       16 05 48    1,9 /   53                                       D=146,5 DEG   AZ=  8       MOX

1978 FEB 15     AFGHANISTAN-USSR BORDER REGION           MB=4,8 (35)   37,3N; 71,9E 127KM H=18 00 08,0 (NEIS)
                                                                       37,3N; 71,8E 120KM   18 00 07,5 (WDCB)
CLL I P         18 07 58,6C 0,8 /   15                                       D= 43,3 DEG   AZ= 85       CLL
MOX E P         18 08 07                                                     D= 44,2 DEG   AZ= 83       MOX

1978 FEB 15     GREECE                                  /NO MB COMP./  38,5N; 22,5E   0KM H=19 08 19,5  (ISC)
BRG E           19 12 08,1                                                   D= 13,8 DEG   AZ=151       BRG

1978 FEB 15     SOUTH OF FIJI ISLANDS                    MB=4,1 ( 1)   22,3S;176,2W  64KM H=20 52 40,9 (NEIS)
CLL E PKP1      21 12 29    1,1 /   28                                       D=150,2 DEG   AZ= 17       CLL
BRG E PKP1      21 12 28,6  1,3 /   25                                       D=150,4 DEG   AZ= 19       BRG
    I PKP2         12 37,4
MOX E PKHKP     21 12 27                                                     D=151,1 DEG   AZ= 15       MOX

1978 FEB 16     CENTRAL YUGOSLAVIA                       MB=5,1 (10)   43,9N; 16,9E  33KM H=00 26 33,7 (NEIS)
                                                                       43,9N; 17,0E   6KM   00 26 33,1 (CSEM)
BRG E PN        00 28 21,5                                                   D=  7,3 DEG   AZ=163       BRG
    I SN           29 41,5
    E SG           30 28,8
MOX E PN        00 28 25                                                     D=  7,6 DEG   AZ=150       MOX
    E SG           30 23
CLL E           00 28 44                                                     D=  7,9 DEG   AZ=159       CLL
    E(SN)          29 58
    E              30 17
    E              30 46
    E SG           30 53
    E              31 07

1978 FEB 16     NEAR WEST COAST OF COLOMBIA              MB=5,5 (57)   5,5N; 77,7W  24KM H=03 47 24,6 (NEIS)
                                                                       3,6N; 77,6W  33KM   03 47 21,5 (WDCB)
MOX E P         04 00 01    1,1 /   32                    MPV  =5,5      D= 85,4 DEG   AZ=273       MOX
    E S            10 35
    E SS           16 45
      LMV          35,2     T 20                 AV   0,5   MLV  =4,9
    E LMH          35 18    T 20            AE   0,7       MLH  =5,1
CLL I P         04 00 05,6D 1,3 /   46                                       D= 86,2 DEG   AZ=274       CLL
    I              00 11,2
    E S            10 54
BRG I P         04 00 08,8D 1,3 /   54                                       D= 86,8 DEG   AZ=275       BRG
    I              00 14,8

1978 FEB 16     KERMADEC ISLANDS REGION                  MB=5,1 ( 2)   31,1S;177,0W  33KM H=07 13 59,4 (NEIS)
CLL E PKP2      07 34 28   TRACES                                            D=158,5 DEG   AZ= 24       CLL
BRG E PKP2      07 34 29,0                                                   D=158,6 DEG   AZ= 27       BRG

1978 FEB 16     OFF COAST OF OREGON                      MB=5,0 (12)   42,7N;125,9W  15KM H=12 00 21,2 (NEIS)
                                                                       42,6N;126,2W  33KM   12 00 23,2 (WDCB)
CLL E P         12 12 31                                                     D= 79,8 DEG   AZ=331       CLL
MOX    LMH      12 49,0     T 18   AN   0,8 AE   0,5          MLH  =5,2     D= 79,9 DEG   AZ=330       MOX
       LMV         50,2     T 18                  AV   0,6    MLV  =5,0
BRG E P         12 12 35,0                                                   D= 80,5 DEG   AZ=331       BRG

1978 FEB 16     CARIBBEAN SEA                            MB=5,2 ( 7)   17,8N; 81,8W  33KM H=14 55 30,7 (NEIS)
MOX E P         15 07 30                                                     D= 78,6 DEG   AZ=284       MOX
CLL E P         15 07 34                                                     D= 79,3 DEG   AZ=285       CLL
BRG E P         15 07 38,3  2,0 /   66                                       D= 79,9 DEG   AZ=286       BRG
    E              08 26,8

1978 FEB 16
CLL E           17 22 19
BRG E(P)        17 22 21,8

1978 FEB 16
CLL E           19 19 51
    E              19 56
BRG E(P)        19 19 51,8

1978 FEB 17     GDR, VOGTLAND                                                50,25N;12,33E              (JENA)
MOX I PG        00 37 12,0                                                   D=   67 KM    AZ=131       MOX
    I SG           37 20,5                                                   DISTANCE   ,6DEG
CLL I PG        00 37 22,1                                                   D=  127 KM    AZ=202       CLL
    I              37 24,4
    I SG           37 36,1
BRG I PG        00 37 23,2                                                   D=  134 KM    AZ=239       BRG
    I SG           37 39,0

1978 FEB 17     EASTER ISLAND CORDILLERA                 MB=5,8 (19)   55,5S;125,2W  33KM H=01 40 02,9 (NEIS)
                                                                       54,9S;127,9W  33KM   01 39 57,1 (WDCB)
MOX E PKIKP     01 59 53                                                     D=153,9 DEG   AZ=242       MOX
    E PKHKP        59 59,5
    E PKP2      02 00 12
      LMV       03 07       T 18                 AV   0,5    MLV  =5,4
      LMH          12       T 18            AE   0,5       MLH  =5,3
CLL E PKIKP     01 59 52    1,8 /   36                                       D=155,0 DEG   AZ=244       CLL
BRG E PKIKP     01 59 52,6  1,6 /   23                                       D=155,4 DEG   AZ=243       BRG
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1978 FEB 17	PYRENEES		MB=5,3 (4)	43,3N;	0,9W 33KM H=02 34 16,8 (NEIS)	
				43,3N;	0,9W 34KM 02 34 18,8 (CSEM)	
MOX E S	02 40 30				D= 11,3 DEG AZ=234	MOX
CLL E LG2	02 41 03				D= 12,4 DEG AZ=235	CLL
E	41 36					
BRG E P	02 37 18,2 2,4 / 63				D= 12,6 DEG AZ=239	BRG
E	41 07,5					
1978 FEB 17						
CLL E	04 01 36 TRACES					
1978 FEB 17	JAN MAYEN ISLAND REGION		MB=4,5 (25)	71,0N;	6,1W 10KM H=06 41 49,3 (NEIS)	
				71,0N;	6,4W 10KM 06 41 51,0 (CSEM)	
CLL E P	06 46 39 1,7 / 45				D= 21,6 DEG AZ=343	CLL
E	46 55					
LM	57					
MOX E P	06 46 45,5 2,0 / 85		MPV =4,9		D= 22,0 DEG AZ=345	MOX
LMH	56,1 T 18	AE 0,8	MLH =4,2			
LMV	58,1 T 12	AV 0,6	MLV =4,4			
BRG E P	06 46 47,3				D= 22,2 DEG AZ=343	BRG
1978 FEB 17	PYRENEES		NO MB COMP,	43,4N;	1,1W 33KM H=19 39 08,5 (NEIS)	
				43,3N;	0,8W 10KM 19 39 09,1 (CSEM)	
MOX E S	19 44 13,5				D= 11,3 DEG AZ=235	MOX
CLL E(S)	19 44 04				D= 12,4 DEG AZ=236	CLL
1978 FEB 17						
CLL E	20 42 29					
1978 FEB 17	OFF EAST COAST OF KAMCHATKA		MB=4,7 (6)	52,7N;	160,4W 33KM H=22 22 38,1 (NEIS)	
CLL I P	22 34 04,4				D= 76,2 DEG AZ=356	CLL
BRG E P	22 34 06,0				D= 76,7 DEG AZ=356	BRG
1978 FEB 17						
CLL E	23 11 41					
1978 FEB 17	AFGHANISTAN-USSR BORDER REGION		MB=5,0 (38)	36,3N;	71,0E 119KM H=23 18 00,5 (NEIS)	
				36,7N;	71,0E 120KM 23 18 03,3 (WDCB)	
BRG I P	23 25 47,5D 0,9 / 15				D= 42,7 DEG AZ= 87	BRG
E AP	26 14,6					
E PP	27 27,4					
CLL E P	23 25 52				D= 43,3 DEG AZ= 87	CLL
E PP	27 36					
E	27 50					
MOX E P	23 26 00 TRACES				D= 44,2 DEG AZ= 85	MOX
1978 FEB 18						
CLL E	01 40 12					
MOX E P	01 40 17					
1978 FEB 18	SOUTHERN SUMATERA		MB=5,5 (30)	4,6S;	102,9E 53KM H=03 43 14,2 (NEIS)	
				4,2S;	102,8E 33KM 03 43 08,7 (WDCB)	
BRG E P	03 56 23,3 0,7 / 23				D= 92,9 DEG AZ= 94	BRG
E PP	04 00 05,9					
CLL I P	03 56 25,6 1,1 / 18				D= 93,5 DEG AZ= 93	CLL
MOX E P	03 56 30				D= 94,3 DEG AZ= 92	MOX
1978 FEB 18	CELEBES SEA		MB=5,1 (33)	3,4N;	122,9E 522KM H=03 59 05,6 (NEIS)	
				1,1N;	123,7E 33KM 03 58 02,6 (WDCB)	
BRG E P	04 11 51,9 1,0 / 20				D= 99,2 DEG AZ= 73	BRG
CLL E P	04 11 54				D= 99,6 DEG AZ= 72	CLL
E PP	16 09					
MOX E P	04 11 59				D=100,7 DEG AZ= 71	MOX
1978 FEB 18	TONGA ISLANDS		/MB=4,2 (4)/	17,8S;	173,4W 191KM H=07 59 06 (ISC)	
CLL I PKP	08 18 24,5 1,4 / 42				D=146,2 DEG AZ= 11	CLL
I	18 35,5					
E	21 15				D=146,5 DEG AZ= 13	BRG
BRG I PKP	08 18 26,4 1,3 / 28					
E	18 37,0				D=147,0 DEG AZ= 9	MOX
MOX E PKP	08 18 29					
E	18 39					
1978 FEB 18						
CLL E	09 03 40					
MOX E P	09 03 50					
1978 FEB 18	SOUTH OF KERMADEC ISLANDS		NO MB COMP,	33,2S;	178,5W 32KM H=09 57 16,7 (NEIS)	
CLL E PKP2	10 17 51				D=160,0 DEG AZ= 29	CLL
BRG E PKP2	10 17 53,2				D=160,1 DEG AZ= 32	BRG
1978 FEB 18	FIJI ISLANDS REGION		MB=4,9 (9)	20,1S;	178,9W 640KM H=10 06 48,8 (NEIS)	
CLL I PKP1	10 25 23,4D 1,0 / 35				D=147,5 DEG AZ= 21	CLL
E APKP	27 51					
BRG I PKP1	10 25 24,0 0,4 / 8				D=147,7 DEG AZ= 23	BRG
E APKP	27 51,2					
MOX E PKHKP	10 25 25,5				D=148,4 DEG AZ= 19	MOX
1978 FEB 18	NORTHERN YUGOSLAVIA			45,2N;	16,4E 10KM H=15 13 51,3 (CSEM)	
BRG E PN	15 15 18,0				D= 5,9 DEG AZ=163	BRG
I SN	16 26,0				DISTANCE 6,0DEG	
I SG	17 04,9					
MOX E PN	15 15 24				D= 6,3 DEG AZ=148	MOX
E SN	16 32,5					
E SG	17 10					

(CONT.)

CLL I PN	15 15 27,4				D= 6,5 DEG AZ=158	CLL
E(SN)	16 37					
E	16 53					
E	17 10					
I SG	17 35,0					
1978 FEB 18	SOUTH OF KERMADEC ISLANDS		MB=5,0 (2)	33,3S;	178,6W 41KM H=17 20 13,1 (NEIS)	
CLL E PKP2	17 40 47				D=160,1 DEG AZ= 30	CLL
E APKP2	41 00					
BRG E PKP2	17 40 46,6				D=160,2 DEG AZ= 32	BRG
MOX E	17 41 02				D=161,1 DEG AZ= 27	MOX
1978 FEB 18	NEAR EAST COAST OF HONSHU, JAPAN		MB=5,1 (49)	38,2N;	142,5E 45KM H=17 33 15,7 (NEIS)	
				38,3N;	142,6E 33KM 17 33 14,2 (WDCB)	
BRG E P	17 45 23,8 1,7 / 34				D= 80,5 DEG AZ= 39	BRG
CLL I P	17 45 23,6 1,4 / 28				D= 80,5 DEG AZ= 38	CLL
E	46 23					
LM	18 24					
MOX E P	17 45 30				D= 81,6 DEG AZ= 37	MOX
LMH	18 22,7 T 18	AN 1,2 AE 1,1	MLH =5,4			
LMV	25 T 18	AV 1,0	MLV =5,2			
1978 FEB 18	SWITZERLAND		/NO MB COMP,/	46,8N;	9,6E 10KM H=19 33 48,1 (ISC)	
MOX E	19 35 59				D= 4,1 DEG AZ=200	MOX
CLL E SG	19 36 39				D= 5,0 DEG AZ=208	CLL
1978 FEB 19						
CLL E	00 08 25					
1978 FEB 19						
BRG E P	02 34 51,2 1,4 / 11					
1978 FEB 19	CERAM		MB=5,8 (51)	3,9S;	129,0E 90KM H=12 19 34,4 (NEIS)	
				3,6S;	129,0E 80KM 12 19 34,3 (WDCB)	
BRG E PKP	12 37 54,2				D=108,7 DEG AZ= 73	BRG
CLL E	12 38 04				D=109,1 DEG AZ= 72	CLL
I PP	38 27,0					
MOX E	12 38 37				D=110,1 DEG AZ= 71	MOX
1978 FEB 19	DODECANESE ISLANDS		MB=3,4 (1)	36,6N;	28,4E 113KM H=17 09 45,5 (NEIS)	
BRG E P	17 12 53,6				D= 17,6 DEG AZ=138	BRG
1978 FEB 19						
BRG I(P)	18 24 09,6					
1978 FEB 19	NEAR COAST OF GUATEMALA		MB=5,1 (24)	13,7N;	90,7W 74KM H=19 42 43,3 (NEIS)	
				13,0N;	91,0W 33KM 19 42 32,5 (WDCB)	
MOX E P	19 55 23 1,2 / 18		MPV =5,0		D= 87,2 DEG AZ=288	MOX
LMH	20 40,0 T 17	AE 0,8				
LMV	40 T 17	AV 0,6				
CLL I P	19 55 26,6 1,2 / 18				D= 87,8 DEG AZ=289	CLL
BRG E P	19 55 28,0				D= 88,5 DEG AZ=290	BRG
1978 FEB 19	FIJI ISLANDS REGION		MB=5,4 (28)	20,9S;	178,8W 603KM H=20 23 53,1 (NEIS)	
				21,3S;	179,1W 33KM 20 22 50,8 (WDCB)	
CLL I PKIKP	20 42 29,1C 2,2 / 120				D=148,3 DEG AZ= 21	CLL
I PKP1	42 33,0 1,4 / 200				DISTANCE 148 DEG DEPTH 610 KM	
I PKP2	42 38,3 1,0 / 110		MC =5,4			
E APKP	44 54					
E PP	46 03					
BRG E PKIKP	20 42 28,7D				D=148,4 DEG AZ= 23	BRG
I PKP1	42 33,4					
I PKP2	42 39,2					
E APKP	44 54,0					
MOX E PKIKP	20 42 30				D=149,2 DEG AZ= 19	MOX
I PKHKP	42 35,0D 2,0 / 205					
I PKP2	42 42,0 1,7 / 97					
1978 FEB 19	WEST CHILE RISE		MB=5,6 (13)	40,1S;	91,2W 33KM H=21 17 08,9 (NEIS)	
				40,7S;	92,6W 33KM 21 17 03,8 (WDCB)	
MOX E PKP	21 36 11				D=127,1 DEG AZ=250	MOX
CLL E PKP	21 36 13				D=128,1 DEG AZ=251	CLL
BRG E PKP	21 36 13,5				D=128,6 DEG AZ=251	BRG
1978 FEB 20						
CLL E	02 15 06					
1978 FEB 20	NORTHERN YUGOSLAVIA		NO MB COMP,	45,1N;	16,6E 33KM H=02 49 32,4 (NEIS)	
				45,1N;	16,1E 10KM 02 49 34,2 (CSEM)	
BRG E(PN)	02 51 02,0				D= 6,0 DEG AZ=162	BRG
E(SG)	52 59,4					
MOX E SN	02 52 42				D= 6,5 DEG AZ=147	MOX
CLL E	02 52 32				D= 6,7 DEG AZ=157	CLL
E	52 45					
E SG	53 03					
1978 FEB 20	RAT ISLANDS, ALEUTIAN ISLANDS		MB=4,8 (18)	51,3N;	177,1E 44KM H=03 45 39,4 (NEIS)	
				50,7N;	176,9E 33KM 03 45 35,8 (WDCB)	
MOX E P	03 57 33 TRACES				D= 77,7 DEG AZ= 9	MOX
1978 FEB 20	NEAR EAST COAST OF HONSHU, JAPAN		MB=6,1 (93)	38,8N;	141,9E 60KM H=04 36 58,1 (NEIS)	
				39,1N;	141,7E 33KM 04 36 57,1 (WDCB)	
BRG I P	04 49 00,9D 1,2 / 228				D= 79,7 DEG AZ= 39	BRG
I	49 05,7					
E	49 10,6					
I PP	52 06,5					
CLL I P	04 49 00,7				D= 79,8 DEG AZ= 38	CLL
I	49 05,1 1,0 / 440					
E	49 19					

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    E            04 49 52
    E               51 50
    I S             58 58    T 12   AN(  2.8)AE(  6.7)          MSH  =6.5
    E XS            59 33
    E            05 03 52
    E               08 09
    E(SSS)          08 20
    E PKPPKP        15 51
    E               16 20
      LW            21
      LMH           26       T 15   AN  16.5 AE  16            MLH  =6.6  (NO DEPTH CORRECTION)
      LMV           27       T 16                  AV  15      MLV  =6.5  (NO DEPTH CORRECTION)
      FINAL      06 30
MOX I P          04 49 06,5  1.0 /   91                        MPV  =5.7          D= 80.8 DEG   AZ= 37       MOX
    E PM            49 12    1.3 /  232                        MPMV =6.0
                             T  5.5                  AV  1.6   MPMV =6.2
    E S          04 59 08    T 14   AN   4.0 AE   8.2         MSH  =6.7
    E SS         05 04 00
    E SSS           07 40
      LMH           22.9     T 17.5 AN   9.1 AE  17.4
      LMV           28.2     T 16.5                AV  12.2

1978 FEB 20      NEAR EAST COAST OF HONSHU, JAPAN              MB=4.6 (12)   38.7N;141.8E  74KM H=04 53 30.6 (NEIS)
BRG E(P)         05 05 32,5                                                        D= 79.8 DEG   AZ= 39       BRG
CLL I P          05 05 32,8  0.8 /   12                                          D= 79.8 DEG   AZ= 38       CLL

1978 FEB 20      NEAR EAST COAST OF HONSHU, JAPAN              MB=4.4 ( 6)   38.8N;142.0E  63KM H=05 00 30.3 (NEIS)
BRG E P          05 12 33,8                                                        D= 79.8 DEG   AZ= 39       BRG

1978 FEB 20
CLL I P          06 59 42,3D 1.4 /   23

1978 FEB 20      KERMADEC ISLANDS                             MB=5.1 ( 4)   30.4S;177.1W  10KM H=07 30 42.7 (NEIS)
                                                                            30.4S;177.1W  33KM   07 30 41.1 (WDCB)
CLL E PKP1       07 50 51                                                          D=157.8 DEG   AZ= 24       CLL
    I PKP2          51 12,7
BRG E PKIKP      07 50 38,2                                                        D=157.9 DEG   AZ= 26       BRG
    E PKP2          51 12,4
MOX E PKP2       07 51 17                                                          D=158.7 DEG   AZ= 21       MOX

1978 FEB 20      FIJI ISLANDS                                 MB=5.0 ( 2)   16.5S;177.6E  32KM H=09 01 55.6 (NEIS)
CLL E            09 20 37                                                          D=143.2 DEG   AZ= 25       CLL

1978 FEB 20      KERMADEC ISLANDS                             MB=4.6 ( 1)   30.1S;177.2W  33KM H=10 13 12.9 (NEIS)
BRG I PKP2       10 33 50,0                                                        D=157.6 DEG   AZ= 26       BRG

1978 FEB 20
CLL E            11 17 31

1978 FEB 20      NORTHERN ITALY            FRIULI             NO MB COMP,   46.5N; 13.4E  10KM H=12 13 36.5 (CSEM)
                                                                            46.4N; 13.3E  10KM   12 13 35.1 (NEIS)
MOX E PN         12 14 41                                                  46.3N; 13.0E  33KM   12 13 34.5 (WDCB)
    E SN            15 31,5                                                       D=  4.3 DEG   AZ=163       MOX
    I SG            15 50,5
BRG E PN         12 14 42,6                                                        D=  4.4 DEG   AZ=185       BRG
    E               14 57,2                                                       DISTANCE   4.4DEG
    I SN            15 35,1
    I SG            15 56,5
CLL I PN         12 14 49,0                                                        D=  4.8 DEG   AZ=177       CLL
    I PG            15 08,3
    E SN            15 43
    E SG            16 10

1978 FEB 20      BONIN ISLANDS REGION                         MB=5.0 (34)   28.0N;139.0E 527KM H=15 28 04.0 (NEIS)
                                                                            28.4N;139.0E 600KM   15 28 11.5 (WDCB)
BRG I P          15 39 57,5C 1.1 /   21                                            D= 87.7 DEG   AZ= 46       BRG
CLL E P          15 39 57                                                          D= 87.9 DEG   AZ= 46       CLL
    E AP            42 10
MOX E P          15 40 03                                                          D= 88.9 DEG   AZ= 45       MOX

1978 FEB 20      BONIN ISLANDS REGION                         MB=4.3 ( 2)   28.0N;139.4E 534KM H=15 36 48.8 (NEIS)
BRG I P          15 47 41,0                                                        D= 87.9 DEG   AZ= 46       BRG

1978 FEB 20      FIJI ISLANDS REGION                          MB=5.0 ( 7)   17.7S;176.4W  33KM H=20 19 05.7 (NEIS)
CLL E PKP        20 38 39                                                          D=145.6 DEG   AZ= 16       CLL
    I               38 44,0  1.5 /   42
BRG E PKP        20 38 40,3  1.0 /   20                                          D=145.9 DEG   AZ= 18       BRG
    I               38 45,3
MOX E PKP        20 38 42,5                                                        D=146.5 DEG   AZ= 14       MOX
    I               38 46,5  1.6 /   55
    I               38 50,5  1.2 /   24
      LM            46

1978 FEB 21      BANDA SEA                                    MB=5.6 (23)    7.0S;128.9E  33KM H=23 51 48.5 (NEIS)
BRG E PP         00 11 05,3                                                        D=111.0 DEG   AZ= 75       BRG
MOX   LMH        00 54,0                                                           D=112.5 DEG   AZ= 73       MOX
      LMV           59

1978 FEB 21
CLL E            01 58 08

1978 FEB 21      KERMADEC ISLANDS REGION                      MB=5.3 ( 2)   31.0S;178.3W  58KM H=02 59 54.0 (NEIS)
CLL I            03 20 10,9C 1.3 /   15                                            D=158.0 DEG   AZ= 27       CLL
BRG E            03 20 11,5                                                        D=158.2 DEG   AZ= 29       BRG

1978 FEB 21      BANDA SEA                                    MB=5.9 (57)    4.9S;125.2E 535KM H=07 14 05.3 (NEIS)
                                                                             5.0S;125.2E 470KM   07 13 59.7 (WDCB)
CLL E PDIF       07 27 26                                                          D=107.6 DEG   AZ= 75       CLL
    I PP            32 07,5
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1978 FEB 21      BANDA SEA                                                                  MB=6.3 (34)   4.8S;125.4E 510KM H=07 14 54.4 (NEIS)
                                                                                                          5.0S;125.6E 470KM   07 14 50.2 (WDCB)
BRG I PDIF       07 28 19,1C                                                                                D=107.2 DEG   AZ= 76       BRG
    E AP            30 26,0                                                                                DISTANCE 105 DEG  DEPTH 580 KM
    E PP            32 57,0
    I SKS        07 38 06,0
    E S             39 32
    E SP            41 17
    E PS            42 28
    E PKKP1         43 41,7
    E PKKP2         43 59
    E SS            47 25
    E SSS           50 49
    E SSSS          54 48
CLL I PDIF       07 28 20,5  1.7 /   50                                                     D=107.6 DEG   AZ= 75       CLL
    E               28 40                                                                  DISTANCE 107 DEG  DEPTH<600 KM
    E AP            30 23
    E(XP)           31 37
    E PP            33 00
    E APP           34 55
    E PPP           35 20
    E(PPPP)         37 30
    E SKS           38 06
    E SKS           38 46
    E SDIF          39 30
    E SP            41 20
    E XSKS          41 54
    E(PS)           42 30
    E XS            43 20
    E PKKP1         43 39
    E PKKP2         43 56
    E               44 30
    E SKKP          46 22
    E SS            47 34
    E PCPPKP        47 45
    E(SSS)          51,5
    E SCPPKP        52 06
    E SSSS          54,6
      LMH        08 15       T 20   AN   7   AE  3.5 AV  3.5   MLH  =6.3  (NO DEPTH CORRECTION)
      LMV           24       T 17   AN   4   AE  2.5 AV  3.5   MLV  =6.0  (NO DEPTH CORRECTION)
      FINAL      09 30
MOX I PDIF       07 28 25,5  1.6 /   50                                                     D=108.7 DEG   AZ= 74       MOX
    E PKIKP         32 13
    E PP            33 04    2.0 /  274                        MPPV =6.2
    E               34 45
    E SKS           38 12
    I               39 45
    E SP            41 30
    E               42 35
    E PKKP          43 37
    E SS            47 50
    E               50 40
      LMH        08 18       T 18   AN  4.3 AE  4.9
      LMV           26       T 16.5                AV  4.4

1978 FEB 21      KURILE ISLANDS                                                             MB=4.4 ( 2)   43.2N;146.9E  33KM H=07 44 27.6 (NEIS)
CLL E P          07 56 23                                                                                 D= 77.7 DEG   AZ= 33       CLL

1978 FEB 21      BANDA SEA                                                                  MB=5.6 (41)   5.0S;125.2E 531KM H=07 47 21.7 (NEIS)
                                                                                                          5.1S;125.1E 470KM   07 47 16.1 (WDCB)
BRG I PKP        08 04 48,2  1.0 /   16                                                                   D=107.2 DEG   AZ= 76       BRG
    E               07 31,0
    E               09 36,0
    E               10 24,8
    E PKKP1         16 06,4
    I PKKP2         16 22,8
CLL E PKP        08 04 49    0.8 /   15                                                     D=107.7 DEG   AZ= 75       CLL
    E               05 16
    E               07 32
    E               10 27
    I PKKP1         16 04,8D
    I PKKP2         16 20,4
MOX E PKP        08 04 51,5                                                                D=108.7 DEG   AZ= 75       MOX
    E               07 39
    E               10 29

1978 FEB. 21     HOKKAIDO, JAPAN, REGION                                                    MB=5.0 (18)   43.3N;145.5E 108KM H=08 56 47.9 (NEIS)
                                                                                                          42.1N;145.7E  33KM   08 56 29.0 (WDCB)
CLL I P          09 08 31,3D 1.1 /   22                                                                   D= 77.1 DEG   AZ= 34       CLL
    I               08 33,7
BRG E P          09 08 31,3                                                                               D= 77.2 DEG   AZ= 34       BRG

1978 FEB 21
MOX E PG         10 25 42
    E SG            25 51

1978 FEB 21      JAN MAYEN ISLAND REGION                                                    MB=4.3 ( 4)   71.1N;  6.3W  33KM H=15 40 47.8 (NEIS)
                                                                                                          71.1N;  6.4W  10KM   15 40 47.9 (CSEM)
CLL E            15 45 41                                                                                 D= 21.7 DEG   AZ=343       CLL
MOX E P          15 45 43                                                                                 D= 22.1 DEG   AZ=345       MOX

1978 FEB 21      POLAND, UPPER SILESIA
BRG E(PG)        19 03 02,4
    E(SG)           03 43,3
CLL E            19 03 11
    E               03 50
    E SG            04 11
MOX E(SG)        19 04 28
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1978 FEB 21 RED SEA MB=4,7 (13) 16,5N; 40,4E 33KM H=22 04 42,3 (NEIS)
14,2N; 40,1E 33KM 22 04 27,0 (WDCB)
D= 40,3 DEG AZ=139 BRG
BRG E P 22 12 17,2
I 12 21,4
CLL E P 22 12 26 D= 41,0 DEG AZ=138 CLL

1978 FEB 22 TONGA ISLANDS REGION /MB=4,3 (1)/ 17,6S;172,0W 33KM H=00 25 51 (ISC)
CLL E PKP1 00 45 32 1,6 / 27 D=146,1 DEG AZ= 9 CLL
BRG E PKP1 00 45 33,3 1,6 / 20 D=146,5 DEG AZ= 10 BRG

1978 FEB 22
CLL E 01 24 16 TRACES

1978 FEB 22
CLL E 02 53 38

1978 FEB 22 TONGA ISLANDS NO MB COMP. 15,9S;174,6W 18KM H=03 25 23,9 (NEIS)
CLL E APKP 03 45 03 D=144,2 DEG AZ= 13 CLL
MOX E PKP 03 45 07 D=145,0 DEG AZ= 10 MOX

1978 FEB 22 GUATEMALA MB=5,7 (84) 14,2N; 91,4W 100KM H=06 07 37,0 (NEIS)
14,5N; 91,1W 50KM 06 07 33,2 (WDCB)
MOX I P 06 20 13,0C 1,4 / 102 1,9 / 53 1,7 / 55 MPV =5,7 MPH =5,7 D= 87,2 DEG AZ=289 MOX
T 7,0 AV 1,1 MPV =6,0 DEPTH 71 KM
E AP 20 32
E PP 23 38
E S 30 35 T 24,5 AN 2,6 AE 9,4 MSH =6,4
E PS 32 00
E SS 36 30
E SSS 40 00
LMH 52,7 T 22 AE 4,2
LMV 56 T 21 AV 3,1
CLL I P 06 20 16,1C 1,5 / 88 D= 87,8 DEG AZ=290 CLL
I AP 20 34,9 DISTANCE 87 DEG DEPTH 70 KM
E(PP) 24,0
E SKS 30 39
E S 30 55
E XS 31 28
E PS 32 10
E SS 36,8
E PKKP1 38 03
E PKPPKP 46 09
LM 53 T 24 AN 5 AE 6 AV 6,5 MLH =6,0 MLV =5,9 (NO DEPTH CORRECTION)
L 56 T 20 AN 2 AE 5,5 AV 5
BRG I P 06 20 19,3C 1,6 / 59 D= 88,5 DEG AZ=291 BRG
I AP 20 38,3 DISTANCE 87 DEG
E PP 23 46,6
E SKS 30 42,0
E S 31 04
E PS 32 16,0
E PKPPKP 46 09
LM 57 T 21 AN 1,7 AE 11,7 AV 8,5 MLH =6,3 MLV =6,2 (NO DEPTH CORRECTION)

1978 FEB 22 NORTHERN COLOMBIA MB=4,8 (22) 8,7N; 75,2W 53KM H=08 19 47,8 (NEIS)
BRG E P 08 32 06,6 D= 82,8 DEG AZ=275 BRG

1978 FEB 22 BURMA-INDIA BORDER REGION MB=5,0 (17) 23,3N; 94,1E 78KM H=09 07 30,2 (NEIS)
22,8N; 94,5E 33KM 09 07 21,4 (WDCB)
BRG E P 09 18 11,6 D= 66,2 DEG AZ= 82 BRG
CLL E P 09 18 14 D= 66,7 DEG AZ= 81 CLL
MOX E P 09 18 21 1,1 / 14 MPV =4,8 D= 67,7 DEG AZ= 80 MOX

1978 FEB 22 RYUKYU ISLANDS MB=5,9(116) 29,3N;130,5E 60KM H=18 00 35,8 (NEIS)
29,9N;130,3E 33KM 18 00 35,4 (WDCB)
BRG E P 18 12 53,4D 1,9 / 214 D= 82,6 DEG AZ= 52 BRG
I AP 13 08,4 DISTANCE 81 DEG
E S 23 06
LM 53 T 20 AN 1,6 AE 3,2 AV 4,0 MLH =5,7 MLV =5,8 (NO DEPTH CORRECTION)
CLL I P 18 12 55,3C 1,6 / 320 D= 82,8 DEG AZ= 51 CLL
I AP 13 08,4 DISTANCE 82 DEG
E 13 21
E S 23 08
E 23 34
E 31 40
E 35 26
LM 53 T 17 AN 3 AE 2 AV 4,5 MLH =5,8 MLV =5,9 (NO DEPTH CORRECTION)
MOX E P 18 13 01 D 1,3 / 179 MPV =5,9 D= 83,9 DEG AZ= 50 MOX
E AP 13 15 DEPTH 51 KM
E S 23 16 T 10 AN 1,0 AE 2,2 MSH =6,3
LMV 54,7 T 19,5 AV 5,1 MLV =5,9 (NO DEPTH CORRECTION)
LMH 54,8 T 17,5 AN 2,3 AE 1,9 MLH =5,7 (NO DEPTH CORRECTION)

1978 FEB 22
MOX E 18 24 02

1978 FEB 22 GUATEMALA MB=5,1 (16) 14,1N; 90,6W 102KM H=19 31 41,4 (NEIS)
CLL E 19 44 36 D= 87,4 DEG AZ=289 CLL
E AP 44 47
E 47 15
BRG E(P) 19 44 28,3 D= 88,1 DEG AZ=290 BRG

1978 FEB 22 SOUTH OF FIJI ISLANDS MB=5,6 (29) 22,7S;176,2W 85KM H=19 37 17,0 (NEIS)
22,3S;177,8W 33KM 19 37 08,8 (WDCB)
CLL E PKIKP 19 56 55 D=150,6 DEG AZ= 17 CLL
I PKP1 57 01,8C 1,3 / 160
E APKP 57 20 1,5 / 340
I 57 30,8C
E 20 05 35
BRG I PKIKP 19 56 56,4 1,9 / 62
I PKP1 57 02,7 D=150,8 DEG AZ= 19 BRG
I PKP2 57 13,2
E APKP 57 20,2
(CONT,)

(CONT,)
MOX E PKIKP 19 56 57,5 D=151,4 DEG AZ= 15 MOX
E PKHKP 57 03,5 2,0 / 111
E 57 23 1,6 / 181
LMV 21 08 T 20 AV 0,9
LMH 08 T 22 AE 0,8

1978 FEB 22 SOUTHERN IRAN MB=5,1 (62) 28,0N; 56,9E 23KM H=20 17 57,8 (NEIS)
28,3N; 57,0E(106KM) 20 18 09,4 (CSEM)
27,9N; 56,9E 33KM 20 17 57,5 (WDCB)
BRG I P 20 25 28,0C 1,0 / 25 D= 39,5 DEG AZ=109 BRG
CLL I P 20 25 33,8C 1,5 / 90 D= 40,2 DEG AZ=108 CLL
I 25 38,9
E PPP 27 44
MOX E P 20 25 39 2,0 / 68 MPV =5,0 D= 40,9 DEG AZ=106 MOX
E AP 25 46

1978 FEB 23 KASHMIR-INDIA BORDER REGION MB=4,9 (23) 33,5N; 76,1E 36KM H=02 01 28,4 (NEIS)
33,7N; 75,9E 33KM 02 01 31,0 (WDCB)
BRG E P 02 10 03,4 1,3 / 27 D= 47,8 DEG AZ= 86 BRG
CLL E P 02 10 08 D= 48,3 DEG AZ= 86 CLL
MOX E P 02 10 16 D= 49,2 DEG AZ= 85 MOX

1978 FEB 23 TONGA ISLANDS MB=4,3 (2) 16,5S;174,2W 167KM H=06 48 57,2 (NEIS)
CLL E PKP 07 08 12 D=144,8 DEG AZ= 12 CLL
BRG I PKP 07 08 15,9 D=145,1 DEG AZ= 14 BRG
MOX E PKP 07 08 18 2,0 / 34 D=145,6 DEG AZ= 10 MOX

1978 FEB 23
BRG E(P) 07 44 16,2

1978 FEB 23 NEW BRITAIN REGION MB=5,3 (27) 4,3S;152,8E 57KM H=07 29 25,4 (NEIS)
3,9S;152,8E 33KM 07 29 24,3 (WDCB)
BRG I PKP 07 48 15,5C 0,8 / 29 D=122,2 DEG AZ= 51 BRG
CLL I PKP 07 48 15,8 0,9 / 38 D=122,4 DEG AZ= 50 CLL
MOX E PKP 07 48 19 D=123,5 DEG AZ= 49 MOX

1978 FEB 23 SWITZERLAND NO MB COMP. 46,5N; 9,8E 10KM H=09 49 22,8 (NEIS)
46,5N; 9,8E 10KM 09 49 24,2 (CSEM)
MOX E PN 09 50 27 D= 4,3 DEG AZ=197 MOX
I PG 50 45,0
I SN 51 17,0
I SG 51 40,0
BRG E PN 09 50 42,0 D= 5,2 DEG AZ=214 BRG
I 50 57,8
E SG 52 10,8
CLL E PN 09 50 47 D= 5,3 DEG AZ=205 CLL
E 51 03 DISTANCE 5,2DEG
E SN 51 40
E SG 52 18

1978 FEB 23
BRG E(P) 14 17 10,8 1,0 / 12

1978 FEB 23
CLL E 14 41 50

1978 FEB 23 SOUTH OF FIJI ISLANDS MB=5,2 (18) 26,1S;179,9E 435KM H=15 08 57,5 (NEIS)
CLL I PKP1 15 28 04,1 1,0 / 19 D=152,9 DEG AZ= 27 CLL
I PKP2 28 17,6 1,1 / 21
BRG I PKP1 15 28 04,3 0,7 / 15 D=153,0 DEG AZ= 29 BRG
I PKP2 28 18,0
MOX E PKIKP 15 27 57 D=153,9 DEG AZ= 25 MOX
E PKHKP 28 06
E PKP2 28 21,5

1978 FEB 23 AFGHANISTAN MB=4,6 (13) 31,5N; 67,0E 33KM H=16 02 37,1 (NEIS)
31,7N; 67,2E 33KM 16 02 40,6 (WDCB)
MOX E P 16 10 57 D= 44,8 DEG AZ= 94 MOX

1978 FEB 23
CLL E PKP 16 36 28 1,1 / 13
E 36 42
BRG E PKP 16 36 28,8 1,0 / 13

1978 FEB 23 UNDERGROUND EXPLOSION MB=5,6 (80)
>REBLOCHON< 37,1N;116,1W 0KM H=17 00 00,2 (NEIS)
MOX E P 17 12 18 C 1,2 / 57 MPV =5,5 D= 81,3 DEG AZ=320 MOX
E PP 15 23
CLL I P 17 12 17,9C 1,6 / 86 D= 81,3 DEG AZ=321 CLL
E 12 39
E 13 20
E 14 36
BRG I P 17 12 21,9C 1,1 / 43 D= 82,0 DEG AZ=322 BRG

1978 FEB 23 SICILY MB=4,5 (3) 37,9N; 15,8E 10KM H=19 47 43,7 (NEIS)
37,4N; 15,2E 16KM 19 47 37,4 (CSEM)
BRG E P 19 50 51,4 D= 13,0 DEG AZ=173 BRG
MOX E P 19 50 55 D= 13,1 DEG AZ=165 MOX
E 51 05,5
CLL E P 19 50 56 D= 13,6 DEG AZ=171 CLL
E 51 11

1978 FEB 23 WINDWARD ISLANDS MB=4,8 (26) 11,1N; 62,3W 105KM H=21 25 05,4 (NEIS)
BRG I P 21 36 24,3 0,9 / 12 D= 72,8 DEG AZ=266 BRG

1978 FEB 23 FIJI ISLANDS REGION MB=5,0 (8) 17,6S;179,0W 538KM H=21 28 43,8 (NEIS)
CLL I PKP 21 47 21,6C 0,9 / 35 D=145,0 DEG AZ= 20 CLL
BRG E PKP 21 47 22,2 0,8 / 21 D=145,2 DEG AZ= 22 BRG
MOX E PKP 21 47 24 D=146,0 DEG AZ= 18 MOX

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1978 FEB 23    BURMA-INDIA BORDER REGION                    MB=5,1 (60)   23,1N; 94,7E 105KM H=23 18 33,2 (NEIS)
                                                                          22,3N; 95,3E 100KM   23 18 25,8 (WDCB)
                                                                          D= 66,7 DEG   AZ= 82        BRG

BRG E P        23 29 14,0
    I AP          29 45,8                                                 D= 67,2 DEG   AZ= 81        CLL
CLL I AP       23 29 48,3D 1,1 /   22                                     D= 68,2 DEG   AZ= 80        MOX
MOX E AP       23 29 55    1,3 /   31                                                   DEPTH 126 KM

1978 FEB 23    SOUTHERN IRAN                                MB=5,2 (40)   28,1N; 56,9E  24KM H=23 24 47,8 (NEIS)
                                                                          28,3N; 57,0E 115KM   23 25 00,1 (CSEM)
                                                                          27,4N; 57,0E  33KM   23 24 39,4 (WDCB)
BRG E P        23 32 17,5                                                 D= 39,5 DEG   AZ=109        BRG
CLL I P        23 32 23,9C 1,5 /   90                                     D= 40,2 DEG   AZ=108        CLL
    E             32 30
MOX E P        23 32 29,5                                                 D= 40,8 DEG   AZ=106        MOX
    E AP          32 36                                                                DEPTH  25 KM

1978 FEB 24
CLL E          02 40 28   TRACES

1978 FEB 24    WESTERN TURKEY                               MB=4,6 (11)   37,9N; 32,7E  10KM H=02 51 23,2 (NEIS)
                                                                          37,8N; 32,6E  10KM   02 51 26,1 (CSEM)
                                                                          38,7N; 33,0E  33KM   02 51 29,9 (WDCB)
BRG E P        02 55 24,2                                                 D= 18,6 DEG   AZ=127        BRG
CLL E(PP)      02 56 14                                                   D= 19,3 DEG   AZ=126        CLL
    E             56 41
    E          03 01 50
MOX E P        02 55 58   TRACES                                          D= 19,7 DEG   AZ=122        MOX

1978 FEB 24    NORTHWEST OF KURILE ISLANDS                 /MB=4,9 (11)/  47,1N;149,6E   0KM H=03 06 27    (ISC)
CLL I P        03 18 12,4                                                 D= 75,1 DEG   AZ= 29        CLL

1978 FEB 24    NORTH OF ASCENSION ISLAND                    MB=5,5 (65)   4,6S; 12,4W  10KM H=07 02 39,6 (NEIS)
                                                                          4,4S; 12,3W  33KM   07 02 39,1 (WDCB)
MOX I P        07 12 40,0C 1,8 /  162                        MPV  =5,8     D= 58,8 DEG   AZ=208        MOX
    I             12 46,5
    E             12 52
    E S           20 50
      LMH         35,5     T 14          AE   0,9          MLH  =5,0
      LMV         39       T 14               AV   1,1    MLV  =5,2
BRG I P        07 12 46,2C 1,5 /   66                                     D= 59,7 DEG   AZ=211        BRG
    E PP          14 56,0                                                 DISTANCE  59 DEG
    E SS          24 48,0
      LM          39       T 17   AN   3,0 AE   2,0 AV   2,6   MLH  =5,6 MLV  =5,5
CLL I P        07 12 46,8  2,1 /  175                                     D= 59,8 DEG   AZ=210        CLL
    I             12 52,1
    E PP          14 57
      LM          39

1978 FEB 24    SOUTHERN GREECE                                             36,6N; 24,6E  10KM H=13 46 58,9 (CSEM)
CLL E          13 51 02                                                   D= 16,9 DEG   AZ=146        CLL

1978 FEB 24
CLL I P        14 52 11,5C

1978 FEB 24
BRG E P        17 54 29,2
CLL E          17 54 39   TRACES

1978 FEB 24    KERMADEC ISLANDS                             MB=5,2 ( 3)   30,6S;177,4W  48KM H=18 16 33,4 (NEIS)
CLL E(PKP2)    18 37 08                                                   D=157,9 DEG   AZ= 24        CLL
BRG E          18 36 38,9                                                 D=158,0 DEG   AZ= 27        BRG
    I(PKP2)       37 05,0

1978 FEB 24    KERMADEC ISLANDS                             MB=5,2 ( 2)   30,7S;177,3W  21KM H=21 12 23,5 (NEIS)
CLL E PKP2     21 33 03                                                   D=158,0 DEG   AZ= 24        CLL
BRG E PKP2     21 33 02,4                                                 D=158,2 DEG   AZ= 27        BRG

1978 FEB 25    NEW BRITAIN REGION                           MB=5,4 (32)   4,2S;152,8E  43KM H=04 29 36,9 (NEIS)
                                                                          3,8S;152,6E  33KM   04 29 37,9 (WDCB)
BRG I PKP      04 48 29,0C                                                D=122,1 DEG   AZ= 51        BRG
CLL I PKP      04 48 29,2                                                 D=122,3 DEG   AZ= 50        CLL
MOX E PKP      04 48 32                                                   D=123,4 DEG   AZ= 49        MOX
    E APKP        48 39                                                                DEPTH  25 KM
      LMH      05 30,3     T 30   AN   1,0 AE   0,6          MLH  =5,3
      LMV         44,5     T 21               AV   0,7    MLV  =5,3

1978 FEB 25    SUMBAWA ISLAND REGION                        MB=5,6 (31)   9,7S;117,1E  33KM H=06 10 35,8 (NEIS)
                                                                          8,7S;116,9E  33KM   06 10 35,6 (WDCB)
BRG E PDIF     06 24 54,6                                                 D=105,8 DEG   AZ= 86        BRG
    E PKP         28 57,4
CLL   LMH      07 08                                                      D=106,3 DEG   AZ= 85        CLL
MOX E          06 29 22,5 TRACES                                          D=107,3 DEG   AZ= 84        MOX
      LMH      07 08,7     T 32   AN   2,7 AE   1,0          MLH  =5,6
      LMV         11       T 36               AV   1,0    MLV  =5,1

1978 FEB 25
CLL E P        06 42 27
    E             42 42
BRG E(P)       06 42 33,0
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1978 FEB 25    TURKEY-USSR BORDER REGION                    NO MB COMP.   40,4N; 44,4E  10KM H=08 25 23,6 (NEIS)
                                                                          40,2N; 44,5E  33KM   08 25 21,7 (WDCB)
BRG E P        08 30 46,3                                                 D= 23,6 DEG   AZ=105        BRG
CLL E P        08 30 41                                                   D= 24,3 DEG   AZ=104        CLL
MOX E P        08 30 48   TRACES                                          D= 25,0 DEG   AZ=101        MOX

1978 FEB 25    CENTRAL YUGOSLAVIA                                         43,5N; 20,8E  10KM H=18 13 46,3 (CSEM)
CLL E          18 18 19                                                   D=  9,4 DEG   AZ=143        CLL

1978 FEB 26    KURILE ISLANDS                               MB=5,3 (73)   49,3N;155,6E  44KM H=00 05 46,1 (NEIS)
                                                                          49,1N;155,6E  33KM   00 05 43,7 (WDCB)
CLL I P        00 17 22,8D 1,0 /   31                                     D= 74,8 DEG   AZ= 24        CLL
BRG I P        00 17 23,7  1,0 /   10                                     D= 75,0 DEG   AZ= 25        BRG
MOX E P        00 17 28    1,0 /   20                    MPV  =5,0       D= 75,8 DEG   AZ= 23.       MOX

1978 FEB 26    JAMAICA REGION                               MB=4,8 (15)   18,2N; 76,5W  15KM H=05 07 20,8 (NEIS)
MOX E(P)       05 19 09                                                   D= 75,0 DEG   AZ=280        MOX
CLL E          05 19 14                                                   D= 75,7 DEG   AZ=281        CLL
BRG E(P)       05 19 12,0                                                 D= 76,4 DEG   AZ=282        BRG

1978 FEB 26    EASTER ISLAND REGION                         MB=5,9 (38)   26,6S;114,6W  33KM H=09 16 52,4 (NEIS)
                                                                          26,1S;115,1W  33KM   09 16 54,1 (WDCB)
MOX E PKP      09 36 06                                                   D=132,9 DEG   AZ=280        MOX
      LMH      10 20,5     T 40          AE   2,5          MLH  =5,6
      LMV      20,5        T 40               AV   3,0    MLV  =5,7
CLL I PKP      09 36 07,3C 1,6 /   46                                     D=133,6 DEG   AZ=282        CLL
    E PP          38 44
BRG I PKP      09 36 07,9D 1,5 /   42                                     D=134,3 DEG   AZ=282        BRG

1978 FEB 26
CLL E          09 48 14

1978 FEB 26
CLL I P        10 04 17,3D

1978 FEB 26    PANAMA-COSTA RICA BORDER REGION              MB=4,8 (13)   8,9N; 82,9W  35KM H=14 49 45,9 (NEIS)
CLL E P        15 02 28    1,3 /   18                                     D= 86,8 DEG   AZ=280        CLL
BRG E P        15 02 32,0  1,0 /   14                                     D= 87,5 DEG   AZ=281        BRG

1978 FEB 26
BRG E(P)       20 14 31,2

1978 FEB 26
CLL E          21 14 37

1978 FEB 27    MID-INDIAN RISE                              MB=5,0 ( 8)   16,2S; 67,1E  10KM H=00 20 36,9 (NEIS)
                                                                          15,3S; 67,8E  33KM   00 20 42,0 (WDCB)
CLL E AP       00 33 05                                                   D= 82,1 DEG   AZ=128        CLL
MOX E P        00 33 07                                                   D= 82,4 DEG   AZ=127        MOX

1978 FEB 27    LOYALTY ISLANDS REGION                       MB=4,5 ( 1)   22,0S;170,2E  33KM H=00 36 02,6 (NEIS)
BRG E PKP      00 55 39,3  1,0 /   14                                     D=145,7 DEG   AZ= 42        BRG
CLL E PKP      00 55 40                                                   D=145,8 DEG   AZ= 40        CLL

1978 FEB 27    WEST OF MACQUARIE ISLAND                     MB=5,3 ( 7)   53,8S;140,8E  10KM H=00 37 24,2 (NEIS)
BRG E PKIKP    00 57 10,0  1,2 /   32                                     D=148,0 DEG   AZ=116        BRG
    E PKP1        57 13,8
CLL E PKIKP    00 57 11                                                   D=148,7 DEG   AZ=115        CLL
    I PKP1        57 15,7C 1,7 /   59
MOX E PKHKP    00 57 13    1,4 /   19                                     D=149,3 DEG   AZ=116        MOX
    E PKP2        57 20    2,0 /   51
      LMV      02 05       T 24               AV   0,9    MLV  =5,5
      LMH      09          T 23   AN   2,0     MLH  =5,8

1978 FEB 27    TONGA ISLANDS                               /MB=5,1 ( 2)/  21,8S;174,3W  33KM H=08 08 26,7 (ISC)
CLL I PKP1     08 28 15,7                                                 D=150,0 DEG   AZ= 14        CLL
    E             28 33
BRG E PKP1     08 28 16,1                                                 D=150,3 DEG   AZ= 16        BRG
MOX E PKHKP    08 28 18                                                   D=150,8 DEG   AZ= 11        MOX

1978 FEB 27
CLL E          16 11 00

1978 FEB 27
BRG E P        16 44 37,9  0,8 /    8

1978 FEB 27
CLL I(P)       18 12 12,3

1978 FEB 27    NEAR EAST COAST OF HONSHU, JAPAN             MB=4,8 (12)   38,1N;142,8E  29KM H=18 10 11,3 (NEIS)
                                                                          38,3N;142,6E  33KM   18 10 13,6 (WDCB)
BRG E P        18 22 24,0                                                 D= 80,7 DEG   AZ= 39        BRG
CLL E P        18 22 24    1,0 /   12                                     D= 80,7 DEG   AZ= 38        CLL
MOX E P        18 22 29   TRACES                                          D= 81,8 DEG   AZ= 37        MOX

1978 FEB 27    FIJI ISLANDS REGION                         /NO MB COMP./  20,9S;178,4W 612KM H=19 34 14,9 (ISC)
CLL I PKP1     19 52 56,3  1,1 /   18                                     D=148,4 DEG   AZ= 21        CLL
BRG E PKP1     19 52 56,7  1,2 /   12                                     D=148,5 DEG   AZ= 23        BRG
    E PKP2        53 03.
MOX E PKHKP    19 52 58                                                   D=149,3 DEG   AZ= 19        MOX

1978 FEB 28    WESTERN TURKEY                                             38,5N; 27,2E  10KM H=00 43 25,7 (CSEM)
CLL E(P)       00 47 17   TRACES                                          D= 16,2 DEG   AZ=137        CLL

1978 FEB 28    TONGA ISLANDS REGION                        /MB=4,4 ( 1)/  22,5S;174,8W  33KM H=04 09 05    (ISC)
CLL I PKP1     04 28 55,4                                                 D=150,6 DEG   AZ= 15        CLL
BRG E PKP1     04 28 55,8                                                 D=150,9 DEG   AZ= 17        BRG

1978 FEB 28
MOX E(P)       08 47 02
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1978 FEB 28
CLL E          16 23 17

1978 FEB 28    PAKISTAN                                    MB=4,7 (11)   28,5N; 66,2E  33KM H=17 07 17,0 (NEIS)
                                                                         28,8N; 66,1E  33KM   17 07 14,5 (WDCB)
BRG E P        17 15 30,3  0,8 /  14                                     D= 44,9 DEG   AZ= 99       BRG
CLL E          17 16 09                                                  D= 45,5 DEG   AZ= 99       CLL
     LMH           36
MOX E P        17 15 43                                                  D= 46,3 DEG   AZ= 97       MOX
     LMH          37,2      T 18   AN   1,3          MLH  =4,9
     LMV          40

1978 FEB 28
CLL E          21 11 51   TRACES

1978 FEB 28    WESTERN CAUCASUS                            MB=4,8 (26)   44,3N; 42,7E  10KM H=22 58 14,0 (NEIS)
                                                                         44,3N; 42,9E  10KM   22 58 16,8 (CSEM)
                                                                         44,2N; 42,6E  33KM   22 58 11,8 (WDCB)
BRG I P        23 02 53,7D 1,4 /  22                                     D= 20,4 DEG   AZ= 98       BRG
     E            02 59,0
CLL I P        23 03 00,9D 1,4 /  32                                     D= 21,0 DEG   AZ= 98       CLL
     E            06 10
     E SS         07 39
     E SSS        07 54
     LM           10
MOX I P        23 03 09,0D 1,4 /  37          MPV  =4,6                  D= 21,8 DEG   AZ= 95       MOX
     LMH          11,9      T 16   AN   1,1   MLH  =4,4
     LMV          13        T 11   AV   0,8   MLV  =4,5
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1978 MAR 01    KURILE ISLANDS                                  MB=5,4 (68)   46,3N;153,1E  33KM H=00 08 19,7 (NEIS)
                                                                             46,8N;152,6E  33KM   00 08 18,0 (WDCB)
CLL E P        00 20 09  C 1,5 /  69                                         D= 76,9 DEG   AZ= 27       CLL
     E            20 54
BRG E P        00 20 10,0  1,3 /  29                                         D= 77,0 DEG   AZ= 28       BRG
MOX E P        00 20 16    1,2 /  41                                         D= 77,9 DEG   AZ= 26       MOX
     E            20 29,5                          MPV  =5,3
     LMH          57,6      T 20   AN   1,2        MLH  =5,2
     LMV          57,9      T 18,5 AV   0,5        MLV  =4,9

1978 MAR 01    EASTERN GULF OF ADEN                            MB=5,1 (33)   13,2N; 50,2E  33KM H=01 58 45,2 (NEIS)
                                                                             12,5N; 50,2E  33KM   01 58 35,5 (WDCB)
BRG I P        02 07 20,0C 1,5 /  25                                         D= 47,7 DEG   AZ=129       BRG
CLL I P        02 07 26,0C 2,4 /  92                                         D= 48,4 DEG   AZ=128       CLL
     E PCP        08 52
MOX E P        02 07 28    1,9 /  45                                         D= 48,7 DEG   AZ=126       MOX
     E            09 25                            MPV  =5,2

1978 MAR 01
CLL E SG       09 16 57

1978 MAR 01    SOUTHERN IRAN                                   MB=4,6 (16)   27,4N; 56,4E  33KM H=09 53 46,4 (NEIS)
                                                                             27,8N; 56,4E  66KM   09 53 54,2 (CSEM)
                                                                             26,7N; 56,5E  33KM   09 53 37,4 (WDCB)
BRG E P        10 01 12,6                                                    D= 39,7 DEG   AZ=110       BRG
CLL E          10 01 30                                                      D= 40,4 DEG   AZ=109       CLL

1978 MAR 01    KURILE ISLANDS                                  MB=5,0 (31)   46,3N;153,1E  33KM H=11 05 02,0 (NEIS)
                                                                             46,8N;152,6E  33KM   11 05 05,9 (WDCB)
CLL I P        11 16 52,3  0,8 /  15                                         D= 76,9 DEG   AZ= 27       CLL
BRG E P        11 16 53,0                                                    D= 77,0 DEG   AZ= 28       BRG
MOX E P        11 16 58    1,1 /  12                       MPV  =4,8         D= 77,9 DEG   AZ= 26       MOX

1978 MAR 01    KURILE ISLANDS                                  MB=5,0 (31)   46,3N;153,1E  33KM H=11 47 34,0 (NEIS)
                                                                             46,5N;153,0E  33KM   11 47 35,0 (WDCB)
CLL I P        11 59 24,2D 1,2 /  14                                         D= 76,9 DEG   AZ= 27       CLL
BRG E P        11 59 25,0                                                    D= 77,0 DEG   AZ= 28       BRG
MOX E P        11 59 28                                                      D= 77,9 DEG   AZ= 26       MOX

1978 MAR 01
CLL E          13 43 35

1978 MAR 01    OFF EAST COAST OF HONSHU, JAPAN                 MB=5,4 (49)   34,8N;141,7E  32KM H=15 45 09,6 (NEIS)
                                                                             35,2N;141,6E  33KM   15 45 06,5 (WDCB)
BRG I P        15 57 33,3C 1,5 /  32                                         D= 83,1 DEG   AZ= 41       BRG
     E            58 02,0
     E PP      16 00 44,2
     E S          08 00,0
     LM           39        T 15   AN   3,3 AE   4,6 AV   5,9   MLV  =6,0
CLL I P        15 57 33,9C 1,5 /  45                                         D= 83,1 DEG   AZ= 40       CLL
     E S       16 08,0
     E            18,0
     LMH          35        T 16   AN   2,5 AE   3,5 AV   2     MLH  =5,9
     LMV          39        T 14   AN   3   AE   2   AV   2,5   MLV  =5,8
MOX E P        15 57 39    1,6 /  52                   MPV  =5,5         D= 84,2 DEG   AZ= 39       MOX
     E            57 54
     E            58 08
     E S       16 08 00
     E SS         14 00
     E SSS        17 30
     LMH          39,6      T 14   AN   3,2   MLH  =5,9
     LMV          43,2      T 15   AV   2,9   MLV  =5,8

1978 MAR 01    TONGA ISLANDS                                   MB=5,4 (18)   15,4S;173,3W  33KM H=20 33 39,6 (NEIS)
                                                                             17,8S;169,9W  33KM   20 33 29,6 (WDCB)
CLL I PKP      20 53 10,5  1,2 /  23                                         D=143,8 DEG   AZ= 10       CLL
BRG E PKP      20 53 12,0                                                    D=144,1 DEG   AZ= 12       BRG
MOX E PKP      20 53 13    1,6 /  50                                         D=144,6 DEG   AZ=  8       MOX
     LMH          21 50     T 25   AN   0,5   MLH  =5,2
     LMV          51

1978 MAR 01    DODECANESE ISLANDS                              MB=4,6 (22)   36,0N; 27,1E  89KM H=22 51 05,1 (NEIS)
                                                                             36,2N; 27,2E 105KM   22 51 10,3 (CSEM)
                                                                             35,4N; 26,8E  33KM   22 50 55,3 (WDCB)
BRG E P        22 55 07,2                                                    D= 17,6 DEG   AZ=142       BRG
     I            55 39,6
CLL E P        22 55 14                                                      D= 18,3 DEG   AZ=141       CLL
MOX E P        22 55 16,5  1,8 /  54                       MPV  =4,5         D= 18,4 DEG   AZ=137       MOX

1978 MAR 01    TURKEY-USSR BORDER REGION                       MB=4,5 ( 7)   41,0N; 42,9E  33KM H=23 27 58,4 (NEIS)
                                                                             40,9N; 42,9E  33KM   23 27 53,4 (WDCB)
BRG E(P)       23 33 09,5                                                    D= 22,3 DEG   AZ=105       BRG
CLL E P        23 33 03                                                      D= 23,0 DEG   AZ=105       CLL

1978 MAR 02
CLL E          00 18 07

1978 MAR 02    POLAND, UPPER SILESIA
CLL E          07 47 28
     E SS         48 13

1978 MAR 02    BURMA-INDIA BORDER REGION                       MB=4,6 (14)   27,2N; 96,9E  93KM H=12 14 42,8 (NEIS)
BRG I P        12 25 16,0                                                    D= 65,1 DEG   AZ= 77       BRG
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1978 MAR 02    KOMANDORSKY ISLANDS REGION                    MB=5,4 (71)   55,1N;164,6E  33KM H=14 34 58,5 (NEIS)
                                                                           55,1N;164,3E  33KM   14 34 59,3 (WDCB)
CLL E P        14 46 17    1,8 /   42                                      D= 71,4 DEG   AZ= 17       CLL
    E          14 46 30                                                    DISTANCE  72 DEG
    E(PP)      14 49 11
    E S        14 55 40
      LMH      15 17       T 20   AN   2   AE   2,5          MLH  =5,6
      LMV      21          T 17   AN   1,5 AE   1,5 AV  2,5  MLV  =5,6
BRG E P        14 46 19,0                                                  D= 71,6 DEG   AZ= 17       BRG
    E          14 46 32,3                                                  DISTANCE  72 DEG
    E PP       14 49 02,7
    E S        14 55 46
      LM       15 20       T 14   AN   2,2 AE   3,4 AV  3,8  MLH  =5,8 MLV  =5,9
MOX E P        14 46 23                                                    D= 72,2 DEG   AZ= 16       MOX
    E PM       14 46 38    1,6 /   60                       MPMV =5,4
    E PP       14 49 14    2,4 /   97                       MPPV =5,6
    E S        14 55 55
    E SS       15 00 15
    E SSS      15 04 00
      LMH      15 19,8     T 15   AN   2,4 AE   2,1          MLH  =5,7
      LMV      22,3        T 17,5                 AV  2,4   MLV  =5,6

1978 MAR 02    ALASKA PENINSULA                              MB=4,9 (12)   56,4N;158,3W  88KM H=14 41 40,7 (NEIS)
BRG E P        14 53 01,6                                                  D= 72,9 DEG   AZ=355       BRG
MOX E P        14 53 02    1,5 /   15                       MPV  =4,7     D= 73,0 DEG   AZ=354       MOX

1978 MAR 02    TONGA ISLANDS REGION                          /MB=4,8 ( 1)/ 23,2S;174,6W  33KM H=17 33 13,3  (ISC)
CLL E PKP1     17 53 08    1,5 /   27                                      D=151,3 DEG   AZ= 15       CLL
    E APKP     17 53 22
BRG E PKP1     17 53 09,9  1,0 /   14                                      D=151,6 DEG   AZ= 17       BRG
    E APKP     17 53 24,0
MOX E APKP     17 53 25    1,8 /   27                                      D=152,2 DEG   AZ= 12       MOX

1978 MAR 02    ICELAND REGION                                MB=4,7 (25)   62,5N; 26,1W  10KM H=17 51 29,4 (NEIS)
                                                                           62,5N; 26,0W  10KM   17 51 31,4 (CSEM)
MOX E P        17 56 40    1,6 /   22                       MPV  =4,5     D= 23,5 DEG   AZ=315       MOX
    E S        18 00 55
      LMH      07,1        T  8   AN   0,7                  MLH  =4,5
      LMV      09,8        T 12                   AV  0,6   MLV  =4,4
CLL E          17 56 44    1,4 /   48                                      D= 23,7 DEG   AZ=313       CLL
    LM         18 07
BRG E P        17 56 49,3                                                  D= 24,4 DEG   AZ=314       BRG

1978 MAR 02    TONGA ISLANDS REGION                          MB=5,1 ( 5)   23,0S;175,1W  33KM H=18 23 06,1 (NEIS)
CLL I PKP1     18 42 57,3  1,6 /   40                                      D=151,0 DEG   AZ= 16       CLL
    I APKP     43 10,9
BRG E PKIKP    18 42 52,4                                                  D=151,3 DEG   AZ= 18       BRG
    I PKP1     42 57,7     0,7 /   14
    I PKP2     43 12,0
MOX E PKP2     18 43 13    1,5 /   28                                      D=151,9 DEG   AZ= 13       MOX

1978 MAR 02    KOMANDORSKY ISLANDS REGION                    MB=4,8 (27)   55,1N;164,6E  33KM H=22 09 22,5 (NEIS)
                                                                           55,3N;163,9E  33KM   22 09 25,1 (WDCB)
CLL E P        22 20 41                                                    D= 71,4 DEG   AZ= 17       CLL
    LM         22 54
BRG E P        22 20 42,3                                                  D= 71,6 DEG   AZ= 17       BRG
MOX E P        22 20 46,5                                                  D= 72,2 DEG   AZ= 16       MOX
    E          22 20 53
      LMH      23,5        T 17           AE   0,5          MLH  =4,9
      LMV      26,7        T 13,5                 AV  0,6   MLV  =5,1

1978 MAR 02    KURILE ISLANDS                                MB=5,0 (21)   43,3N;147,8E  33KM H=22 53 46,2 (NEIS)
                                                                           43,5N;147,8E  33KM   22 53 47,1 (WDCB)
CLL I P        23 05 42,7D 1,1 /   15                                      D= 77,9 DEG   AZ= 32       CLL
BRG E P        23 05 42,8                                                  D= 78,0 DEG   AZ= 33       BRG
MOX E P        23 05 49                                                    D= 79,0 DEG   AZ= 31       MOX

1978 MAR 03    KERMADEC ISLANDS                              MB=4,6 ( 5)   30,2S;178,0W 338KM H=02 00 11,7 (NEIS)
                                                                           28,9S;176,6W  33KM   01 59 35,3 (WDCB)
CLL E          02 19 44                                                    D=157,4 DEG   AZ= 25       CLL
    E PKP2     20 03
BRG I PKP2     02 20 04,4  1,6 /   25                                      D=157,5 DEG   AZ= 28       BRG
MOX E          02 20 21                                                    D=158,3 DEG   AZ= 23       MOX

1978 MAR 03    WESTERN IRAN                                  MB=4,8 (30)   32,9N; 48,6E  33KM H=02 42 47,5 (NEIS)
                                                                           33,3N; 48,8E  59KM   02 42 53,9 (CSEM)
                                                                           32,7N; 48,5E  33KM   02 42 41,1 (WDCB)
BRG E(P)       02 49 03,8                                                  D= 31,1 DEG   AZ=112       BRG
CLL E P        02 49 10    1,1 /   12                                      D= 31,8 DEG   AZ=112       CLL

1978 MAR 03    TONGA ISLANDS REGION                          MB=5,2 (10)   23,3S;175,0W  33KM H=07 34 59,8 (NEIS)
CLL I PKP1     07 54 51,9  1,4 /   46                                      D=151,4 DEG   AZ= 15       CLL
    I APKP     55 05,7
BRG E PKIKP    07 54 45,9                                                  D=151,6 DEG   AZ= 17       BRG
    I PKP1     54 52,6
    I PKP2     55 07,0
MOX E PKHKP    07 54(53)   1,4 /   19                                      D=152,2 DEG   AZ= 13       MOX
    E PKP2     55 07,5     1,7 /   55

1978 MAR 03    TONGA ISLANDS REGION                          MB=5,2 ( 9)   23,3S;175,0W  33KM H=07 42 08,6 (NEIS)
CLL I PKP1     08 02 00,4D 1,6 /   48                                      D=151,4 DEG   AZ= 15       CLL
    I APKP     02 14,7
BRG E PKIKP    08 01 54,4  1,8 /   47                                      D=151,6 DEG   AZ= 17       BRG
    I PKP1     02 01,4
    I          02 15,4
MOX E PKHKP    08 02 02,5  1,6 /   17                                      D=152,2 DEG   AZ= 13       MOX
    E          02 16,5     1,8 /   47
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1978 MAR 03    KOMANDORSKY ISLANDS REGION                    MB=4,5 (15)   55,5N;164,4E  33KM H=09 55 25,0 (NEIS)
                                                                           55,4N;164,0E  33KM   09 55 26,2 (WDCB)
CLL E P        10 06 42                                                    D= 70,9 DEG   AZ= 17       CLL
    E          10 06 54
    E          10 07 32
BRG E P        10 06 44,2                                                  D= 71,2 DEG   AZ= 17       BRG

1978 MAR 03    KOMANDORSKY ISLANDS REGION                    MB=5,5 (65)   55,1N;164,8E  33KM H=10 53 19,8 (NEIS)
                                                                           55,1N;163,9E  33KM   10 53 21,1 (WDCB)
CLL I P        11 04 38,1C 2,0 /   125                                     D= 71,4 DEG   AZ= 17       CLL
    E(AP)      11 04 51                                                    DISTANCE  71 DEG
    E S        11 13 55
    E SS       11 18 30
    E SSSS     11 23,0
      LM       11 37       T 16   AN   7   AE   7   AV  5,5  MLH  =6,0 MLV  =5,9
      L        11 44       T 14   AN   8   AE   4,5 AV  3
BRG I P        11 04 39,3C 1,4 /   35                                      D= 71,6 DEG   AZ= 17       BRG
    E AP       11 04 52,9
    E PP       11 07 27
    E S        11 14 00,0
    E SS       11 18 33,0
    E SSS      11 21 56,0
    E PKPPKP   11 32 14
      LM       11 39       T 15   AN  15,6 AE   9,3 AV  10,8  MLV  =6,3
MOX I P        11 04 43,5C 2,0 /   86                                      MPV  =5,4     D= 72,3 DEG   AZ= 16       MOX
    I AP       11 04 56,5  1,6 /   132                                                   DEPTH  50 KM
    E S        11 14 08
    E PS       11 14 40
    E SS       11 18 36
    E SSS      11 22 10
      LMH      11 37,3     T 19   AN   9,6 AE   8,9          MLH  =6,2
      LMV      11 40,6     T 17                   AV  8,3   MLV  =6,1

1978 MAR 03    TONGA ISLANDS                                 MB=5,6 (16)   15,3S;173,5W  33KM H=10 48 11,1 (NEIS)
CLL E PKP      11 07 45    1,0 /   31                                      D=143,7 DEG   AZ= 11       CLL
    E          11 08 07
BRG E PKP      11 07 47,6                                                  D=144,0 DEG   AZ= 12       BRG
    E          11 08 08,3
MOX E PKP      11 07 45                                                    D=144,5 DEG   AZ=  9       MOX

1978 MAR 03
MOX E          11 47 56

1978 MAR 03    CARLSBERG RIDGE                               MB=5,0 (18)    3,5N; 63,8E  33KM H=17 29 43,2 (NEIS)
                                                                            3,2N; 63,7E  33KM   17 29 35,1 (WDCB)
BRG E P        17 40 08,0                                                  D= 63,0 DEG   AZ=121       BRG
CLL E P        17 40 12    2,3 /   64                                      D= 63,7 DEG   AZ=120       CLL

1978 MAR 03    VANUATU ISLANDS                               /NO MB COMP./ 19,9S;168,7E  33KM H=18 15 39,1  (ISC)
MOX E PKP      18 35 12                                                    D=144,4 DEG   AZ= 39       MOX

1978 MAR 03    KODIAK ISLAND REGION                          MB=4,5 ( 7)   56,3N;152,8W  35KM H=18 48 36,7 (NEIS)
BRG E P        19 00 03,3                                                  D= 72,6 DEG   AZ=352       BRG

1978 MAR 03    POLAND, UPPER SILESIA
CLL E          20 37 57

1978 MAR 03
CLL E          22 53 28
MOX E          22 53 37,5

1978 MAR 04    SOUTH OF FIJI ISLANDS                         MB=5,2 ( 8)   23,9S;179,8E 513KM H=03 51 33,1 (NEIS)
CLL I PKP1     04 10 27,6  1,0 /   22                                      D=150,8 DEG   AZ= 25       CLL
    I PKP2     10 37,4
    E APKP     12 33
BRG E PKIKP    04 10 21,2                                                  D=150,9 DEG   AZ= 27       BRG
    I PKP1     10 28,1     0,5 /    8
    I PKP2     10 37,8
    E APKP     12 34,0
MOX E PKP2     04 10 41                                                    D=151,8 DEG   AZ= 23       MOX

1978 MAR 04    FIJI ISLANDS REGION                           /MB=4,6 ( 4)/ 18,8S;177,9W 615KM H=03 56 10,5  (ISC)
CLL I PKP1     04 14 45,7D 0,9 /   30                                      D=146,4 DEG   AZ= 19       CLL
BRG I PKP1     04 14 46,1D 0,6 /   14                                      D=146,6 DEG   AZ= 21       BRG
MOX E PKHKP    04 14 48                                                    D=147,3 DEG   AZ= 17       MOX

1978 MAR 04    ALBANIA                                                     42,0N; 19,5E  10KM H=04 16 42,2 (CSEM)
CLL E(SG)      04 22 45    TRACES                                          D= 10,3 DEG   AZ=152       CLL

1978 MAR 04    TONGA ISLANDS                                 MB=5,7 (33)   21,9S;174,9W  33KM H=04 46 36,1 (NEIS)
                                                                           21,6S;175,4W  33KM   04 46 38,2 (WDCB)
CLL E PKIKP    05 06 18                                                    D=150,0 DEG   AZ= 15       CLL
    I PKP1     06 24,8     1,8 /  180                                      DISTANCE 151 DEG
    E PP       10 08
    E SKKS     16,8
    E SKSP     20 12
    E PS       20,2
    E PPS      23,2
    E SS       29,7
    E SSS      35,1
      LM       06 18       T 18   AN   3   AE   2,5 AV  4    MLH  =6,1 MLV  =6,3
      L        27          T 17   AN   2,5 AE   1,5 AV  3
BRG I PKIKP    05 06 20,0                                                  D=150,3 DEG   AZ= 17       BRG
    I PKP1     06 26,4                                                     DISTANCE 150 DEG
    E PKP2     06 34,2
  (CONT.)
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(CONT,)

E SKSP 05 20 20
E SS 29 24
LM 06 23 T 18 AN 4,4 AE 5,3 AV 4,4 MLH =6,4 MLV =6,3
D=150,9 DEG AZ= 12 MOX
MOX E PKIKP 05 06 21
E 06 40 1,9 / 288
T 5,5 AV 1,7
E SKKS 17 00
E PS 20 35
E SS 29 30
LMV 06 24,5 T 17 AV 12,5 MLV =6,8
LMH 24,7 T 17 AN 3,9 AE 2,9 MLH =6,3

1978 MAR 04 KODIAK ISLAND REGION MB=4,6 (8) 56,3N;152,7W 20KM H=10 23 01,4 (NEIS)
BRG E P 10 34 29,7 D= 72,6 DEG AZ=352 BRG
MOX E P 10 34 29 TRACES D= 72,6 DEG AZ=351 MOX

1978 MAR 04 FIJI ISLANDS REGION MB=5,0 (4) 18,0S;178,5W 588KM H=12 08 49,0 (NEIS)
CLL I PKP1 12 27 22,9 1,0 / 15 D=145,5 DEG AZ= 20 CLL

1978 MAR 04
MOX E PN 13 00 03 DISTANCE 1,4DEG
I SG 00 22,5

1978 MAR 04 CZECHOSLOVAKIA NO MB COMP, 48,8N; 19,3E 33KM H=13 00 37,2 (NEIS)
48,7N; 19,3E 10KM 13 00 37,1 (CSEM)
BRG E(PN) 13 01 38,2 D= 4,0 DEG AZ=119 BRG
E PG 01 53,0
E SG 02 47,6
CLL E PG 13 02 10 D= 4,8 DEG AZ=119 CLL
E SG 03 12

1978 MAR 04 NEW IRELAND REGION MB=6,2 (55) 4,7S;153,1E 78KM H=14 58 13,0 (NEIS)
4,9S;152,8E 70KM 14 58 12,7 (WDCB)
BRG I PDIF 15 13 32,0 0,8 / 11 D=122,7 DEG AZ= 51 BRG
E PKP 17 02,0 1,5 / 185
E PP 18 41
E PKKP 26 57,0
E PS 28 32,0
E SS 35 39
LM 16 12
LM 17 T 17 AV 2,6 MLV =6,0 (NO DEPTH CORRECTION)
CLL E PDIF 15 13 32 D=122,9 DEG AZ= 50 CLL
I PKP 17 02,2C 1,0 / 140 DISTANCE 122 DEG
E PP 18 41
E 19 43
E 21 03
E PKKP2 26 57
E SKSP 28,5
E SKKP 30 45
LM 16 13 T 15 AN 2 AE 2,5 AV 3 MLH =6,1 MLV =6,1 (NO DEPTH CORRECTION)
MOX E PKP 15 17 04,5C 1,3 / 109 D=124,0 DEG AZ= 48 MOX
E PP 18 51 1,4 / 56 MPPV =5,4
T 8 AV 1,1 MPPV =5,9
E SKKS 26 05
E PS 29 05
E SS 36 20
E SSS 40 45
LMH 16 08,8 T 20 AN 2,4
LMV 16,2 T 19 AV 2,9

1978 MAR 04 CZECHOSLOVAKIA-FRG BORDER REGION 49,9N; 12,8E 10KM H=15 45 16,2 (CSEM)
MOX I PG 15 45 36,4D D= 1,1 DEG AZ=134 MOX
I 45 40 DISTANCE 1,0DEG
I SG 45 50
BRG I PN 15 45 38,7 D= 1,2 DEG AZ=217 BRG
I PG 45 39,8 DISTANCE 1,3DEG
I SG 45 55,3
CLL I PN 15 45 41,2 D= 1,4 DEG AZ=185 CLL
I PG 45 43,2 DISTANCE 170 KM
E 45 47
I SG 46 03,3

1978 MAR 04 GUATEMALA MB=5,2 (43) 14,3N; 91,3W 101KM H=17 35 09,4 (NEIS)
MOX E P 17 47 44 1,4 / 19 MPV =4,9 D= 87,1 DEG AZ=289 MOX
E AP 48 13 DEPTH 115 KM
CLL E P 17 47 48 1,5 / 18 D= 87,7 DEG AZ=290 CLL
E AP 48 16
BRG E P 17 47 47,8 D= 88,4 DEG AZ=291 BRG

1978 MAR 05 KERMADEC ISLANDS MB=5,1 (2) 30,2S;177,2W 33KM H=00 54 45,8 (NEIS)
CLL E PKP2 01 15 11 1,7 / 30 D=157,6 DEG AZ= 24 CLL
E APKP2 15 24
BRG E PKP2 01 15 09,9 D=157,7 DEG AZ= 26 BRG
I APKP2 15 24,8

1978 MAR 05
CLL E 02 53 33

1978 MAR 05 CRETE MB=4,4 (11) 34,9N; 23,4E 33KM H=05 26 05,3 (NEIS)
35,2N; 23,6E 75KM 05 26 14,2 (CSEM)
34,5N; 23,5E 33KM 05 25 57,2 (WDCB)
BRG E P 05 30 07,5 1.0 / 6 D= 17,4 DEG AZ=153 BRG
MOX E P 05 30 15 D= 17,9 DEG AZ=147 MOX
CLL I P 05 30 15,3 0,8 / 14 D= 18,0 DEG AZ=151 CLL

1978 MAR 05 MEDITERRANEAN SEA MB=4,2 (4) 35,7N; 22,1E 33KM H=10 05 51,4 (NEIS)
35,8N; 22,0E 10KM 10 05 52,4 (CSEM)
BRG E 10 09 53,3 D= 16,3 DEG AZ=156 BRG
MOX E 10 10 10 D= 16,8 DEG AZ=149 MOX
CLL E(PPP) 10 10 08 D= 16,9 DEG AZ=154 CLL

1978 MAR 05 KURILE ISLANDS MB=4,6 (9) 47,0N;154,0E 33KM H=10 47 50,4 (NEIS)
CLL E P 10 59 38 1,0 / 15 D= 76,5 DEG AZ= 26 CLL
E AP 59 50
BRG E P 10 59 41,0 1,0 / 6 D= 76,6 DEG AZ= 27 BRG
MOX E P 10 59 44 D= 77,5 DEG AZ= 25 MOX

1978 MAR 05
CLL E 12 52 51 TRACES

1978 MAR 05 FIJI ISLANDS REGION MB=4,9 (3) 17,7S;178,7W 581KM H=13 00 08,2 (NEIS)
CLL I PKP 13 18 42,2D 1,0 / 15 D=145,2 DEG AZ= 20 CLL
BRG E PKP 13 18 41,8 D=145,4 DEG AZ= 22 BRG
E APKP 20 44,2

1978 MAR 05 FIJI ISLANDS REGION MB=4,5 (4) 17,3S;178,5W 553KM H=20 24 16,6 (NEIS)
CLL I PKP 20 42 54,0 D=144,9 DEG AZ= 19 CLL
BRG I PKP 20 42 54,7 D=145,1 DEG AZ= 21 BRG

1978 MAR 05 SOUTHERN GREECE MB=4,2 (5) 37,7N; 21,3E 33KM H=23 29 25,8 (NEIS)
37,8N; 21,3E 44KM 23 29 29,1 (CSEM)
CLL I(P) 23 33 01,7D D= 14,8 DEG AZ=153 CLL

1978 MAR 06 SOUTHERN PACIFIC OCEAN MB=5,4 (15) 35,5S;102,6W 33KM H=00 22 19,2 (NEIS)
35,4S;104,3W 33KM 00 22 15,4 (WDCB)
MOX E PKP 00 41 30 D=131,2 DEG AZ=262 MOX
E SS 01 01 40
E SSS 05 40
LMH 26,5 T 48 AE 2,0 MLH =5,4
LMV 26,6 T 44 AV 1,7 MLV =5,4
CLL E PKP 00 41 30 D=132,2 DEG AZ=263 CLL
E(SKP) 45 03 2,2 / 52
BRG E PKP 00 41 33,4 D=132,7 DEG AZ=263 BRG
E PP 44 07,8
E SKP 45 03,8 1,7 / 25

1978 MAR 06 KOMANDORSKY ISLANDS REGION MB=5,1 (37) 55,0N;164,7E 33KM H=01 18 59,6 (NEIS)
54,9N;164,5E 33KM 01 18 59,8 (WDCB)
CLL E P 01 30 18 1,6 / 24 D= 71,5 DEG AZ= 17 CLL
LH 02 02
LH 10
BRG I P 01 30 20,4C 1,0 / 16 D= 71,7 DEG AZ= 17 BRG
MOX E P 01 30 24 2,0 / 43 MPV =5,1 D= 72,3 DEG AZ= 16 MOX
LMH 02 03 T 20 AN 2,8 MLH =5,5
LMV 04,8 T 21,5 AV 0,9 MLV =5,0

1978 MAR 06 FIJI ISLANDS REGION MB=5,2 (5) 21,0S;178,9W 620KM H=02 15 32,2 (NEIS)
CLL I PKP1 02 34 11,1D 1,1 / 24 D=148,3 DEG AZ= 22 CLL
I PKP2 34 16,4 1,1 / 16 MC =4,4
E APKP 36 33
BRG I PKIKP 02 34 08,2 D=148,5 DEG AZ= 23 BRG
E PKP1 34 11,3 DISTANCE 148,5DEG
I PKP2 34 17,2
E APKP 36 33,0
MOX E PKHKP 02 34 13 D=149,3 DEG AZ= 19 MOX
E PKP2 34 20

1978 MAR 06 NEW BRITAIN REGION MB=5,5 (36) 4,9S;151,8E 99KM H=05 04 14,7 (NEIS)
BRG I PKP 05 23 02,2 D=122,3 DEG AZ= 52 BRG
I SKP 26 27,0

1978 MAR 06 FIJI ISLANDS REGION MB=4,6 (3) 21,2S;178,2W 437KM H=09 45 12,1 (NEIS)
CLL I PKP1 10 04 09,7D 0,8 / 18 D=148,7 DEG AZ= 20 CLL
BRG E PKP1 10 04 10,2 0,8 / 9 D=148,9 DEG AZ= 22 BRG

1978 MAR 06
MOX E(P) 11 09 51

1978 MAR 06 SEA OF JAPAN MB=5,1 (75) 38,3N;134,0E 417KM H=15 11 38,2 (NEIS)
38,5N;133,9E(410KM) 15 11 38,0 (WDCB)
BRG I P 15 22 47,1D 1,3 / 56 D= 76,8 DEG AZ= 44 BRG
E AP 24 18,6
CLL I P 15 22 47,2D 1,0 / 78 D= 76,9 DEG AZ= 44 CLL
E AP 24 23
MOX E P 15 22 54 1,2 / 37 MPV =5,0 D= 78,0 DEG AZ= 43 MOX
E AP 24 30 1,5 / 20 DEPTH 438 KM

1978 MAR 06 KOMANDORSKY ISLANDS REGION MB=5,0 (31) 55,1N;164,6E 33KM H=18 33 57,1 (NEIS)
55,1N;164,1E 33KM 18 33 58,1 (WDCB)
CLL I P 18 45 15,8 1,1 / 14 D= 71,4 DEG AZ= 17 CLL
E AP 45 28
BRG E P 18 45 17,1 1,3 / 11 D= 71,6 DEG AZ= 17 BRG
MOX I P 18 45 21,5 1,4 / 16 MPV =4,8 D= 72,2 DEG AZ= 16 MOX

1978 MAR 06
CLL E 22 49 01

1978 MAR 07 SOUTH OF HONSHU, JAPAN MB=6,0(116)
MB=6,9(6) (2)32,0N;137,6E 442KM H=02 48 39,4 (NEIS)
31,7N;137,6E 400KM 02 48 34,6 (WDCB)
32,0N; 37,6E 439KM 02 48 47,6 (NEIS)
BRG I P(1) 03 00 21,3 1,0 / 64 D= 83,7 DEG AZ= 45 BRG
I P(2) 00 28,2 1,3 / 730 MPV =6,2 DISTANCE 83 DEG DEPTH 460 KM
I 00 32,2
I 00 57,5
(CONT,)

(CONT,)
E AP 03 02 09,7
E SP 02 59,1
E XPP 05 53,3
E SKS 10 13
E XS 13 07
E SS 15 44
E PKKS 22 32
E PKPPKP 26 47
LMH 37
LMV 45 T 15 AN 35,3 AE 35,8 MLH =7,0 (NO DEPTH CORRECTION)
D= 83,8 DEG AZ= 45 CLL
CLL I P(1) 03 00 22,2C 1,2 / 110 DISTANCE 84 DEG DEPTH>400 KM
I P(2) 00 28,0
I 00 57,0
I 01 12,2
I AP(2) 02 11
E(XP) 03 09
E(PPP) 05 45
E SKS(1) 10 08
I SKS(2) 10 13
E S 10 23
E 10 41
E 11 01
I 11 09
I SP 11 14
E(PS) 12 30
I XS 13 06
E 14 29
E(SS) 15,8
E SSSS 22,5
E PKPPKP 26 48
E APKPPKP 28 35
E 32 13
L(2) 38 T 15 AN 14 AE 17 AV 7,5
LM(2) 44 T 16 AN 27 AE 7 AV 18,5 MLH =6,7 MLV =6,6 (NO DEPTH CORRECTION)
MOX E P(1) 03 00 28,5 1,4 / 37 MPV =4,9 D= 84,9 DEG AZ= 44 MOX
I P(2) 00 34,5 1,8 / 716 MPV =6,1 DEPTH 461 KM
I AP 02 16,0 2,0 / 615
E PP 04 00 1,9 / 424 MPPV =6,2
E SKS 10 16
E XS 13 12
E SS 16 00
E SSS 19 55
E 22 40
LMH 44 T 16 AV 19,2
LMV 45 T 16 AN 17,1 AE 14,8

1978 MAR 07 POLAND, UPPER SILESIA NO MB COMP, (50,7N; 18,9E 33KM H=08 14 06,9)(NEIS)
BRG I PG 08 15 12,2 D= 3,1 DEG AZ= 91 BRG
I SN 15 38,8
E SG 15 55,2
CLL E PG 08 15 23 D= 3,8 DEG AZ= 97 CLL
E SN 15 55 DISTANCE 4,0DEG
E SG 16 15
MOX E PN 08 16 24,5 D= 4,6 DEG AZ= 87 MOX
E SG 16 40

1978 MAR 07
CLL E 19 09 20 TRACES

1978 MAR 07 SOUTHERN SUMATERA MB=5,3 (32) 1,7S; 99,7E 33KM H=19 58 45,8 (NEIS)
1,3S; 99,7E 33KM 19 58 47,4 (WDCB)
BRG I P 20 11 38,2D 1,3 / 30 D= 88,6 DEG AZ= 94 BRG
CLL I P 20 11 40,8D 1,3 / 19 D= 89,2 DEG AZ= 94 CLL
E 11 54
MOX E P 20 11 45 1,4 / 28 MPV =5,4 D= 90,1 DEG AZ= 93 MOX

1978 MAR 07 CRETE MB=5,4 (84) 34,5N; 25,3E 42KM H=22 33 46,7 (NEIS)
34,5N; 25,3E 48KM 22 33 49,4 (CSEM)
34,3N; 25,1E 33KM 22 33 43,5 (WDCB)
BRG I P 22 37 58,0D 1,4 / 134 D= 18,3 DEG AZ=149 BRG
I 38 08,0 DISTANCE 19 DEG
E S 41 40,8
LM 47 T 14 AN 3,0 AE 2,3 AV 2,4 MLH =4,9 MLV =4,8
MOX I P 22 38 06,0C 2,5 / 691 MPV =5,4 D= 19,0 DEG AZ=143 MOX
T 5 AV 1,2 MPV =5,4
E S 41 32
LMH 46,8 T 16 AN 4,2 MLH =4,8
LMV 46,8 T 14,5 AV 4,9 MLV =5,1
CLL I P 22 38 06,1C 2,2 / 290 MPV =5,1 D= 19,0 DEG AZ=147 CLL
T 4 AN 1,3 AE 0,9 AV 1,5 MPH =5,7 MPV =5,6 DISTANCE 20 DEG
I XP 38 18,8
E S 41 38
I XS 41 52,0 T 6 AN 0,8 AE 2,0
E SS 42 06
LH 44
LM 46,4 T 10 AN 2,5 AE 1,5 AV 2,5 MLH =4,9 MLV =4,9
E 47 55
E 48 27
E SCS 49 43

1978 MAR 07 CRETE MB=4,4 (39) 34,4N; 25,3E 33KM H=22 59 58,0 (NEIS)
34,4N; 25,3E 37KM 23 00 01,1 (CSEM)
34,2N; 25,1E 33KM 22 59 56,3 (WDCB)
BRG E P 23 04 12,7 D= 18,4 DEG AZ=149 BRG
MOX E P 23 04 20 0,7 / 13 MPV =4,3 D= 19,1 DEG AZ=143 MOX
CLL E P 23 04 20 D= 19,1 DEG AZ=147 CLL
E 04 30
E 04 50
E S 07 55
E XS 08 06

1978 MAR 07 / SOUTH SANDWICH ISLANDS REGION MB=5,7 (13)
MAR 08 56,5S; 25,6W 33KM H=23 31 29,7 (NEIS)
MOX LMH 00 35,6 T 17 AN 0,7 MLH =5,3 D=111,1 DEG AZ=201 MOX
LMV 38,2 T 16 AV 0,9 MLV =5,4
CLL E PP 23 50 52
E PKKP2 00 01 09 D=112,1 DEG AZ=202 CLL
LM 49

1978 MAR 08 FIJI ISLANDS REGION
CLL I PKP 06 26 42,5C 1,1 / 25 /MB=3,8 (1)/ 17,4S;177,9W 330KM H=06 07 45,5 (ISC)
MOX E PKP 06 26 45 D=145,1 DEG AZ= 18 CLL
D=146,0 DEG AZ= 16 MOX

1978 MAR 08 LOYALTY ISLANDS REGION
BRG E PKP 09 33 13,4 NO MB COMP, 23,3S;170,1E 33KM H=09 13 31,1 (NEIS)
CLL E APKP 09 33 21 TRACES D=146,8 DEG AZ= 43 BRG
D=146,9 DEG AZ= 41 CLL

1978 MAR 08 NEAR EAST COAST OF HONSHU, JAPAN MB=4,7 (6) 36,0N;141,2E 42KM H=10 27 49,7 (NEIS)
CLL E P 10 40 07 D= 81,9 DEG AZ= 40 CLL

1978 MAR 08 WESTERN POLAND
BRG E PG 12 19 02,1
I SG 19 21,1
CLL E PG 12 19 15
E SG 19 41 DISTANCE 220 KM
MOX E SG 12 20 10

1978 MAR 08 HUNGARY
BUDAPEST REGION
BRG E(PN) 14 10 48,0 (VKA)
E 12 11,6
CLL E 14 12 16
E 13 08

1978 MAR 08
CLL E 16 04 15

1978 MAR 08
BRG I(P) 18 42 33,8 0,8 / 10
I 43 00,2

1978 MAR 08 FIJI ISLANDS REGION MB=4,7 (6) 19,5S;178,0W 437KM H=18 36 56,4 (NEIS)
CLL I PKP1 18 55 51,2C 0,8 / 21 D=147,1 DEG AZ= 19 CLL
I PKP2 55 54,2
BRG I PKP1 18 55 52,2 1,0 / 12 D=147,3 DEG AZ= 21 BRG
I PKP2 55 55,6
MOX E PKHKP 18 55 54 D=148,0 DEG AZ= 17 MOX

1978 MAR 08 / MEDITERRANEAN SEA MB=4,3 (4)
MAR 09 34,8N; 22,9E 33KM H=23 54 29,4 (NEIS)
34,7N; 22,9E 10KM 23 54 28,9 (CSEM)
BRG E P 23 58 31,9 D= 17,3 DEG AZ=155 BRG
MOX E 23 58 49 1,6 / 17 D= 17,8 DEG AZ=148 MOX
LMH 00 05,5 T 14 AE 0,3 MLH =3,7
CLL E P 23 58 39 D= 18,0 DEG AZ=153 CLL

1978 MAR 09 FIJI ISLANDS REGION /MB=4,7 (2)/ (17,3S;177,9W 619KM H=01 44 32,7) (ISC)
CLL I PKP 02 03 12,8C 0,9 / 15 D=145,0 DEG AZ= 18 CLL
BRG E PKP 02 03 13,4 D=145,2 DEG AZ= 20 BRG

1978 MAR 09 FIJI ISLANDS REGION MB=5,2 (27) 20,9S;179,8W 672KM H=14 22 02,3 (NEIS)
CLL I PKIKP 14 40 31,5 1,3 / 20 D=148,0 DEG AZ= 23 CLL
I PKP1 40 35,7C 0,9 / 100 DISTANCE 148 DEG DEPTH 680 KM
I PKP2 40 41,2D 1,0 / 34 MC =5,0
E APKP 43 08
BRG E PKIKP 14 40 31,5 D=148,2 DEG AZ= 25 BRG
I PKP1 40 36,0
I PKP2 40 41,4
E APKP 43 09,1
MOX E PKIKP 14 40 32,5 D=149,0 DEG AZ= 21 MOX
I PKHKP 40 37,5 1,4 / 61 DEPTH 707 KM
E PKP2 40 46
E APKP 43 12

1978 MAR 09
CLL E 19 53 52 TRACES

1978 MAR 09 NEW BRITAIN REGION MB=5,3 (23) 6,1S;149,9E 65KM H=21 43 06,9 (NEIS)
6,0S;150,1E 33KM 21 42 57,6 (WDCB)
BRG E PKP 22 01 56,2 1,2 / 15 D=122,3 DEG AZ= 55 BRG
I APKP 02 09,0
CLL E PKP 22 01 56 1,1 / 14 D=122,5 DEG AZ= 54 CLL
E APKP 02 09
E PKKP 11 52
E SKKP 15 40
LM 55 T 20 AN 2 AE 2 AV 3 MLH =5,9 MLV =5,9 (NO DEPTH CORRECTION)
MOX E PKP 22 02 03 D=123,6 DEG AZ= 53 MOX
E 02 12
E PP 03 45
E PS 13 45
E SS 21 25
LM 56,6 T 21 AN 1,3 AE 2,0 AV 2,8

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1978 MAR 09
CLL E          23 42 22

1978 MAR 09    KURILE ISLANDS                                  MB=4,7 (25)   46,8N;153,9E  43KM H=23 41 58,1 (NEIS)
                                                                             46,9N;153,9E  33KM   23 41 57,4 (WDCB)
                                                                                   D= 76,6 DEG   AZ= 26       CLL
CLL I P        23 53 46,0  1,1 /   27                                          D= 76,8 DEG   AZ= 27       BRG
BRG E P        23 53 46,3  1,2 /   11
MOX E P        23 53 52    1,2 /   18                          MPV  =5,0      D= 77,6 DEG   AZ= 25       MOX
   E           54 12

1978 MAR 10    MEDITERRANEAN SEA                               MB=4,3 (17)   35,1N; 23,0E  57KM H=00 23 06,5 (NEIS)
                                                                             35,0N; 23,0E  47KM   00 23 07,8 (CSEM)
                                                                             34,6N; 23,0E  33KM   00 23 00,7 (WDCB)
                                                                                   D= 17,1 DEG   AZ=154       BRG
BRG E P        00 27 03,4                                                      D= 17,6 DEG   AZ=148       MOX
MOX E P        00 27 14                                                        D= 17,7 DEG   AZ=152       CLL
CLL I P        00 27 12,5
   I           27 20,7

1978 MAR 10    POLAND, UPPER SILESIA
BRG E PG       08 53 03,3
   E SG        53 42,0
CLL E          08 53 51
   E SG        54 05

1978 MAR 10
BRG E(P)       11 34 38,0

1978 MAR 10
CLL E SG       11 47 08

1978 MAR 10    POLAND, UPPER SILESIA
BRG E(PG)      17 04 25,7
   E(SG)       05 09,3
CLL E SG       17 05 32

1978 MAR 10
CLL E          19 37 24

1978 MAR 10    MID-INDIAN RISE                                 MB=4,8 ( 4)    9,2S; 67,3E  33KM H=22 15 07,9 (NEIS)
                                                                                   D= 75,5 DEG   AZ=125       BRG
BRG E P        22 26 51,0                                                      D= 76,2 DEG   AZ=124       CLL
CLL E P        22 26 56

1978 MAR 10    OFF EAST COAST OF HONSHU, JAPAN                 MB=4,9 (37)   38,6N;143,1E  30KM H=22 20 58,1 (NEIS)
                                                                             38,7N;142,9E  33KM   22 20 54,1 (WDCB)
                                                                                   D= 80,4 DEG   AZ= 38       BRG
BRG E P        22 33 08,0  0,9 /   12                                          D= 80,4 DEG   AZ= 37       CLL
CLL I P        22 33 07,0  1,1 /   18                                          D= 81,4 DEG   AZ= 36       MOX
MOX E P        22 33 14    TRACES

1978 MAR 11
CLL E          02 57 25

1978 MAR 11    MOLUCCA PASSAGE                                 MB=5,7 (59)   1,8N;126,0E  63KM H=04 18 03,6 (NEIS)
                                                                             2,1N;125,7E  70KM   04 18 07,2 (WDCB)
BRG I P        04 31 54,5  1,0 /   12                                          D=102,3 DEG   AZ= 71       BRG
   E           35 24,0
   E PKP       35 52,0
   E SKS       42 30,0
   E PS        46 00,0
   LM          05 23
CLL E(P)       04 32 01    1,6 /   35                                          D=102,8 DEG   AZ= 71       CLL
   E AP        32 11
   E           35 43
MOX E P        04 32 06,5  1,5 /   25                          MPV  =5,9      D=103,8 DEG   AZ= 70       MOX
   LMH         05 16,4     T 20          AE   0,7
   LMV         25          T 16               AV   0,6

1978 MAR 11
BRG E P        04 50 09,0  1,3 /   13

1978 MAR 11    HALMAHERA                                       MB=5,3 (43)   0,3N;127,6E 237KM H=10 38 24,5 (NEIS)
MOX E PKP      10 56 40                                                        D=106,0 DEG   AZ= 69       MOX

1978 MAR 11    SUMBA REGION                                    MB=5,5 (16)   10,9S;119,1E  33KM H=11 54 42,1 (NEIS)
MOX   LMV      12 58       T 28               AV   0,6  MLV  =5,0      D=109,4 DEG   AZ= 83       MOX

1978 MAR 11    TONGA ISLANDS                                   MB=4,8 ( 2)   21,4S;174,8W  33KM H=14 41 29,7 (NEIS)
CLL E PKP1     15 01 19                                                        D=149,5 DEG   AZ= 14       CLL
BRG E PKP1     15 01 19,8                                                      D=149,8 DEG   AZ= 16       BRG

1978 MAR 11    SOUTHERN ITALY                                  MB=5,6 (69)   38,1N; 16,0E  33KM H=19 20 49,1 (NEIS)
                                                                             38,0N; 16,1E  10KM   19 20 49,1 (CSEM)
                                                                             38,2N; 16,1E  33KM   19 20 50,3 (WDCB)
BRG E P        19 23 51,9  1,1 /  150                                          D= 12,9 DEG   AZ=173       BRG
   I PP        24 04,0
   LM          29          T 12               AV  15,0
MOX E P(1)     19 23 53    1,0 /   47                          MPV  =5,4      D= 12,9 DEG   AZ=164       MOX
   E P(2)      24 00       1,3 /  205                          MPV  =5,9
   E P(3)      24 09       1,3 /  240                          MPV  =6,0
   E S         26 25
   LMH         28,9        T 16          AE   8,0            MLH  =4,8
   LMV         29,8        T 13               AV   6,6
CLL I P        19 23 59,2  1,2 /  120                                          D= 13,4 DEG   AZ=170       CLL
   I(PP)       24 09,5
   E           25 55
  (CONT.)
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  (CONT.)
   E SS        19 26 44
   E           28,5
   LM          29,9        T 12   AN   5,5 AE   4,5 AV   7,5  MLH  =4,9

1978 MAR 11    KURILE ISLANDS                                  MB=4,9 (31)   44,4N;149,5E  33KM H=21 11 20,7 (NEIS)
                                                                             44,3N;149,3E  33KM   21 11 20,6 (WDCB)
CLL I P        21 23 14,0D 0,9 /   32                                          D= 77,5 DEG   AZ= 30       CLL
BRG E P        21 23 14,1  1,1 /   14                                          D= 77,6 DEG   AZ= 31       BRG
MOX E P        21 23 20                                                        D= 78,5 DEG   AZ= 29       MOX

1978 MAR 12    CALIFORNIA-MEXICO BORDER REGION                 MB=4,5 ( 4)   32,2N;115,1W   5KM H=00 30 14,2 (NEIS)
CLL E AP       00 42 57    TRACES                                              D= 85,2 DEG   AZ=318       CLL

1978 MAR 12    SOUTH INDIAN OCEAN                             /MB=4,8 (11)/  2,9S; 86,8E  33KM H=01 42 01,5  (ISC)
CLL E P        01 54 21    0,8 /   15                                          D= 82,2 DEG   AZ=105       CLL
MOX E P        01 54 25                                                        D= 82,9 DEG   AZ=103       MOX

1978 MAR 12    SOUTHERN SINKIANG PROV., CHINA                  MB=5,3 (87)   41,9N; 80,0E  26KM H=08 29 19,0 (NEIS)
                                                                             42,0N; 80,0E  33KM   08 29 20,2 (WDCB)
BRG I P(1)     08 37 34,2C 0,8 /   20                                          D= 45,0 DEG   AZ= 75       BRG
   I P(2)      37 41,6     1,4 /   86
   I PP        39 22,6
   I           39 37,4
   E SS        47 43,0
   LM          09 00       T 15               AV   3,6  MLV  =5,5
CLL I P(1)     08 37 37,3C 0,9 /   40                                          D= 45,5 DEG   AZ= 75       CLL
   I P(2)      37 44,8C                                                        DISTANCE  45 DEG
   I PM        37 48,7     1,5 /  175
   E PP        39 27
   E           39 46
   E           39 56
   E SS        48,0
   LM          57          T 15   AN   2   AE   1,5 AV   2    MLH  =5,2 MLV  =5,2
MOX E P(1)     08 37 45,5  1,0 /   24                          MPV  =5,1      D= 46,5 DEG   AZ= 73       MOX
   E P(2)      37 53       1,4 /  121                          MPV  =5,7
   LMH         59,5        T 13   AN   1,8                    MLH  =5,2
   LMV         09 01,1     T 18               AV   2,8  MLV  =5,3

1978 MAR 12    KERMADEC ISLANDS                                MB=5,5 ( 9)   30,7S;178,1W  37KM H=16 13 13,0 (NEIS)
                                                                             30,6S;178,5W  33KM   16 13 07,6 (WDCB)
CLL E PKIKP    16 33 05    2,1 /   46                                          D=157,8 DEG   AZ= 26       CLL
   I PKP2      33 38,2     1,7 /   45                          MC   =5,5      DISTANCE 158 DEG
BRG I PKIKP    16 33 06,2D 1,6 /   25                                          D=157,9 DEG   AZ= 29       BRG
   I           33 17,6
   I PKP2      33 39,0
MOX E PKIKP    16 33 07    TRACES                                              D=158,8 DEG   AZ= 24       MOX
   E PKP2      33 42

1978 MAR 12    MONGOLIA                                        MB=4,6 ( 8)   42,9N;106,2E  33KM H=16 41 56,0 (NEIS)
                                                                             43,2N;105,7E  33KM   16 42 00,3 (WDCB)
BRG E P        16 51 58,8                                                      D= 59,6 DEG   AZ= 58       BRG
CLL E P        16 52 00    TRACES                                              D= 59,8 DEG   AZ= 58       CLL

1978 MAR 12    POLAND, UPPER SILESIA
BRG I(PG)      17 13 16,4
   E SG        13 58,4
CLL E SG       17 14 24

1978 MAR 12    NEAR EAST COAST OF HONSHU, JAPAN                MB=5,1 (53)   38,8N;141,9E  64KM H=17 59 48,7 (NEIS)
                                                                             39,0N;141,8E  33KM   17 59 46,3 (WDCB)
BRG I P        18 11 51,0C 0,6 /   11                                          D= 79,7 DEG   AZ= 39       BRG
CLL I P        18 11 51,1  0,9 /   20                                          D= 79,8 DEG   AZ= 38       CLL
MOX E P        18 11 57                                                        D= 80,8 DEG   AZ= 37       MOX

1978 MAR 12    CALIFORNIA-MEXICO BORDER REGION                 MB=4,9 (11)   32,2N;115,1W   5KM H=18 42 22,8 (NEIS)
CLL E AP       18 55 06                                                        D= 85,2 DEG   AZ=318       CLL

1978 MAR 12
CLL E          19 28 27

1978 MAR 12
CLL E P        20 01 07  D 0,8 /   17
BRG E P        20 01 08,4

1978 MAR 13    FIJI ISLANDS REGION                             MB=5,2 (11)   19,1S;177,5W 583KM H=08 45 17,6 (NEIS)
CLL E PKP1     09 03 55                                                        D=146,8 DEG   AZ= 18       CLL
BRG I PKP1     09 03 56,6                                                      D=147,0 DEG   AZ= 20       BRG

1978 MAR 13
CLL I P        16 57 22,1C 1,1 /   17
BRG I P        16 57 22,2D 1,0 /   12

1978 MAR 13    NORTHERN ITALY                                  NO MB COMP.   45,5N;  9,6E  33KM H=17 42 39,6 (NEIS)
                                                                             45,5N;  9,7E  40KM   17 42 41,0 (CSEM)
MOX E PN       17 43 55,5                                                      D=  5,3 DEG   AZ=195       MOX
   E SN        44 54
BRG E PN       17 44 07,1                                                      D=  6,1 DEG   AZ=210       BRG
   E SG        45 50,8
CLL E PG       17 44 39                                                        D=  6,2 DEG   AZ=203       CLL
   E SG        46 04

1978 MAR 14    MINDANAO, PHILIPPINE ISLANDS                    MB=5,5 (30)   6,1N;126,9E  82KM H=01 57 03,7 (NEIS)
                                                                             6,5N;126,9E  33KM   01 56 59,9 (WDCB)
BRG I P        02 10 39,2  1,0 /   16                                          D= 99,4 DEG   AZ= 68       BRG
CLL E P        02 10 40                                                        D= 99,8 DEG   AZ= 67       CLL
MOX E P        02 10 47                                                        D=100,9 DEG   AZ= 66       MOX

1978 MAR 14    TONGA ISLANDS                                   MB=4,7 ( 1)   20,1S;174,6W  66KM H=02 08 13,7 (NEIS)
CLL E PKP1     02 27 54                                                        D=148,3 DEG   AZ= 14       CLL
  (CONT.)
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(CONT.)                                                                    D=148,6 DEG   AZ= 16        BRG
BRG E PKP1      02 27 55,0

1978 MAR 14
CLL E           03 12 47
                                                   MB=4,7 ( 5)   14,1N; 91,0W 153KM H=07 49 49,6 (NEIS)
1978 MAR 14     GUATEMALA                                                  D= 87,6 DEG   AZ=290       CLL
CLL E AP        08 02 58
                                                   MB=5,5 (82)   24,1N;122,6E  43KM H=20 32 15,0 (NEIS)
1978 MAR 14     TAIWAN REGION                                    24,5N;122,7E  33KM   20 32 15,3 (WDCB)
                                                                           D= 82,6 DEG   AZ= 61       BRG
BRG E P         20 44 35,2  1,8 /   66            AV   5,8   MLV  =5,9
      LM        21 26       T 17                                           D= 82,9 DEG   AZ= 60       CLL
CLL I P         20 44 36,0  1,2 /   38
    E              46 16
    E PP           47 50
      LM        21 25       T 16   AN   2   AE   3   AV   4,5   MLM  =5,9 MLV  =6,0   D= 84,0 DEG   AZ= 59   MOX
                                                               MPV  =5,7
MOX E P         20 44 42,5  2,3 /  158              AV   4,3   MLV  =6,0
      LMV       21 26,5     T 16                               MLM  =5,8
      LMH          27,3     T 17   AN   2,3 AE   2,4
                                                  /MB=4,5 ( 2)/  20,0S; 66,7E  33KM H=20 52 04,6  (ISC)
1978 MAR 14     MASCARENE ISLANDS REGION                                   D= 85,1 DEG   AZ=130       CLL
CLL E           21 04 52

1978 MAR 14
CLL E           23 57 38
                                                  /MB=4,8 ( 1)/  26,2S;179,7W  33KM H=03 33 02     (ISC)
1978 MAR 15     SOUTH OF FIJI ISLANDS                                      D=153,1 DEG   AZ= 26       CLL
CLL E PKP2      03 53 08   TRACES
                                                   MB=4,7 (18)   52,3N;168,4W  20KM H=15 01 51,4 (NEIS)
1978 MAR 15     FOX ISLANDS, ALEUTIAN ISLANDS                    51,9N;168,7W  33KM   15 01 46,7 (WDCB)
                                                                           D= 76,8 DEG   AZ=  1       CLL
CLL E P         15 13 42                                                   D= 77,2 DEG   AZ=  1       BRG
BRG E P         15 13 45,8                          MPV  =5,0              D= 77,4 DEG   AZ=  0       MOX
MOX E P         15 13 47     1,3 /   22

1978 MAR 15     POLAND, UPPER SILESIA
CLL E SG        15 53 30
                                                   MB=4,9 (13)    1,6S; 13,0W  33KM H=21 50 06,0 (NEIS)
1978 MAR 15     NORTH OF ASCENSION ISLAND           MPV  =5,1              D= 56,1 DEG   AZ=210       MOX
MOX I P         21 59 44,5C(1,0)/   20                                     D= 57,1 DEG   AZ=213       BRG
BRG E P         21 59 49,0  1,4 /   20                                     D= 57,2 DEG   AZ=211       CLL
CLL E P         21 59 51    1,5 /   22
                                                   MB=5,3 (47)   42,8N;146,0E( 57KM)H=21 54 31,1 (NEIS)
1978 MAR 15     OFF COAST OF HOKKAIDO, JAPAN                     43,9N;145,6E 110KM   21 54 42,2 (WDCB)
                                                                           D= 77,8 DEG   AZ= 33       CLL
CLL I P         22 06 23,3C 1,1 /   40
    E XP           07 08
    E              09 11                                                   D= 77,8 DEG   AZ= 34       BRG
BRG I P         22 06 23,8C 1,2 /   15              MPV  =5,1              D= 78,8 DEG   AZ= 32       MOX
MOX E P         22 06 29    (1,0)/   24
                                                   MB=6,1 (94)   26,4N;140,6E 263KM H=22 04 40,1 (NEIS)
1978 MAR 15     BONIN ISLANDS REGION                             26,6N;140,5E 250KM   22 04 39,5 (WDCB)
                                                                           D= 89,8 DEG   AZ= 46       BRG
BRG I P         22 17 08,9  1,1 /  318                                     DISTANCE  89 DEG  DEPTH 250 KM
    E AP           18 19
    I PP           20 45,8
    I SKS          27 13,0
    E S            27 35
    I SP           28 38,0
    I SS           33 43,0
      LM        23 02       T 14   AN   2,3 AE   4,2 AV   7,3   MLH  =6,1 MLV  =6,3 (NO DEPTH CORRECTION)
CLL I P         22 17 09,7D 1,2 /  440                          MPV  =6,3     D= 90,0 DEG   AZ= 45      CLL
                            T  7                    AV   2,4   MPV  =6,3     DISTANCE  88 DEG  DEPTH 290 KM
    E AP           18 19
    E              20 24
    E              20 43    T  8                    AV   4,0
    E SKS          27 12
    E S            27 36
    E              28 14
    E              28 34
    E              29 10
    E(XS)          29,9
    E              33 24
    E SS           33 40
    E              42,1
      LM        23 04       T 12   AN   4   AE   3   AV   4     MLH  =6,2 MLV  =6,2 (NO DEPTH CORRECTION)
MOX I P         22 17 15,5D 1,1 /  294                          MPV  =6,1      D= 91,0 DEG   AZ= 44      MOX
    E PP           20 53    1,4 /  228                          MPPV =6,1
    E SKS          27 20
    E S            27 40
    E SP           28 55
    E SS           34 00
      LMH          57,4     T 14   AN   3,8
      LMV       23 05       T 13                    AV   4,6

1978 MAR 15
CLL E           22 50 38   TRACES

1978 MAR 16     PAKISTAN                            MB=5,3 (43)   29,9N; 66,3E  33KM H=02 00 00,5 (NEIS)
                                                                29,9N; 66,4E  33KM   01 59 55,8 (WDCB)
BRG I P         02 08 07,8  1,1 /   80                                     D= 44,0 DEG   AZ= 98       BRG
    I              08 12,9
    E              08 32,8
    E S            14 44
    E SS           17 48
      LM           28       T 21   AN   7,4 AE  18,7 AV   5,0   MLV  =5,5
CLL E(P)        02 08 17    1,3 /   44                                     D= 44,6 DEG   AZ= 98       CLL
    E              08 55
    E              09 25
      LM           28       T 19   AN  13   AE   7   AV   4,5   MLH  =5,9 MLV  =5,5
  (CONT.)
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(CONT.)
MOX E P         02 08 18,5  1,4 /   84                      MPV  =5,5          D= 45,4 DEG   AZ= 96       MOX
      LMH          29       T 19,5 AN  11,6 AE   5,2        MLH  =5,9
      LMV          30,6     T 18                   AV   5,7 MLV  =5,6
1978 MAR 16     FOX ISLANDS, ALEUTIAN ISLANDS               MB=5,1 (10)   52,3N;168,6W  38KM H=02 00 50,4 (NEIS)
BRG I P         02 12 43,9                                                      D= 77,2 DEG   AZ=  2       BRG
MOX E P         02 12 44     1,5 /   45                     MPV  =5,2           D= 77,4 DEG   AZ=  0       MOX
1978 MAR 16     FOX ISLANDS, ALEUTIAN ISLANDS               MB=5,5 (67)   52,3N;168,6W  49KM H=02 09 38,4 (NEIS)
CLL I P         02 21 26,1C 1,3 /   69                                    52,7N;169,2W  33KM   02 09 39,9 (WDCB)
    I AP           21 39,4                                                      D= 76,8 DEG   AZ=  1       CLL
BRG I P         02 21 28,7C 1,4 /   81
    I AP           21 41,9                                                      D= 77,2 DEG   AZ=  2       BRG
MOX I P         02 21 30,3C 1,4 /   98
                                                            MPV  =5,6           D= 77,4 DEG   AZ=  0       MOX
1978 MAR 16     FOX ISLANDS, ALEUTIAN ISLANDS               MB=4,6 ( 6)   52,4N;168,6W  51KM H=02 31 10,5 (NEIS)
MOX E P         02 43 02   TRACES                                               D= 77,3 DEG   AZ=  0       MOX
1978 MAR 16     BONIN ISLANDS REGION                        MB=4,5 (17)   27,0N;140,1E 480KM H=02 44 27,5 (NEIS)
                                                                          24,1N;141,0E  33KM   02 43 25,0 (WDCB)
BRG E P         02 56 31,3                                                      D= 89,1 DEG   AZ= 46       BRG
CLL E P         02 56 30                                                        D= 89,2 DEG   AZ= 45       CLL

1978 MAR 16
CLL E           03 05 34

1978 MAR 16     FOX ISLANDS, ALEUTIAN ISLANDS               MB=5,0 (41)   52,3N;168,6W  33KM H=03 29 59,6 (NEIS)
                                                                          52,3N;168,8W  33KM   03 30 00,1 (WDCB)
CLL I P         03 41 49,1D 1,1 /   19                                          D= 76,8 DEG   AZ=  1       CLL
BRG E P         03 41 51,0  1,3 /   18                                          D= 77,2 DEG   AZ=  2       BRG
MOX E P         03 41 53    1,2 /   22                      MPV  =5,0           D= 77,4 DEG   AZ=  0       MOX
1978 MAR 16     SOUTHERN GREECE                             MB=4,9 (30)   36,8N; 21,6E  58KM H=05 51 57,3 (NEIS)
                                                                          36,7N; 21,5E  48KM   05 51 58,0 (CSEM)
                                                                          36,6N; 21,4E  33KM   05 51 48,0 (WDCB)
BRG E P         05 55 32,7                                                      D= 15,1 DEG   AZ=156       BRG
MOX E P         05 55 36                                                        D= 15,6 DEG   AZ=149       MOX
CLL I P         05 55 40,2C 1,5 /   43                                          D= 15,7 DEG   AZ=154       CLL

1978 MAR 16
CLL I P         06 00 02,7D

1978 MAR 16     SOUTHERN GREECE                             MB=4,2 ( 6)   36,8N; 21,7E  65KM H=05 58 13,2 (NEIS)
                                                                          36,7N; 21,4E  42KM   05 58 12,3 (CSEM)
MOX E P         06 01 53                                                        D= 15,6 DEG   AZ=149       MOX
CLL E(P)        06 01 56     1,4 /   22                                         D= 15,8 DEG   AZ=153       CLL
1978 MAR 16     CENTRAL YUGOSLAVIA                          NO MB COMP.   43,1N; 17,8E  33KM H=06 08 40,8 (NEIS)
                                                                          43,1N; 17,9E  10KM   06 08 39,9 (CSEM)
BRG E(PN)       06 10 39,6                                                      D=  8,2 DEG   AZ=160       BRG
    E SG           12 34,8
MOX E PN        06 10 45                                                        D=  8,7 DEG   AZ=148       MOX
CLL E           06 12 15                                                        D=  8,8 DEG   AZ=157       CLL
    E SN           12 27
    E              12 55
    E SG           13 36

1978 MAR 16     TONGA ISLANDS REGION                        MB=4,8 ( 5)   22,7S;175,4W  95KM H=08 21 21,8 (NEIS)
CLL I PKP1      08 41 05,3  1,0 /   25                                          D=150,7 DEG   AZ= 16       CLL
    I              41 17,8
BRG I PKP1      08 41 05,8                                                      D=150,9 DEG   AZ= 18       BRG
MOX E PKHKP     08 41 06,5                                                      D=151,6 DEG   AZ= 14       MOX
    E PKP2         41 19,5

1978 MAR 16     TONGA ISLANDS REGION                        MB=5,1 ( 3)   19,0S;172,6W  33KM H=18 00 56,9 (NEIS)
CLL E PKP1      18 20 40     1,1 /   18                                         D=147,5 DEG   AZ= 10       CLL
BRG E PKP1      18 20 41,2                                                      D=147,8 DEG   AZ= 12       BRG
1978 MAR 16     CASPIAN SEA                                 MB=4,6 ( 9)   41,3N; 49,3E  69KM H=19 47 47,8 (NEIS)
                                                                          41,3N; 49,3E  61KM   19 47 49,4 (CSEM)
                                                                          41,6N; 49,5E  33KM   19 47 46,8 (WDCB)
BRG E P         19 53 17,0  1,1 /    9                                          D= 26,1 DEG   AZ= 98       BRG
CLL E P         19 53 24                                                        D= 26,7 DEG   AZ= 98       CLL

1978 MAR 16
MOX E           22 59 42

1978 MAR 16     LUZON, PHILIPPINE ISLANDS                   MB=4,9 (15)   17,4N;122,6E  46KM H=22 49 59,4 (NEIS)
                                                                          17,9N;122,5E  33KM   22 50 01,9 (WDCB)
BRG E(P)        23 02 55,6                                                      D= 87,9 DEG   AZ= 65       BRG
CLL E           23 02 57   TRACES                                               D= 88,3 DEG   AZ= 64       CLL
1978 MAR 16     ALGERIA                                     MB=4,7 ( 1)   36,6N;  7,4E  33KM H=23 11 06,3 (NEIS)
                                                                          36,4N;  7,4E  10KM   23 11 04,9 (CSEM)
MOX E           23 14 42                                                        D= 14,4 DEG   AZ=194       MOX
BRG E P         23 14 48,0                                                      D= 15,0 DEG   AZ=201       BRG
    I              15 54,1
CLL E           23 14 49                                                        D= 15,2 DEG   AZ=197       CLL
1978 MAR 17     NEAR EAST COAST OF KAMCHATKA                MB=4,8 (16)   55,2N;162,1E  33KM H=03 07 23,9 (NEIS)
                                                                          55,1N;162,3E  50KM   03 07 25,2 (WDCB)
CLL I P         03 18 38,2D 1,2 /   25                                          D= 70,8 DEG   AZ= 18       CLL
BRG E(P)        03 18 39,3  1,1 /   11                                          D= 71,0 DEG   AZ= 19       BRG
MOX E P         03 18 44    1,2 /   20                      MPV  =5,0           D= 71,7 DEG   AZ= 17       MOX
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1978 MAR 21
CLL E   13 11 08

1978 MAR 21   LUZON, PHILIPPINE ISLANDS   MB=5,3 (49)   17,1N;122,4E 43KM H=13 42 32,5 (NEIS)
17,1N;122,5E 33KM 13 42 25,6 (WDCB)
D= 88,0 DEG AZ= 65 BRG
BRG I P   13 55 20,0 1,2 / 27
E   55 40,2
CLL E P   13 55 21 1,2 / 28   D= 88,4 DEG AZ= 64 CLL
MOX E P   13 55 26 1,5 / 30   MPV =5,4   D= 89,5 DEG AZ= 63 MOX

1978 MAR 21   NEAR EAST COAST OF KAMCHATKA   MB=5,1 (60)   53,9N;160,5E 57KM H=15 32 54,6 (NEIS)
54,0N;160,3E 50KM 15 32 55,0 (WDCB)
CLL I P   15 44 12,4D 1,3 / 90   D= 71,7 DEG AZ= 20 CLL
BRG I P   15 44 13,8D 1,3 / 53   D= 71,9 DEG AZ= 20 BRG
MOX I P   15 44 18,0D 1,5 / 53   MPV =5,3   D= 72,6 DEG AZ= 19 MOX

1978 MAR 21   NEAR EAST COAST OF HONSHU, JAPAN   MB=4,6 (5)   40,1N;142,5E 61KM H=16 57 03,5 (NEIS)
CLL E AP   17 09 15 TRACES   D= 78,9 DEG AZ= 37 CLL

1978 MAR 21   VANUATU ISLANDS   MB=5,2 (6)   17,5S;167,9E 27KM H=17 53 07,9 (NEIS)
BRG E PKP   18 12 37,0 1,5 / 21   D=140,8 DEG AZ= 41 BRG
CLL E PKP   18 12 37   D=140,8 DEG AZ= 40 CLL
MOX E   18 12 48   D=141,9 DEG AZ= 38 MOX

1978 MAR 21   VANUATU ISLANDS   MB=5,4 (12)   17,6S;167,8E 23KM H=19 14 05,9 (NEIS)
17,3S;167,7E 33KM 19 14 03,2 (WDCB)
BRG E PKP   19 33 32,8   D=140,8 DEG AZ= 42 BRG
CLL E PKP   19 33 38   D=140,9 DEG AZ= 40 CLL

1978 MAR 21   SAKHALIN ISLAND   MB=5,2 (31)   46,0N;141,8E 33KM H=23 02 42,8 (NEIS)
46,7N;141,4E 33KM 23 02 43,1 (WDCB)
CLL E P   23 14 15 1,5 / 37   D= 73,5 DEG AZ= 35 CLL
BRG E P   23 14 13,8   D= 73,5 DEG AZ= 35 BRG
MOX E P   23 14 24   D= 74,5 DEG AZ= 34 MOX

1978 MAR 22   KURILE ISLANDS   ***   MB=6,3 (97)
THIS QUAKE IS THE BEGINNING OF AN AFTERSHOCK SEQUENCE DENOTED BY ***   44,0N;149,0E 33KM H=00 50 32,2 (NEIS)
44,8N;148,6E 70KM 00 50 40,8 (WDCB)
CLL I P   01 02 26,0C 2,4 / 2400   D= 77,7 DEG AZ= 31 CLL
T 8   AV 8,1 MPV =6,9   DISTANCE 77 DEG
E AP   02 39
E PP   05 24
E   06 40
E S   12 14   T 14 AN 11,5 AE 9,3   MSH =6,9
E SKS   12 30
E SS   17,9
LMH   34   T 20 AN 72 AE 113   MLH =7,3
LMV   41   T 15 AN 66 AE 44 AV(62)   MLV =7,1
FINAL   04
BRG I P   01 02 26,2 2,6 / 2121   D= 77,8 DEG AZ= 31 BRG
E PP   05 27   DISTANCE 78 DEG
I S   12 16,5
E PS   12 56
E SS   17 45,0
LMH   34   T 21 AN 43,0 AE 191,0   MLH =7,4
LMV   40   T 19   AV 66,0 MLV =7,0
MOX I P   01 02 33,0 2,8 / 2897   MPV =6,8   D= 78,7 DEG AZ= 30 MOX
T 11   AV 9,3 MPV =6,7
E S   12 25   T 13 AN 10,9 AE 7,1   MSH =6,9
E PS   12 48
E SS   17 50
LMH   35,6   T 20 AN 72,0 AE 113,2   MLH =7,3
LMV   42,2   T 17,5   AV 88,2 MLV =7,2

1978 MAR 22   KURILE ISLANDS REGION   ***   MB=5,2 (10)   43,9N;149,0E 33KM H=00 57 14,3 (NEIS)
CLL I P   01 09 09,1C 1,2 / 38   D= 77,8 DEG AZ= 31 CLL
E AP   09 24
BRG I P   01 09 10,0 1,1 / 20   D= 77,9 DEG AZ= 31 BRG
MOX E P   01 09 16 1,2 / 22   MPV =5,0   D= 78,8 DEG AZ= 30 MOX

1978 MAR 22
CLL I(P)   01 10 46,3D

1978 MAR 22   KURILE ISLANDS   MB=4,9 (6)   44,8N;148,3E 33KM H=01 00 22,6 (NEIS)
MOX E P   01 12 18   D= 77,8 DEG AZ= 30 MOX

1978 MAR 22   KURILE ISLANDS   ***   /MB=4,5 (2)/   44,4N;148,6E 33KM H=01 06 29,8 (ISC)
CLL E   01 18 36 TRACES   D= 77,2 DEG AZ= 31 CLL

1978 MAR 22   KURILE ISLANDS REGION   ***   MB=5,1 (50)   43,8N;149,0E 33KM H=01 13 30,2 (NEIS)
44,2N;149,1E 33KM 01 13 32,2 (WDCB)
CLL I P   01 25 25,7C 1,1 / 32   D= 77,9 DEG AZ= 31 CLL
E AP   25 38
BRG I P   01 25 26,0 0,9 / 8   D= 77,9 DEG AZ= 32 BRG
MOX E P   01 25 31 1,2 / 12   MPV =4,8   D= 78,9 DEG AZ= 30 MOX

1978 MAR 22   KURILE ISLANDS   ***   MB=5,4 (63)   44,0N;149,2E 33KM H=01 23 53,4 (NEIS)
44,2N;149,2E 33KM 01 23 54,1 (WDCB)
CLL I P   01 35 48,1C 1,3 / 67   D= 77,8 DEG AZ= 31 CLL
I AP   36 02,9
BRG I P   01 35 48,8C 1,1 / 23   D= 77,8 DEG AZ= 31 BRG
MOX E P   01 35 54 1,2 / 24   MPV =5,1   D= 78,8 DEG AZ= 30 MOX
E AP   36 06,5 1,2 / 53   DEPTH 50 KM

1978 MAR 22   KURILE ISLANDS   ***   MB=5,1 (32)   44,0N;149,1E 43KM H=02 04 40,1 (NEIS)
44,3N;149,0E 33KM 02 04 40,9 (WDCB)
CLL E P   02 16 34 1,2 / 31   D= 77,7 DEG AZ= 31 CLL
E AP   16 46
BRG E P   02 16 34,5   D= 77,8 DEG AZ= 31 BRG
MOX E P   02 16 40 1,2 / 20   MPV =5,0   D= 78,7 DEG AZ= 30 MOX

1978 MAR 22
CLL E(P)   02 17 22

1978 MAR 22   KURILE ISLANDS   ***   MB=4,6 (14)   44,4N;148,9E 66KM H=02 31 33,6 (NEIS)
44,2N;149,2E 33KM 02 31 28,9 (WDCB)
CLL E P   02 43 22   D= 77,3 DEG AZ= 31 CLL
E AP   43 38
BRG E P   02 43 24,4   D= 77,4 DEG AZ= 31 BRG
MOX E P   02 43 29,5   D= 78,3 DEG AZ= 30 MOX

1978 MAR 22   KURILE ISLANDS   ***   MB=5,6 (79)   44,1N;149,0E 33KM H=02 32 38,9 (NEIS)
44,3N;149,0E 33KM 02 32 39,5 (WDCB)
CLL I P   02 44 33,0C 1,4 / 100   D= 77,6 DEG AZ= 31 CLL
I AP   44 47,2
BRG I P   02 44 33,9C   D= 77,7 DEG AZ= 31 BRG
I AP   44 48,0
E PP   47 31,5
MOX E P   02 44 39 C 2,2 / 142   MPV =5,6   D= 78,6 DEG AZ= 30 MOX
LMH   03 21   T 17   AE 4,1   MLH =5,8
LMV   26   T 17   AV 2,9 MLV =5,7

1978 MAR 22   KURILE ISLANDS   ***   MB=4,7 (5)   44,0N;149,0E 33KM H=02 50 22,9 (NEIS)
CLL I P   03 02 18,3D   D= 77,7 DEG AZ= 31 CLL
I AP   02 33,9
BRG E P   03 02 18,2   D= 77,8 DEG AZ= 31 BRG
MOX E P   03 02 24,5   D= 78,7 DEG AZ= 30 MOX

1978 MAR 22   KURILE ISLANDS REGION   ***   MB=4,4 (2)   43,7N;149,4E 33KM H=06 23 38,2 (NEIS)
CLL E AP   06 35 51   D= 78,1 DEG AZ= 31 CLL

1978 MAR 22   KURILE ISLANDS   ***   MB=5,1 (53)   44,1N;149,0E 37KM H=08 25 18,4 (NEIS)
44,0N;149,0E 33KM 08 25 12,1 (WDCB)
CLL I P   08 37 11,9 1,0 / 33   D= 77,6 DEG AZ= 31 CLL
I AP   37 25,6
BRG E P   08 37 13,0 1,2 / 15   D= 77,7 DEG AZ= 31 BRG
I AP   37 27,0
MOX E P   08 37 18   D= 78,6 DEG AZ= 30 MOX
I AP   37 32,0 1,2 / 53   DEPTH 52 KM

1978 MAR 22   KURILE ISLANDS   ***   MB=4,2 (4)   44,1N;149,1E 49KM H=11 45 47,7 (NEIS)
CLL E AP   11 57 54   D= 77,6 DEG AZ= 31 CLL
BRG E P   11 57 44,2   D= 77,7 DEG AZ= 31 BRG

1978 MAR 22   POLAND, UPPER SILESIA   /NO MB COMP./ (49,5N; 18,8E 0KM H=12 35 30) (ISC)
BRG E PG   12 36 25,0   D= 3,4 DEG AZ=112 BRG
E SG   37 07,9
CLL E(PG)   12 36 41   D= 4,1 DEG AZ=114 CLL
E SG   37 28
MOX E SG   12 37 52,5   D= 4,8 DEG AZ=101 MOX

1978 MAR 22   KURILE ISLANDS REGION   ***   MB=4,8 (15)   43,9N;149,0E 39KM H=13 55 16,5 (NEIS)
CLL I P   14 07 11,3 0,8 / 21   D= 77,8 DEG AZ= 31 CLL
E AP   07 27
BRG E P   14 07 12,7 1,3 / 18   D= 77,9 DEG AZ= 31 BRG
E AP   07 28,0
MOX E P   14 07 17   D= 78,8 DEG AZ= 30 MOX
E AP   07 32   DEPTH 57 KM

1978 MAR 22
CLL I P   14 30 50,3D

1978 MAR 22
CLL E   16 47 18

1978 MAR 22
CLL I(P)   18 07 25,0 TRACES

1978 MAR 22   KURILE ISLANDS   ***   MB=4,5 (9)   44,3N;149,0E 49KM H=19 23 20,8 (NEIS)
44,2N;149,2E 33KM 19 23 18,6 (WDCB)
CLL I P   19 35 12,5   D= 77,4 DEG AZ= 31 CLL
BRG E P   19 35 14,3   D= 77,5 DEG AZ= 31 BRG

1978 MAR 22   KURILE ISLANDS   ***   /MB=4,3 (5)/   44,2N;148,7E 33KM H=21 13 10,0 (ISC)
CLL E P   21 25 04   D= 77,4 DEG AZ= 31 CLL

1978 MAR 22   KURILE ISLANDS   ***   MB=6,0 (88)   44,1N;149,0E 33KM H=21 34 33,4 (NEIS)
45,1N;148,7E 70KM 21 34 42,1 (WDCB)
CLL I P   21 46 26,7C 2,5 / 810   D= 77,6 DEG AZ= 31 CLL
I   46 29,1 (1,0)/ 370   DISTANCE 77 DEG
I   46 40
E   46 58
E PP   49 20
E S   56 14
E   22 02,0
LMH   17   T 20 AN 43,5 AE 69   MLH =7,0
BRG I P   21 46 27,3C 3,2 / 1800   D= 77,7 DEG AZ= 31 BRG
E PP   49 20
E S   56 10,0
E SS   22 01 48
E SSS   05 40
LM   17
MOX I P   21 46 33,0C 2,0 / 538   MPV =6,2   D= 78,6 DEG AZ= 30 MOX
T 14   AV 1,0 MPV =5,6
E S   56 32
LMH   22 19,5   T 20 AN 46,3 AE 65,8   MLH =7,1
LMV   26,1   T 15   AV 61,7 MLV =7,1

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1978 MAR 22
CLL I(P)        21 50 35,4D

1978 MAR 22     KURILE ISLANDS                  ***             MB=5,0 (30)   44,0N;149,2E  33KM H=22 10 46,9 (NEIS)
                                                                              44,6N;149,0E  60KM   22 10 52,8 (WDCB)
CLL I P         22 22 41,7  1,0 /   23                                        D= 77,8 DEG   AZ= 31       CLL
BRG E P         22 22 42,5  1,1 /   19                                        D= 77,8 DEG   AZ= 31       BRG
MOX E P         22 22 48    1,0 /   16                    MPV  =5,0           D= 78,8 DEG   AZ= 30       MOX

1978 MAR 22
CLL E           22 52 14

1978 MAR 23     KURILE ISLANDS                  ***             MB=4,5 ( 4)   44,0N;149,2E  33KM H=00 18 44,7 (NEIS)
CLL E P         00 30 39                                                      D= 77,8 DEG   AZ= 31       CLL
BRG E P         00 30 40,4                                                    D= 77,8 DEG   AZ= 31       BRG
MOX E P         00 30 46                                                      D= 78,8 DEG   AZ= 30       MOX

1978 MAR 23
CLL E P         00 34 21

1978 MAR 23     KURILE ISLANDS                  ***                                                                   (UPP)
CLL E P         00 36 13

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,9 ( 5)/ 44,2N;148,7E  33KM H=00 25 10,1  (ISC)
CLL I P         00 37 03,8D                                                   D= 77,4 DEG   AZ= 31       CLL
    E           37 13

1978 MAR 23     KURILE ISLANDS                  ***             MB=6,1 (83)   44,2N;149,0E  46KM H=00 31 02,1 (NEIS)
                                                                              44,8N;148,8E  50KM   00 31 05,5 (WDCB)
CLL I P         00 42 54,2C                                                   D= 77,5 DEG   AZ= 31       CLL
    E S         52 41                                                         DISTANCE  77 DEG
    E SS        57
    E SSSS      01 02,0
      LH          15        T 20   AN 125   AE 230
      LMH         21        T 15   AN 240   AE 120          MLH  =7,7
BRG I P         00 42 54,7C 2,4 / 1640                                        D= 77,6 DEG   AZ= 31       BRG
    I S         52 43,9
    E SS        57 38
    E SSS       01 02 06
MOX I P         00 43 00,0C 1,2 /  659                    MPV  =6,5           D= 78,5 DEG   AZ= 30       MOX
    E S         52 52
      LMH       01 19,0     T 15,5 AN 195,2 AE 199,0      MLH  =7,7
      LMV         22,3      T 16                AV 288,1  MLV  =7,7

1978 MAR 23
CLL I P         00 44 32,6C(1,5 /   42)

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,6 (26)   44,0N;148,8E  54KM H=00 36 35,4 (NEIS)
CLL I P         00 48 26,9C 1,2 /  200                                        D= 77,6 DEG   AZ= 31       CLL
    I(AP)       48 43,7
BRG I P         00 48 27,0D 1,0 /   70                                        D= 77,7 DEG   AZ= 32       BRG
MOX I P         00 48 33,0C 1,4 /  107                    MPV  =5,6           D= 78,7 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,6 (26)   44,2N;149,3E  33KM H=00 39 41,0 (NEIS)
CLL I P         00 51 34,6C 1,8 /  160                                        44,3N;149,2E  33KM   00 39 41,7 (WDCB)
    E AP        51 49                                                         D= 77,6 DEG   AZ= 31       CLL
BRG I P         00 51 35,4C 2,0 /  119                                        D= 77,7 DEG   AZ= 31       BRG
MOX I P         00 51 40,6C 2,3 /  244                    MPV  =5,8           D= 78,6 DEG   AZ= 30       MOX
    I AP        51 53,5                                                                   DEPTH  50 KM

1978 MAR 23     KURILE ISLANDS                  ***                                                                   (UPP)
CLL I P         00 56 58,1  0,8 /   20
    E           57 12
BRG E AP        00 57 13,3  0,8 /   10

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,3 (30)   44,1N;149,1E  47KM H=00 46 35,0 (NEIS)
                                                                              44,2N;149,4E  33KM   00 46 33,6 (WDCB)
CLL I P         00 58 27,4C 1,3 /   78                                        D= 77,6 DEG   AZ= 31       CLL
    E(XP)       58 45
BRG I P         00 58 28,0C 1,4 /   34                                        D= 77,7 DEG   AZ= 31       BRG
    E           58 47,0
MOX E P         00 58 33  C 1,5 /   50                    MPV  =5,3           D= 78,7 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,6 ( 4)/ 44,1N;148,8E  33KM H=00 49 48,2  (ISC)
CLL E P         01 01 42                                                      D= 77,5 DEG   AZ= 31       CLL

1978 MAR 23
CLL E P         01 04 19

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,2 (31)   44,3N;149,1E  49KM H=00 54 26,6 (NEIS)
                                                                              44,2N;149,3E  33KM   00 54 23,7 (WDCB)
CLL I P         01 06 18,1C 1,1 /   50                                        D= 77,5 DEG   AZ= 31       CLL
BRG I P         01 06 18,2C 1,2 /   17                                        D= 77,5 DEG   AZ= 31       BRG
MOX E P         01 06 24    1,5 /   35                    MPV  =5,1           D= 78,5 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             /MB=5,1 (13)/ 44,1N;149,2E  33KM H=00 57 23,2  (ISC)
CLL I P         01 09 17,8C 0,8 /   18                                        D= 77,7 DEG   AZ= 31       CLL
    E           09 30
MOX E P         01 09 24                                                      D= 78,7 DEG   AZ= 30       MOX

1978 MAR 23
MOX E(P)        01 10 20,5

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,3 (37)   44,3N;149,1E  33KM H=01 04 44,8 (NEIS)
                                                                              44,2N;149,3E  33KM   01 04 44,1 (WDCB)
CLL I P         01 16 38,2C 1,3 /   57                                        D= 77,5 DEG   AZ= 31       CLL
    I AP        16 51,9
BRG I P         01 16 38,5C 1,3 /   22                                        D= 77,5 DEG   AZ= 31       BRG
MOX E P         01 16 44,5  1,8 /   61                    MPV  =5,3           D= 78,5 DEG   AZ= 30       MOX
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1978 MAR 23     KURILE ISLANDS                  ***             MB=4,8 ( 8)   44,3N;149,0E  33KM H=01 12 17,5 (NEIS)
CLL E P         01 24 11                                                      D= 77,4 DEG   AZ= 31       CLL
    E AP        24 24
BRG E P         01 24 12,0                                                    D= 77,5 DEG   AZ= 31       BRG
MOX E(P)        01 24 17                                                      D= 78,4 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             MB=4,5 ( 6)   44,2N;148,9E  47KM H=01 24 02,3 (NEIS)
CLL E AP        01 36 06                                                      D= 77,5 DEG   AZ= 31       CLL

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,7 ( 4)/ 44,5N;149,0E  33KM H=01 27 15,9  (ISC)
CLL E P         01 39 08   TRACES                                             D= 77,3 DEG   AZ= 31       CLL

1978 MAR 23
CLL E           01 57 29

1978 MAR 23     KURILE ISLANDS REGION           ***             MB=5,8 (72)   43,9N;148,9E  33KM H=01 49 33,8 (NEIS)
CLL I P         02 01 28,7C 1,2 /  280                                        43,9N;148,8E  33KM   01 49 35,0 (WDCB)
    I           01 43,4                                                       D= 77,8 DEG   AZ= 31       CLL
    E S         11 18
      LMH       32        T 20   AN  25   AE  22
BRG I P         02 01 29,3C 1,2 /  220          MLH  =6,4
    E S         11 35                                                         D= 77,8 DEG   AZ= 32       BRG
MOX I P         02 01 35,0C 1,3 /  170          MPV  =5,9                     D= 78,8 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,2 ( 9)   44,1N;148,9E  33KM H=01 54 29,8 (NEIS)
CLL I P         02 06 23,1  1,2 /   18                                        D= 77,6 DEG   AZ= 31       CLL
    E AP        06 39
BRG E P         02 06 25,6  1,3 /   45                                        D= 77,6 DEG   AZ= 31       BRG
MOX E P         02 06 29,5                                                    D= 78,6 DEG   AZ= 30       MOX
    E AP        06 46                                                                     DEPTH  63 KM

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,5 ( 6)/ 45,7N;148,3E  33KM H=01 59 36    (ISC)
CLL I P         02 11 20,3  0,9 /   15                                        D= 76,0 DEG   AZ= 31       CLL
MOX E P         02 11 26,5                                                    D= 77,0 DEG   AZ= 30       MOX

1978 MAR 23     CENTRAL ITALY                                   MB=3,5 ( 1)   43,7N; 11,2E  10KM H=02 06 28,0 (NEIS)
BRG E PN        02 08 16,8                                                    43,6N; 11,3E  10KM   02 06 29,1 (CSEM)
CLL E L         02 11 26                                                      D=  7,4 DEG   AZ=196       BRG
                                                                              D=  7,7 DEG   AZ=190       CLL

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,6 ( 4)/ 44,8N;147,8E  33KM H=02 33 49    (ISC)
CLL E(P)        02 45 41   TRACES                                             D= 76,6 DEG   AZ= 31       CLL

1978 MAR 23     KURILE ISLANDS                  ***             MB=5,8 (81)   44,2N;148,7E  50KM H=02 37 00,9 (NEIS)
CLL I P         02 48 51,7C(1,0)/  420                                        44,3N;148,8E  33KM   02 36 59,3 (WDCB)
    E S         58 38                                                         D= 77,4 DEG   AZ= 31       CLL
BRG I P         02 48 52,2C 1,0 /  172                                        D= 77,5 DEG   AZ= 32       BRG
    I S         58 39,0
MOX I P         02 48 58,0C 1,6 /  319          MPV  =6,0                     D= 78,4 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS REGION           ***             /MB=4,8 ( 5)/ 43,8N;149,4E  33KM H=02 47 17    (ISC)
CLL E P         02 59 15                                                      D= 78,0 DEG   AZ= 31       CLL

1978 MAR 23     KURILE ISLANDS                  ***             MB=4,6 ( 4)   44,3N;149,1E  33KM H=02 59 25,5 (NEIS)
CLL E P         03 11 19                                                      D= 77,5 DEG   AZ= 31       CLL
BRG E P         03 11 19,0                                                    D= 77,5 DEG   AZ= 31       BRG

1978 MAR 23     KURILE ISLANDS                  ***             /MB=4,7 ( 9)/ 44,2N;149,1E  39KM H=03 08 36,1  (ISC)
CLL I P         03 20 29,1D 1,2 /   32                                        D= 77,6 DEG   AZ= 31       CLL
BRG E P         03 20 30,0  1,0 /   10                                        D= 77,6 DEG   AZ= 31       BRG
MOX E P         03 20 35                                                      D= 78,6 DEG   AZ= 30       MOX

1973 MAR 23     KURILE ISLANDS                  ***             MB=5,9 (74)   44,3N;149,1E  33KM H=03 14 23,3 (NEIS)
                                                                              44,2N;149,2E  33KM   03 14 17,6 (WDCB)
CLL I P         03 26 16,2C(1,0)/  390                                        D= 77,5 DEG   AZ= 31       CLL
    E AP        26 30
BRG I P         03 26 16,2C 2,4 /  670                                        D= 77,5 DEG   AZ= 31       BRG
    E S         36 16
MOX E P         03 26 22    2,4 /  843          MPV  =6,3                     D= 78,5 DEG   AZ= 30       MOX

1978 MAR 23     KURILE ISLANDS                  ***             MB=6,4 (34)   44,9N;148,4E  33KM H=03 15 20,3 (NEIS)
CLL I P         03 27 08,9 (1,5 /  480)                                       43,3N;150,0E  33KM   03 15 09,0 (WDCB)
    I           27 15,9 (0,9 / 1070)                                          D= 76,7 DEG   AZ= 31       CLL
    I           27 36,1                                                       DISTANCE  77 DEG
    E(S)        37 01
      LH          57        T 20   AN 215   AE 340
      LMH       04 01       T 15   AN 305   AE-180         MLH  =7,8
BRG I P         03 27 09,4D 1,0 /  800                                        D= 76,8 DEG   AZ= 31       BRG
    E S         37 10
MOX E P(1)      03 27 14,5  2,3 /  633          MPV  =6,2                     D= 77,7 DEG   AZ= 30       MOX
    E P(2)      27 22       1,4 / 1102          MPV  =6,7
      LMH       04 02,9     T 16   AN 192,3 AE 291,7     MLH  =7,8
      LMV         06,8      T 17                AV 401,8  MLV  =7,9

1978 MAR 23
CLL E           03 33 25

1978 MAR 23     KURILE ISLANDS REGION           ***             MB=5,5 (24)   43,9N;149,1E  33KM H=03 24 25,2 (NEIS)
CLL I P         03 36 19,6C 2,3 /  360                                        D= 77,8 DEG   AZ= 31       CLL
    E AP        36 32
BRG E P         03 36 19    1,9 /  156                                        D= 77,9 DEG   AZ= 31       BRG
    E AP        36 32,0
MOX E P         03 36 25                                                      D= 78,8 DEG   AZ= 30       MOX
    E           36 34

1978 MAR 23
CLL E P         03 41 32
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1978 MAR 23	KURILE ISLANDS	***	MB=4,6 (6)	44,0N;149,1E 33KM H=03 48 16,2 (NEIS)		
CLL E P	04 00 11			D= 77,7 DEG AZ= 31		CLL
I AP	00 24,5					
BRG E AP	04 00 25,5			D= 77,8 DEG AZ= 31		BRG
MOX E	04 00 31 1,0 / 20			D= 78,7 DEG AZ= 30		MOX
1978 MAR 23	KURILE ISLANDS	***	MB=5,3 (31)	44,4N;149,5E 33KM H=03 49 27,7 (NEIS)		
CLL I P	04 01 20,4C 1,0 / 75			D= 77,5 DEG AZ= 30		CLL
I AP	01 33,5					
BRG I P	04 01 21,6 1,5 / 37			D= 77,6 DEG AZ= 31		BRG
I	01 34,0					
MOX I P	04 01 26,5 1,6 / 55		MPV =5,3	D= 78,5 DEG AZ= 29		MOX
E	01 40 1,2 / 89					
1978 MAR 23	KURILE ISLANDS	***	MB=6,0 (57)	44,4N;149,6E 50KM H=03 50 52,5 (NEIS)		
				45,6N;149,1E 50KM 03 50 59,2 (WDCB)		
CLL I P	04 02 43,5 (1,8)/ 1400			D= 77,5 DEG AZ= 30		CLL
E S	12 32					
BRG I P	04 02 44,5D 1,6 / 460			D= 77,6 DEG AZ= 31		BRG
MOX I P	04 02 50,5C 1,7 / 606		MPV =6,3	D= 78,5 DEG AZ= 29		MOX
1973 MAR 23						
CLL E P	04 05 07 1,3 / 51					
1978 MAR 23						
CLL E	04 06 13					
MOX E P	04 06 28,5 TRACES					
1978 MAR 23	KURILE ISLANDS	***				(UPP)
CLL E P	04 07 17					
MOX E P	04 07 22 TRACES					
1978 MAR 23						
CLL E(P)	04 08 23					
MOX E P	04 08 25 TRACES					
1978 MAR 23	KURILE ISLANDS	***	/MB=4,8 (4)/	44,2N;149,8E 33KM H=03 57 22,8 (ISC)		
CLL E P	04 09 19			D= 77,8 DEG AZ= 30		CLL
E(XP)	09 32					
MOX E P	04 09 26			D= 78,8 DEG AZ= 29		MOX
1978 MAR 23	KURILE ISLANDS	***	MB=4,9 (12)	44,5N;149,5E 33KM H=04 03 30,4 (NEIS)		
CLL E P	04 15 23			D= 77,4 DEG AZ= 30		CLL
BRG E P	04 15 23,6			D= 77,5 DEG AZ= 31		BRG
MOX E P	04 15 29 TRACES			D= 78,4 DEG AZ= 29		MOX
1978 MAR 23	KURILE ISLANDS	***	/MB=4,2 (3)/	45,4N;147,9E 33KM H=04 09 27 (ISC)		
CLL E P	04 21 12			D= 76,1 DEG AZ= 31		CLL
1978 MAR 23	KURILE ISLANDS	***	/MB=4,5 (4)/	43,9N;149,4E 33KM H=04 11 42 (ISC)		
CLL E P	04 23 39			D= 77,9 DEG AZ= 31		CLL
E(XP)	23 52					
1978 MAR 23	KURILE ISLANDS	***	MB=4,9 (10)	44,2N;149,4E 33KM H=04 13 39,8 (NEIS)		
CLL E P	04 25 33			D= 77,6 DEG AZ= 31		CLL
I AP	25 45,7					
BRG E P	04 25 35,5 1,2 / 21			D= 77,7 DEG AZ= 31		BRG
MOX E P	04 25 44			D= 78,7 DEG AZ= 30		MOX
1978 MAR 23						
MOX E P	04 26 42 TRACES					
CLL E	04 26 45					
1978 MAR 23	KURILE ISLANDS REGION	***	/MB=4,7 (7)/	44,0N;149,9E 33KM H=04 20 09,7 (ISC)		
CLL I P	04 32 05,5 1,1 / 22			D= 78,0 DEG AZ= 30		CLL
1978 MAR 23	KURILE ISLANDS	***	MB=5,2 (30)	44,3N;149,6E 33KM H=04 25 25,1 (NEIS)		
				44,3N;149,9E 33KM 04 25 19,0 (WDCB)		
CLL I P	04 37 18,4C 1,4 / 72			D= 77,6 DEG AZ= 30		CLL
BRG I P	04 37 19,2C 1,7 / 58			D= 77,7 DEG AZ= 31		BRG
MOX E P	04 37 24 1,6 / 44		MPV =5,2	D= 78,6 DEG AZ= 29		MOX
1978 MAR 23	KURILE ISLANDS	***				(UPP)
CLL E P	04 43 28					
1978 MAR 23	KURILE ISLANDS	***	MB=4,5 (3)	44,1N;148,8E 33KM H=04 34 12,6 (NEIS)		
CLL E P	04 46 06			D= 77,5 DEG AZ= 31		CLL
1978 MAR 23	KURILE ISLANDS	***	MB=4,6 (5)	44,4N;149,4E 33KM H=04 36 43,5 (NEIS)		
CLL I P	04 48 37,0C			D= 77,5 DEG AZ= 30		CLL
BRG E P	04 48 38,0			D= 77,5 DEG AZ= 31		BRG
MOX E P	04 48 43			D= 78,5 DEG AZ= 29		MOX
1978 MAR 23	KURILE ISLANDS	***	MB=4,8 (10)	44,2N;149,5E 43KM H=04 48 16,2 (NEIS)		
CLL I P	05 00 09,7C 1,1 / 25			D= 77,7 DEG AZ= 30		CLL
I AP	00 22,8					
BRG E P	05 00 10,5			D= 77,7 DEG AZ= 31		BRG
I AP	00 23,0					
MOX E P	05 00 16 1,3 / 22		MPV =5,0	D= 78,7 DEG AZ= 29		MOX
1978 MAR 23						
CLL E P	05 10 35 TRACES					
1978 MAR 23	KURILE ISLANDS	***	MB=5,0 (17)	44,2N;149,6E 43KM H=05 12 54,2 (NEIS)		
				44,1N;149,8E 33KM 05 12 47,0 (WDCB)		
CLL I P	05 24 47,6C 1,2 / 41			D= 77,7 DEG AZ= 30		CLL
E AP	25 01					
BRG I P	05 24 48,8 1,2 / 24			D= 77,8 DEG AZ= 31		BRG
MOX E P	05 24 54,5			D= 78,7 DEG AZ= 29		MOX

1978 MAR 23						
CLL E P	05 27 23 0,9 / 15					
MOX E P	05 27 30 TRACES					
1978 MAR 23	KURILE ISLANDS	***	MB=4,3 (4)	44,2N;149,2E 33KM H=05 19 31,3 (NEIS)		
CLL E P	05 31 24			D= 77,6 DEG AZ= 31		CLL
1978 MAR 23	KURILE ISLANDS	***	/MB=4,6 (5)/	44,6N;149,2E 33KM H=05 23 04 (ISC)		
CLL E P	05 34 55			D= 77,2 DEG AZ= 30		CLL
1978 MAR 23	KURILE ISLANDS	***	MB=5,0 (9)	44,1N;149,2E 33KM H=05 23 16,9 (NEIS)		
				44,2N;149,1E 33KM 05 23 17,5 (WDCB)		
CLL E P	05 35 12			D= 77,7 DEG AZ= 31		CLL
I AP	35 25,6					
BRG E P	05 35 15,6 1,0 / 16			D= 77,7 DEG AZ= 31		BRG
I AP	35 26,8					
MOX E	05 35 31,5 1,4 / 28			D= 78,7 DEG AZ= 30		MOX
1978 MAR 23						
CLL E P	05 42 07					
1978 MAR 23						
CLL E	05 45 00 TRACES					
1978 MAR 23	KURILE ISLANDS REGION	***	/MB=4,6 (2)/	43,9N;148,8E 33KM H=05 34 33,8 (ISC)		
CLL E AP	05 46 42			D= 77,7 DEG AZ= 31		CLL
1978 MAR 23	KURILE ISLANDS	***	MB=4,9 (19)	44,3N;149,2E 41KM H=05 38 30,8 (NEIS)		
				44,5N;149,3E 33KM 05 38 31,1 (WDCB)		
CLL I P	05 50 23,1D			D= 77,5 DEG AZ= 31		CLL
I AP	50 37,0					
BRG E P	05 50 25,0 1,2 / 15			D= 77,6 DEG AZ= 31		BRG
MOX E	05 50 37 TRACES			D= 78,5 DEG AZ= 30		MOX
E	50 42					
1978 MAR 23						
CLL E P	05 53 22					
E	53 36					
1978 MAR 23	KURILE ISLANDS	***	MB=4,9 (6)	44,1N;149,8E 33KM H=05 42 46,2 (NEIS)		
CLL I P	05 54 42,5D 1,0 / 29			D= 77,9 DEG AZ= 30		CLL
E AP	54 56					
BRG E P	05 54 43,5 1,0 / 11			D= 77,9 DEG AZ= 31		BRG
I AP	54 56,0					
MOX E P	05 54 47,5			D= 78,9 DEG AZ= 29		MOX
E	55 05					
1978 MAR 23	DODECANESE ISLANDS		/NO MB COMP./	36,4N; 25,5E 33KM H=05 56 25,1 (ISC)		
				36,4N; 25,6E 100KM 05 56 25 (ATH)		
CLL E P	06 00 28 TRACES			D= 17,4 DEG AZ=144		CLL
1978 MAR 23	KURILE ISLANDS	***	/MB=4,7 (6)/	45,3N;149,5E 33KM H=06 02 09,3 (ISC)		
CLL I P	06 13 56,1D 1,8 / 40			D= 76,7 DEG AZ= 30		CLL
BRG E P	06 13 55,5			D= 76,8 DEG AZ= 31		BRG
1978 MAR 23	KURILE ISLANDS	***	MB=5,0 (32)	44,3N;149,7E 33KM H=06 05 43,9 (NEIS)		
				44,4N;149,7E 33KM 06 05 44,9 (WDCB)		
CLL I P	06 17 38,1 1,4 / 52			D= 77,7 DEG AZ= 30		CLL
E	17 51					
BRG E P	06 17 39,0 1,1 / 19			D= 77,7 DEG AZ= 31		BRG
MOX E P	06 17 44 1,5 / 28		MPV =5,1	D= 78,7 DEG AZ= 29		MOX
1978 MAR 23						
CLL E P	06 24 21					
BRG E P	06 24 21,6					
1978 MAR 23						
CLL E P	06 43 39					
1978 MAR 23	KURILE ISLANDS	***	MB=4,6 (9)	44,3N;149,2E 50KM H=06 34 27,1 (NEIS)		
CLL E P	06 46 20			D= 77,5 DEG AZ= 31		CLL
BRG E(P)	06 46 27,2			D= 77,6 DEG AZ= 31		BRG
1978 MAR 23	KURILE ISLANDS REGION	***	MB=5,1 (28)	43,9N;148,9E 33KM H=07 03 56,3 (NEIS)		
				43,9N;148,9E 33KM 07 03 50,7 (WDCB)		
CLL I P	07 15 51,4D 1,0 / 32			D= 77,8 DEG AZ= 31		CLL
I AP	16 04,6					
BRG I P	07 15 52,0 0,9 / 16			D= 77,8 DEG AZ= 32		BRG
MOX E P	07 15 57 1,0 / 20		MPV =5,1	D= 78,8 DEG AZ= 30		MOX
1973 MAR 23	FOX ISLANDS, ALEUTIAN ISLANDS		MB=5,6 (81)	52,0N;169,5W 23KM H=07 23 13,4 (NEIS)		
				53,1N;170,3W 33KM 07 23 16,7 (WDCB)		
CLL E P(1)	07 35 06 C			D= 77,0 DEG AZ= 2		CLL
I P(2)	35 08,2D 2,0 / 140					
LM	08 13					
BRG E P	07 35 08,3			D= 77,5 DEG AZ= 2		BRG
I	35 11,1					
LM	08 15					
MOX E P(1)	07 35 10 1,0 / 20		MPV =5,1	D= 77,7 DEG AZ= 1		MOX
E P(2)	35 12 1,3 / 103		MPV =5,7			
1978 MAR 23	KURILE ISLANDS	***	/MB=4,9 (5)/	45,0N;148,7E 33KM H=07 29 34 (ISC)		
CLL I P	07 41 22,8C			D= 76,7 DEG AZ= 31		CLL
BRG I P	07 41 24,6C			D= 76,8 DEG AZ= 31		BRG
1978 MAR 23	KURILE ISLANDS	***	MB=5,1 (39)	44,1N;148,8E 48KM H=07 32 15,7 (NEIS)		
				44,4N;148,8E 33KM 07 32 15,1 (WDCB)		
CLL I P	07 44 07,8C 1,5 / 57			D= 77,5 DEG AZ= 31		CLL
I AP	44 23,2					
(CONT.)						

(CONT.)

BRG I P   07 44 08,1C 1,6 /   31   D= 77,6 DEG   AZ= 32   BRG
MOX E P   07 44 14   1,5 /   25   MPV =4,9   D= 78,6 DEG   AZ= 30   MOX
    E   44 19,5
    E   44 28,5

1973 MAR 23   KURILE ISLANDS   ***   /MB=4,5 (4)/   44,5N;148,4E 33KM H=07 35 35,9 (ISC)
CLL E P   07 47 27   D= 77,1 DEG   AZ= 31   CLL
BRG E P   07 47 29,5   D= 77,1 DEG   AZ= 32   BRG

1978 MAR 23   KURILE ISLANDS   ***   MB=4,9 (16)   44,5N;149,3E 49KM H=07 52 07,9 (NEIS)
                                                   44,2N;149,7E 33KM   07 51 58,8 (WDCB)
CLL I P   08 03 58,4 1,2 /   37   D= 77,3 DEG   AZ= 30   CLL
BRG I P   08 04 00,0D 1,1 /   14   D= 77,4 DEG   AZ= 31   BRG
MOX E P   08 04 05   1,3 /   20   MPV =4,9   D= 78,4 DEG   AZ= 29   MOX

1978 MAR 23
CLL E P   08 05 44   TRACES

1978 MAR 23   KURILE ISLANDS   ***   MB=5,7 (85)   44,3N;149,1E 48KM H=08 14 31,9 (NEIS)
                                                   44,5N;149,0E 33KM   08 14 31,1 (WDCB)
CLL I P   08 26 22,7C 1,1 / 250   D= 77,5 DEG   AZ= 31   CLL
                                                                   DISTANCE 77 DEG
    E AP   26 36
    E S   36 13
      LH   58   T 20   AN 4   AE 6
      LM   09 05   T 16   AN 5   AE 3   AV 6,5   MLH =6,0 MLV =6,0
BRG E P   08 26 23,6C 1,3 / 102   D= 77,5 DEG   AZ= 31   BRG
    E S   36 26
      LMH   58   T 20   AN 2,1 AE 8,8
      LMV   09 04   T 16   AV 12,2   MLV =6,4
MOX I P   08 26 28,9C 1,8 / 216   MPV =5,8 D= 78,5 DEG   AZ= 30   MOX
                                                                   DEPTH 60 KM
    E AP   26 45
      LMH   59,3   T 19   AN 3,2 AE 6,1   MLH =6,0
      LMV   09 06   T 16   AV 6,9   MLV =6,1

1978 MAR 23   KURILE ISLANDS   ***   MB=4,6 (6)   44,0N;149,2E 33KM H=08 50 58,9 (NEIS)
CLL E P.   09 02 54   D= 77,8 DEG   AZ= 31   CLL
    E AP   03 10
BRG E P   09 02 56,2   D= 77,8 DEG   AZ= 31   BRG
MOX E P   09 03 04,5   D= 78,8 DEG   AZ= 30   MOX

1978 MAR 23
CLL E   09 05 04
MOX E   09 05 23   TRACES

1978 MAR 23   KURILE ISLANDS   ***   MB=4,8 (9)   44,2N;148,7E 41KM H=08 55 26,8 (NEIS)
                                                   44,1N;149,0E 33KM   08 55 25,3 (WDCB)
CLL I P   09 07 19,8D 1,4 /   32   D= 77,4 DEG   AZ= 31   CLL
    I AP   07 31,3
BRG E P   09 07 19,5   D= 77,5 DEG   AZ= 32   BRG
    I AP   07 31,3
MOX E P   09 07 25   1,5 /   20   MPV =4,9   D= 78,4 DEG   AZ= 30   MOX
                                                                   DEPTH 44 KM
    E AP   07 37

1978 MAR 23   KURILE ISLANDS   ***   MB=4,9 (21)   44,0N;149,1E 49KM H=09 19 09,2 (NEIS)
                                                   44,1N;149,1E 33KM   09 19 08,3 (WDCB)
CLL E P   09 31 03   D= 77,7 DEG   AZ= 31   CLL
    E AP   31 18
BRG E P   09 31 03,0   D= 77,8 DEG   AZ= 31   BRG
MOX E P   09 31 09   D= 78,7 DEG   AZ= 30   MOX

1978 MAR 23   KURILE ISLANDS   ***   MB=4,7 (8)   44,4N;149,5E 33KM H=09 48 52,1 (NEIS)
CLL I P   10 00 46,0   D= 77,5 DEG   AZ= 30   CLL
    I AP   00 58,7
BRG I P   10 00 49,2   D= 77,6 DEG   AZ= 31   BRG
    E AP   00 59,3
MOX E   10 01 05   D= 78,5 DEG   AZ= 29   MOX

1973 MAR 23   KURILE ISLANDS   ***   MB=4,6 (7)   44,1N;149,4E 44KM H=09 52 05,5 (NEIS)
CLL E P   10 03 58   D= 77,7 DEG   AZ= 31   CLL
    E AP   04 12
BRG E(P)   10 04 02,0   D= 77,8 DEG   AZ= 31   BRG
MOX E P   10 04 05,5   D= 78,8 DEG   AZ= 30   MOX

1978 MAR 23
CLL E P   10 05 27   TRACES

1978 MAR 23   KURILE ISLANDS   ***   MB=4,7 (7)   44,4N;149,7E 51KM H=10 52 20,5 (NEIS)
                                                   44,5N;149,9E 33KM   10 52 18,8 (WDCB)
CLL E P   11 04 13   D= 77,6 DEG   AZ= 30   CLL
BRG I P   11 04 14,3C   D= 77,6 DEG   AZ= 31   BRG

1978 MAR 23
CLL E P   11 11 17   TRACES

1978 MAR 23   NORTHWEST OF KURILE ISLANDS   ***   /MB=4,7 (3)/   46,8N;147,7E 33KM H=11 06 29,3 (ISC)
CLL E P   11 18 07   TRACES   D= 74,8 DEG   AZ= 30   CLL

1978 MAR 23   KURILE ISLANDS   ***   MB=4,9 (21)   44,4N;149,7E 45KM H=11 26 37,1 (NEIS)
                                                   44,6N;149,7E 33KM   11 26 37,0 (WDCB)
CLL I P   11 38 29,7   D= 77,6 DEG   AZ= 30   CLL
    E AP   38 42
BRG E P   11 38 31,0   D= 77,6 DEG   AZ= 31   BRG
MOX E P   11 38 36,5   D= 78,6 DEG   AZ= 29   MOX

1973 MAR 23   KURILE ISLANDS   ***   /MB=4,5 (4)/   45,3N;149,3E 33KM H=12 52 36   (ISC)
CLL E P   13 04 26   D= 76,6 DEG   AZ= 30   CLL

1978 MAR 23   KURILE ISLANDS   ***   MB=4,8 (3)   44,4N;149,7E 33KM H=13 19 50,0 (NEIS)
CLL I P   13 22 44,0   D= 77,6 DEG   AZ= 30   CLL
BRG E(P)   13 22 42,8   D= 77,6 DEG   AZ= 31   BRG

1978 MAR 23   POLAND, UPPER SILESIA
BRG E(PG)   13 23 54,5
    E(SG)   24 35,5

1978 MAR 23   KURILE ISLANDS   ***   MB=5,1 (34)   44,4N;149,7E 43KM H=13 22 58,3 (NEIS)
                                                   44,7N;149,6E 33KM   13 22 59,1 (WDCB)
CLL I P   13 34 51,9D 1,0 /   42   D= 77,6 DEG   AZ= 30   CLL
    I AP   35 04,6
BRG I P   13 34 52,4D 1,8 /   35   D= 77,6 DEG   AZ= 31   BRG
    I AP   35 05,6
MOX I P   13 34 58,5C 1,2 /   28   MPV =5,1   D= 78,6 DEG   AZ= 29   MOX

1978 MAR 23
CLL I P   13 50 38,4D

1978 MAR 23   KURILE ISLANDS   ***   MB=5,1 (53)   44,3N;149,4E 50KM H=13 49 44,5 (NEIS)
                                                   44,9N;149,1E 33KM   13 49 46,6 (WDCB)
CLL I P   14 01 36,8C 1,0 /   80   D= 77,6 DEG   AZ= 30   CLL
    I AP   01 50,6
BRG I P   14 01 37,8 1,0 /   24   D= 77,6 DEG   AZ= 31   BRG
    E AP   01 53,2
MOX E P   14 01 43,5 1,5 /   35   MPV =5,1   D= 78,6 DEG   AZ= 29   MOX

1978 MAR 23
CLL I P   14 15 12,0C

1978 MAR 23   KURILE ISLANDS   ***   MB=4,8 (6)   44,1N;149,3E 33KM H=14 07 15,5 (NEIS)
CLL E P   14 19 11   D= 77,7 DEG   AZ= 31   CLL
BRG E P   14 19 13,0   D= 77,8 DEG   AZ= 31   BRG
MOX E(P)   14 19 17   TRACES   D= 78,7 DEG   AZ= 30   MOX

1978 MAR 23   KURILE ISLANDS   ***   MB=4,7 (3)   44,1N;149,6E 33KM H=14 18 39,7 (NEIS)
CLL E P   14 30 36   TRACES   D= 77,8 DEG   AZ= 30   CLL

1978 MAR 23   CENTRAL MID-ATLANTIC RIDGE   MB=4,8 (9)   7,6N; 37,3W 10KM H=14 52 20,2 (NEIS)
MOX E P   15 02 21,5 TRACES   D= 58,9 DEG   AZ=241   MOX
BRG E P   15 02 23,7   D= 60,3 DEG   AZ=243   BRG

1978 MAR 23   KURILE ISLANDS   ***   MB=4,6 (5)   44,2N;149,2E 33KM H=15 07 15,7 (NEIS)
CLL E(P)   15 19 13   D= 77,6 DEG   AZ= 31   CLL
BRG E P   15 19 11,8   D= 77,7 DEG   AZ= 31   BRG

1978 MAR 23   KURILE ISLANDS   ***   MB=4,8 (13)   44,1N;149,0E 44KM H=15 09 16,9 (NEIS)
                                                   43,5N;149,6E 33KM   15 09 11,4 (WDCB)
CLL E(P)   15 21 13   D= 77,6 DEG   AZ= 31   CLL
    E AP   21 23
BRG E P   15 21 10,0   D= 77,7 DEG   AZ= 31   BRG
MOX E AP   15 21 28   D= 78,6 DEG   AZ= 30   MOX

1978 MAR 23   KURILE ISLANDS   ***   MB=4,8 (9)   44,8N;149,0E 33KM H=15 16 54,4 (NEIS)
CLL I P   15 28 45,8C 1,3 /   20   D= 77,0 DEG   AZ= 31   CLL
BRG I P   15 28 46,4   D= 77,1 DEG   AZ= 31   BRG

1978 MAR 23   KURILE ISLANDS   ***   MB=4,6 (5)   44,3N;149,9E 33KM H=15 42 19,5 (NEIS)
CLL E P   15 54 15   D= 77,7 DEG   AZ= 30   CLL

1978 MAR 23   KURILE ISLANDS   ***   MB=5,2 (32)   44,3N;149,8E 33KM H=16 22 59,3 (NEIS)
                                                   44,4N;149,9E 33KM   16 22 54,4 (WDCB)
CLL I P   16 34 54,9D 0,9 /   32   D= 77,7 DEG   AZ= 30   CLL
BRG I P   16 34 55,4D 1,8 /   28   D= 77,8 DEG   AZ= 31   BRG
    I AP   35 08,4
MOX E P   16 35 02   D= 78,7 DEG   AZ= 29   MOX

1978 MAR 23
CLL E   16 36 46   TRACES

1978 MAR 23   UNDERGROUND EXPLOSION   MB=5,6 (71)
              >ICEBERG<   37,1N;116,1W   0KM H=16 30 00,2 (NEIS)
MOX E P   16 42 18   1,6 /   82   MPV =5,6   D= 81,3 DEG   AZ=320   MOX
CLL I P   16 42 18,3C 1,5 /   66   D= 81,3 DEG   AZ=321   CLL
BRG I P   16 42 22,2C 1,1 /   41   D= 82,0 DEG   AZ=322   BRG

19 8 MAR 23
CLL E P   16 51 27

1978 MAR 23   KURILE ISLANDS   ***   MB=4,5 (4)   44,3N;149,2E 33KM H=16 50 07,5 (NEIS)
CLL E P   17 02 00   TRACES   D= 77,5 DEG   AZ= 31   CLL

1978 MAR 23   KURILE ISLANDS   ***   MB=5,4 (72)   44,3N;149,6E 46KM H=16 52 35,2 (NEIS)
                                                   44,4N;149,6E 33KM   16 52 29,0 (WDCB)
CLL I P   17 04 28,4C 1,0 / 120   D= 77,6 DEG   AZ= 30   CLL
    I AP   04 40,9
BRG I P   17 04 28,7C 1,1 /   40   D= 77,7 DEG   AZ= 31   BRG
    I AP   04 41,8
MOX E P   17 04 34   1,4 /   60   MPV =5,4   D= 78,6 DEG   AZ= 29   MOX

1978 MAR 23
CLL I(P)   17 04 52,2 1,1 /   70
MOX E P   17 04 57,5

1978 MAR 23
CLL E P   17 21 41   TRACES

1978 MAR 23
CLL E P   17 36 54

1978 MAR 23   KURILE ISLANDS   ***   MB=4,9 (17)   44,0N;149,5E 33KM H=17 27 06,0 (NEIS)
                                                   44,1N;149,6E 33KM   17 27 01,1 (WDCB)
CLL E P   17 39 02   1,0 /   17   D= 77,9 DEG   AZ= 31   CLL
    E AP   39 14
BRG I P   17 39 02,5   D= 77,9 DEG   AZ= 31   BRG

1978 MAR 23
CLL E P 17 39 30 1,3 / 19
E AP 39 42

1978 MAR 23 KURILE ISLANDS *** /MB=4,2 (4)/ 44,0N;149,7E 33KM H=17 33 56,4 (ISC)
CLL E P 17 45 55 TRACES D= 77,9 DEG AZ= 30 CLL

1978 MAR 23 KURILE ISLANDS *** MB=4,4 (4) 44,2N;148,9E 33KM H=18 28 51,9 (NEIS)
CLL E P 18 40 45 D= 77,5 DEG AZ= 31 CLL

1978 MAR 23 CENTRAL YUGOSLAVIA MB=4,2 (4) 43,6N; 16,7E 33KM H=18 45 39,3 (NEIS)
43,6N; 16,8E 10KM 18 45 39,3 (CSEM)
43,3N; 16,9E 33KM 18 45 35,1 (WDCB)
D= 7,5 DEG AZ=165 BRG
D= 7,9 DEG AZ=152 MOX
BRG E(PN) 18 47 32,0
MOX E PN 18 47 33,5 1,2 / 57
E SG 49 49 D= 8,1 DEG AZ=161 CLL
CLL E PN 18 47 38 DISTANCE 8,0DEG
E(PG) 48 25
I 48 50,7
I(SN) 49 11,3
E SG 50 04

1978 MAR 23 KURILE ISLANDS *** MB=6,0 (99) 44,3N;149,7E 33KM H=19 12 23,6 (NEIS)
45,0N;149,5E 50KM 19 12 28,1 (WDCB)
D= 77,7 DEG AZ= 30 CLL
DISTANCE 77 DEG
CLL I P(1) 19 24 17,1C
I P(2) 24 18,6D(1,3)/ 520 AV 6,1 MPV =6,6
T 12
E AP 24 30 MSH =6,8
E S 34 08 T 15 AN 10,8 AE 8,8
LMH 57 T 19 AN 56,5 AE 64,5 AV 19,5 MLH =7,1
LMV 20 01 T 16 AN 51 AE 47 AV 45 MLV =6,9 D= 77,7 DEG AZ= 31 BRG
BRG E P 19 24 19,6C 1,8 / 270
E S 34 06,0
E SS 39 33
LM 57 T 20 AN 27,0 AE 129,0
LM 20 05 T 18 AV 88,0 MLV =7,1
MOX E P 19 24 23 C 2,0 / 684 2,0 / 410 2,0 / 0 MPV =6,3 MPH =6,4 D= 78,7 DEG AZ= 29 MOX
T 10 AV 10 MPV =6,8
E S 34 18 T 14 AN 9,8 AE 8,6 MSH =6,8
LMH 58 T 20 AN 48,8 AE 75,0 MLH =7,1
LMV 20 03,9 T 18 AV 36,1 MLV =6,8

1978 MAR 23 KURILE ISLANDS *** MB=5,2 (21) 44,3N;149,8E 33KM H=19 21 00,1 (NEIS)
44,4N;150,1E 33KM 19 20 55,2 (WDCB)
D= 77,7 DEG AZ= 30 CLL
CLL E P(1) 19 32 53
I P(2) 32 55,4 1,4 / 61
E AP 33 08 MPV =5,2 D= 78,7 DEG AZ= 29 MOX
MOX E P 19 33 01 1,9 / 53 DEPTH 33 KM
E AP 33 10 1,5 / 30

1978 MAR 23
CLL E P 19 51 48

1978 MAR 23 KURILE ISLANDS *** MB=5,4 (54) 44,4N;149,7E 33KM H=19 46 24,4 (NEIS)
44,8N;149,7E 33KM 19 46 26,1 (WDCB)
D= 77,6 DEG AZ= 30 CLL
CLL I P 19 58 18,7C 1,4 / 120
I AP 58 31,3 D= 77,6 DEG AZ= 31 BRG
BRG E P 19 58 19,1D 1,2 / 22 MPV =5,3 D= 78,6 DEG AZ= 29 MOX
MOX E P 19 58 25,5 1,5 / 50

1978 MAR 23 KURILE ISLANDS *** MB=5,2 (39) 44,3N;149,6E 45KM H=20 21 13,8 (NEIS)
44,8N;149,1E 33KM 20 21 11,1 (WDCB)
D= 77,6 DEG AZ= 30 CLL
CLL I P 20 33 07,0 1,0 / 60
I AP 33 19,7
MOX E P 20 33 13,5 1,1 / 20 MPV =5,0 D= 78,6 DEG AZ= 29 MOX

1978 MAR 23 EASTERN KAZAKH SSR MB=4,7 (14) 44,5N; 79,4E 33KM H=21 13 15,8 (NEIS)
44,7N; 79,0E 33KM 21 13 12,3 (WDCB)
CLL I P 21 21 18,1D 1,1 / 25 D= 43,6 DEG AZ= 72 CLL
MOX E P 21 21 27 1,2 / 14 MPV =4,7 D= 44,7 DEG AZ= 70 MOX

1978 MAR 23 SOUTH OF FIJI ISLANDS MB=5,5 (19) 24,8S;179,9W 475KM H=21 44 50,2 (NEIS)
CLL I PKP1 22 03 51,2C 1,3 / 70 D=151,7 DEG AZ= 25 CLL
I PKP2 04 02,0 1,5 / 66
E APKP 05 42
E 05 58
E 07 00
E PKS 07 13
E(PP) 07 27
BRG I PKP1 22 03 51,6 1,6 / 38 D=151,9 DEG AZ= 27 BRG
I PKP2 04 02,9
MOX E PKIKP 22 03 45,5 D=152,7 DEG AZ= 23 MOX
E PKHKP 03 53 1,4 / 33
E PKP2 04 05,5 1,4 / 47

1978 MAR 23 KURILE ISLANDS *** /MB=4,6 (4)/ 45,4N;148,8E 33KM H=22 19 28 (ISC)
CLL E P 22 31 14 D= 76,4 DEG AZ= 30 CLL

1978 MAR 23 KURILE ISLANDS *** /MB=4,5 (4)/ 44,2N;149,6E 33KM H=22 20 17 (ISC)
CLL I P 22 32 13,3C D= 77,7 DEG AZ= 30 CLL

1978 MAR 23 KURILE ISLANDS *** MB=5,2 (49) 44,4N;149,9E 42KM H=23 33 01,7 (NEIS)
44,4N;150,0E 33KM 23 32 55,1 (WDCB)
D= 77,6 DEG AZ= 30 CLL
CLL I P 23 44 54,9 1,6 / 90
E AP 45 07
E 48 52
(CONT.)

(CONT.)
MOX E P 23 45 01 2,2 / 131 MPV =5,5 D= 78,6 DEG AZ= 29 MOX
E AP 45 13 1,5 / 50 DEPTH 44 KM

1978 MAR 24 NORTH ATLANTIC OCEAN MB=6,1(103) 29,8N; 67,4W 20KM H=00 42 36,3 (NEIS)
29,3N; 67,6W 33KM 00 42 31,2 (WDCB)
MOX I P 00 52 49,0C 1,7 / 315 2,0 / 114 2,0 / 320 MPV =6,2 MPH =6,4 D= 60,9 DEG AZ=282 MOX
T 6 AV 3,5 MPV =6,7
E S 01 01 05
LMH 15,6 T 17 AN 4,7 AE 5,4 MLH =5,9
LMV 16 T 18 AV 8,5 MLV =6,0
E PKPPKP 22 13 1,7 / 36
CLL I P 00 52 53,8C 1,7 / 310 D= 61,6 DEG AZ=283 CLL
E S 01 01 16 DISTANCE 62 DEG
LM 16 T 16 AN 3 AE 4,5 AV 5,5 MLH =5,8 MLV =5,9
E PKPPKP 22 14
BRG E P 00 52 58,4C 1,8 / 294 D= 62,3 DEG AZ=284 BRG
LM 01 16 T 17 AV 8,8 MLV =6,0

1978 MAR 24 KURILE ISLANDS *** /MB=4,5 (2)/ 45,2N;148,7E 33KM H=01 42 54 (ISC)
CLL E P 01 54 44 D= 76,5 DEG AZ= 31 CLL

1978 MAR 24 KURILE ISLANDS *** MB=4,4 (3) 44,4N;149,0E 33KM H=01 49 39,6 (NEIS)
CLL I P 02 01 33,2D D= 77,3 DEG AZ= 31 CLL

1978 MAR 24 SOUTH OF FIJI ISLANDS /MB=4,3 (2)/ 22,0S;177,7W 251KM H=02 38 53 (ISC)
CLL I PKP1 02 58 13,0 D=149,6 DEG AZ= 20 CLL
I PKP2 58 19,5

1978 MAR 24 KURILE ISLANDS *** /MB=4,7 (4)/ 44,2N;148,3E 33KM H=03 59 23,4 (ISC)
CLL E P 04 11 16 D= 77,3 DEG AZ= 31 CLL

1978 MAR 24 KURILE ISLANDS *** MB=4,7 (6) 44,0N;148,9E 46KM H=07 12 45,0 (NEIS)
CLL E 07 24 47 D= 77,7 DEG AZ= 31 CLL
BRG E(P) 07 24 47,4 D= 77,7 DEG AZ= 32 BRG
E 25 01,8

1978 MAR 24 KURILE ISLANDS *** /MB=4,7 (5)/ 44,9N;149,5E 38KM H=07 45 41 (ISC)
CLL I P 07 57 32,0D 0,7 / 17 D= 77,1 DEG AZ= 30 CLL
I AP 57 43,6
BRG I P 07 57 29,9 D= 77,1 DEG AZ= 31 BRG
E 57 44,8

1978 MAR 24 KURILE ISLANDS *** MB=4,4 (5) 44,2N;149,4E 33KM H=09 13 41,1 (NEIS)
44,9N;148,9E 33KM 09 13 52,6 (WDCB)
CLL E AP 09 25 47 D= 77,6 DEG AZ= 31 CLL
BRG E P 09 25 40,0 D= 77,7 DEG AZ= 31 BRG
E AP 25 49,9

1978 MAR 24 POLAND, UPPER SILESIA
BRG E(SG) 10 53 28,0

1978 MAR 24 SANTA CRUZ ISLANDS MB=5,0 (12) 12,4S;166,9E 247KM H=10 47 49,2 (NEIS)
BRG E PKP 11 06 42,3 D=135,8 DEG AZ= 40 BRG

1978 MAR 24 KURILE ISLANDS *** /MB=4,2 (4)/ 44,9N;149,4E 33KM H=11 27 20,1 (ISC)
CLL E P 11 39 12 TRACES D= 77,0 DEG AZ= 30 CLL

1978 MAR 24 KURILE ISLANDS *** MB=4,4 (5) 44,5N;149,7E 33KM H=11 35 09,7 (NEIS)
CLL I P 11 47 04,2D D= 77,5 DEG AZ= 30 CLL

1978 MAR 24 KURILE ISLANDS *** MB=4,3 (3) 44,4N;149,8E 33KM H=13 19 08,1 (NEIS)
CLL E P 13 30 02 D= 77,6 DEG AZ= 30 CLL

1978 MAR 24 KURILE ISLANDS *** MB=4,8 (12) 44,1N;148,8E 40KM H=14 23 16,8 (NEIS)
CLL I P 14 35 09,8 D= 77,5 DEG AZ= 31 CLL
E AP 35 21 D= 77,6 DEG AZ= 32 BRG
BRG I P 14 35 11,2 1,2 / 16 D= 78,6 DEG AZ= 30 MOX
MOX E P 14 35 17

1978 MAR 24 KURILE ISLANDS *** MB=4,9 (33) 44,1N;148,8E 48KM H=18 30 08,4 (NEIS)
43,8N;148,9E 33KM 18 30 00,6 (WDCB)
D= 77,5 DEG AZ= 31 CLL
CLL I P 18 42 00,3
E AP 42 15 D= 77,6 DEG AZ= 32 BRG
BRG E P 18 42 02,4
E AP 42 14,2 D= 78,6 DEG AZ= 30 MOX
MOX E P 18 42 06 DEPTH 48 KM
E AP 42 19

1978 MAR 24 TONGA ISLANDS /MB=4,7 (2)/ 17,0S;175,1W 33KM H=18 33 09 (ISC)
CLL E PKP 18 57 44 D=145,2 DEG AZ= 14 CLL
BRG E PKP 18 57 45,2 1,0 / 10 D=145,4 DEG AZ= 15 BRG

1978 MAR 24 KURILE ISLANDS *** MB=6,5 (81) 44,2N;148,9E 33KM H=19 47 50,7 (NEIS)
45,5N;148,3E 60KM 19 48 00,7 (WDCB)
D= 77,5 DEG AZ= 31 CLL
DISTANCE 77 DEG
CLL I P(1) 19 59 43,2C(1,1 / 89)
I P(2) 59 46,6
I 59 55 (1,1 / 2200)
I 20 00 15,9
E PP 02
E PPPP 05 46
E S 09 33 T 12 AN 44 AE 38,5 MSH =7,5
E SCS 10 05
E SS 15,4 T 29
E SSSS 19,6
E PKPPKP 26 56
E 27 15
LMH 33 T 18 AN 425 AE 410 MLH =8,0 MAG =7,9
(CONT.)

(CONT,)

BRG I P 19 59 44,2 2,0 / 3070 D= 77,6 DEG AZ= 31 BRG
E AP 59 58
E S 20 09 44
E SS 14 51
E PKPPKP 27 01,2
I 27 14,6 MPV =7,0 D= 78,5 DEG AZ= 30 MOX
MOX E P 19 59 49 1,5 / 2211
T 2,0 AV 5,3 MPV =8,2
E PP 20 02 40
E S 09 44 T 23 AN 60,3 AE 97,5 MSM =7,6
E SS 15 12
E 18 35
E SSS 19 30
LMV 39,0 T 18 AV 532,4 MLV =8,0
LMH 39,3 T 19 AN 430,9 AE 578,9 MLH =8,0

1978 MAR 24
CLL I P 20 08 28,3C 1,1 / 46

1978 MAR 24 KURILE ISLANDS REGION *** /MB=5,5 (9)/ 43,8N;148,5E 33KM H=19 58 30,9 (ISC)
CLL I AP 20 10 39,3 D= 77,7 DEG AZ= 31 CLL

1978 MAR 24 KURILE ISLANDS REGION *** MB=5,6 (34) 43,7N;148,6E 44KM H=20 00 20,5 (NEIS)
CLL I P 20 12 13 0,9 / 200 D= 77,8 DEG AZ= 31 CLL
I AP 12 25,5
BRG I P 20 12 15,2D 0,8 / 10 D= 77,9 DEG AZ= 32 BRG
MOX E P 20 12 21 2,5 / 645 MPV =6,2 D= 78,9 DEG AZ= 30 MOX

1978 MAR 24
CLL I P 20 15 53,1
MOX E P 20 15 59

1978 MAR 24 HOKKAIDO, JAPAN, REGION /MB=5,1 (6)/ 44,5N;144,6E 33KM H=20 04 46 (ISC)
CLL I P 20 16 30,7 D= 75,8 DEG AZ= 34 CLL
I AP 16 43,3
MOX E 20 16 50 D= 76,8 DEG AZ= 33 MOX

1978 MAR 24 KURILE ISLANDS REGION *** MB=4,8 (4) 43,9N;149,4E 33KM H=20 07 56,5 (NEIS)
CLL E P 20 19 54 D= 77,9 DEG AZ= 31 CLL
E AP 20 07

1978 MAR 24
CLL E 20 21 34

1978 MAR 24 KURILE ISLANDS *** (H=20 13 27)(UPP)
CLL I P 20 25 07,6D
I AP 25 20,6
MOX E AP 20 25 25

1978 MAR 24 KURILE ISLANDS *** H=20 14 25 (UPP)
CLL I P 20 26 18,1
E AP 26 31
MOX E AP 20 26 37

1978 MAR 24
CLL E P 20 27 46 1,3 / 37
E 27 54

1978 MAR 24 KURILE ISLANDS *** MB=5,2 (29) 44,3N;148,7E 33KM H=20 16 36,1 (NEIS)
CLL I P 20 28 28,6 1,3 / 69 D= 77,3 DEG AZ= 31 CLL
I AP 28 39,6
BRG E P 20 28 29,0 D= 77,4 DEG AZ= 31 BRG
MOX E P 20 28 34,5 1,4 / 33 MPV =5,2 D= 78,3 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS *** MB=5,1 (29) 45,6N;148,8E 33KM H=20 18 17,8 (NEIS)
CLL I P 20 30 03,2 1,1 / 52 D= 76,2 DEG AZ= 30 CLL
MOX E P 20 30 09 D= 77,2 DEG AZ= 29 MOX

1978 MAR 24
CLL E P 20 31 21

1978 MAR 24 KURILE ISLANDS REGION *** MB=5,5 (7) 43,9N;148,8E 33KM H=20 31 09,0 (NEIS)
CLL E P 20 43 04 D= 77,7 DEG AZ= 31 CLL
E AP 43 14
MOX E AP 20 43 20,5 1,4 / 47 D= 78,7 DEG AZ= 30 MOX

1978 MAR 24
CLL I P 20 43 39,4C 1,1 / 33
E AP 43 51
BRG E P 20 43 40,6

1978 MAR 24 KURILE ISLANDS REGION *** MB=5,0 (26) 43,9N;148,6E 33KM H=20 38 20,5 (NEIS)
CLL E P 20 50 14 D= 77,7 DEG AZ= 31 CLL
BRG E P 20 50 15,0 D= 77,7 DEG AZ= 32 BRG
MOX E P 20 50 20 D= 78,7 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS *** /MB=5,0 (11)/ 44,1N;149,1E 54KM H=20 41 37 (ISC)
CLL E P 20 53 29 D= 77,6 DEG AZ= 31 CLL
MOX E P 20 53 36 D= 78,7 DEG AZ= 30 MOX

1978 MAR 24
CLL E 20 56 42

1978 MAR 24 KURILE ISLANDS REGION *** /MB=4,9 (4)/ 43,7N;148,8E 33KM H=20 46 16,7 (ISC)
CLL I P 20 58 13,0 D= 77,9 DEG AZ= 31 CLL
MOX E P 20 58 19 D= 78,9 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS REGION *** MB=4,9 (18) 43,9N;148,7E 33KM H=20 48 11,7 (NEIS)
CLL E P 21 00 06 D= 77,7 DEG AZ= 31 CLL
BRG E P 21 00 07,0 D= 77,8 DEG AZ= 32 BRG

1978 MAR 24
CLL E P 21 00 44
MOX E P 21 00 50 1,5 / 20

1978 MAR 24
CLL E P 21 01 15

1978 MAR 24
CLL E P 21 03 57 TRACES

1978 MAR 24 ALMA-ATA REGION MB=6,2 (74) 42,8N; 78,6E 33KM H=21 05 48,2 (NEIS)
42,9N; 78,6E 33KM 21 07 48,8 (WDCB)
BRG E P 21 13 50,7 1,8 / 509 D= 43,7 DEG AZ= 74 BRG
E PP 15 38,0
CLL I P 21 13 55,1C 1,2 / 390 D= 44,1 DEG AZ= 74 CLL
I 14 02 DISTANCE 45 DEG
E PP 15 41
E(S) 20 38
LH 29
LMH 33 T 11 AN 73 AE 145 MLH =7,2
MOX I P(1) 21 14 03,5C 1,6 / 423 MPV =6,0 D= 45,1 DEG AZ= 73 MOX
E P(2) 14 10 1,6 / 907 MPV =6,4
E PP 15 53
LMH 35,5 T 14 AN 128,8 MLH =7,0
LMV 36,9 T 16 AV 120,3 MLV =7,0

1978 MAR 24
CLL E P 21 23 08

1978 MAR 24 KURILE ISLANDS *** MB=5,4 (26) 44,1N;148,9E 33KM H=21 13 43,4 (NEIS)
CLL I P 21 25 36 D= 77,6 DEG AZ= 31 CLL
I AP 25 52

1978 MAR 24
CLL E P 21 27 00

1978 MAR 24 KURILE ISLANDS *** MB=5,1 (6) 44,1N;148,4E 33KM H=21 24 07,9 (NEIS)
CLL E AP 21 36 16 D= 77,4 DEG AZ= 31 CLL

1978 MAR 24 KURILE ISLANDS *** MB=5,2 (18) 44,1N;148,8E 33KM H=21 25 18,3 (NEIS)
CLL E P 21 37 11 D= 77,5 DEG AZ= 31 CLL
MOX E P 21 37 17,5 D= 78,6 DEG AZ= 30 MOX

1978 MAR 24
CLL E(P) 21 38 17

1978 MAR 24 KURILE ISLANDS REGION *** /MB=5,4 (8)/ 43,1N;149,8E 33KM H=21 26 25 (ISC)
CLL I P 21 38 28,7 D= 78,8 DEG AZ= 31 CLL
MOX I P 21 38 35,0C D= 79,8 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS *** /MB=4,8 (5)/ 45,4N;147,1E 50KM H=21 30 31 (ISC)
CLL E P 21 42 16 D= 75,8 DEG AZ= 31 CLL
MOX E 21 42 31 D= 76,9 DEG AZ= 30 MOX

1978 MAR 24
CLL I P 21 42 42
BRG E(P) 21 42 42,4

1978 MAR 24 KURILE ISLANDS REGION *** MB=4,8 (11) 43,9N;148,7E 43KM H=21 45 40,8 (NEIS)
CLL E P 21 57 35 0,9 / 21 D= 77,7 DEG AZ= 31 CLL
I AP 57 46,6
BRG I AP 21 57 46,9 D= 77,8 DEG AZ= 32 BRG
MOX E P 21 57 41,5 D= 78,7 DEG AZ= 30 MOX
E AP 57 52,5 DEPTH 40 KM

1978 MAR 24
CLL E P 22 00 28

1978 MAR 24 KURILE ISLANDS REGION *** /MB=4,7 (7)/ 43,8N;149,7E(0KM H=21 48 33) (ISC)
CLL E P 22 00 41 D= 78,1 DEG AZ= 30 CLL
BRG I P 22 00 41,4D 1,1 / 16 D= 78,2 DEG AZ= 31 BRG
MOX E P 22 00 46,5 1,4 / 23 MPV =5,1 D= 79,1 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS *** /MB=5,1 (17)/ 44,2N;149,8E 33KM H=21 49 11,1 (ISC)
CLL E P 22 01 05 D= 77,8 DEG AZ= 30 CLL
BRG E P 22 01 05,9 1,3 / 21 D= 77,8 DEG AZ= 31 BRG
MOX E P 22 01 11 1,6 / 39 MPV =5,2 D= 78,8 DEG AZ= 29 MOX

1978 MAR 24 NORTH PACIFIC OCEAN /MB=5,4 (21)/ 41,5N;151,5E 33KM H=21 49 26,7 (ISC)
CLL I P 22 01 37,6C 1,1 / 105 D= 80,7 DEG AZ= 30 CLL
BRG E P 22 01 37,1 1,4 / 53 D= 80,8 DEG AZ= 31 BRG
MOX E P 22 01 43,5 1,5 / 65 MPV =5,4 D= 81,8 DEG AZ= 29 MOX

1978 MAR 24 KURILE ISLANDS *** MB=5,4 (30) 44,3N;149,0E 33KM H=21 50 54,3 (NEIS)
CLL I P 22 02 46,8C 1,0 / 100 D= 77,4 DEG AZ= 31 CLL
BRG E P 22 02 47,2 1,1 / 37 D= 77,5 DEG AZ= 31 BRG
MOX E P 22 02 53 1,2 / 49 MPV =5,4 D= 78,4 DEG AZ= 30 MOX

1978 MAR 24 KURILE ISLANDS REGION *** /MB=4,7 (7)/ 43,1N;148,3E 42KM H=21 52 32 (ISC)
CLL I P 22 04 28,4D D= 78,3 DEG AZ= 32 CLL
I AP 04 40,8
BRG I(P) 22 04 35,0D 1,2 / 15 D= 78,3 DEG AZ= 32 BRG

1978 MAR 24
CLL I P 22 08 22,5C

1978 MAR 24 KURILE ISLANDS REGION *** MB=5,2 (2) 43,8N;148,8E 33KM H=21 57 22,1 (NEIS)
CLL I P 22 09 18,1D D= 77,8 DEG AZ= 31 CLL
BRG E P 22 09 18,2 D= 77,9 DEG AZ= 32 BRG
MOX E P 22 09 24 D= 78,8 DEG AZ= 30 MOX

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1978 MAR 24     KURILE ISLANDS                  ***     MB=5,0 (13)   44,5N;148,4E  33KM H=21 58 25,1 (NEIS)
CLL I P         22 10 16,2  0,9 /   30                                          D= 77,1 DEG   AZ= 31       CLL
    E AP           10 28
                                                                                D= 77,1 DEG   AZ= 32       BRG
BRG E P         22 10 16,6  0,9 /   12                                          D= 78,1 DEG   AZ= 30       MOX
MOX E P         22 10 22    1,0 /   12                      MPV  =4,9

1978 MAR 24     KURILE ISLANDS                  ***     MB=5,2 (19)   44,4N;148,8E( 33KM)H=21 59 41,8 (NEIS)
CLL I P         22 11 32,8C                                                     D= 77,3 DEG   AZ= 31       CLL
    I AP           11 39,0
                                                                                D= 77,3 DEG   AZ= 31       BRG
BRG E P         22 11 33,5                                                      D= 78,3 DEG   AZ= 30       MOX
MOX E P         22 11 39    1,6 /   28          MPV  =5,0
    E           22 11 45    1,8 /   68

1978 MAR 24
CLL E P         22 12 54

1978 MAR 24     KURILE ISLANDS REGION           ***     MB=4,6 ( 5)   43,9N;148,6E  48KM H=22 04 50,3 (NEIS)
CLL E P         22 16 43                                                        D= 77,7 DEG   AZ= 31       CLL
    I AP           16 57,0
                                                                                D= 77,7 DEG   AZ= 32       BRG
BRG E P         22 16 44,9
    I AP           16 57,3                                                      D= 78,7 DEG   AZ= 30       MOX
MOX E(P)        22 16 56,5
    E           23 17 03    1,0 /   26

1978 MAR 24     KURILE ISLANDS                  ***     MB=5,6 (68)   44,1N;149,0E  45KM H=22 08 58,3 (NEIS)
                                                        44,3N;149,1E  33KM   22 08 52,1 (WDCB)
CLL I P(1)      22 20 50,5C                                                     D= 77,6 DEG   AZ= 31       CLL
    I P(2)         20 52,6  1,4 /  210
    E AP           21 03                                                        D= 77,7 DEG   AZ= 31       BRG
BRG I P         22 20 50,9
    I              20 53,4
    E AP           21 04,5
MOX E P         22 20 56    1,6 /  148                      MPV  =5,7          D= 78,6 DEG   AZ= 30       MOX

1978 MAR 24     KURILE ISLANDS                  ***     MB=4,9 (16)   44,4N;149,8E  33KM H=22 24 44,7 (NEIS)
                                                        44,8N;149,8E  33KM   22 24 47,2 (WDCB)
CLL I P         22 36 39,1C 1,3 /   28                                          D= 77,6 DEG   AZ= 30       CLL
BRG I P         22 36 39,2C 1,1 /    8                                          D= 77,7 DEG   AZ= 31       BRG
MOX E P         22 36 45                                                        D= 78,6 DEG   AZ= 29       MOX

1978 MAR 24     KURILE ISLANDS                  ***     MB=4,9 (20)   44,0N;148,5E  38KM H=22 35 33,7 (NEIS)
                                                        44,0N;149,2E  33KM   22 35 26,1 (WDCB)
CLL I P         22 47 26,2C 1,2 /   35                                          D= 77,5 DEG   AZ= 31       CLL
BRG I P         22 47 27,4D 1,0 /   16                                          D= 77,6 DEG   AZ= 32       BRG
MOX E P         22 47 32,5  1,2 /   16                      MPV  =4,9          D= 78,6 DEG   AZ= 30       MOX

1978 MAR 24     KURILE ISLANDS                  ***     MB=4,7 ( 6)   44,0N;148,5E  33KM H=22 45 33,5 (NEIS)
CLL E P         22 57 28                                                        D= 77,5 DEG   AZ= 31       CLL
    E AP           57 39
BRG I(P)        22 57 29,1                                                      D= 77,6 DEG   AZ= 32       BRG

1978 MAR 24     KURILE ISLANDS                  ***     /MB=4,5 ( 5)/ 44,3N;149,9E  33KM H=22 51 01,8  (ISC)
CLL E P         23 02 57                                                        D= 77,7 DEG   AZ= 30       CLL
BRG E P         23 02 57,0                                                      D= 77,8 DEG   AZ= 31       BRG
MOX E P         23 03 02,5                                                      D= 78,7 DEG   AZ= 29       MOX

1978 MAR 24     KURILE ISLANDS                  ***     MB=5,0 (16)   44,0N;148,9E  46KM H=22 53 38,7 (NEIS)
                                                        43,8N;149,2E  33KM   22 53 30,5 (WDCB)
CLL E P         23 05 33                                                        D= 77,7 DEG   AZ= 31       CLL
    E           23 05 46
                                                                                D= 77,7 DEG   AZ= 32       BRG
BRG E P         23 05 32,7                                                      D= 78,7 DEG   AZ= 30       MOX
MOX E P         23 05 40

1978 MAR 24
CLL E(P)        23 06 07
    E           23 06 24

1978 MAR 24     KURILE ISLANDS REGION           ***     MB=4,6 ( 7)   43,9N;149,1E  33KM H=22 58 06,9 (NEIS)
CLL E P         23 10 02                                                        D= 77,8 DEG   AZ= 31       CLL
    E AP           10 14
                                                                                D= 77,9 DEG   AZ= 31       BRG
BRG E P         23 10 01,8
    I AP           10 15,8                                                      D= 78,8 DEG   AZ= 30       MOX
MOX E P         23 10 09

1978 MAR 24     KURILE ISLANDS                  ***     MB=4,9 (13)   44,3N;149,2E  33KM H=22 59 12,8 (NEIS)
CLL I P         23 11 05,9D 1,3 /   35                                          D= 77,5 DEG   AZ= 31       CLL
BRG I P         23 11 06,7C 0,7 /   11                                          D= 77,6 DEG   AZ= 31       BRG
MOX E P         23 11 13                                                        D= 78,5 DEG   AZ= 30       MOX
    E           23 11 29

1978 MAR 24     KURILE ISLANDS                  ***     MB=4,9 ( 9)   44,3N;149,0E  33KM H=23 02 01,7 (NEIS)
CLL E P         23 13 55                                                        D= 77,4 DEG   AZ= 31       CLL
    E AP           14 06
BRG E(P)        23 13 56,1                                                      D= 77,5 DEG   AZ= 31       BRG
    E AP           14 10,2

1978 MAR 24     KURILE ISLANDS                  ***     MB=5,4 (55)   44,1N;148,9E  45KM H=23 15 45,6 (NEIS)
                                                        44,9N;148,7E  80KM   23 15 52,9 (WDCB)
CLL I P         23 27 38,3C 1,3 /   82                                          D= 77,6 DEG   AZ= 31       CLL
    I AP           27 50,8
BRG E P         23 27 38,9  1,1 /   35                                          D= 77,6 DEG   AZ= 31       BRG
    I AP           27 51,1
MOX E P         23 27 44    1,5 /   50          MPV  =5,3                       D= 78,6 DEG   AZ= 30       MOX
    E AP           27 56    1,5 /  111                                                                  DEPTH  44 KM

1978 MAR 24     KURILE ISLANDS                  ***     MB=5,0 (37)   44,1N;149,1E  47KM H=23 40 05,6 (NEIS)
                                                        45,6N;148,3E  50KM   23 40 14,5 (WDCB)
CLL I P         23 51 58,0  1,3 /   47                                          D= 77,6 DEG   AZ= 31       CLL
    I AP           52 10,8
  (CONT.)
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  (CONT.)
BRG E P         23 51 58,2  1,3 /   16
    I AP           52 11,1                                                      D= 77,7 DEG   AZ= 31       BRG
MOX E P         23 52 03,5  1,6 /   28
    E AP           52 16,5  1,6 /   66          MPV  =5,0                       D= 78,7 DEG   AZ= 30       MOX

1978 MAR 25     KURILE ISLANDS                  ***     /MB=4,6 ( 5)/ 44,3N;148,5E  33KM H=23 56 35,9  (ISC)
CLL I P         00 08 28,5                                                      D= 77,3 DEG   AZ= 31       CLL

1978 MAR 25     KURILE ISLANDS                  ***     MB=4,8 ( 4)   44,0N;148,9E  45KM H=00 12 15,6 (NEIS)
CLL E P         00 24 09                                                        D= 77,7 DEG   AZ= 31       CLL
    I AP           24 21,7
BRG E(P)        00 24 11,4  1,0 /    9                                          D= 77,7 DEG   AZ= 32       BRG
    E AP           24 22,4
MOX E AP        00 24 28                                                        D= 78,7 DEG   AZ= 30       MOX
                                                                                                        DEPTH  51 KM

1978 MAR 25
CLL E P         00 36 09
    E AP           36 21

1978 MAR 25
CLL E P         00 38 36

1978 MAR 25     KURILE ISLANDS REGION           ***     /MD=4,3 ( 4)/ 44,3N;150,4E  33KM H=00 29 52,0  (ISC)
CLL E P         00 41 46                                                        D= 77,9 DEG   AZ= 30       CLL

1978 MAR 25     KURILE ISLANDS REGION           ***     MB=4,8 (15)   43,8N;148,9E  33KM H=00 37 35,4 (NEIS)
CLL I P         00 49 31,2                                                      D= 77,8 DEG   AZ= 31       CLL
    I AP           49 44,8
BRG E P         00 49 31,1  1,0 /   14                                          D= 77,9 DEG   AZ= 32       BRG
    E AP           49 44,6
MOX E P         00 49 36,5  1,1 /   16          MPV  =4,9                       D= 78,9 DEG   AZ= 30       MOX

1978 MAR 25     KURILE ISLANDS REGION           ***     MB=5,3 (33)   43,7N;148,6E  37KM H=00 38 12,5 (NEIS)
CLL I P         00 50 07,0C 0,9 /   89                                          D= 77,8 DEG   AZ= 31       CLL
    I AP           50 17,4
BRG I P         00 50 07,2C 1,0 /   28                                          D= 77,9 DEG   AZ= 32       BRG
    E AP           50 18,9
MOX E P         00 50 13    1,1 /   48          MPV  =5,4                       D= 78,9 DEG   AZ= 30       MOX

1978 MAR 25     KURILE ISLANDS REGION           ***     /MB=4,0 ( 1)/ 43,9N;148,8E  33KM H=00 42 20     (ISC)
CLL E P         00 54 16                                                        D= 77,7 DEG   AZ= 31       CLL

1978 MAR 25     KURILE ISLANDS                  ***     MB=5,0 (29)   44,0N;149,0E  33KM H=00 44 40,2 (NEIS)
                                                        43,7N;149,4E  33KM   00 44 32,6 (WDCB)
CLL E P         00 56 34                                                        D= 77,7 DEG   AZ= 31       CLL
    E AP           56 45
BRG E P         00 56 35,1                                                      D= 77,8 DEG   AZ= 31       BRG
    E AP           56 50,6
MOX E P         00 56 41                                                        D= 78,7 DEG   AZ= 30       MOX
    E AP           56 50,5                                                                              DEPTH  35 KM
    E              57 04

1978 MAR 25     KURILE ISLANDS                  ***     MB=4,3 ( 5)   44,4N;149,5E  47KM H=00 59 06,2 (NEIS)
CLL I P         01 10 56,8D                                                     D= 77,5 DEG   AZ= 30       CLL

1978 MAR 25     KURILE ISLANDS                  ***     MB=4,5 ( 8)   44,0N;148,7E  43KM H=01 08 31,7 (NEIS)
CLL I P         01 20 24,8D                                                     D= 77,6 DEG   AZ= 31       CLL
    I AP           20 37,0
BRG E P         01 20 26,0  1,0 /   14                                          D= 77,7 DEG   AZ= 32       BRG
    E AP           20 38,1
MOX E AP        01 20 43    1,3 /   20                                          D= 78,6 DEG   AZ= 30       MOX
                                                                                                        DEPTH  47 KM

1978 MAR 25     KURILE ISLANDS                  ***     MB=5,0 (30)   44,2N;148,9E  57KM H=01 25 04,6 (NEIS)
                                                        44,0N;149,3E  33KM   01 24 55,3 (WDCB)
CLL I P         01 36 55,6C 1,1 /   25                                          D= 77,5 DEG   AZ= 31       CLL
    E AP           37 11
BRG E P         01 36 56,0  1,1 /   14                                          D= 77,6 DEG   AZ= 31       BRG
    E AP           37 12,0
MOX E P         01 37 02    1,1 /   16          MPV  =4,9                       D= 78,5 DEG   AZ= 30       MOX

1978 MAR 25     KURILE ISLANDS REGION           ***     MB=5,0 (13)   43,8N;149,2E  33KM H=01 31 31,2 (NEIS)
                                                        44,3N;149,2E  33KM   01 31 34,3 (WDCB)
CLL E P         01 43 27                                                        D= 77,9 DEG   AZ= 31       CLL
    I AP           43 39,8
BRG E(P)        01 43 28,3                                                      D= 78,0 DEG   AZ= 31       BRG
MOX E AP        01 43 45,5                                                      D= 79,0 DEG   AZ= 30       MOX
    E           01 43 56

1978 MAR 25     KURILE ISLANDS                  ***                                                     (H=01 32 10)(UPP)

CLL E(P)        01 43 51
    E AP           44 05

1978 MAR 25
CLL E P         01 47 18
BRG I(P)        01 47 18,2

1978 MAR 25     KURILE ISLANDS                  ***     MB=4,6 ( 9)   44,3N;149,7E  33KM H=01 40 16,5 (NEIS)
                                                        43,9N;149,4E  33KM   01 40 16,2 (WDCB)
CLL I P         01 52 10,6C                                                     D= 77,7 DEG   AZ= 30       CLL
BRG E P         01 52 12,0                                                      D= 77,7 DEG   AZ= 31       BRG

1978 MAR 25     KURILE ISLANDS                  ***     MB=5,3 (57)   43,9N;148,4E  41KM H=01 41 04,6 (NEIS)
                                                        43,7N;148,3E  33KM   01 41 03,6 (WDCB)
CLL I P         01 52 57,8C 1,0 /   63                                          D= 77,6 DEG   AZ= 31       CLL
    I AP           53 09,4
BRG I P         01 52 58,2C 1,1 /   23                                          D= 77,7 DEG   AZ= 32       BRG
    I AP           53 11,1
MOX E P         01 53 04    1,1 /   38          MPV  =5,3                       D= 78,6 DEG   AZ= 30       MOX
    E AP           53 16,5  1,2 /   53                                                                  DEPTH  46 KM
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1978 MAR 25     KURILE ISLANDS              ***     MB=4,6 ( 8)   44,0N;148,4E  33KM H=01 47 52,6 (NEIS)
CLL E P         01 59 46    1,3 /   19                                       D= 77,5 DEG   AZ= 31      CLL
BRG E P         01 59 46,3                                                   D= 77,6 DEG   AZ= 32      BRG

1978 MAR 25
CLL E           02 04 08

1978 MAR 25     ALMA-ATA REGION                     MB=4,9 (19)   42,8N; 78,7E  29KM H=02 25 19,2 (NEIS)
                                                                  43,0N; 78,6E  33KM   02 25 16,3 (WDCB)
BRG E P         02 33 23,2                                                   D= 43,7 DEG   AZ= 74      BRG
CLL E P         02 33 27   TRACES                                            D= 44,2 DEG   AZ= 74      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,2 ( 1)   44,7N;148,6E  33KM H=02 27 18,1 (NEIS)
CLL E AP        02 39 22                                                     D= 76,9 DEG   AZ= 31      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,3 ( 3)   44,3N;148,9E  33KM H=02 39 41,9 (NEIS)
CLL I P         02 51 36,0D                                                  D= 77,4 DEG   AZ= 31      CLL
BRG E P         02 51 35,0                                                   D= 77,5 DEG   AZ= 31      BRG

1978 MAR 25     RED SEA                             MB=5,0 (34)   16,5N; 40,3E  10KM H=02 55 04,2 (NEIS)
                                                                  15,4N; 40,0E  33KM   02 54 54,7 (WDCB)
BRG I P         03 02 41,9C 1,4 /   26                                       D= 40,3 DEG   AZ=139      BRG
    I AP           02 46,0
CLL I P         03 02 47,3  1,7 /   30                                       D= 41,0 DEG   AZ=138      CLL
    E AP           02 52
MOX E P         03 02 48,5  1,5 /   25                MPV  =4,7              D= 41,1 DEG   AZ=136      MOX

1978 MAR 25     KURILE ISLANDS              ***    /MB=4,6 ( 8)/  44,4N;148,4E  33KM H=02 54 58   (ISC)
CLL E P         03 06 44                                                     D= 77,1 DEG   AZ= 31      CLL
    I AP           06 58,0
BRG I(P)        03 06 46,1                                                   D= 77,2 DEG   AZ= 32      BRG
MOX E AP        03 07 04    1,4 /   19                                       D= 78,2 DEG   AZ= 30      MOX

1978 MAR 25
BRG E P         03 06 58,5
CLL E P         03 07 03

1978 MAR 25     KURILE ISLANDS              ***     MB=4,3 ( 4)   44,7N;147,5E  33KM H=03 01 59,7 (NEIS)
CLL E P         03 13 50                                                     D= 76,6 DEG   AZ= 32      CLL
    E AP           13 58
BRG E P         03 13 51,0                                                   D= 76,6 DEG   AZ= 32      BRG

1978 MAR 25     KURILE ISLANDS              ***     MB=4,5 ( 4)   44,0N;149,4E  42KM H=03 32 46,4 (NEIS)
CLL E P         03 44 42                                                     D= 77,8 DEG   AZ= 31      CLL
BRG E P         03 44 41,9                                                   D= 77,9 DEG   AZ= 31      BRG

1978 MAR 25     KURILE ISLANDS              ***    /MB=4,1 ( 3)/  44,7N;148,5E  33KM H=03 43 51   (ISC)
CLL E           03 55 47   TRACES                                            D= 76,9 DEG   AZ= 31      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,7 ( 6)   44,1N;148,5E  33KM H=03 52 32,0 (NEIS)
CLL E P         04 04 26                                                     D= 77,4 DEG   AZ= 31      CLL
    E AP           04 38
BRG E(P)        04 04 23,7                                                   D= 77,5 DEG   AZ= 32      BRG

1978 MAR 25     KURILE ISLANDS                     /MB=4,2 ( 4)/  44,3N;148,5E  33KM H=04 19 09   (ISC)
BRG E P         04 31 04,8                                                   D= 77,3 DEG   AZ= 32      BRG

1978 MAR 25     KURILE ISLANDS              ***    /NO MB COMP,/  44,0N;148,3E  33KM H=04 42 29   (ISC)
CLL E P         04 54 22                                                     D= 77,5 DEG   AZ= 31      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,6 (12)   44,1N;148,9E  45KM H=05 15 55,2 (NEIS)
CLL E P         05 27 48                                                     D= 77,6 DEG   AZ= 31      CLL
    I AP           28 00,9
BRG E(P)        05 27 48,4                                                   D= 77,6 DEG   AZ= 31      BRG
MOX E AP        05 28 07                                                     D= 78,6 DEG   AZ= 30      MOX

1978 MAR 25     KURILE ISLANDS              ***     MB=5,4 (54)   44,0N;149,3E  33KM H=05 24 41,3 (NEIS)
                                                                  44,1N;149,3E  33KM   05 24 36,9 (WDCB)
CLL I P         05 36 36,7  1,4 /   63                                       D= 77,8 DEG   AZ= 31      CLL
    I AP           36 48,8
    E              37 06
BRG I P         05 36 37,1C 1,2 /   29                                       D= 77,9 DEG   AZ= 31      BRG
    I AP           36 49,0
    I              37 07,1
MOX E P         05 36 42    1,1 /   32                MPV  =5,2              D= 78,8 DEG   AZ= 30      MOX
    E AP           36 54,5                                                            DEPTH  46 KM
      LMH       06 10,0      T 18         AE   1,7    MLH  =5,4
      LMV          16,5      T 14             AV   1,1  MLV  =5,4

1978 MAR 25     NORTH PACIFIC OCEAN                /MB=4,1 ( 2)/ (42,8N;150,3E  33KM H=05 37 51  ) (ISC)
CLL E P         05 49 54                                                     D= 79,2 DEG   AZ= 31      CLL
    E AP           50 06

1978 MAR 25     KURILE ISLANDS              ***     MB=4,9 (21)   44,0N;148,4E  42KM H=05 45 51,4 (NEIS)
                                                                  44,0N;148,7E  33KM   05 45 49,8 (WDCB)
CLL I P         05 57 44,0C 1,2 /   35                                       D= 77,5 DEG   AZ= 31      CLL
BRG E P         05 57 44,1  1,1 /   11                                       D= 77,6 DEG   AZ= 32      BRG
MOX E P         05 57 50                                                     D= 78,5 DEG   AZ= 30      MOX

1978 MAR 25     KURILE ISLANDS              ***    /MB=4,1 ( 2)/  44,6N;148,4E  33KM H=06 26 18,6  (ISC)
CLL E P         06 38 09                                                     D= 77,0 DEG   AZ= 31      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,9 (26)   44,0N;148,6E  44KM H=07 10 02,6 (NEIS)
                                                                  44,1N;148,7E  33KM   07 10 01,6 (WDCB)
CLL I P         07 21 55,8D                                                  D= 77,6 DEG   AZ= 31      CLL
BRG E P         07 21 56,2                                                   D= 77,6 DEG   AZ= 32      BRG
MOX E P         07 22 02                                                     D= 78,6 DEG   AZ= 30      MOX
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1978 MAR 25     KURILE ISLANDS              ***     MB=4,3 ( 6)   44,2N;149,0E  44KM H=07 17 20,6 (NEIS)
CLL E P         07 29 13                                                     D= 77,5 DEG   AZ= 31      CLL
    E AP           29 26
BRG E AP        07 29 27                                                     D= 77,6 DEG   AZ= 31      BRG

1978 MAR 25     KURILE ISLANDS              ***     MB=4,3 ( 3)   44,4N;149,5E  33KM H=07 32 44,9 (NEIS)
CLL I P         07 44 38,6                                                   D= 77,5 DEG   AZ= 30      CLL
BRG I P         07 44 39,3                                                   D= 77,6 DEG   AZ= 31      BRG

1978 MAR 25
CLL E           07 54 08   TRACES

1978 MAR 25     KURILE ISLANDS              ***     MB=4,9 (16)   44,7N;148,8E  33KM H=07 54 28,6 (NEIS)
CLL I P         08 06 19,8C 1,2 /   28                                       D= 77,0 DEG   AZ= 31      CLL
    E              06 37
BRG E P         08 06 19,7
    E AP           06 34,4                                                   D= 77,1 DEG   AZ= 31      BRG

1978 MAR 25     KURILE ISLANDS              ***     MB=5,3 (60)   44,1N;149,0E  50KM H=08 01 48,4 (NEIS)
                                                                  44,0N;149,2E  33KM   08 01 40,1 (WDCB)
CLL I P         08 13 40,6C 0,8 /   46                                       D= 77,6 DEG   AZ= 31      CLL
    I AP           13 53,2
BRG I P         08 13 41,0C 1,1 /   29                                       D= 77,7 DEG   AZ= 31      BRG
    I AP           13 54,0
MOX E P         08 13 46    2,2 /  109                MPV  =5,4              D= 78,6 DEG   AZ= 30      MOX
    E AP           13 58                                                              DEPTH  44 KM
      LMV          53,5      T 14             AV   0,8  MLV  =5,2

1978 MAR 25     KURILE ISLANDS              ***     MB=4,7 ( 7)   44,6N;148,5E  33KM H=08 21 27,6 (NEIS)
CLL I P         08 33 18,1D 1,1 /   17                                       D= 77,0 DEG   AZ= 31      CLL
BRG I P         08 33 19,5                                                   D= 77,1 DEG   AZ= 31      BRG

1978 MAR 25     NORTHWEST OF KURILE ISLANDS ***    /MB=4,6 ( 2)/  46,8N;148,2E  33KM H=08 31 23   (ISC)
CLL E P         08 43 01   TRACES                                            D= 74,9 DEG   AZ= 30      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=5,0 (28)   44,1N;149,0E  45KM H=08 48 50,6 (NEIS)
                                                                  44,2N;149,2E  33KM   08 48 49,7 (WDCB)
CLL I P         09 00 43,6  1,0 /   19                                       D= 77,6 DEG   AZ= 31      CLL
    I AP           00 56,2
BRG I P         09 00 43,8                                                   D= 77,7 DEG   AZ= 31      BRG
    I AP           00 56,6
MOX E AP        09 01 02    1,3 /   26                                       D= 78,6 DEG   AZ= 30      MOX

1978 MAR 25     KURILE ISLANDS              ***     MB=5,0 ( 9)   44,3N;149,2E  40KM H=08 55 22,5 (NEIS)
CLL I P         09 07 15,4D                                                  D= 77,5 DEG   AZ= 31      CLL
BRG E(P)        09 07 16,0                                                   D= 77,6 DEG   AZ= 31      BRG
MOX E P         09 07 21                                                     D= 78,5 DEG   AZ= 30      MOX

1978 MAR 25     KURILE ISLANDS              ***     MB=5,1 (36)   44,1N;149,0E  45KM H=09 14 00,1 (NEIS)
                                                                  44,0N;149,3E  33KM   09 13 52,4 (WDCB)
CLL I P         09 25 52,8C 1,0 /   28                                       D= 77,6 DEG   AZ= 31      CLL
    I AP           26 05
BRG I P         09 25 53,2C                                                  D= 77,7 DEG   AZ= 31      BRG
    I AP           26 06,0
MOX E P         09 25 58   TRACES                                            D= 78,6 DEG   AZ= 30      MOX
    E AP           26 11    1,5 /   30                                                DEPTH  48 KM

1978 MAR 25     ANDAMAN ISLANDS REGION              MB=4,8 (19)   10,1N; 93,2E  33KM H=09 21 33,7 (NEIS)
                                                                   9,5N; 93,4E  33KM   09 21 24,0 (WDCB)
BRG E P         09 33 16,1                                                   D= 75,5 DEG   AZ= 92      BRG
CLL E           09 33 38   TRACES                                            D= 76,1 DEG   AZ= 91      CLL

1978 MAR 25
CLL E P         10 03 55   TRACES

1978 MAR 25     KURILE ISLANDS              ***     MB=4,7 ( 3)   44,3N;148,4E  33KM H=09 56 56,5 (NEIS)
CLL I P         10 08 49,2D                                                  D= 77,2 DEG   AZ= 31      CLL
BRG E P         10 08 53,0                                                   D= 77,3 DEG   AZ= 32      BRG

1978 MAR 25     KURILE ISLANDS REGION       ***     MB=5,0 (39)   43,9N;148,4E  44KM H=11 00 02,4 (NEIS)
                                                                  43,9N;148,5E  33KM   11 00 00,9 (WDCB)
CLL I P         11 11 55,3C 1,5 /   50                                       D= 77,6 DEG   AZ= 31      CLL
BRG I P         11 11 56,0D 1,8 /   35                                       D= 77,7 DEG   AZ= 32      BRG
MOX E P         11 12 02    1,4 /   23                MPV  =5,0              D= 78,6 DEG   AZ= 30      MOX

1978 MAR 25     KURILE ISLANDS              ***     MB=4,3 ( 5)   44,6N;149,7E  33KM H=11 19 17,8 (NEIS)
CLL I P         11 31 11,4 TRACES                                            D= 77,4 DEG   AZ= 30      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=5,4 (67)   44,1N;148,7E  46KM H=11 40 29,6 (NEIS)
                                                                  44,2N;148,7E  33KM   11 40 28,1 (WDCB)
CLL E P         11 52 21    1,5 /  105                                       D= 77,5 DEG   AZ= 31      CLL
      LH        12 26
      L            30
BRG E P         11 52 21,6  1,4 /   33                                       D= 77,6 DEG   AZ= 32      BRG
    I AP           52 34,8
MOX E P         11 52 28    1,6 /   23                MPV  =4,9              D= 78,5 DEG   AZ= 30      MOX
      LMH       12 28,8      T 15,5       AE   1,6    MLH  =5,5
      LMV          31,7      T 17,0           AV   1,7  MLV  =5,5

1978 MAR 25     OFF COAST OF HOKKAIDO, JAPAN       /MB=4,3 ( 1)/  42  N;148  E  33KM H=12 33 20   (ISC)
CLL E(P)        12 45 21   TRACES                                            D= 79   DEG   AZ= 32      CLL

1978 MAR 25     KURILE ISLANDS              ***     MB=4,7 ( 7)   44,0N;148,5E  41KM H=12 50 30,6 (NEIS)
                                                                  43,7N;148,9E  33KM   12 50 22,6 (WDCB)
CLL I P         13 02 23,8                                                   D= 77,5 DEG   AZ= 31      CLL
    I AP           02 35,6
BRG E(P)        13 02 24,3                                                   D= 77,6 DEG   AZ= 32      BRG
MOX E P         13 02 30                                                     D= 78,6 DEG   AZ= 30      MOX
    E AP           02 42                                                              DEPTH  44 KM
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1978 MAR 25	KERMADEC ISLANDS REGION		/MB=4,6 (1)/	30,3S;176,9W 33KM H=12 48 50	(ISC)
CLL E PKP2	13 09 15			D=157,8 DEG AZ= 23	CLL
BRG E PKP2	13 09 17,0			D=157,9 DEG AZ= 26	BRG
1978 MAR 25	KURILE ISLANDS	***	MB=4,5 (7)	44,2N;148,7E 33KM H=13 54 02,9	(NEIS)
CLL E P	14 05 57			D= 77,4 DEG AZ= 31	CLL
1978 MAR 25	KURILE ISLANDS REGION	***	/MB=4,6 (4)/	43 N;149 E 33KM H=14 21 33	(ISC)
CLL I AP	14 33 41,1C 1,1 / 23			D= 79 DEG AZ= 31	CLL
MOX E AP	14 33 46,5			D= 80 DEG AZ= 30	MOX
1978 MAR 25	KURILE ISLANDS	***	MB=4,4 (4)	44,1N;149,0E 33KM H=14 41 21,8	(NEIS)
CLL E	14 53 21			D= 77,6 DEG AZ= 31	CLL
BRG E P	14 53 18,0			D= 77,7 DEG AZ= 31	BRG
1978 MAR 25	KURILE ISLANDS	***	/MB=4,5 (5)/	44,4N;149,4E 33KM H=15 02 08	(ISC)
CLL E AP	15 14 11			D= 77,5 DEG AZ= 30	CLL
1978 MAR 25	KURILE ISLANDS	***	MB=5,0 (6)	44,0N;148,7E 33KM H=15 09 07,6	(NEIS)
				44,6N;148,8E 33KM 15 09 10,9	(WDCB)
CLL I P	15 21 01,7 1,3 / 17			D= 77,6 DEG AZ= 31	CLL
BRG E P	15 21 02,7			D= 77,7 DEG AZ= 32	BRG
MOX E P	15 21 08			D= 78,6 DEG AZ= 30	MOX
1978 MAR 25	FIJI ISLANDS REGION		MB=4,9 (7)	18,0S;177,9W 592KM H=15 09 32,8	(NEIS)
CLL I PKP1	15 28 08,3C 1,0 / 13			D=145,7 DEG AZ= 19	CLL
BRG I PKP1	15 28 08,9			D=145,9 DEG AZ= 20	BRG
1978 MAR 25	KURILE ISLANDS REGION	***	MB=4,8 (10)	43,8N;148,8E 33KM H=15 21 43,4	(NEIS)
				45,1N;148,2E 130KM 15 22 01,3	(WDCB)
CLL I P	15 33 39,2			D= 77,8 DEG AZ= 31	CLL
1978 MAR 25					
CLL E P	15 34 54				
1978 MAR 25					
BRG I(P)	17 01 18,5 0,8 / 9				
1978 MAR 25	KURILE ISLANDS	***	MB=5,2 (62)	44,1N;148,8E 50KM H=16 55 13,3	(NEIS)
				44,8N;148,6E 70KM 16 55 18,8	(WDCB)
CLL I P	17 07 05,4D 1,3 / 61			D= 77,5 DEG AZ= 31	CLL
E AP	07 18				
E	10 20				
BRG I P	17 07 05,5D 1,3 / 22			D= 77,6 DEG AZ= 32	BRG
E AP	07 20,1				
MOX E P	17 07 11 1,8 / 47		MPV =5,2	D= 78,6 DEG AZ= 30	MOX
E AP	07 23			DEPTH 44 KM	
1978 MAR 25	POLAND, UPPER SILESIA				
CLL E SG	17 54 27				
1978 MAR 25	KURILE ISLANDS	***	MB=5,0 (38)	44,1N;149,0E 45KM H=18 10 02,4	(NEIS)
				44,1N;148,9E 33KM 18 10 01,5	(WDCB)
CLL I P	18 21 55,4 1,0 / 20			D= 77,6 DEG AZ= 31	CLL
E AP	22 09				
BRG E P	18 21 55,2 0,9 / 7			D= 77,7 DEG AZ= 31	BRG
E AP	22 09,0				
MOX E P	18 22 02			D= 78,6 DEG AZ= 30	MOX
E AP	22 14			DEPTH 44 KM	
1978 MAR 25					
CLL E	18 40 06 TRACES				
1978 MAR 25	FIJI ISLANDS REGION		MB=5,7 (50)	21,0S;178,8W 595KM H=19 26 03,2	(NEIS)
				21,2S;178,9W 400KM 19 25 43,6	(WDCB)
CLL I PKIKP	19 44 39,8D 1,8 / 81			D=148,4 DEG AZ= 21	CLL
I PKP1	44 44,7D 1,3 / 435			DISTANCE 148 DEG DEPTH 560 KM	
I PKP2	44 50,0C 1,1 / 170		MC =5,6		
I	46 10,7				
E APKP	46 57				
E PP	48 16				
BRG I PKIKP	19 44 40,3			D=148,5 DEG AZ= 23	BRG
I PKP1	44 45,1				
E PKP2	44 51,0				
E APKP	47 02,7				
MOX E PKIKP	19 44 41 2,0 / 111			D=149,3 DEG AZ= 19	MOX
E PKHKP	44 47 1,8 / 385				
E PKP2	44 53 1,6 / 115				
1978 MAR 25	KURILE ISLANDS	***	/MB=4,4 (4)/	44,3N;149,0E 33KM H=20 54 43,7	(ISC)
CLL I AP	21 06 49,6			D= 77,4 DEG AZ= 31	CLL
1978 MAR 25	NORTH PACIFIC OCEAN		/MB=4,7 (4)/	(41 N;150,9E 33KM H=23 20 40)	(ISC)
CLL I(P)	23 32 56,8 1,1 / 16			D= 81 DEG AZ= 31	CLL
1978 MAR 26	KURILE ISLANDS REGION	***	MB=5,6 (75)	43,8N;148,5E 47KM H=23 52 14,8	(NEIS)
				45,1N;147,3E 60KM 23 52 24,9	(WDCB)
CLL I P	00 04 07,6 1,3 / 140			D= 77,7 DEG AZ= 31	CLL
I AP	04 20,8				
E S	13 58				
LMH	36 T 21 AN 7,5 AE 11		MLH =6,2		
LH	38 T 17 AN 5,5 AE 9				
LMV	42 T 15 AN 3,5 AE 5 AV 3		MLV =5,8		
BRG E P	00 04 08,0C 1,2 / 66			D= 77,8 DEG AZ= 32	BRG
E AP	04 21,6				
LM	45 T 17 AV 6,1		MLV =6,0		
MOX E P	00 04 13 C 1,3 / 79		MPV =5,5	D= 78,7 DEG AZ= 30	MOX
E AP	04 26				
LMH	37,0 T 20 AN 6,4 AE 10,9		MLH =6,3	DEPTH 48 KM	
LMV	46,1 T 13 AV 5,7		MLV =6,1		

1978 MAR 26	MOLUCCA SEA		MB=5,5 (28)	0,1S;125,2E 33KM H=00 03 54,5	(NEIS)
				0,5N;124,8E 33KM 00 05 58,5	(WDCB)
CLL E PP	00 23 33			D=103,8 DEG AZ= 72	CLL
E	27 52				
1978 MAR 26	FIJI ISLANDS REGION		MB=5,4 (17)	21,2S;179,1W 628KM H=00 13 40,7	(NEIS)
CLL I PKP1	00 37 19,8C 1,3 / 37			D=148,5 DEG AZ= 22	CLL
I PKP2	37 25,3C 1,5 / 42		MC =4,7	DISTANCE 148 DEG DEPTH 620 KM	
E	38 04				
E APKP	39 42				
BRG I PKP1	00 37 18,7 0,9 / 16			D=148,7 DEG AZ= 24	BRG
I PKP2	37 26,1				
E APKP	39 44,5				
MOX E PKHKP	00 37 22,5			D=149,4 DEG AZ= 20	MOX
E PKP2	37 29,5 1,4 / 28				
1978 MAR 26	KURILE ISLANDS REGION	***	MB=5,0 (25)	43,9N;148,4E 43KM H=00 53 00,7	(NEIS)
				43,7N;148,7E 33KM 00 52 53,2	(WDCB)
CLL I P	01 04 54,8D 1,3 / 31			D= 77,6 DEG AZ= 31	CLL
E AP	05 05				
BRG E P	01 04 54,4 1,0 / 12			D= 77,7 DEG AZ= 32	BRG
MOX E P	01 05 01			D= 78,6 DEG AZ= 30	MOX
E AP	05 10,5			DEPTH 35 KM	
1978 MAR 26					
CLL E P	02 38 54				
1978 MAR 26	KURILE ISLANDS	***	MB=4,8 (19)	44,0N;149,0E 33KM H=02 51 55,2	(NEIS)
				43,8N;149,4E 33KM 02 51 48,4	(WDCB)
CLL I P	03 03 50,5C			D= 77,7 DEG AZ= 31	CLL
E AP	04 06				
BRG E P	03 03 51,8 1,1 / 12			D= 77,8 DEG AZ= 31	BRG
MOX E P	03 03 56			D= 78,7 DEG AZ= 30	MOX
E AP	04 12			DEPTH 61 KM	
1978 MAR 26	UNDERGROUND EXPLOSION		MB=5,5 (78)	49,7N; 78,1E 0KM H=03 56 57,6	(NEIS)
BRG I P	04 04 34,0C 1,0 / 44			D= 39,8 DEG AZ= 66	BRG
I PN	06 02,1				
CLL I P	04 04 36,6C 1,0 / 105			D= 40,2 DEG AZ= 66	CLL
E PN	06 09				
E(SKS)	14 56				
MOX I P	04 04 46,0C 1,1 / 113		MPV =5,5	D= 41,3 DEG AZ= 64	MOX
E PN	06 18				
1978 MAR 26	KURILE ISLANDS	***	MB=4,6 (5)	44,2N;149,6E 33KM H=04 06 41,1	(NEIS)
CLL E P	04 18 36			D= 77,7 DEG AZ= 30	CLL
E AP	18 50				
1978 MAR 26					
CLL E P	04 25 43 TRACES				
1978 MAR 26	KURILE ISLANDS REGION	***	MB=4,8 (8)	43,9N;148,3E 47KM H=04 48 39,8	(NEIS)
				44,3N;148,4E 33KM 04 48 39,8	(WDCB)
CLL E P	05 00 32			D= 77,6 DEG AZ= 31	CLL
BRG E P	05 00 33,2			D= 77,6 DEG AZ= 32	BRG
1978 MAR 26	NORTH PACIFIC OCEAN		/MB=4,5 (6)/	(43,1N;153,1E 33KM H=05 39 14)	(ISC)
CLL I P	05 51 18,0			D= 79,8 DEG AZ= 29	CLL
BRG I P	05 51 19,2			D= 79,9 DEG AZ= 29	BRG
1978 MAR 26	KURILE ISLANDS	***	MB=5,4 (62)	44,5N;149,7E 33KM H=06 00 16,6	(NEIS)
				44,9N;149,6E 33KM 06 00 18,4	(WDCB)
CLL I P	06 12 09,3C 1,3 / 150			D= 77,5 DEG AZ= 30	CLL
BRG I P	06 12 10,6C 1,3 / 68			D= 77,5 DEG AZ= 31	BRG
MOX I P	06 12 16,0D 1,6 / 110		MPV =5,6	D= 78,5 DEG AZ= 29	MOX
1978 MAR 26					
BRG E(P)	07 19 21,0				
1978 MAR 26	KURILE ISLANDS	***	MB=4,9 (37)	44,5N;149,7E 41KM H=07 09 57,7	(NEIS)
				44,5N;149,8E 33KM 07 09 51,8	(WDCB)
CLL I P	07 21 50,2C 1,3 / 54			D= 77,5 DEG AZ= 30	CLL
BRG I P	07 21 50,8C 1,4 / 24			D= 77,5 DEG AZ= 31	BRG
MOX E P	07 21 56 1,5 / 35		MPV =5,1	D= 78,5 DEG AZ= 29	MOX
1978 MAR 26					
BRG E P	07 28 19,0 1,1 / 9				
1978 MAR 26	TALAUD ISLANDS		MB=5,0 (13)	4,8N;125,4E 28KM H=07 21 17,8	(NEIS)
BRG E P	07 35 08,0			D= 99,6 DEG AZ= 70	BRG
I	35 46,8				
1978 MAR 26	KURILE ISLANDS		MB=4,4 (5)	44,4N;149,9E 33KM H=07 31 08,6	(NEIS)
BRG E(P)	07 43 05,3			D= 77,7 DEG AZ= 31	BRG
1978 MAR 26	KURILE ISLANDS	***	MB=4,8 (7)	44,5N;149,7E 33KM H=07 36 00,2	(NEIS)
				44,7N;149,8E 33KM 07 36 01,4	(WDCB)
CLL I P	07 47 54,1D 1,1 / 17			D= 77,5 DEG AZ= 30	CLL
BRG I P	07 47 54,5D			D= 77,5 DEG AZ= 31	BRG
1978 MAR 26	FIJI ISLANDS REGION		MB=5,0 (18)	21,2S;178,8W 565KM H=07 46 08,7	(NEIS)
CLL I PKP1	08 04 52,5D 1,0 / 51			D=148,6 DEG AZ= 21	CLL
I PKP2	04 58,0				
E	07 07			D=148,7 DEG AZ= 23	BRG
BRG I PKIKP	08 04 47,8 1,2 / 38				
I PKP1	04 53,2				
I PKP2	04 59,1				
E APKP	07 09,7			D=149,5 DEG AZ= 19	MOX
MOX E PKHKP	08 04 55 1,6 / 50				
E PKP2	05 02				

1978 MAR 26	ALMA-ATA REGION			MB=5,0 (29)	42,8N; 78,8E 24KM H=08 51 23,8 (NEIS)
					43,0N; 78,6E 33KM 08 51 22,1 (WDCB)
BRG E P	08 59 28,8C 1,0 / 12				D= 43,8 DEG AZ= 74 BRG
CLL I P	08 59 32,3D				D= 44,2 DEG AZ= 74 CLL
E	09 01 33				
MOX E P	08 59 40 1,4 / 28			MPV =5,0	D= 45,3 DEG AZ= 73 MOX
1978 MAR 26	KURILE ISLANDS		***	/MB=4,3 (4)/	44,5N;149,7E 33KM H=09 31 31,3 (ISC)
CLL I P	09 43 25,0C				D= 77,5 DEG AZ= 30 CLL
1978 MAR 26	KURILE ISLANDS		***	MB=4,8 (9)	44,0N;148,6E 33KM H=10 29 29,2 (NEIS)
CLL I P	10 41 23,2D				D= 77,6 DEG AZ= 31 CLL
I AP	41 34,0D				
BRG E(P)	10 41 23,0				D= 77,6 DEG AZ= 32 BRG
MOX E	10 41 34				D= 78,6 DEG AZ= 30 MOX
1978 MAR 26	TONGA ISLANDS REGION			MB=5,1 (3)	22,1S;174,5W 45KM H=10 46 28,6 (NEIS)
CLL E PKP	11 06 21				D=150,3 DEG AZ= 14 CLL
BRG E PKP1	11 06 18,7 1,7 / 34				D=150,5 DEG AZ= 16 BRG
MOX E PKHKP	11 06 20				D=151,1 DEG AZ= 12 MOX
1978 MAR 26	KURILE ISLANDS		***	MB=5,1 (41)	44,4N;149,4E 45KM H=11 01 45,9 (NEIS)
					44,9N;149,2E 33KM 11 01 47,8 (WDCB)
CLL E P	11 13 38 1,1 / 36				D= 77,5 DEG AZ= 30 CLL
I AP	13 50,9				
BRG E P	11 13 38,4				D= 77,5 DEG AZ= 31 BRG
I AP	13 51,7				
MOX E P(1)	11 13 45				D= 78,5 DEG AZ= 29 MOX
E P(2)	13 48 1,2 / 24			MPV =5,1	
E AP	13 57 1,6 / 71				
1978 MAR 26					
CLL E P	11 49 19 TRACES				
1978 MAR 26					
CLL E P	12 10 10 TRACES				
1978 MAR 26	NORTHERN ITALY	FRIULI			46,4N; 13,2E 10KM H=12 12 49,8 (CSEM)
MOX E SG	12 15 14				D= 4,4 DEG AZ=165 MOX
BRG E(PN)	12 14 16,4				D= 4,5 DEG AZ=187 BRG
E(SG)	15 16,3				
CLL E SG	12 15 29				D= 4,9 DEG AZ=178 CLL
1978 MAR 26	LOYALTY ISLANDS REGION			/NO MB COMP./	21,6S;170,6E 141KM H=14 19 59,3 (ISC)
BRG I PKP	14 39 21,0D 1,0 / 18				D=145,5 DEG AZ= 41 BRG
CLL I PKP	14 39 21,3C				D=145,6 DEG AZ= 39 CLL
MOX E PKP	14 39 24				D=146,6 DEG AZ= 37 MOX
1978 MAR 26	KURILE ISLANDS		***	MB=5,1 (38)	44,0N;148,9E 48KM H=14 54 00,2 (NEIS)
					44,0N;148,9E 33KM 14 53 53,1 (WDCB)
CLL I P	15 05 53,4				D= 77,7 DEG AZ= 31 CLL
I AP	06 06,9				
BRG E P	15 05 53,8				D= 77,7 DEG AZ= 32 BRG
I AP	06 07,6				
MOX E P	15 05 59,5				D= 78,7 DEG AZ= 30 MOX
E AP	06 13				DEPTH 50 KM
1978 MAR 26	KURILE ISLANDS		***	MB=4,9 (28)	44,3N;149,1E 51KM H=17 39 13,0 (NEIS)
					44,7N;149,1E 33KM 17 39 14,5 (WDCB)
CLL I P	17 51 04,4C 1,3 / 25				D= 77,5 DEG AZ= 31 CLL
BRG E(P)	17 51 05,2				D= 77,5 DEG AZ= 31 BRG
MOX E	17 51 17,5				D= 78,5 DEG AZ= 30 MOX
1978 MAR 26					
BRG E(P)	19 39 18,8				
1978 MAR 26	KURILE ISLANDS		***	MB=4,8 (15)	44,0N;149,0E 33KM H=20 35 11,6 (NEIS)
					44,2N;149,0E 33KM 20 35 13,3 (WDCB)
CLL E P	20 47 07				D= 77,7 DEG AZ= 31 CLL
BRG E(P)	20 47 07,5				D= 77,8 DEG AZ= 31 BRG
MOX E P	20 47 14				D= 78,7 DEG AZ= 30 MOX
1978 MAR 26	KURILE ISLANDS		***	MB=4,7 (11)	44,2N;149,5E 37KM H=20 46 09,6 (NEIS)
					44,4N;149,4E 33KM 20 46 10,8 (WDCB)
CLL E P	20 58 04				D= 77,7 DEG AZ= 30 CLL
E AP	58 15				
BRG E P	20 58 04,7				D= 77,7 DEG AZ= 31 BRG
1978 MAR 26	KURILE ISLANDS		***	(MB=5,3 (13))	44,2N;148,9E 33KM H=21 03 07,0 (NEIS)
CLL E P	21 15 01 TRACES				D= 77,5 DEG AZ= 31 CLL
BRG E P	21 14 56,5				D= 77,6 DEG AZ= 31 BRG
1978 MAR 26	OFF EAST COAST OF KAMCHATKA			MB=5,5 (81)	53,5N;163,0E 34KM H=21 04 58,9 (NEIS)
					53,7N;162,6E 00KM 21 05 00,6 (WDCB)
CLL I P	21 16 23,2 1,5 / 90				D= 72,6 DEG AZ= 18 CLL
E	16 28				
BRG I P	21 16 24,8D				D= 72,8 DEG AZ= 19 BRG
I	16 30,8				
MOX E P	21 16 29 1,4 / 56			MPV =5,4	D= 73,5 DEG AZ= 17 MOX
E	16 34 1,4 / 49				
1978 MAR 26	TONGA ISLANDS REGION			MB=5,0 (3)	22,1S;174,3W 33KM H=21 24 42,6 (NEIS)
CLL E PKP1	21 44 33				D=150,3 DEG AZ= 14 CLL
BRG E PKP1	21 44 33,8 1,0 / 9				D=150,6 DEG AZ= 16 BRG
MOX E	21 44 39				D=151,1 DEG AZ= 11 MOX
1978 MAR 26	KURILE ISLANDS REGION		***	MB=4,7 (5)	43,9N;148,8E 33KM H=23 02 38,3 (NEIS)
CLL E P	23 14 34				D= 77,7 DEG AZ= 31 CLL

1978 MAR 26	KURILE ISLANDS		***	MB=4,8 (12)	44,1N;148,7E 44KM H=23 11 27,2 (NEIS)
					44,1N;148,9E 33KM 23 11 26,1 (WDCB)
CLL E P	23 23 20				D= 77,5 DEG AZ= 31 CLL
E AP	23 33 D				
BRG E P	23 23 20,4 1,1 / 19				D= 77,6 DEG AZ= 32 BRG
I AP	23 33,0				
MOX E AP	23 23 39 1,4 / 26				D= 78,5 DEG AZ= 30 MOX
					DEPTH 51 KM
1978 MAR 27	KURILE ISLANDS REGION		***	MB=5,2 (61)	43,9N;149,0E 42KM H=23 56 45,3 (NEIS)
					44,2N;149,1E 33KM 23 56 45,1 (WDCB)
CLL I P	00 08 39 C 1,3 / 50				D= 77,8 DEG AZ= 31 CLL
E AP	08 51				
BRG E P	00 08 40,3 1,2 / 25				D= 77,9 DEG AZ= 31 BRG
I AP	08 52,0				
MOX E P	00 08 45,5 1,3 / 24			MPV =5,0	D= 78,8 DEG AZ= 30 MOX
E AP	08 57				DEPTH 42 KM
1978 MAR 27					
CLL I(AP)	00 09 27,2				
1978 MAR 27					
CLL E P	01 06 31				
1978 MAR 27					
BRG E(P)	02 16 06,5				
1978 MAR 27	KURILE ISLANDS REGION		***	MB=4,7 (13)	43,8N;148,5E 36KM H=02 41 20,1 (NEIS)
					43,6N;148,9E 33KM 02 41 17,3 (WDCB)
CLL I P	02 53 15				D= 77,7 DEG AZ= 31 CLL
BRG E P	02 53 17,0				D= 77,8 DEG AZ= 32 BRG
MOX E P	02 53 21				D= 78,7 DEG AZ= 30 MOX
1978 MAR 27	KURILE ISLANDS		***	/MB=4,3 (4)/	45,1N;147,6E 33KM H=04 39 31,0 (ISC)
CLL E P	04 51 18				D= 76,3 DEG AZ= 31 CLL
1978 MAR 27	FIJI ISLANDS REGION			MB=5,5 (27)	20,5S;178,0W 550KM H=07 13 43,6 (NEIS)
CLL I PKIKP	07 32 24,2				D=148,1 DEG AZ= 20 CLL
I PKP1	32 28,2D 1,0 / 175				DISTANCE 148 DEG DEPTH 560 KM
I PKP2	32 32,3 1,0 / 72			MC =5,3	
E APKP	34 38				
E PKS	35 58				D=148,3 DEG AZ= 22 BRG
BRG I PKIKP	07 32 25,0C				
I PKP1	32 29,0				
I PKP2	32 34,0				D=149,0 DEG AZ= 18 MOX
E APKP	34 37,1				
MOX E PKIKP	07 32 25,5 1,5 / 30				
E PKHKP	32 30 D 1,4 / 88				
E PKP2	32 36 1,6 / 44				
1978 MAR 27	SOUTH OF FIJI ISLANDS			/MB=4,4 (7)/	25,0S;179,8E 511KM H=10 30 03,4 (ISC)
CLL E PKP1	10 49 01 TRACES				D=151,8 DEG AZ= 26 CLL
1978 MAR 27	TIMOR			MB=5,9 (58)	8,6S;125,1E 69KM H=10 36 06,0 (NEIS)
					8,5S;125,0E 70KM 10 36 06,3 (WDCB)
BRG E	10 54 11,4				D=109,9 DEG AZ= 79 BRG
E	55 02,0				
E PKKP1	11 05 34,9				
I PKKP2	05 48,1				
CLL E	10 54 16				D=110,4 DEG AZ= 78 CLL
E	54 42				
E	54 55				
MOX E	10 54 46				D=111,4 DEG AZ= 77 MOX
LMH	11 35,5 T 35 AN 3,5			MLM =5,7	(NO DEPTH CORRECTION)
LMV	38,0 T 35		AV 1,6	MLV =5,4	(NO DEPTH CORRECTION)
1978 MAR 27	DODECANESE ISLANDS				36,9N; 25,5E 10KM H=11 36 27,4 (NEIS)
MOX E P	11 40 33 TRACES				D= 17,0 DEG AZ=139 MOX
1978 MAR 27					
BRG E P	12 06 04,4				
1978 MAR 27	MINDANAO, PHILIPPINE ISLANDS			MB=5,2 (39)	6,7N;123,6E 602KM H=18 33 38,9 (NEIS)
BRG E P	18 46 08,0				D= 97,0 DEG AZ= 70 BRG
1978 MAR 27	KURILE ISLANDS		***	MB=4,5 (5)	44,0N;149,1E 39KM H=18 51 13,9 (NEIS)
					44,2N;149,5E 33KM 18 51 12,9 (WDCB)
CLL E AP	19 03 21				D= 77,7 DEG AZ= 31 CLL
1978 MAR 27	KURILE ISLANDS		***	MB=4,7 (10)	44,1N;148,9E 46KM H=20 49 34,4 (NEIS)
					44,0N;149,2E 33KM 20 48 31,3 (WDCB)
CLL E P	21 00 27				D= 77,6 DEG AZ= 31 CLL
I AP	00 40,6D 1,3 / 38				
BRG E(P)	21 00 28,4				D= 77,6 DEG AZ= 31 BRG
E AP	00 39,9				
MOX E AP	21 00 47				D= 78,6 DEG AZ= 30 MOX
					DEPTH 64 KM
1978 MAR 27	NORTHERN ITALY	FRIULI		NO MB COMP.	46,3N; 13,1E 10KM H=21 15 23,0 (CSEM)
					46,4N; 13,1E 10KM 21 15 21,4 (NEIS)
MOX E SG	21 17 42,5				D= 4,5 DEG AZ=167 MOX
E	17 49,5				
BRG E(PG)	21 16 49,0				D= 4,6 DEG AZ=187 BRG
E SG	17 56,3				
CLL E SG	21 18 06				D= 5,0 DEG AZ=179 CLL
1978 MAR 28					
BRG E(P)	01 15 35,1				

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                                                              NO MB COMP.  42,8N; 12,7E  10KM H=03 54 39,7 (NEIS)
1978 MAR 28   CENTRAL ITALY                                                42,8N; 12,7E  10KM    03 54 42,0 (CSEM)
                                                                                     D=  7,9 DEG   AZ=174       MOX
MOX E PN      03 56 37
    E PG         57 10
    E SN         58 15
    E SG      03 59 10                                                               D=  8,1 DEG   AZ=187       BRG
BRG E(PN)     03 56 41,4
    I SN         58 06,5
    E SG         59 10,0                                                             D=  8,5 DEG   AZ=182       CLL
CLL E SN      03 58 19
    E            58 33
    E SG         59 24

1978 MAR 28
BRG E(P)      04 40 30,5

1978 MAR 28   KURILE ISLANDS                  ***             MB=4,4 ( 5)  44,0N;149,0E  33KM H=05 04 44,7 (NEIS)
CLL E AP      05 16 50                                                               D= 77,7 DEG   AZ= 31       CLL

1978 MAR 28   KURILE ISLANDS                  ***             MB=4,5 ( 9)  44,0N;148,8E  54KM H=10 45 40,8 (NEIS)
                                                                           44,0N;149,1E  33KM    10 45 37,8 (WDCB)
                                                                                     D= 77,6 DEG   AZ= 31       CLL
CLL E P       10 57 32
    E AP         57 45                                                               D= 77,7 DEG   AZ= 32       BRG
BRG E(P)      10 57 34,1

1978 MAR 28   KURILE ISLANDS REGION           ***             MB=5,0 (23)  43,9N;149,1E  33KM H=11 01 01,8 (NEIS)
                                                                           43,8N;149,2E  33KM    11 00 56,0 (WDCB)
                                                                                     D= 77,8 DEG   AZ= 31       CLL
CLL I P       11 12 56,6C 1.1 /   22
    I AP         13 12,6                                                             D= 77,9 DEG   AZ= 31       BRG
BRG E P       11 12 57,7
    E AP         13 13,0                                                             D= 78,8 DEG   AZ= 30       MOX
MOX E P       11 13 03                                                                                  DEPTH  57 KM
    E AP         13 18

1978 MAR 28   KURILE ISLANDS                  ***             MB=4,9 (10)  44,2N;148,4E  45KM H=13 48 50,0 (NEIS)
                                                                           44,1N;148,6E  33KM    13 48 47,8 (WDCB)
                                                                                     D= 77,3 DEG   AZ= 31       CLL
CLL I P       14 00 41,2D 1.1 /   32                                                 D= 77,4 DEG   AZ= 32       BRG
BRG E P       14 00 41,4  1.1 /   11                                                 D= 78,3 DEG   AZ= 30       MOX
MOX E P       14 00 47

1978 MAR 28
CLL E         14 22 44

1978 MAR 28   VANUATU ISLANDS                                 MB=4,9 ( 8)  20,6S;169,8E 144KM H=18 40 48,3 (NEIS)
BRG I PKP     19 08 06,9C 0,7 /   13                                                 D=144,3 DEG   AZ= 41       BRG
CLL I PKP     19 08 06,7  0,6 /   14                                                 D=144,4 DEG   AZ= 39       CLL

1978 MAR 28
MOX E         19 08 43,5
    E            08 57,5

1978 MAR 28
BRG E(P)      19 52 23,8
CLL E P       19 52 24

1978 MAR 28   KURILE ISLANDS                                  MB=5,7(101)  48,6N;154,9E  53KM H=20 17 05,8 (NEIS)
                                                                           49,2N;154,5E  50KM    20 17 08,0 (WDCB)
CLL I P       20 28 43,5C 1,8 /  270                                                 D= 75,1 DEG   AZ= 25       CLL
    I            29 22,5
    I            32 16,6
    E PPP        33 11
    E            37,8
      LM      21 04        T 20   AN   6   AE   6   AV   7,5   MLH  =6.0 MLV  =5,9
BRG E P       20 28 44,3  1,5 /  101                                                 D= 75,2 DEG   AZ= 26       BRG
      LM      21 05        T 20                     AV   8,3   MLV  =6,1
MOX E P       20 28 49  C 1,3 /  127                           MPV  =5,7             D= 76,0 DEG   AZ= 24       MOX
      LMH     21 03,8      T 20             AE   6,6           MLH  =5,9
      LMV        05,8      T 18,5                   AV   5,7   MLV  =6,0

1978 MAR 28   KURILE ISLANDS                  ***             MB=5,2 (51)  44,1N;148,5E  43KM H=21 13 16,4 (NEIS)
                                                                           44,1N;148,8E  33KM    21 13 08,8 (WDCB)
CLL I P       21 25 08,7  1.1 /   82                                                 D= 77,4 DEG   AZ= 31       CLL
BRG I P       21 25 09,1C 1,0 /   22                                                 D= 77,5 DEG   AZ= 32       BRG
MOX E P       21 25 15  C 1,0 /   28                           MPV  =5,2             D= 78,5 DEG   AZ= 30       MOX

1978 MAR 28   KURILE ISLANDS                  ***           /MB=4,4 ( 5)/  44,9N;149,0E  33KM H=22 11 55    (ISC)
CLL E P       22 23 45                                                               D= 76,9 DEG   AZ= 30       CLL

1978 MAR 28   KURILE ISLANDS                  ***             MB=5,4 (59)  44,1N;149,5E  33KM H=22 12 14,0 (NEIS)
                                                                           45,0N;149,0E  50KM    22 12 21,3 (WDCB)
CLL I P       22 24 08,8C 1,3 /  105                                                 D= 77,8 DEG   AZ= 30       CLL
    I AP         24 23,0  2.1 /  320
      LMH        57
      LMV     23 03
BRG I P       22 24 09,4C 2,0 /  126
    I AP         24 21,2                                                             D= 77,8 DEG   AZ= 31       BRG
      LM      23 02        T 16                     AV   3,5   MLV  =5,8
MOX E P       22 24 14  C 2,4 /  235                           MPV  =5,8             D= 78,8 DEG   AZ= 30       MOX
    E AP         24 27    2,5 /  323                                                                    DEPTH  48 KM
      LMH        57,5      T 19   AN   2,4 AE   3,1            MLH  =5,8
      LMV     23 03,9      T 17                     AV   2,1   MLV  =5,6

1978 MAR 28   LOYALTY ISLANDS REGION                          MB=5,3 ( 5)  23,2S;170,1E  53KM H=22 50 07,9 (NEIS)
                                                                           22,6S;170,2E  33KM    22 50 04,0 (WDCB)
BRG E PKP1    23 09 46,0  1.1 /   29                                                 D=146,7 DEG   AZ= 43       BRG
    I APKP       09 54,9
CLL I PKP1    23 09 45,5D 1,3 /   23                                                 D=146,8 DEG   AZ= 41       CLL
    I APKP       09 54,8
MOX E PKHKP   23 09 49                                                               D=147,9 DEG   AZ= 39       MOX
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1978 MAR 29   KURILE ISLANDS                  ***             MB=4,6 (15)  44,1N;149,5E  35KM H=02 40 39,3 (NEIS)
                                                                           44,2N;149,7E  33KM    02 40 35,3 (WDCB)
CLL E P       02 52 35                                                               D= 77,8 DEG   AZ= 30       CLL
    I AP         52 45,8
BRG E P       02 52 35,9                                                             D= 77,8 DEG   AZ= 31       BRG
    E AP         52 55,7
MOX E AP      02 52 55                                                               D= 78,8 DEG   AZ= 30       MOX

1978 MAR 29   NEW BRITAIN REGION                              MB=5,4 (34)  6,1S;148,6E  64KM H=04 02 20,4 (NEIS)
BRG E PKP     04 21 09,0  0.9 /   12                                                 D=121,6 DEG   AZ= 56       BRG
CLL E PKP     04 21 09                                                               D=121,9 DEG   AZ= 55       CLL
    E            23 02
      LM      05 15        T 14   AN   1,5 AE   2   AV   2,5   MLH  =6.0 MLV  =6,1 (NO DEPTH CORRECTION)
MOX E SS      04 40 25                                                               D=123,0 DEG   AZ= 54       MOX
      LMH     05 13,7      T 20            AE   2,3            MLH  =5,8  (NO DEPTH CORRECTION)
      LMV        16        T 17,5                   AV   2,0   MLV  =5,8  (NO DEPTH CORRECTION)

1978 MAR 29
CLL E         04 29 55
    E            30 07

1978 MAR 29   SOUTH OF KERMADEC ISLANDS                       MB=5,3 ( 5)  33,0S;178,9W  33KM H=09 59 34,3 (NEIS)
CLL E(PKP2)   10 20 08                                                               D=159,7 DEG   AZ= 30       CLL
    E            20 27
BRG E(PKP2)   10 20 08,0                                                             D=159,8 DEG   AZ= 33       BRG
    E            21 22,2

1978 MAR 29
BRG E(P)      12 22 14,0

1978 MAR 29   SOUTH OF FIJI ISLANDS                           MB=5,3 (18)  22,0S;179,5W 604KM H=12 37 44,4 (NEIS)
CLL I PKP1    12 56 26,7D 0,9 /   50                                                 D=149,2 DEG   AZ= 23       CLL
    I PKP2       56 33,8  1,2 /   31                           MC   =4,9
    E APKP       58 51
BRG E PKIKP   12 56 22,4                                                             D=149,3 DEG   AZ= 25       BRG
    I PKP1       56 27,2
    I PKP2       56 33,6
    E APKP       58 53,2
MOX E PKHKP   12 56 29                                                               D=150,1 DEG   AZ= 21       MOX
    E PKP2       56 37,5

1978 MAR 29   SAKHALIN ISLAND                                 MB=4,8 (12)  46,2N;141,7E  37KM H=14 10 07,4 (NEIS)
                                                                           46,1N;141,7E  33KM    14 10 03,2 (WDCB)
CLL E P       14 21 37                                                               D= 73,3 DEG   AZ= 34       CLL
BRG E(P)      14 21 38,0                                                             D= 73,3 DEG   AZ= 35       BRG

1978 MAR 29   TONGA ISLANDS                                   MB=5,0 ( 8)  21,6S;174,4W  33KM H=14 08 21,7 (NEIS)
CLL I PKP1    14 28 09,9D 1.7 /   65                                                 D=149,8 DEG   AZ= 14       CLL
    E            28 35
BRG I PKP1    14 28 10,5  1.6 /   51                                                 D=150,1 DEG   AZ= 16       BRG
MOX E PKHKP   14 28 12    1.6 /   55                                                 D=150,6 DEG   AZ= 11       MOX

1978 MAR 29   NORTHERN AUSTRIA                                                                                 (VKA)
CLL E SG      14 41 49

1978 MAR 29   NORTHERN ITALY          FRIULI                               46,0N; 12,9E  12KM H=14 43 37,6  (OGS)
CLL E         14 46 19                                                               D=  5,3 DEG   AZ=181       CLL

1978 MAR 29   KURILE ISLANDS                  ***             MB=4,7 ( 5)  44,4N;149,3E  51KM H=16 06 22,7 (NEIS)
CLL E P       16 18 14                                                               D= 77,4 DEG   AZ= 30       CLL
BRG E P       16 18 15,7                                                             D= 77,5 DEG   AZ= 31       BRG

1978 MAR 29   VANUATU ISLANDS                                 MB=5,9 (46)  19,6S;169,1E  94KM H=16 55 48,2 (NEIS)
                                                                           19,6S;168,8E  33KM    16 55 41,1 (WDCB)
BRG I PKP     17 15 09,6C 1.1 /   50                                                 D=143,1 DEG   AZ= 41       BRG
    E APKP       15 33,9
    I SKP        18 42,5  1.4 /  270
    E            19 25,1
CLL I PKP     17 15 10,4C 1.2 /   50                                                 D=143,2 DEG   AZ= 40       CLL
    I APKP       15 34,8                                                             DISTANCE 143 DEG  DEPTH 100 KM
    I SKP        18 43,0D 1.5 /  250
    E            18 58
    E            20 11
    E SKS        22 09
    E(SKKS)      24 44
MOX E PKP     17 15 12    1.4 /  223                                                 D=144,3 DEG   AZ= 38       MOX
    E APKP       15 38                                                                                  DEPTH  87 KM
    E            15 55
      LMH     18 04,1      T 36            AE   1,2
      LMV        12,2      T 32                     AV   1,0

1978 MAR 29   BONIN ISLANDS REGION                            MB=5,5 (64)  27,9N;141,8E  22KM H=17 51 18,9 (NEIS)
                                                                           28,2N;141,6E  33KM    17 51 22,1 (WDCB)
BRG I P       18 04 13,5D 1.3 /   27                                                 D= 89,1 DEG   AZ= 44       BRG
    E PP         07 45
CLL I P       18 04 14,0  1.2 /   38                                                 D= 89,2 DEG   AZ= 44       CLL
    I            04 27,5
    E            06 36
    E PP         07 43
    E            15 45
MOX E P       18 04 19,5  1,4 /   33                           MPV  =5,4             D= 90,3 DEG   AZ= 43       MOX
    E PP         07 51
    E PPM        08 08    1.8 /   41

1978 MAR 29   POLAND, UPPER SILESIA
BRG E SG      20 54 18
```

1978 MAR 29	FRG, CENTRAL REGION		MB=4,4 (1)	50,5N; 6,6E 10KM H=21 51 57,5 (NEIS)		
				50,6N; 6,6E 10KM 21 51 58,7 (CSEM)		
				D= 3,2 DEG AZ=269		MOX
MOX E PN	21 52 47 TRACES					
E	53 33					
CLL E	21 54 04			D= 4,1 DEG AZ=261		CLL
E SG	54 11					
1978 MAR 29	TONGA ISLANDS		MB=5,4 (27)	21,8S;174,0W 33KM H=22 00 26,7 (NEIS)		
				21,6S;174,0W 33KM 22 00 22,4 (WDCB)		
				D=150,0 DEG AZ= 13		CLL
CLL E PKIKP	22 20 10					
I PKP1	20 14,7 1,7 / 195					
LMV	23 34			D=150,3 DEG AZ= 15		BRG
BRG E PKIKP	22 20 10,9					
I PKP1	20 16,1			D=150,9 DEG AZ= 11		MOX
MOX E PKIKP	22 20 12					
E PKHKP	20 17 1,6 / 126					
LMH	23 29 T 20 AN 1,4		MLH =5,7			
LMV	29 T 18	AV 0,8	MLV =5,6			
1978 MAR 29						
CLL E PKP	22 38 32 1,4 / 18					
BRG E PKP	22 38 33,0					
MOX E PKP	22 38 35					
1978 MAR 29						
BRG E P	23 11 44,9					
1978 MAR 29	WESTERN AUSTRIA		NO MB COMP,	47,3N; 11,2E 10KM H=23 33 18,1 (NEIS)		
				47,3N; 11,4E 10KM 23 33 19,3 (CSEM)		
				D= 3,4 DEG AZ=185		MOX
MOX E PN	23 34 10					
E SN	34 50					
E SG	35 07			D= 4,0 DEG AZ=208		BRG
BRG I PG	23 34 34,2					
I SG	35 25,0			D= 4,2 DEG AZ=197		CLL
CLL E SN	23 35 07					
E SG	35 32					
1978 MAR 30	WESTERN AUSTRIA		NO MB COMP,	47,3N; 11,2E 10KM H=00 00 46,3 (NEIS)		
				47,4N; 11,3E 10KM 00 00 48,3 (CSEM)		
				D= 3,4 DEG AZ=185		MOX
MOX I PN	00 01 38,0					
E PG	01 50					
E SN	02 18					
E SG	02 36			D= 4,0 DEG AZ=208		BRG
BRG E PN	00 01 48,5					
E PG	02 01,3					
I SG	02 52,8			D= 4,2 DEG AZ=197		CLL
CLL E PG	00 02 05					
E SN	02 36					
E SG	03 00					
1978 MAR 30	POLAND, UPPER SILESIA					
CLL E	02 08 04					
1978 MAR 30	KURILE ISLANDS	***	MB=5,1 (53)	44,5N;149,1E 47KM H=02 37 42,1 (NEIS)		
				44,6N;149,2E 33KM 02 37 40,9 (WDCB)		
CLL I P	02 49 32,2C 1,1 / 80			D= 77,3 DEG AZ= 31		CLL
BRG E P	02 49 33,0 1,1 / 28			D= 77,4 DEG AZ= 31		BRG
MOX E P	02 49 38,5 1,2 / 33		MPV =5,2	D= 78,3 DEG AZ= 30		MOX
1978 MAR 30	HOKKAIDO, JAPAN, REGION		/MB=4,5 (4)/	45,4N;146,0E 33KM H=02 57 05,5 (ISC)		
CLL E P	03 08 47			D= 75,5 DEG AZ= 32		CLL
LM	48					
1978 MAR 30	GDR, VOGTLAND					
MOX I PG	03 21 06,5					
I SG	21 14,5					
1978 MAR 30	POLAND, UPPER SILESIA					
BRG E(PG)	03 34 31,0					
E SG	35 09,0					
CLL E SG	03 35 32					
1978 MAR 30	FIJI ISLANDS REGION		MB=4,5 (5)	20,6S;178,2W 538KM H=03 28 41,0 (NEIS)		
CLL I PKP1	03 47 25,4D 0,8 / 24			D=148,1 DEG AZ= 20		CLL
I PKP2	47 29,8 0,8 / 18		MC =4,6			
BRG I PKP1	03 47 26,6 0,8 / 12			D=148,3 DEG AZ= 22		BRG
I PKP2	47 31,4					
MOX E PKHKP	03 47 28,5			D=149,0 DEG AZ= 18		MOX
E PKP2	47 34					
1978 MAR 30	KURILE ISLANDS	***	MB=4,9 (23)	44,1N;149,5E 44KM H=05 16 32,3 (NEIS)		
				44,1N;149,7E 33KM 05 16 25,2 (WDCB)		
CLL I P	05 28 26,5D 0,8 / 26			D= 77,8 DEG AZ= 30		CLL
E AP	28 39					
BRG E P	05 28 27,0			D= 77,8 DEG AZ= 31		BRG
MOX E P	05 28 32,5 1,0 / 12		MPV =4,8	D= 78,8 DEG AZ= 30		MOX
1978 MAR 30	KURILE ISLANDS REGION	***	/MB=4,6 (7)/	43,9N;148,4E 49KM H=11 02 09 (ISC)		
CLL I P	11 14 01,0C 1,0 / 27			D= 77,6 DEG AZ= 31		CLL
BRG I P	11 14 02,1			D= 77,7 DEG AZ= 32		BRG
MOX E P	11 14 08 1,3 / 13		MPV =4,7	D= 78,6 DEG AZ= 30		MOX
1978 MAR 30	VANUATU ISLANDS		MB=4,7 (4)	14,2S;167,3E 181KM H=11 57 35,7 (NEIS)		
BRG I SKP	12 19 57,9			D=137,5 DEG AZ= 40		BRG
CLL E SKP	12 19 57			D=137,6 DEG AZ= 39		CLL
1978 MAR 30	KURILE ISLANDS	***	MB=4,9 (22)	44,1N;149,4E 46KM H=12 32 31,1 (NEIS)		
				44,3N;149,6E 33KM 12 32 29,5 (WDCB)		
CLL I P	12 44 24,5D 1,0 / 17			D= 77,7 DEG AZ= 31		CLL
I	44 38,5					
BRG E P	12 44 26,4			D= 77,8 DEG AZ= 31		BRG
MOX E P	12 44 31,5 1,2 / 14		MPV =4,8	D= 78,8 DEG AZ= 30		MOX

1978 MAR 30	KURILE ISLANDS REGION	***	MB=4,5 (10)	43,4N;150,0E 33KM H=16 26 15,9 (NEIS)		
				43,6N;149,9E 33KM 16 26 13,0 (WDCB)		
				D= 78,6 DEG AZ= 30		CLL
CLL E P	16 38 16 TRACES					
1978 MAR 30	KYUSHU, JAPAN		/MB=4,8 (2)/	33,1N;131,5E 33KM H=16 29 25,5 (ISC)		
CLL E P	16 41 33			D= 80,1 DEG AZ= 48		CLL
1978 MAR 30	GUATEMALA		MB=5,1 (18)	15,0N; 90,3W 33KM H=19 30 12,6 (NEIS)		
MOX E P	19 42 51,5 1,6 / 27		MPV =5,2	D= 85,9 DEG AZ=289		MOX
CLL I P	19 42 54,2 1,0 / 26			D= 86,5 DEG AZ=290		CLL
BRG E P	19 42 57,7 1,4 / 30			D= 87,2 DEG AZ=290		BRG
1978 MAR 31	SOUTHERN ALASKA		MB=5,1 (59)	61,8N;151,4W 90KM H=00 38 13,4 (NEIS)		
				61,2N;151,1W 33KM 00 38 03,5 (WDCB)		
CLL I P	00 48 55,1C 1,3 / 37			D= 66,6 DEG AZ=352		CLL
E AP	49 17					
BRG I P	00 48 58,2C 1,0 / 34			D= 67,1 DEG AZ=353		BRG
I AP	49 20,6					
MOX I P	00 48 58,5C 1,0 / 47		MPV =5,3	D= 67,1 DEG AZ=351		MOX
1978 MAR 31	LUZON, PHILIPPINE ISLANDS		MB=5,3 (30)	14,6N;120,0E 57KM H=03 22 16,8 (NEIS)		
				14,9N;119,9E 33KM 03 22 15,9 (WDCB)		
BRG E P	03 35 05,4 0,8 / 8			D= 88,6 DEG AZ= 69		BRG
I AP	35 18,6					
CLL E P	03 35 07			D= 89,0 DEG AZ= 68		CLL
MOX E P	03 35 12			D= 90,1 DEG AZ= 67		MOX
E	35 27					
1978 MAR 31	NORTHERN SINKIANG PROV., CHINA		MB=4,7 (16)	43,3N; 82,8E 33KM H=03 58 39,5 (NEIS)		
				43,4N; 82,7E 33KM 03 58 36,1 (WDCB)		
BRG E P	04 07 01,5 1,3 / 11			D= 45,9 DEG AZ= 71		BRG
CLL E P	04 07 04 D			D= 46,3 DEG AZ= 71		CLL
MOX E P	04 07 13 1,3 / 15		MPV =4,8	D= 47,4 DEG AZ= 70		MOX
1978 MAR 31	SOUTH OF FIJI ISLANDS		/MB=4,8 (2)/	24,4S;179,7E 449KM H=04 05 01 (ISC)		
CLL I PKP1	04 24 01,8C 0,8 / 13			D=151,2 DEG AZ= 26		CLL
BRG I PKP1	04 24 02,0C			D=151,4 DEG AZ= 28		BRG
1978 MAR 31	SOLOMON ISLANDS		MB=5,4 (28)	6,5S;154,9E 44KM H=07 01 55,5 (NEIS)		
				6,2S;154,7E 33KM 07 01 50,4 (WDCB)		
BRG E PKP	07 20 52,1 1,1 / 14			D=125,2 DEG AZ= 50		BRG
CLL E PKP	07 20 53			D=125,3 DEG AZ= 49		CLL
LH	08 17					
MOX E PKIKP	07 20 57			D=126,4 DEG AZ= 48		MOX
LH	08 20 T 20 AN 1,0	AV 1,2	MLH =5,5 MLV =5,6			
1978 MAR 31						
CLL E P	08 25 46 TRACES					
1978 MAR 31						
CLL E(P)	08 55 27					
1978 MAR 31	MARIANA ISLANDS		MB=4,8 (17)	19,2N;144,8E 397KM H=08 54 32,7 (NEIS)		
BRG E(P)	09 08 01,4			D= 98,0 DEG AZ= 46		BRG
E AP	09 41,2					
CLL E(PP)	09 11 31			D= 98,1 DEG AZ= 45		CLL
1978 MAR 31						
BRG I P	09 11 29,1 1,2 / 14					
MOX E P	09 11 40 1,5 / 25					
1978 MAR 31	SOUTH OF HONSHU, JAPAN		MB=5,0 (15)	33,1N;140,5E 68KM H=13 37 04,9 (NEIS)		
BRG I P	13 49 29,9C 0,8 / 17			D= 84,0 DEG AZ= 43		BRG
CLL I P	13 49 29,8 1,1 / 40			D= 84,1 DEG AZ= 42		CLL
E AP	49 46					
MOX E P	13 49 35,5 1,2 / 12		MPV =4,8	D= 85,2 DEG AZ= 41		MOX
1978 MAR 31						
BRG E(P)	14 47 44,0					
1978 MAR 31	POLAND, UPPER SILESIA					
BRG E(PG)	18 23 02,0					
E(SG)	23 44,5					
CLL E	18 24 09					
1978 MAR 31						
CLL E	18 34 34					
1978 MAR 31	BURMA-INDIA BORDER REGION		MB=4,6 (21)	24,9N; 94,6E 33KM H=19 20 21,1 (NEIS)		
				27,4N; 94,1E 33KM 19 20 31,6 (WDCB)		
BRG E P	19 31 02,7			D= 65,3 DEG AZ= 80		BRG
CLL E P	19 31 05			D= 65,8 DEG AZ= 80		CLL
MOX E P	19 31 13			D= 66,8 DEG AZ= 79		MOX

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1978 APR 01
CLL E           00 42 13

1978 APR 01     GREECE-ALBANIA BORDER REGION                                    39.9N; 19.5E  10KM H=00 52 17.9 (CSEM)
CLL E(S)        00 57 24                                                              D= 12.3 DEG   AZ=156       CLL

1978 APR 01     TONGA ISLANDS REGION                          MB=5.2 (15)   22.0S;174.0W  33KM H=01 31 36.6 (NEIS)
CLL I PKP1      01 51 27.4C 1.7 /   76                                              D=150.2 DEG   AZ= 13       CLL
BRG I PKIKP     01 51 23.9                                                          D=150.5 DEG   AZ= 15       BRG
    I PKP1        51 29.0
MOX E PKHKP     01 51 30    1.6 /   33                                            D=151.1 DEG   AZ= 11       MOX
    E APKHKP      51 41
      LMH       02 59       T 18   AN   0.6          MLH =5.4
      LMV       03 00       T 18              AV  0.3  MLV =5.1

1978 APR 01     ANDAMAN ISLANDS REGION                       /MB=4.9 ( 5)/  14.1N; 92.7E   0KM H=09 36 20    (ISC)
BRG E P         09 47 48,5D 1,5 /   17                                              D= 72.1 DEG   AZ= 90       BRG
CLL E P         09 47 51                                                            D= 72.7 DEG   AZ= 89       CLL

1978 APR 01     SOUTH OF HONSHU, JAPAN                        MB=5.0 (16)   32.4N;140.9E  51KM H=09 49 30.3 (NEIS)
BRG I P         10 02 01,1D                                                         D= 84.8 DEG   AZ= 43       BRG
CLL I P         10 02 01,0D 1.1 /   24                                              D= 84.9 DEG   AZ= 42       CLL
    E             02 27
MOX E P         10 02 07                                                            D= 86.0 DEG   AZ= 41       MOX

1978 APR 01     DODECANESE ISLANDS                                              36.5N; 28.9E  10KM H=10 03 54.7 (CSEM)
CLL E           10 10 24                                                              D= 18.7 DEG   AZ=136       CLL

THE QUAKES DENOTED BY *** ARE BELONGING TO THE AFTERSHOCK SEQUENCE STARTING 1978 MAR 22

1978 APR 01     KURILE ISLANDS REGION         ***             MB=5.2 (51)   44.7N;150.3E  33KM H=09 59 17.5 (NEIS)
                                                                              45.2N;150.0E  33KM   09 59 20.1 (WDCB)
CLL I P         10 11 10,6C 1.6 /   70                                              D= 77.5 DEG   AZ= 30       CLL
    E             14 50
      LM          49                                                              D= 77.6 DEG   AZ= 30       BRG
BRG I P         10 11 11,0C 1.4 /   31                                            D= 78.5 DEG   AZ= 29       MOX
MOX E P         10 11 17    1.6 /   33          MPV =5.1
      LMH         45,0      T 20   AN   0.8 AE  1.3  MLH =5.3
      LMV         52,9      T 16              AV  1.5  MLV =5.5

1978 APR 01     KURILE ISLANDS                ***             /MB=4.3 ( 3)/  45.2N;149.9E  40KM H=10 08 29.4 (ISC)
CLL I P         10 20 20,2                                                          D= 76.9 DEG   AZ= 30       CLL

1978 APR 01     KURILE ISLANDS REGION         ***             MB=4.8 (14)   44.9N;150.0E  33KM H=10 51 47.2 (NEIS)
                                                                              45.5N;150.6E  33KM   10 51 44.2 (WDCB)
CLL I P         11 03 39,5  1.4 /   23                                              D= 77.2 DEG   AZ= 30       CLL
    E AP          03 52
BRG E(P)        11 03 38,4                                                          D= 77.3 DEG   AZ= 30       BRG
MOX E           11 03 46    TRACES                                                  D= 78.2 DEG   AZ= 29       MOX

1978 APR 01
CLL E           12 33 49    TRACES

1978 APR 01
BRG E(P)        12 48 46,2

1978 APR 01     KURILE ISLANDS REGION         ***             MB=4.9 (20)   44.7N;150.2E  37KM H=12 44 38.2 (NEIS)
                                                                              45.0N;150.4E  33KM   12 44 38.5 (WDCB)
CLL I P         12 56 31,7C                                                         D= 77.4 DEG   AZ= 30       CLL

1978 APR 01     FIJI ISLANDS REGION                           MB=5.0 (21)   20.0S;177.6W 383KM H=17 09 23.3 (NEIS)
CLL I PKP1      17 28 24,7  1.0 /   46                                              D=147.7 DEG   AZ= 19       CLL
    I PKP2        28 28,0C 1.1 /   28
BRG I PKIKP     17 28 21,7                                                          D=147.9 DEG   AZ= 21       BRG
    I PKP1        28 25,6
    I PKP2        28 29,0                                                         D=148.6 DEG   AZ= 17       MOX
MOX E PKHKP     17 28 27,5
    E PKP2        28 31,5

1978 APR 01     AZORES ISLANDS REGION                         MB=4.7 (30)   37.1N; 24.5W  33KM H=19 02 43.3 (NEIS)
BRG I P         19 08 54,3C                                                         D= 30.5 DEG   AZ=258       BRG

1978 APR 01
BRG E(P)        22 23 39,0

1978 APR 02     SOUTH OF HONSHU, JAPAN                        MB=4.4 ( 4)   32.5N;139.4E 212KM H=23 51 58.4 (NEIS)
CLL I P         00 04 07,5                                                          D= 84.2 DEG   AZ= 43       CLL

1978 APR 02
CLL E           00 59 24    TRACES

1978 APR 02     SOUTH OF FIJI ISLANDS                        /MB=4.9 ( 2)/ (22.9S;178.8W 589KM H=05 14 54  ) (ISC)
CLL I(PKP)      05 33 51,5                                                          D=150.2 DEG   AZ= 22       CLL
BRG I(PKP)      05 33 51,8                                                          D=150.4 DEG   AZ= 24       BRG

1978 APR 02     FRG, CENTRAL REGION                                                                           (GRF)
                NEAR DORSTEN
MOX E           06 00 09
    E             00 26
    E(SG)         00 32
CLL E           06 00 58

1978 APR 02
BRG E P         07 54 02,8  1,2 /   11

1978 APR 02     NORTHERN CHILE                                MB=5.3 (48)   19.1S; 69.3W  86KM H=09 07 07.1 (NEIS)
MOX   LM        10 01,7     T 22                                                D= 99.0 DEG   AZ=251       MOX
CLL E AP        09 21 10    1,5 /   17  AE  0.4 AV  0.5                        D=100.0 DEG   AZ=252       CLL
BRG E P         09 20 58,8                                                      D=100.4 DEG   AZ=253       BRG
    E AP          21 11,9
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1978 APR 02	KURILE ISLANDS REGION	***	MB=4.7 (3)	44.8N;150.3E 43KM H=09 29 39.2 (NEIS)	
				45.1N;150.3E 33KM 09 29 35.4 (WDCB)	
CLL E P	09 41 30			D= 77.4 DEG AZ= 30	CLL
1978 APR 02	NORTHERN ITALY	FRIULI	NO MB COMP.	46.3N; 13.3E 10KM H=18 23 22.2 (CSEM)	
				46.2N; 13.4E 20KM 18 23 20.8 (NEIS)	
MOX E PN	18 24 30			D= 4.5 DEG AZ=165	
E PG	24 50			DISTANCE 4.2DEG	MOX
E SN	25 18				
E SG	25 44				
BRG I PN	18 24 31.6			D= 4.6 DEG AZ=186	
E PG	24 46.6			DISTANCE 4.5DEG	BRG
E SN	25 19.5				
E SG	25 45.1				
CLL E PN	18 24 38			D= 5.0 DEG AZ=178	
E PG	24 55				CLL
E SN	25 29				
E SG	25 59				
1978 APR 02	CORSICA		NO MB COMP.	42.3N; 9.4E 20KM H=20 10 19.2 (NEIS)	
				42.2N; 9.5E 5KM 20 10 17.8 (CSEM)	
MOX E	20 12 25 TRACES			D= 8.5 DEG AZ=191	MOX
E	13 57				
E	15 03				
BRG E PN	20 12 31.2			D= 9.1 DEG AZ=202	BRG
E	14 51.8				
CLL E SB	20 15 03			D= 9.3 DEG AZ=197	CLL
1978 APR 03					
CLL E	01 54 32				
1978 APR 03	SOUTH OF PANAMA		MB=4.8 (21)	3.4N; 78.9W 33KM H=03 06 45.4 (NEIS)	
MOX E P	03 19 32 TRACES			D= 87.7 DEG AZ=273	MOX
CLL E P	03 19 38			D= 88.6 DEG AZ=274	CLL
BRG E P	03 19 40.7D			D= 89.2 DEG AZ=274	BRG
1978 APR 03	KURILE ISLANDS	***	/MB=4.5 (4)/	45.1N;147.9E 40KM H=03 27 54 (ISC)	
CLL E P	03 39 40			D= 76.4 DEG AZ= 31	CLL
1978 APR 03	OFF EAST COAST OF HONSHU, JAPAN		MB=5.0 (40)	40.6N;143.5E 33KM H=03 36 14.4 (NEIS)	
				40.8N;143.6E 33KM 03 36 14.9 (WDCB)	
BRG E P	03 48 15.6			D= 78.8 DEG AZ= 37	BRG
CLL E P	03 48 15			D= 78.8 DEG AZ= 36	CLL
MOX E P	03 48 21			D= 79.8 DEG AZ= 35	MOX
LMH	04 22.3 T 18 AN 0.5 AE 0.7		MLH =5.1		
LMV	29.7 T 18 AV 0.7		MLV =5.1		
1978 APR 03	CORSICA		MB=4.1 (2)	42.3N; 9.4E 19KM H=06 26 42.4 (NEIS)	
				42.2N; 9.6E 10KM 06 26 43.9 (CSEM)	
MOX E PN	06 28 40			D= 8.5 DEG AZ=191	MOX
E PG	29 22				
E SN	30 11				
E SG	31 11				
LM	31.5				
BRG E PN	06 28 55.7 0.6 / 14			D= 9.1 DEG AZ=202	BRG
E	31 17.2				
CLL E PN	06 28 58			D= 9.3 DEG AZ=197	CLL
E	29 06			DISTANCE 9.5DEG	
E	29 17				
E	30 12				
E SN	30 48				
E	31 42				
E(SG)	32.1				
LMH	32.5 T 12 AN 1.5 AE 3		MLH =4.3		
LMV	33.3 T 11 AV 1.5				
1978 APR 03	SOUTH ATLANTIC RIDGE		/MB=4.6 (11)/	28.7S; 10.7W 33KM H=07 42 54 (ISC)	
CLL E P	07 55 14			D= 82.4 DEG AZ=201	CLL
1978 APR 03	KURILE ISLANDS	***	(MB=4.7 (13))	44.1N;148.9E 50KM H=09 16 51.9 (NEIS)	
				44.1N;149.2E 33KM 09 16 49.3 (WDCB)	
CLL I P	09 28 43.7 0.7 / 13			D= 77.6 DEG AZ= 31	CLL
I AP	28 56.3				
BRG E P	09 28 45.2 1.0 / 14			D= 77.6 DEG AZ= 31	BRG
I AP	28 57.9				
1978 APR 03	WEST IRIAN REGION		MB=6.2 (55)	4.9S;133.9E 33KM H=09 48 35.0 (NEIS)	
				6.2S;135.3E 80KM 09 48 30.3 (WDCB)	
BRG I PDIF	10 03 14.5			D=112.4 DEG AZ= 69	BRG
E PKP	07 12.0				
E PP	07 59.0				
E PKS	10 35				
E PS	17 26				
E PKKP	18 09				
LMV	59 T 17 AV 4.3		MLV =6.1		
CLL E PDIF	10 03 17			D=112.8 DEG AZ= 68	CLL
E PKP	07 11			DISTANCE 113 DEG	
E	07 22				
E PP	08 02				
E PPP	10 30				
E PS	17 26				
E	17 36				
E	17 52				
E PKKP2	18 08				
LMH	51 T 17 AN 9 AE 7 AV 2		MLH =6.5		
LMV	11 02 T 18 AN 3.5 AE 2 AV 3.5		MLV =6.0		
MOX E PKP	10 07 12			D=113.8 DEG AZ= 67	MOX
E PP	08 09				
E PPP	10 24				
E SKKS	15 05				

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E PS	10 17 28				
E PKKP	18 03				
E SS	23 12				
LMH	52.2 T 18.5 AN 7.1 AE 8.5		MLH =6.5		
LMV	11 02 T 18.5 AV 3.9		MLV =6.0		
1978 APR 03	NORTHERN ITALY	FRIULI	NO MB COMP.	46.3N; 13.2E 10KM H=10 49 47.2 (CSEM)	
				46.2N; 13.2E 34KM 10 49 47.3 (NEIS)	
MOX E PN	10 50 55			D= 4.5 DEG AZ=166	MOX
E PG	51 14				
E SN	51 45				
E SG	52 11				
BRG I PN	10 50 56.6			D= 4.6 DEG AZ=186	BRG
E	51 11.0			DISTANCE 4.6DEG	
I SN	51 49.8				
E SG	52 17.0				
CLL I PN	10 51 02.7			D= 5.0 DEG AZ=178	CLL
I	51 04.0				
E PG	51 22				
E	51 38				
E SN	51 59				
E SG	52 26				
1978 APR 03	SOUTHERN PACIFIC OCEAN		MB=5.1 (11)	35.8S;100.8W 33KM H=11 28 27.8 (NEIS)	
CLL E PKP	11 47 39			D=131.2 DEG AZ=262	CLL
BRG E PKP	11 47 39.0			D=131.8 DEG AZ=262	BRG
1978 APR 03	NORTHERN ITALY	FRIULI	NO MB COMP.	46.3N; 13.2E 10KM H=14 35 00.1 (CSEM)	
				46.2N; 13.2E 36KM 14 35 00.3 (NEIS)	
MOX E PN	14 36 07			D= 4.5 DEG AZ=166	MOX
E PG	36 26				
E SN	36 58				
E SG	37 22				
BRG I PN	14 36 10.1			D= 4.6 DEG AZ=186	BRG
E PB	36 23.1			DISTANCE 4.6DEG	
E PG	36 29.4				
E SN	37 02.1				
I SG	37 29.9				
CLL I PN	14 36 16.5			D= 5.0 DEG AZ=178	CLL
E PG	36 38				
E SN	37 12				
E SG	37 39				
1978 APR 03					
CLL E	18 10 49				
1978 APR 03					
CLL E	23 32 46				
1978 APR 04	TIBET		MB=5.6 (73)	33.0N; 82.3E 27KM H=00 40 29.2 (NEIS)	
				33.3N; 82.4E 33KM 00 40 28.2 (WDCB)	
BRG I P(1)	00 49 37.0 1.0 / 22			D= 52.0 DEG AZ= 82	BRG
I P(2)	49 43.2 1.2 / 100			DISTANCE 52 DEG	
I PP	51 44.3				
I S	57 32.0				
E SS	01 00 45.0				
LMH	10 T 19 AN 27.2 AE 16.5		MLH =6.4		
LMV	13 T 16 AV 19.3		MLV =6.3		
CLL E P(1)	00 49 41			D= 52.5 DEG AZ= 82	CLL
I P(2)	49 46.2D 1.6 / 90			DISTANCE 54 DEG	
E AP	49 57				
E	52 16				
E S	57 15				
E	58 40				
E(SS)	01 01.4				
LMH	11 T 20 AN 50.5 AE 13.5 AV 9		MLH =6.6		
LMV	13 T 14 AN 6.5 AE 11 AV 15		MLV =6.3		
MOX E P(1)	00 49 50			D= 53.5 DEG AZ= 81	MOX
E P(2)	49 54 1.6 / 99		MPV =5.6		
E	51 28				
E PP	51 55				
E S	57 15				
E SS	01 01 00				
LMH	11.4 T 20 AN 38.6		MLH =6.4		
LMV	14.3 T 17.5 AV 16.5		MLV =6.2		
1978 APR 04	POLAND, UPPER SILESIA				
CLL E SG	02 20 51				
MOX E(SG)	02 21 33				
1978 APR 04	AFGHANISTAN-USSR BORDER REGION		MB=4.9 (13)	36.4N; 71.1E 133KM H=02 51 05.7 (NEIS)	
BRG E P	02 58 51.9			D= 42.7 DEG AZ= 87	BRG
1978 APR 04	MINDANAO, PHILIPPINE ISLANDS		MB=5.6 (47)	6.8N;123.8E 43KM H=06 56 06.3 (NEIS)	
				6.9N;123.9E 33KM 06 56 00.1 (WDCB)	
BRG I P	07 09 35.7D 1.4 / 22			D= 97.0 DEG AZ= 70	BRG
I XS	20 47.0				
E PS	22 23				
LMV	57 T 14 AV 1.6		MLV =5.7		
CLL E P	07 09 38			D= 97.5 DEG AZ= 69	CLL
E	10 30			DISTANCE 97 DEG	
E PP	13 43				
E(S)	21.0				
E PS	22.3				
LM	08 01 T 18 AN 1.5 AE 1 AV 1.5		MLH =5.6 MLV =5.6		
MOX E P	07 09 43 1.4 / 14		MPV =5.3	D= 98.5 DEG AZ= 68	MOX
E PP	13 40				
E S	21 04				
E PS	22 28				

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(CONT.)
    E SS        07 27 45
                   55,3    T 20   AN   1.1 AE   1.4                MLH  =5.6
      LMH                                           AV   1.3       MLV  =5.5
      LMV       08 02,8    T 16

1978 APR 04
CLL I P         10 01 35,5
BRG I P         10 01 36,5  1,0 /    9

1978 APR 04     MINDANAO, PHILIPPINE ISLANDS          MB=5,3 (31)   6,8N;123.8E  46KM H=14 14 30.1 (NEIS)
                                                                    6,9N;123.7E  33KM    14 14 24.0 (WDCB)
BRG E P         14 27 58,8                                                  D= 97.0 DEG   AZ= 70       BRG
CLL E AP        14 28 13                                                    D= 97.5 DEG   AZ= 69       CLL

1978 APR 04
BRG E P         18 55 16,8
CLL E P         18 55 17

1978 APR 04     SAN JUAN PROVINCE, ARGENTINA          MB=5,5 (25)   31,2S; 67,6W  10KM H=19 33 51,4 (NEIS)
                                                                    31,3S; 66,4W  33KM    19 33 57,5 (WDCB)
CLL E PP        19 52 42   TRACES                                          D=108.3 DEG   AZ=243        CLL

1978 APR 04     NORTH OF PANAMA                       MB=5,8 (81)   10,0N; 78.0W  35KM H=21 11 41.8 (NEIS)
                                                                    11,9N; 78.0W 300KM    21 12 19.2 (WDCB)
MOX I P         21 24 00,5C 1,8 /  236                MPV  =5.9            D= 82.1 DEG   AZ=276        MOX
    E AP           24 15
    E PP           27 04
    E S            34 10
    E SS           39 36
    E LH           45 35
    E LV           49 30
    E PKPPKP       50 49
      LM           55        T 22        AE  10,6 AV  11.8   MLH  =6.2 MLV  =6.2
CLL I P         21 24 04,5D 1,7 /  275                                     D= 82,9 DEG   AZ=277        CLL
    I              24 12,8                                                 DISTANCE  81 DEG
    I              24 20,3
    E PP           27 12
    E(PPP)         29 23
    E S            34 22
    E(PS)          35,0
    E              40.6
    E              48 32
    E PKPPKP       50 31
    E              50 49
      LM           55        T 20   AN   6,5 AE   7   AV   9   MLH  =6.1 MLV  =6.1
BRG I P         21 24 07,5D 1,7 /  312                                     D= 83,6 DEG   AZ=278        BRG
    I PP           27 23,3                                                 DISTANCE  82 DEG
    E S            34 26
    E PS           35 22
    I PKPPKP       50 42,7
      LM           55        T 20   AN   3,4 AE   9.3 AV   7,4   MLH  =6.2 MLV  =6.1

1978 APR 05     KURILE ISLANDS REGION        ***      MB=4,8 (29)   44,2N;151.0E  33KM H=01 49 31.9 (NEIS)
                                                                    44,9N;150.9E  33KM    01 49 30,7 (WDCB)
CLL E P         02 01 28                                                   D= 78,1 DEG   AZ= 29        CLL
BRG I P         02 01 30,0                                                 D= 78.2 DEG   AZ= 30        BRG

1978 APR 05
CLL E           03 57 17

1978 APR 05     PAPUA NEW GUINEA                      MB=5,3 (20)   3,4S;141.6E  33KM H=04 20 32,4 (NEIS)
                                                                    3,5S;141.9E  33KM    04 20 26.1 (WDCB)
CLL E(PKP)      04 39 19   TRACES                                          D=115,9 DEG   AZ= 60        CLL

1978 APR 05     SOUTHERN GREECE                       MB=4,4 (19)   37,8N; 23.2E  45KM H=04 50 46,3 (NEIS)
                                                                    37,7N; 23,2E  10KM    04 50 45.1 (CSEM)
                                                                    38,5N; 23.1E  33KM    04 50 57,3 (WDCB)
BRG E P         04 54 17,6  0,7 /   11                                     D= 14.6 DEG   AZ=150        BRG
MOX E P         04 54 21                                                   D= 15.3 DEG   AZ=143        MOX
CLL I(P)        04 54 25.0D 0,8 /   22                                     D= 15.3 DEG   AZ=148        CLL

1978 APR 05     GREECE                                              38,0N; 23.2E  10KM H=05 07 48,3 (CSEM)
CLL E PP        05 11 35   TRACES                                          D= 15.1 DEG   AZ=148        CLL

1978 APR 05     OFF EAST COAST OF HONSHU, JAPAN       MB=5,4 (61)   39,6N;144.5E  30KM H=07 51 24.9 (NEIS)
                                                                    39.7N;144.4E  33KM    07 51 20.2 (WDCB)
BRG I P         08 03 32,5D 1,2 /   28                                     D= 80.0 DEG   AZ= 37        BRG
    I              03 53,2
    E PP           06 34,0
    E S            13 44,0
      LMH          38        T 19   AN   0.2 AE   1,8
      LMV          43        T 18
CLL I P         08 03 30,5D 1,3 /   68                     AV   0.6   MLV  =5,0
    I              03 52,0                                                 D= 80.0 DEG   AZ= 36        CLL
    E              06 23
    E PP           06 37
    E PPP          08 27
    E              08 39
    E              10 11
      LMH          36        T 20   AN   1,5 AE   2
MOX E P         08 03 38     1,6 /   44                          MLH  =5,5
    E              03 58                                         MPV  =5.2 D= 81.1 DEG   AZ= 35        MOX
    E PP           06 43
      LMH          37,7      T 19   AN   0,8 AE   1,6
      LMV          41,3      T 18                                MLH  =5.4
                                                   AV   0,9      MLV  =5.2
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1978 APR 05     KURILE ISLANDS                 ***    /MB=4,6 ( 2)/  44,7N;148.9E  44KM H=09 2? 33     (ISC)
CLL E AP        09 37 39                                                    D= 77.0 DEG   AZ= 31       CLL

1978 APR 05     CZECHOSLOVAKIA
                LITTLE CARPATHIANS                                                                    (VKA)
CLL E           12 14 46

1978 APR 05     KURILE ISLANDS                 ***     MB=4,9 (33)   44.4N;149.4E  49KM H=14 02 41.5 (NEIS)
                                                                     44.6N;149.4E  33KM    14 02 40.2 (WDCB)
CLL I P         14 14 33,5D 0.8 /   18                                      D= 77,5 DEG   AZ= 30       CLL
    I AP           14 46,0
BRG E P         14 14 33,0  1,3 /   13                                      D= 77.5 DEG   AZ= 31       BRG
    E AP           14 47,8
MOX I P         14 14 38,5                                                  D= 78.5 DEG   AZ= 29       MOX
    E AP           14 53                                                                 DEPTH  54 KM

1978 APR 05     NEAR EAST COAST OF HONSHU, JAPAN       MB=4,8 (12)   35,3N;141.1E  40KM H=15 34 38.2 (NEIS)
                                                                     35,7N;140.9E  33KM    15 34 40,6 (WDCB)
BRG E P         15 46 58,2                                                  D= 82.4 DEG   AZ= 41       BRG
CLL E P         15 46 59                                                    D= 82.5 DEG   AZ= 40       CLL

1978 APR 05     KURILE ISLANDS REGION          ***     MB=5.2 (59)   43,8N;148.6E  40KM H=16 04 33.4 (NEIS)
                                                                     44.1N;148.7E  33KM    16 04 32.8 (WDCB)
CLL I P         16 16 27,7C 1,0 /   37                                      D= 77.7 DEG   AZ= 31       CLL
    E AP           16 38
    E              17 35
      LMH          48        T 20   AN   1.5 AE   2              MLH  =5.5
      LMV          54        T 15                     AV   1
BRG I P         16 16 27,8C 1.8 /   70                                      D= 77.8 DEG   AZ= 32       BRG
    E AP           16 40,0
      LM           47        T 21   AN   0,6 AE   2.4 AV   1.1   MLV  =5.3
MOX E P         16 16 33                                                    D= 78.8 DEG   AZ= 30       MOX
    E AP           16 44                                                                 DEPTH  49 KM
      LMH          49.3      T 20   AN   2.7 AE   2,3            MLH  =5.7
      LMV          55.7      T 17                     AV   1.2   MLV  =5.3

1978 APR 05     KENYA                                  MB=4.7 (10)    1.6S; 36.9E  25KM H=17 46 10.5 (NEIS)
CLL E P         17 55 57                                                    D= 56.5 DEG   AZ=151       CLL

1978 APR 05     FIJI ISLANDS REGION                    MB=5.1 (29)   15.0S;178.5W 389KM H=18 31 35.0 (NEIS)
                                                                     15.3S;178.2W  33KM    18 30 53.4 (WDCB)
CLL E PKP       18 50 24                                                    D=142.6 DEG   AZ= 19       CLL
    E SKP          53 27      1.4 /   33
BRG E PKP       18 50 23,3    1.2 /   11                                    D=142.8 DEG   AZ= 20       BRG
    E APKP         51 58,0
    I SKP          53 29,0    1,5 /   24

1978 APR 05     FIJI ISLANDS REGION                    MB=5.0 ( 5)   19.1S;177.8W 542KM H=23 27 00.0 (NEIS)
CLL I PKP1      23 45 36,5D 0.9 /   29                                      D=146.7 DEG   AZ= 19       CLL
    E              49 37
BRG E PKIKP     23 45 35,4    1.3 /   18                                    D=147.0 DEG   AZ= 21       BRG
    I PKP1         45 37,6
MOX E PKHKP     23 45 39   TRACES                                           D=147.6 DEG   AZ= 17       MOX

1978 APR 06
BRG E(P)        03 31 32,2

1978 APR 06     HOKKAIDO, JAPAN, REGION                MB=5.0 (37)   41.5N;142.5E  46KM H=08 39 48.9 (NEIS)
                                                                     41.6N;142.4E  33KM    08 39 47.6 (WDCB)
BRG E P         08 51 41,5    1,6 /   17                                    D= 77.6 DEG   AZ= 37       BRG
CLL E P         08 51 42      1,7 /   39                                    D= 77.6 DEG   AZ= 36       CLL
    E              52 05
MOX E P         08 51 48      1,7 /   36               MPV  =5.1            D= 78.7 DEG   AZ= 35       MOX

1978 APR 06     NORTHERN ITALY          FRIULI         NO MB COMP.   46.2N; 13.2E  10KM H=10 25 48.4 (CSEM)
                                                                     46.3N; 13.3E  10KM    10 25 47.4 (NEIS)
MOX I PN        10 26 56,5                                                  D=  4,6 DEG   AZ=166       MOX
    E PG           27 14
    E SN           27 49
    E SG           28 10
BRG I PN        10 26 59,4                                                  D=  4.7 DEG   AZ=186       BRG
    E              27 14,8
    E SN           27 50,7
    E SG           28 18,6
CLL I PN        10 27 05,8                                                  D=  5.1 DEG   AZ=178       CLL
    E SN           28 03
    E SG           28 27

1978 APR 06     NEAR EAST COAST OF HONSHU, JAPAN       MB=5.0 (16)   35.2N;141.0E  27KM H=12 37 37.8 (NEIS)
                                                                     35.4N;141.0E  33KM    12 37 39.9 (WDCB)
BRG E P         12 49 59,0                                                  D= 82.5 DEG   AZ= 41       BRG
CLL E P         12 49 58                                                    D= 82.5 DEG   AZ= 41       CLL
      LM        13 32
MOX   LMH       13 34,9    TRACES                                           D= 83.6 DEG   AZ= 40       MOX

1978 APR 06
CLL E           14 52 19

1978 APR 06
MOX E PN        15 17 35
    I SG           17 56,5
BRG E PG        15 18 03,2
    E SG           18 42,4
CLL E           15 18 21
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1978 APR 06   KURILE ISLANDS   ***   MB=4,8 (23)   44.1N;148.4E 49KM H=15 23 13.2 (NEIS)
43.7N;148.7E 33KM 15 23 03.8 (WDCB)
D= 77.4 DEG AZ= 31
CLL I P   15 35 05,4D   CLL
I   35 10,7
BRG E P   15 35 05,0   D= 77.5 DEG AZ= 32   BRG
MOX E P   15 35 13   TRACES   D= 78.4 DEG AZ= 30   MOX
E AP   35 24   DEPTH 51 KM

1978 APR 06   KURILE ISLANDS REGION   ***   /NO MB COMP./   43.5N;148.8E 30KM H=15 23 47.5 (ISC)
CLL I P   15 35 42,5D   D= 78.1 DEG AZ= 31   CLL

1978 APR 06   NEAR EAST COAST OF HONSHU, JAPAN   MB=5.2 (33)   35.2N;141.0E 38KM H=16 24 31.6 (NEIS)
36.1N;140.6E 50KM 16 24 37.7 (WDCB)
BRG I P   16 36 51,3C   D= 82.5 DEG AZ= 41   BRG
E PP   41 00,0
CLL I P   16 36 51,7D 1.7 / 50   D= 82.5 DEG AZ= 41   CLL
I   36 58,5
E PP   40 00
LM   17 18
MOX E P   16 36 58   D= 83.6 DEG AZ= 40   MOX
E AP   37 05   DEPTH 33 KM
LMH   17 16.0   T 16   AN 0.6 AE 0.5   MLH =5.2
LMV   18.8   T 16   AV 0.7 MLV =5.2

1978 APR 06   KIRGHIZ SSR   MB=4.7 (8)   41.5N; 75.1E 23KM H=19 14 40.4 (NEIS)
41.6N; 75.0E 33KM 19 14 38.4 (WDCB)
BRG E P   19 22 32,5   D= 42.2 DEG AZ= 78   BRG
CLL E P   19 22 38   D= 42.7 DEG AZ= 78   CLL

1978 APR 06   KURILE ISLANDS   ***   /MB=4.5 (14)/   48.4N;153.0E 60KM H=22 15 08 (ISC)
CLL I P   22 26 43,8D   D= 74.9 DEG AZ= 26   CLL
BRG I P   22 26 44,5   D= 75.1 DEG AZ= 27   BRG

1978 APR 06 /   NEAR EAST COAST OF HONSHU, JAPAN   MB=5,6 (81)
APR 07   35.2N;141.0E 31KM H=23 29 52.7 (NEIS)
35.7N;140.7E 33KM 23 29 50.3 (WDCB)
BRG I P   23 42 13,0C 2,0 / 83   D= 82,5 DEG AZ= 41   BRG
E PP   45 23,0   DISTANCE 82 DEG
I S   52 29,0
LM   00 21   T 15   AN 4,4 AE 6,0 AV 9,9 MLH =6.2 MLV =6.3
CLL I P   23 42 13,2 1,5 / 90   D= 82.5 DEG AZ= 41   CLL
E PP   45 32   DISTANCE 83 DEG
E PPP   47 16
E S   52 29
LM   00 24   T 14   AN 9,5 AE 5,5 AV 11   MLH =6.3 MLV =6.4
MOX E P   23 42 19   2,1 / 96   MPV =5.6   D= 83.6 DEG AZ= 40   MOX
E AP   42 28   DEPTH 33 KM
E PP   45 32
E PPP   47 20
E S   52 44
E SS   58 12
LMH   00 21.3   T 16   AN 4.6 AE 5.6   MLH =6.2
LMV   24.5   T 15   AV 7.0 MLV =6.2

1978 APR 07   NEAR EAST COAST OF HONSHU, JAPAN   MB=4.7 (4)   35.1N;141.3E 19KM H=00 01 22.9 (NEIS)
BRG E P   00 13 45,8   D= 82.7 DEG AZ= 41   BRG
CLL E P   00 13 46   D= 82.7 DEG AZ= 40   CLL

1978 APR 07
MOX E PN   01 47 47
E SG   48 05

1978 APR 07   KURILE ISLANDS REGION   ***   MB=4,5 (5)   44.9N;150.2E 27KM H=03 10 17.3 (NEIS)
CLL I P   03 22 11.1D   D= 77.3 DEG AZ= 30   CLL
I AP   22 24,8
BRG I P   03 22 12,0

1978 APR 07   D= 77.4 DEG AZ= 30   BRG
BRG E(P)   03 45 04,3

1978 APR 07   LOYALTY ISLANDS REGION   NO MB COMP.   22.7S;170.4E 38KM H=07 04 12.3 (NEIS)
BRG I PKP   07 23 48,6D 1.5 / 40   D=146.4 DEG AZ= 42   BRG
CLL E PKP   07 23 48   1.2 / 31   D=146.5 DEG AZ= 40   CLL
E   24 12
E   24 30
MOX E PKHKP   07 23 51.5

1978 APR 07   KURILE ISLANDS   D=147.6 DEG AZ= 39   MOX
***   MB=5.8(110)   44.4N;149.3E 50KM H=07 44 56.2 (NEIS)
CLL I P   07 56 46,9C 1.2 / 98   45.0N;149.2E 60KM 07 45 00.1 (WDCB)
I   56 48,5 1.3 / 330   D= 77.4 DEG AZ= 30   CLL
E AP   57 03   DISTANCE 77 DEG
I   57 17,1
E PPP   08 01 34
E S   06 32
E PPS   07 32
LH   30   T 18   AN 1.5 AE 1.5
LM   34   T 16   AN 1.5 AE 1.5 AV 2   MLH =5.5 MLV =5.6
BRG I P   07 56 47,6C 1,3 / 146
I AP   57 01,8   D= 77.5 DEG AZ= 31   BRG
E S   08 06 40
LM   35   T 18   AN 1.3 AE 1.4 AV 3.1   MLV =5.7
MOX E P   07 56 53   2,0 / 325   MPV =6.0
E AP   57 06
E S   08 06 35   D= 78.4 DEG AZ= 30   MOX
LMH   34,0   T 17   AN 1.2 AE 1.3   MLH =5.5
LMV   35,5   T 17   AV 1.6 MLV =5.4

1978 APR 07   LOYALTY ISLANDS REGION   MB=5,1 (1)   22.7S;170.7E 33KM H=08 05 09.8 (NEIS)
BRG I PKP   08 24 47,6C   D=146.6 DEG AZ= 41   BRG
CLL E PKP   08 24 48   D=146.6 DEG AZ= 40   CLL
E   25 36
MOX E PKIKP   08 24 50   TRACES   D=147.7 DEG AZ= 38   MOX
E PKHKP   24 54

1978 APR 07   KURILE ISLANDS   ***   MB=5,3 (58)   44.4N;149.4E 34KM H=08 29 56.0 (NEIS)
44.3N;149.7E 33KM 08 29 48.9 (WDCB)
CLL I P(1)   08 41 48,6C 1.3 / 37   D= 77.5 DEG AZ= 30   CLL
I P(2)   41 53,8 1.3 / 120
I   42 26,9
LM   09 20
BRG E P   08 41 49,4   D= 77.5 DEG AZ= 31   BRG
I   41 54,2
LM   09 20   T 16   AV 1.8 MLV =5.5
MOX E P   08 41 54,5   D= 78.5 DEG AZ= 29   MOX
E AP   42 00   DEPTH 20 KM
E   42 07

1978 APR 07
MOX E   09 43 45

1978 APR 07   KURILE ISLANDS   ***   MB=4,5 (6)   44.1N;149.7E 33KM H=13 41 13.5 (NEIS)
CLL E P   13 53 09   D= 77.8 DEG AZ= 30   CLL
I AP   53 21.3 1.0 / 20
BRG E(P)   13 53 12.0   D= 77.9 DEG AZ= 31   BRG
E AP   53 21,7
MOX E AP   13 53 27,5   D= 78.8 DEG AZ= 29   MOX
DEPTH 50 KM

1978 APR 07   SWITZERLAND   NO MB COMP.   47.2N; 7.2E 24KM H=14 49 36.5 (NEIS)
MOX E SG   14 51 05,5   D= 4.5 DEG AZ=222   MOX
CLL E SG   14 51 41   D= 5.6 DEG AZ=225   CLL
BRG E PG   14 50 30,2   D= 5.8 DEG AZ=233   BRG
E SG   51 49,7

1978 APR 07   KAMCHATKA   MB=5.0 (49)   51.1N;156.6E 141KM H=15 34 30.9 (NEIS)
50.8N;156.8E 150KM 15 34 29.3 (WDCB)
CLL I P   15 45 47,8C 1.2 / 31   D= 73.4 DEG AZ= 23   CLL
BRG E P   15 45 49,4 1.3 / 23   D= 73.6 DEG AZ= 24   BRG
MOX E P   15 45 54   1.0 / 24   MPV =4.9   D= 74.3 DEG AZ= 22   MOX

1978 APR 07
CLL E   16 10 47   TRACES

1978 APR 07   NEAR EAST COAST OF HONSHU, JAPAN   MB=5.0 (29)   35.7N;140.6E 57KM H=16 21 20.6 (NEIS)
36.2N;140.3E 50KM 16 21 23.0 (WDCB)
BRG E P   16 33 35,2   D= 81,9 DEG AZ= 41   BRG
I AP   33 49,0
CLL I P   16 33 35,0 1.2 / 26   D= 81,9 DEG AZ= 41   CLL
I AP   33 49,0
MOX E P   16 33 41   D= 83,0 DEG AZ= 40   MOX
E AP   33 55   DEPTH 56 KM

1978 APR 07   NORTHERN SUMATERA   MB=5,3 (38)   3,2N; 96.5E 22KM H=22 48 07.6 (NEIS)
3.3N; 96.4E 33KM 22 48 09.4 (WDCB)
BRG E P   23 00 31,8 1.0 / 8   D= 82,8 DEG AZ= 94   BRG
I AP   00 38,7
CLL E AP   23 00 41   2.2 / 84   D= 83,4 DEG AZ= 93   CLL
MOX E AP   23 00 46   2.4 / 97   D= 84,3 DEG AZ= 92   MOX
DEPTH 25 KM

1978 APR 07
CLL E   23 48 03   TRACES

1978 APR 08   TONGA ISLANDS REGION   MB=4,7 (4)   22.6S;175.2W 33KM H=01 56 56.9 (NEIS)
CLL I PKP1   02 16 46,7C 1,2 / 21   D=150,6 DEG AZ= 16   CLL
E   16 56
BRG I PKP1   02 16 47,5 1.1 / 27   D=150,9 DEG AZ= 18   BRG
MOX E PKHKP   02 16 48,5   D=151,5 DEG AZ= 13   MOX

1978 APR 08   SOUTHERN GREECE   MB=4,5 (25)   37.0N; 23.3E 43KM H=06 22 27.0 (NEIS)
37.0N; 23.5E 69KM 06 22 30.7 (CSEM)
36.9N; 23.3E 33KM 06 22 22.8 (WDCB)
BRG E P   06 26 08,0   D= 15,4 DEG AZ=151   BRG
MOX E P   06 26 13   D= 16,0 DEG AZ=144   MOX
LMH   33,7   T 12   AN 0,4   MLH =3.8
LMV   33,9   T 12   AV 0,6 MLV =4.2
CLL I P   06 26 14,2D 1,4 / 46   D= 16,1 DEG AZ=149   CLL
E   26 47

1978 APR 08   SOUTH OF HONSHU, JAPAN   MB=5.2 (48)   30,9N;141.7E 33KM H=10 07 13.3 (NEIS)
31.2N;141.5E 33KM 10 07 09.8 (WDCB)
BRG I P   10 19 54.0C 1.4 / 17   D= 86,5 DEG AZ= 43   BRG
CLL I P   10 19 54,0 1,6 / 54   D= 86,5 DEG AZ= 42   CLL
E AP   20 06
E   20 20

1978 APR 08   TAIWAN REGION   MB=5,7 (64)   22.7N;121.1E 25KM H=10 26 08.8 (NEIS)
23.0N;121.1E 33KM 10 26 11.3 (WDCB)
BRG I P   10 38 32,2C 2,0 / 125   D= 82.9 DEG AZ= 63   BRG
E PP   41 43,0   DISTANCE 83 DEG
E S   48 54
LM   11 20   T 15   AV 1.2 MLV =5.4
CLL I P   10 38 33,5C 2,0 / 170   D= 83,2 DEG AZ= 62   CLL
I AP   38 39,1
E   39 29
E PP   41 45
LM   11 20   T 15   AN 1   AE 1,5 AV 1.5 MLH =5.5 MLV =5.5
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MOX E P         10 38 40  D 1,9 /  152                          MPV  =5,9          D= 84,3 DEG   AZ= 61       MOX
    E AP           38 45                                                                          DEPTH  19 KM
    E PP           41 40
    E S            49 00
      LMH       11 13,8      T 19,5 AN   1,2 AE   1,1           MLH  =5,4
      LMV          21,7      T 14                  AV   1,7      MLV  =5,6

1978 APR 08     POLAND, UPPER SILESIA                            NO MB COMP,
                POSSIBLY SUPERPOSED BY ANOTHER QUAKE IN SPAIN                  50,5N; 18,9E  33KM H=15 17 15,6 (NEIS)
BRG E PG        15 18 16,0                                                      D=  3,2 DEG   AZ= 95       BRG
    E SG           18 56
CLL E PN        15 18 12                                                       D=  3,8 DEG   AZ=100       CLL
    E PG           18 28
    E              19 06
    E SG           19 23
MOX E PG        15 18 48,5                                                     D=  4,6 DEG   AZ= 89       MOX
    E SG           19 48,5

1978 APR 08     KURILE ISLANDS                ***                MB=4,6 (18)   44,4N;149,5E  33KM H=16 19 42,5 (NEIS)
                                                                                 44,6N;149,5E  33KM   16 19 43,6 (WDCB)
CLL E P         16 31 36                                                       D= 77,5 DEG   AZ= 30       CLL
BRG E(P)        16 31 37,0                                                     D= 77,6 DEG   AZ= 31       BRG
MOX E P         16 31 43   TRACES                                             D= 78,5 DEG   AZ= 29       MOX

1978 APR 08
CLL E           17 48 32
BRG E(P)        17 48 33,0

1978 APR 09     POLAND, UPPER SILESIA
CLL E SG        02 10 03
MOX E           02 10 28

1978 APR 09     SOUTH OF FIJI ISLANDS                            MB=5,2 ( 7)   22,0S;178,5W 457KM H=04 34 54,7 (NEIS)
CLL I PKP1      04 53 52,0D 1,2 /   42                                         D=149,4 DEG   AZ= 21       CLL
    E APKP         55 32
BRG E PKIKP     04 53 48,4                                                     D=149,6 DEG   AZ= 23       BRG
    I PKP1         53 53,5
MOX E PKHKP     04 53 55,5  1,2 /   20                                         D=150,3 DEG   AZ= 19       MOX

1978 APR 09     KURILE ISLANDS                ***                /MB=4,4 ( 6)/ 44,6N;148,8E  43KM H=09 05 38,9  (ISC)
CLL E(P)        09 17 26                                                       D= 77,1 DEG   AZ= 31       CLL

1978 APR 09
BRG E(P)        09 56 27,6

1978 APR 09     OFF EAST COAST OF HONSHU, JAPAN                   MB=4,6 ( 8)   39,0N;143,5E  31KM H=15 34 44,7 (NEIS)
BRG E P         15 46 53,2                                                     D= 80,2 DEG   AZ= 38       BRG
CLL E P         15 46 53  D                                                    D= 80,2 DEG   AZ= 37       CLL

1978 APR 09     SOUTHERN ITALY                                   MB=5,9 ( 3)   38,0N; 16,0E  13KM H=21 01 21,0 (NEIS)
BRG E(P)        21 04 31,8                                                     D= 13,0 DEG   AZ=173       BRG
CLL E(P)        21 04 37                                                       D= 13,5 DEG   AZ=170       CLL

1978 APR 09
CLL E           22 53 18

1978 APR 10
CLL E           03 27 53

1978 APR 10
MOX E           07 51 01
CLL E P         07 51 08

1978 APR 10     NORTHERN ITALY                                   NO MB COMP,   44,0N; 11,1E  23KM H=09 56 31,0 (NEIS)
                                                                                 44,0N; 10,9E  10KM   09 56 31,7 (CSEM)
MOX E           09 59 18                                                       D=  6,7 DEG   AZ=183       MOX
    E SG        10 00 10
CLL E(SN)       09 59 42                                                       D=  7,4 DEG   AZ=191       CLL
    E SG        10 00 28

1978 APR 10     KURILE ISLANDS                ***                MB=4,8 (10)   43,3N;147,8E  43KM H=10 14 04,3 (NEIS)
                                                                                 43,3N;147,7E  33KM   10 13 58,8 (WDCB)
CLL I P         10 25 59,2D                                                    D= 77,9 DEG   AZ= 32       CLL

1978 APR 10     KERMADEC ISLANDS                                 MB=5,0 ( 3)   30,0S;177,8W  41KM H=10 28 17,8 (NEIS)
CLL E PKP2      10 48 40                                                       D=157,2 DEG   AZ= 25       CLL

1978 APR 10     SOUTH OF SUMBAWA ISLAND                          MB=6,7 (71)   11,4S;116,7E  33KM H=20 52 18,9 (NEIS)
                                                                                 10,3S;116,5E  50KM   20 52 26,0 (WDCB)
BRG I P         21 06 32,2D 2,0 /   52                                         D=106,8 DEG   AZ= 87       BRG
    E              09 50,7  1,2 /    9
    I PKP          10 27,0
    I PP           10 56,0
    I PKKP         22 02,8
CLL E PDIF      21 06 35    T  9                    AV   1,3   MPV  =7,0          D=107,4 DEG   AZ= 87       CLL
    E              07 15                                                          DISTANCE 106 DEG
    E              09 31
    E              09 45
    E(PP)          10 54    T 12   AN   0,5 AE   2,5 AV   4,2   MPPH =6,9 MPPV =6,8
    E              11 00
    E SKS          17 15
    E SKKS         17 49
    E S            18,7     T 11   AN   3,1                    MSH  =6,7
    E PS           20,4
    E(PPS)         21,6
    I PKKP1        22 01,1C
    E PKKP2        22 15
    E SS           26,0
    E PCPPKP       26 13
    E SSS          29 52
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    E PKPPKP    21 30 26
      LMH          52       T 28   AN  23,5 AE  11                 MLH  =6,6
      LMV       22 02       T 20   AN   3   AE  10,5 AV  13        MLV  =6,5
MOX E P         21 06 40    T 16                      AV   1,3      MPV  =6,7          D=108,3 DEG   AZ= 86       MOX
    E              10 01
    E PP           11 06    T 11                      AV   4,4      MPPV =7,1
    E SKS          17 24
    E S            18 44
    E PS           20 30
    E PKKP         22 10    2,8 /  236
    E SS           26 16
      LMV       22 02       T 19                      AV  11,1      MLV  =6,4
      LMH          04       T 17,5 AN   4,8 AE  10,4               MLH  =6,5

1978 APR 10     POLAND, UPPER SILESIA
CLL E SG        21 40 38
MOX E           21 41 04   TRACES

1978 APR 11
MOX E P         01 00 15

1978 APR 11
CLL E           01 06 49

1978 APR 11     EAST PAPUA NEW GUINEA REGION                     MB=5,9 (47)   9,5S;148,9E  13KM H=02 41 41,0 (NEIS)
                                                                                 9,0S;148,6E  50KM   02 41 48,8 (WDCB)
BRG I PKP       03 00 41,8C 1,4 /   29                                         D=124,6 DEG   AZ= 58       BRG
CLL I PKP       03 00 41,4  1,6 /   38                                         D=124,9 DEG   AZ= 57       CLL
    E PP           02 34
    E PS           12 26
      LM           58       T 19   AN   1   AE   1   AV   1,5   MLV  =5,7
MOX I PKP       03 00 44,5  1,6 /   33                                         D=126,0 DEG   AZ= 56       MOX
    E PP           02 43,5  2,0 /   43                                MPPV =5,6
    E PS           12 40
    E SS           20 00
      LMH          45       T 23   AN   1,8 AE   1,9               MLH  =5,8
      LMV          52       T 20                      AV   1,7      MLV  =5,7

1978 APR 11     UNIMAK ISLAND REGION                             MB=5,5 (87)   53,5N;163,7W  33KM H=05 12 55,1 (NEIS)
                                                                                 53,6N;164,1W  33KM   05 12 50,5 (WDCB)
CLL I P         05 24 37,2C 1,4 /   80                                         D= 75,5 DEG   AZ=358       CLL
    I AP           24 47,0
    E              24 56
    E(S)           34 30
      LM        06 09       T 15   AN   1,5 AE   1,5 AV   1     MLH  =5,6
BRG E P         05 24 39,4C 1,6 /   61                                         D= 76,0 DEG   AZ=359       BRG
MOX E P         05 24 41    1,8 /  176                                MPV  =5,8          D= 76,2 DEG   AZ=357       MOX
    E              34 35
      LMH       06 03,2     T 17,5 AN   0,7 AE   1,2               MLH  =5,3
      LMV          08,7     T 16                      AV   1,6      MLV  =5,5

1978 APR 11     SOUTH OF TONGA ISLANDS                           /MB=4,9 ( 1)/ 24,9S;175,7W   0KM H=06 02 28     (ISC)
CLL E PKP1      06 22 30                                                       D=152,8 DEG   AZ= 17       CLL

1978 APR 11     KASHMIR-TIBET BORDER REGION                      MB=4,5 ( 3)   32,6N; 78,6E  33KM H=07 55 39,4 (NEIS)
BRG E P         08 04 31,9                                                     D= 49,9 DEG   AZ= 85       BRG

1978 APR 11     JAN MAYEN ISLAND REGION                          MB=4,4 (22)   71,6N;  3,2W  10KM H=09 32 23,9 (NEIS)
                                                                                 71,7N;  3,5W  10KM   09 32 24,7 (CSEM)
                                                                                 71,4N;  2,3W  33KM   09 32 32,0 (WDCB)
CLL E P         09 37 17    1,5 /   37                                         D= 21,6 DEG   AZ=346       CLL
MOX E P(1)      09 37 21                                                       D= 22,1 DEG   AZ=348       MOX
    E P(2)         37 26    1,7 /   61                                MPV  =4,8
BRG E P         09 37 23,6  1,0 /   12                                         D= 22,2 DEG   AZ=346       BRG

1978 APR 11     KURILE ISLANDS                ***                MB=4,7 (33)   44,4N;149,3E  43KM H=12 26 49,1 (NEIS)
                                                                                 44,8N;149,6E  33KM   12 26 48,7 (WDCB)
CLL E P         12 38 41    1,1 /   18                                         D= 77,4 DEG   AZ= 30       CLL
    I AP           38 53,5
BRG I P         12 38 42,4                                                     D= 77,5 DEG   AZ= 31       BRG
    I AP           38 54,4
MOX E AP        12 38 59,5                                                     D= 78,4 DEG   AZ= 30       MOX

1978 APR 11
CLL E(P)        12 41 08

1978 APR 11     UNDERGROUND EXPLOSION                            MB=5,3 (56)
                >FONDUTTA<                                                   37,3N;116,3W   0KM H=15 30 00,2 (NEIS)
MOX E P         15 42 18    1,1 /   28                                MPV  =5,2          D= 81,2 DEG   AZ=320       MOX

CLL I P         15 42 18,0C 1,3 /   39                                         D= 81,2 DEG   AZ=321       CLL
    E              44 41
BRG I P         15 42 21,9D 1,2 /   30                                         D= 81,9 DEG   AZ=322       BRG

1978 APR 11     UNDERGROUND EXPLOSION                            MB=5,5 (63)
                >BACKBEACH<                                                  37,2N;116,4W   0KM H=17 45 00,1 (NEIS)
MOX E P         17 57 18,5  1,2 /   41                                MPW  =5,4          D= 81,3 DEG   AZ=320       MOX

CLL I P         17 57 18,2C 1,3 /   50                                         D= 81,3 DEG   AZ=321       CLL
BRG I P         17 57 22,0C 1,1 /   41                                         D= 82,1 DEG   AZ=322       BRG

1978 APR 11
BRG E(P)        19 17 24,5

1978 APR 11     NEAR EAST COAST OF HONSHU, JAPAN                 MB=4,5 ( 5)   35,6N;140,8E  55KM H=19 34 14,6 (NEIS)
CLL E P         19 46 31   TRACES                                              D= 82,1 DEG   AZ= 41       CLL

1978 APR 11     CENTRAL ITALY                                    NO MB COMP,   42,2N;  13,1E  10KM H=22 05 04,4 (NEIS)
                                                                                 42,2N;  13,1E  10KM   22 05 05,7 (CSEM)
MOX E           22 07 21                                                       D=  8,5 DEG   AZ=173       MOX
    E              09 13
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(CONT.)

BRG E 22 07 25,0 D= 8.7 DEG AZ=184 BRG
E SN 08 48,0
CLL E PG 22 08 51 D= 9.1 DEG AZ=180 CLL
E 09 26
E(SG) 10 13

1978 APR 11 SOUTHERN IRAN MB=4.5 (19) 27.5N; 56.2E 40KM H=22 49 25.8 (NEIS)
28.0N; 55.9E 94KM 22 49 37.5 (CSEM)
26.8N; 56.3E 33KM 22 49 20.1 (WDCB)
BRG E P 22 56 53,8 D= 39.5 DEG AZ=110 BRG
CLL E P 22 57 00 D= 40.2 DEG AZ=110 CLL
E(SCP) 23 02 52

1978 APR 12 TONGA ISLANDS MB=5.6 (25) 19.5S;173.8W 33KM H=23 42 07.6 (NEIS)
19.1S;174.6W 33KM 23 42 10.5 (WDCB)
CLL E PKIKP 00 01 49 D=147.8 DEG AZ= 12 CLL
I PKP1 01 52,1D 1.7 / 205
I APKP 02 12.9
E PP 05 26
E PPP 08,6
LM 01 12 T 18 AN 1 AE 1 AV 1
BRG E PKIKP 00 01 48,8 D=148.1 DEG AZ= 14 BRG
I PKP1 01 53,2
LM 01 10 T 20 AN 0,8 AE 1.1 AV 1.8 MLV =5.8
MOX E PKIKP 00 01 49 D=148.6 DEG AZ= 10 MOX
E PKHKP 01 53 2,0 / 171
T 10 AV 1.8
LMH 01 12 T 19 AN 1,2 MLH =5.6
LMV 14 T 19 AV 1.3 MLV =5.7

1978 APR 12
CLL E 00 08 54

1978 APR 12 KURILE ISLANDS *** MB=5.4 (83) 44.3N;148.1E 87KM H=01 22 26.7 (NEIS)
44.8N;148.0E 100KM 01 22 30.6 (WDCB)
CLL I P 01 34 12,2C 0.9 / 125 D= 77.1 DEG AZ= 31 CLL
BRG I P 01 34 12,5C 1,3 / 52 D= 77.2 DEG AZ= 32 BRG
MOX I P 01 34 18,0C 1.0 / 55 MPV =5.4 D= 78.2 DEG AZ= 30 MOX

1978 APR 12 KODIAK ISLAND REGION MB=6.0 (90) 56.4N;152.7W 14KM H=03 42 03.5 (NEIS)
MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE 56.6N;153.1W 33KM 03 42 02.2 (WDCB)
CLL I P 03 53 28,2C 1.9 / 150 D= 72.0 DEG AZ=352 CLL
I PM 53 33,6 1,8 / 380 DISTANCE 73 DEG
T 10 AV 4.9
I 54 25,2
E 55,4
E PP 56,2
E S 04 02 49 T 15 AN 13,3 AE 14,2 MSH =7.0
E SS 08,0
E SSSS 11,8
E PKPPKP 21 20
LM 29 T 19 AN 33 AE 9,5 AV(37) MLH =6.6 MLV =6.8
L 34 T 17 AN(19) AE 19,5 AV 22
FINAL 06
BRG I P 03 53 31,2C 0,8 / 239
I 53 52,7 D= 72.5 DEG AZ=352 BRG
I S 04 02 56,8 DISTANCE 71 DEG
E PS 03 34,0
E SS 07 47
E SSS 11 38
E PKPPKP 21 21
LM 32 T 18 AN 12,7 AE 24,4 AV 31,6 MLH =6.6 MLV =6.7
MOX I P 03 53 31,0C 1,4 / 386 MPV =6.3
I 53 44,0 D= 72.5 DEG AZ=351 MOX
I 53 52,0
E PP 56 30
E S 04 03 00 T 14,5 AE 14,5
E SS 07 30 MSH =7.0
LMV 29.9 T 19
LMH 30.5 T 19 AN 15,9 AE 26,8 AV 36.0 MLV =6.7
MLH =6.6

1978 APR 12 KODIAK ISLAND REGION
CLL E P 04 00 17 MB=5.2 (6) 56.7N;153.6W 23KM H=03 48 55.6 (NEIS)
BRG E P 04 00 20,1 D= 71.8 DEG AZ=352 CLL
D= 72.3 DEG AZ=353 BRG

1978 APR 12
BRG E P 04 20 42,4

1978 APR 12 KODIAK ISLAND REGION MB=5.1 (49) 56.5N;152.6W 24KM H=05 22 28.9 (NEIS)
CLL E P 05 33 53 2,0 / 41 56.6N;153.3W 33KM 05 22 32.6 (WDCB)
E 34 10 D= 71.9 DEG AZ=352 CLL
BRG E P 05 33 57,0D 1.3 / 22
MOX E P(1) 05 33 53
E P(2) 33 57 1.8 / 47 D= 72.4 DEG AZ=352 BRG
E 34 07 MPV =5.2 D= 72.4 DEG AZ=351 MOX
E 34 13

1978 APR 12 KURILE ISLANDS *** /NO MB COMP./ 44.3N;149.8E 40KM H=08 15 02 (ISC)
CLL E P 08 26 56 D= 77.7 DEG AZ= 30 CLL

1978 APR 12 KODIAK ISLAND REGION MB=5.1 (55) 56.6N;152.8W 27KM H=09 33 38.2 (NEIS)
56.6N;153.1W 33KM 09 33 34.0 (WDCB)
CLL I P 09 45 00,0C 1.0 / 15 D= 71.8 DEG AZ=352 CLL
E 45 12
BRG I P 09 45 03,4D 1.1 / 23
MOX I P 09 45 03,0C 1.1 / 26
E AP 45 10 MPV =5.2 D= 72.3 DEG AZ=352 BRG
LMV 10 21.4 D= 72.3 DEG AZ=351 MOX
DEPTH 27 KM

1978 APR 12 NORTHERN ITALY NO MB COMP. 44.5N; 7.3E 10KM H=13 49 56.4 (NEIS)
44.5N; 7.2E 10KM 13 49 58.4 (CSEM)
MOX E SG 13 52 20 D= 6.8 DEG AZ=207 MOX
BRG E(PG) 13 52 32,2 D= 7.8 DEG AZ=218 BRG
E 53 37,3
CLL E(SG) 13 53 55 D= 7.8 DEG AZ=212 CLL

1978 APR 12 IRAN MB=4.8 (36) 31.8N; 50.6E 34KM H=16 46 23.2 (NEIS)
31.9N; 50.7E 46KM 16 46 26.5 (CSEM)
31.5N; 50.5E 33KM 16 46 16.4 (WDCB)
BRG E P 16 52 56,5 D= 33.0 DEG AZ=111 BRG
CLL E P 16 53 02 1.3 / 30 D= 33.7 DEG AZ=111 CLL
LM 17 08
MOX E P 16 53 10,5 1,5 / 20 MPV =4.8 D= 34.3 DEG AZ=108 MOX
LMH 17 10.5 T 16 AN 0.4 AE 0.3 MLH =4.3
LMV 10.8 T 16 AV 0.4 MLV =4.4

1978 APR 12 BANDA SEA NO MB COMP. 6.3S;130.4E 17KM H=16 35 28.2 (NEIS)
CLL E(PKP) 16 54 06 D=111.8 DEG AZ= 72 CLL

1978 APR 12 NEAR COAST OF NICARAGUA MB=5.1 (19) 12.6N; 87.9W 64KM H=16 51 08.2 (NEIS)
MOX E AP 17 04 08,5 1.3 / 13 D= 86.3 DEG AZ=285 MOX
CLL E AP 17 04 06 1.5 / 30 D= 87.0 DEG AZ=286 CLL
BRG E AP 17 04 07,8 D= 87.7 DEG AZ=287 BRG
E 07 23,5

1978 APR 13 POLAND, UPPER SILESIA /NO MB COMP./ (50.2N; 19.3E 0KM H=00 17 58) (ISC)
BRG E PG 00 18 55,5 D= 3.5 DEG AZ= 99 BRG
E SN 19 20,6
E SG 19 40,0
CLL E PG 00 19 08 D= 4.1 DEG AZ=103 CLL
E 19 26
E SG 20 00
MOX E SG 00 20 23 D= 4.9 DEG AZ= 92 MOX

1978 APR 13 KURILE ISLANDS REGION *** /MB=4.5 (4)/ 43.9N;150.7E 40KM H=00 39 13 (ISC)
CLL E(P) 00 51 13 D= 78.3 DEG AZ= 30 CLL

1978 APR 13 TALAUD ISLANDS MB=5.5 (37) 3.3N;127.8E 98KM H=05 18 37.1 (NEIS)
3.5N;127.7E 100KM 05 18 38.2 (WDCB)
BRG E(P) 05 32 22,6 D=102.2 DEG AZ= 69 BRG
E PP 36 34,2 1,7 / 26
E 37 38,0
CLL E PP 05 36 41 D=102.6 DEG AZ= 68 CLL

1978 APR 13 NORTH ATLANTIC OCEAN MB=5.2 (72) 57.1N; 36.6W 32KM H=06 00 38.3 (NEIS)
57.0N; 37.1W 10KM 06 00 34.9 (CSEM)
56.7N; 36.8W 33KM 06 00 36.9 (WDCB)
MOX E P 06 06 33 1.8 / 176 MPV =5.5 D= 28.6 DEG AZ=302 MOX
E S 11 05
LM 18.2 T 14 AE 1,8 AV 2.5 MLH =4.8 MLV =5.1
CLL I P 06 06 36,5D 1.7 / 89 D= 29.0 DEG AZ=301 CLL
E 08 05
LM 18 T 14 AN 1,5 AE 2 AV 2 MLH =5.0 MLV =5.1
BRG I P 06 06 42,9C 2,0 / 81 D= 29.8 DEG AZ=302 BRG
E S 11 48 DISTANCE 31 DEG
LM 19 T 15 AN 0,8 AE 2,8 AV 3.6 MLH =5.1 MLV =5.3

1978 APR 13
MOX E(P) 06 48 51

1978 APR 13 POLAND, UPPER SILESIA /NO MB COMP./ (50.5N; 19.0E 0KM H=13 23 05) (ISC)
BRG E PG 13 24 04,8 D= 3.2 DEG AZ= 95 BRG
I SG 24 42,2
CLL E(PG) 13 24 19 D= 3.9 DEG AZ=100 CLL
E 24 48
E SG 25 11
MOX E 13 25 03,5 D= 4.7 DEG AZ= 89 MOX
E SG 25 38

1978 APR 13
MOX E 17 00 41

1978 APR 13 CENTRAL YUGOSLAVIA MB=4.8 (39) 43.3N; 20.9E 33KM H=18 05 25.8 (NEIS)
43.3N; 21.1E 10KM 18 05 25.6 (CSEM)
43.4N; 20.9E 33KM 18 05 26.3 (WDCB)
BRG I PN 18 07 35,3D D= 8.9 DEG AZ=145 BRG
E SN 09 18,6 DISTANCE 8.9DEG
I 09 35,0
I SG 10 18,3
CLL E PN 18 07 44 1.5 / 52 D= 9.6 DEG AZ=143 CLL
E PG 08 32 DISTANCE 9.5DEG
E(SN) 09 16
E 09 52
E 10 26
E SG 10 40
E LMH 11 14 T 8 AN 3,5 AE 5 AV 2 MLH =4.8
LMV 12.0 T 8 AN 3,5 AE 3,5 AV 4,5
MOX E PN 18 07 45 1.3 / 100 D= 9.7 DEG AZ=136 MOX
E SN 09 31
I SG 10 47,0
LMH 11.1 T 9.5 AN 5,7 AE 5.9 MLH =4.9
LMV 12.1 T 8 AV 4.4

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1978 APR 17	UNIMAK ISLAND REGION		MB=4.8 ($_{17}$)	54.1N;164.0W 33KM H=05 49 51.1 (NEIS) 52.8N;164.2W 33KM 05 49 44.0 (WDCB)
CLL E P	0^{6} 01 30			D= 74.9 DEG AZ=358 CLL
BRG E P	0^{6} 01 33.0			D= 75.4 DEG AZ=359 BRG
MOX E P	0^{6} 01 34			D= 75.6 DEG AZ=357 MOX
1978 APR 17				
CLL E	1^{8} 3_{1} 55			
E	3_{2} 23			
1978 APR 18	SOUTH OF TONGA ISLANDS		/MB=4.9 (1)/	25.6S;174.8W 33KM H=02 23 51.2 (ISC)
CLL E PKP1	02 43 52 TRACES			D=153.6 DEG AZ= 16 CLL
BRG E PKP1	0^{2} 43 53,2			D=153.9 DEG AZ= 18 BRG
1978 APR 18	SOUTH OF FIJI ISLANDS		MB=5.6 (35)	25.2S;178.4E 566KM H=07 47 35.8 (NEIS) 25.5S;$_{1}$78.7E 500KM 07 47 28.6 (WDCB)
CLL I PKIKP	0^{8} 06 19,3C 1.7 / 29			D=151.6 DEG AZ= 29 CLL
I PKP1	06 26,3D 1.1 / 130			DISTANCE 152.5DEG DEPTH 570 KM
I PKP2	06 37,8 1.5 / 62		MC =5.1	
E	07 52			
I APKP	08 40,5			
BRG I PKIKP	0^{8} 06 20,4 1.2 / 24			D=151.7 DEG AZ= 31 BRG
I PKP1	06 27,1			DISTANCE 152 DEG
I PKP2	06 38,8			
I APKP	08 41,5			
MOX E PKIKP	0^{8} 06 21 1.2 / 16			D=152.6 DEG AZ= 27 MOX
E PKHKP	06 27,5 1.2 / 33			
I PKP2	06 42,5 1.3 / 39			
E APKP	08 43 2.0 / 43			
1978 APR 18	KURILE ISLANDS ***		MB=5.5 ($_{80}$)	44.2N;149.2E 33KM H=11 43 37.8 (NEIS) 44.8N;$_{1}$48.7E 75KM 11 43 45.7 (WDCB)
CLL I P	11 55 32,2C 1.1 / 59			D= 77.6 DEG AZ= 31 CLL
I AP	55 46,8			
LH	12 27 T 20 AN 1,5 AE 2			
LM	34 T 16 AN 1,5 AE 2,5 AV 2,5		MLH =5.7 MLV =5.7	
BRG I P	11 55 32,1C 1.1 / 35			D= 77.7 DEG AZ= 31 BRG
E AP	55 46,2			
LMH	12 27 T 20 AN 0,5 AE 1,9			
LMV	34 T 14 AV 1,8		MLV =5.6	
MOX I P	11 55 37,7C 1,2 / 37		MPV =5.3	D= 78.6 DEG AZ= 30 MOX
E AP	55 51			
LMH	12 28,4 T 20 AN 1,2 AE 1,7		MLH =5.5	
LMV	35,3 T 16 AV 1,5		MLV =5.5	
1978 APR 18	PHILIPPINE ISLANDS REGION		MB=6.0 (87)	5.1N;127.4E 129KM H=17 27 30.6 (NEIS) 5.3N;$_{1}$27.3E 130KM 17 27 31.2 (WDCB)
BRG I P	1^{7} 4_{1} 04,8C 1,3 / 58			D=100.5 DEG AZ= 68 BRG
I AP	4_{1} 37,5			
E	44 47,6			
E	44 57,9			
E SKS	5_{1} 31			
E S	53 00			
E SP	53 56			
E SS	59 30			
LM	18 3_{0} T 19 AN 0,3 AE 3,4 AV 3,2		MLV =5.9	(NO DEPTH CORRECTION)
CLL I P	1^{7} 4_{1} 06,1C 1,5 / 34			D=100.9 DEG AZ= 68 CLL
I AP	41 38,6			DISTANCE 101 DEG DEPTH>100 KM
I APP	45 43,2			
E SKS	5_{1},5			
E S	5_{2},6			
E XS	5_{3},2			
E SP	54 01			
E(PKKP1)	57 21			
E(PKKP2)	57 47			
E SS	59,7			
E PCPPKP	18 01 42			
LH	23 T 18 AN 2,5 AE 2			
LMH	29 T 20 AN 2 AE 3 AV 2,5		MLH =5.9	(NO DEPTH CORRECTION)
LMV	34 T 19 AE 2,5 AV 3		MLV =5.9	(NO DEPTH CORRECTION)
MOX E P	1^{7} 4_{1} 11 1,3 / 28		MPV =5.8	D=102.0 DEG AZ= 66 MOX
I AP	4_{1} 40,5			DEPTH 115 KM
E PP	45 20			
E	45 24			
E APP	45 40			
E XPP	46 00			
E SKS	5_{1} 35			
E S	5_{2} 35			
E XS	5_{3} 20			
E SP	54 10			
E SS	59 40			
LMH	18 32 T 16,5 AN 2,6			
LMV	32 T 14,5 AV 2,6			
1978 APR 18	CERAM			
CLL E PP	18 10 14 TRACES		MB=5,5 ($_{25}$)	3.8S;128.4E 140KM H=17 51 26.2 (NEIS) 3.9S;$_{1}$28.4E 33KM 17 51 14.0 (WDCB)
1978 APR 18				D=108.7 DEG AZ= 72 CLL
BRG E(P)	21 2_{0} 02.1			

1978 APR 19			
BRG E(P)	0^{4} 11 23,7		
1978 APR 19	KURILE ISLANDS ***	MB=5.0 (54)	44.2N;149.1E 33KM H=04 01 35.8 (NEIS) 44.3N;149.3E 33KM 04 01 35.7 (WDCB)
CLL I P	0^{4} 13 30,4C 1.0 / 28		D= 77.6 DEG AZ= 31 CLL
I AP	13 36,6		
BRG E P	0^{4} 13 30,0 1.1 / 11		D= 77.6 DEG AZ= 31 BRG
MOX E P	0^{4} 13 35 1.1 / 16	MPV =4.9	D= 78.6 DEG AZ= 30 MOX
LMV	35,6		
1978 APR 19	SOUTH ATLANTIC RIDGE	NO MB COMP.	15.9S; 12.9W 33KM H=04 34 30.7 (NEIS)
MOX E P	0^{4} 45 38		D= 69.7 DEG AZ=205 MOX
E AP	45 48		DEPTH 39 KM
BRG E P	0^{4} 45 43,6		D= 70.5 DEG AZ=207 BRG
CLL E P	0^{4} 45 45		D= 70.7 DEG AZ=206 CLL
1978 APR 19	LOYALTY ISLANDS REGION	NO MB COMP.	21.7S;169.8E 33KM H=05 03 06.7 (NEIS)
BRG I PKP	0^{5} 22 42,4		D=145.3 DEG AZ= 42 BRG
CLL E PKP	0^{5} 22 42		D=145.4 DEG AZ= 40 CLL
1978 APR 19	NICOBAR ISLANDS REGION	MB=4,3 (5)	6.3N; 95.1E 33KM H=06 40 24.6 (NEIS)
BRG E(P)	0^{6} 52 30,6		D= 79.6 DEG AZ= 93 BRG
1978 APR 19			
CLL E	0^{7} 38 36		
1978 APR 19	SOUTH OF HONSHU, JAPAN	MB=5.1 (36)	30.9N;141.7E 33KM H=07 32 50.5 (NEIS)
BRG E P	0^{7} 45 31,5		31.2N;141.5E 33KM 07 32 47.5 (WDCB)
CLL I P	0^{7} 45 32,3D 1.4 / 27		D= 86.5 DEG AZ= 43 BRG
LM	08 29		D= 86.5 DEG AZ= 42 CLL
MOX E P	0^{7} 45 38		D= 87.6 DEG AZ= 41 MOX
LMH	08 26,5 T 15 AN 0,5 AE 0,5	MLH =5.2	
LMV	29,3 T 16 AV 0,3	MLV =4.9	
1978 APR 19	POLAND, UPPER SILESIA	/NO MB COMP./	(50.1N; 19.3E 0KM H=08 03 42.3) (ISC)
BRG E PG	0^{8} 04 38,0		D= 3.5 DEG AZ=101 BRG
E SG	0^{5} 23,6		
CLL E PG	0^{8} 04 50		D= 4.2 DEG AZ=104 CLL
E SG	0^{5} 45		
1978 APR 19	NEAR EAST COAST OF HONSHU, JAPAN	MB=4,6 (6)	36.5N;140.7E 61KM H=10 47 52.3 (NEIS)
BRG E P	11 00 03,7		D= 81.2 DEG AZ= 41 BRG
CLL E P	11 00 04 D		D= 81.3 DEG AZ= 40 CLL
1978 APR 19	POLAND, UPPER SILESIA		
BRG E PG	12 4_{0} 02,7		
E SG	4_{0} 41,8		
CLL E	12 4_{0} 41		
I SG	4_{1} 05,0		
1978 APR 19	SOUTH OF FIJI ISLANDS	MB=5.0 ($_{19}$)	23.6S;180 532KM H=16 47 54.5 (NEIS)
CLL E PKIKP	1^{7} 06 41		D=150.6 DEG AZ= 25 CLL
I PKP1	06 46,7 0.9 / 58		DEPTH 550 KM
E	08 51		
I APKP	08 56,0		
BRG I PKIKP	1^{7} 06 42,0 0.8 / 34		D=150.7 DEG AZ= 27 BRG
I PKP1	06 47,2		
E APKP	08 56,1		
MOX E PKIKP	1^{7} 06 42		D=151.5 DEG AZ= 23 MOX
E PKHKP	06 49		DEPTH 582 KM
E	08 54 1.7 / 24		
E APKP	08 58 1.4 / 26		
1978 APR 19	INDIA-CHINA BORDER REGION	MB=4.9 (33)	27.7N; 92.7E 51KM H=17 01 45.5 (NEIS)
BRG E P	1^{7} 12 02,9 1.1 / 10		27.7N; 92.7E 33KM 17 01 44.0 (WDCB)
E PP	14 16,0		D= 62.1 DEG AZ= 80 BRG
CLL E P	1^{7} 12 07		D= 62.6 DEG AZ= 79 CLL
MOX E P	1^{7} 12 12,5 1.2 / 16	MPV =4.9	D= 63.6 DEG AZ= 78 MOX
1978 APR 19			
BRG E PG	1^{8} 28 15,6		
E SG	29 03,0		
1978 APR 19	KURILE ISLANDS ***	MB=4.7 ($_{14}$)	44.4N;149.4E 33KM H=22 25 00.7 (NEIS)
CLL E P	22 36 53 0.8 / 17		44.4N;149.5E 33KM 22 25 00.0 (WDCB)
BRG E P	22 36 54,6		D= 77.5 DEG AZ= 30 CLL
			D= 77.5 DEG AZ= 31 BRG
1978 APR 20			
BRG E P	0^{2} 57 19,6		
1978 APR 20			
MOX E	0^{4} 14 02		
CLL E	0^{4} 14 26		
1978 APR 20	SOLOMON ISLANDS	MB=5.2 ($_{15}$)	9.0S;157.8E 27KM H=07 18 39.5 (NEIS)
BRG E PKP	0^{7} 37 47,3 1.4 / 14		8.7S;$_{1}$57.6E 33KM 07 13 35.1 (WDCB)
CLL E PKP	07 37 46 TRACES		D=128.7 DEG AZ= 48 BRG
			D=128.9 DEG AZ= 47 CLL
1978 APR 20			
CLL I P	0^{9} 10 24,7C		
BRG I P	0^{9} 10 24,9		
1978 APR 20			
MOX E	10 3_{1} 34		

1978 APR 20				
CLL E	11 35 10	TRACES		
BRG I P	11 35 10,6			
1978 APR 20	KURILE ISLANDS	***	MB=4,7 (19)	44,4N;149,0E 33KM H=13 40 41,3 (NEIS)
				44,1N;149,5E 33KM 13 40 32,8 (WDCB)
				D= 77,3 DEG AZ= 31 CLL
CLL E P	13 52 34	1,2 / 22		
E AP	52 47			D= 77,4 DEG AZ= 31 BRG
BRG E P	13 52 34,3	1,2 / 11		D= 78,4 DEG AZ= 30 MOX
MOX E P	13 52 41			DEPTH 43 KM
E AP	52 53			
E	53 08			
1978 APR 20				
CLL E(P)	13 53 03			
1978 APR 20				
CLL E	16 08 16	TRACES		
1978 APR 20				
CLL I P	18 29 16,7	TRACES		
1978 APR 20	SOUTH OF FIJI ISLANDS		MB=4,9 (4)	23,1S;179,6E 597KM H=19 39 08,2 (NEIS)
CLL I PKP1	19 57 53,9D	0,9 / 28		D=150,0 DEG AZ= 25 CLL
I PKP2	58 02,2	1,0 / 12	MC =4,6	
BRG I PKP1	19 57 54,2	0,9 / 22		D=150,1 DEG AZ= 27 BRG
I PKP2	58 03,4			
MOX E PKHKP	19 57 56			D=151,0 DEG AZ= 23 MOX
E PKP2	58 07			
1978 APR 20	SOLOMON ISLANDS		MB=5,2 (22)	9,0S;157,6E 60KM H=21 38 27,4 (NEIS)
				8,4S;157,5E 33KM 21 38 22,0 (WDCB)
BRG E PKP	21 57 32,0			D=128,6 DEG AZ= 49 BRG
CLL E PKP	21 57 32			D=128,8 DEG AZ= 47 CLL
1978 APR 20	KURILE ISLANDS		MB=5,5 (93)	46,8N;151,9E 96KM H=22 19 28,6 (NEIS)
				47,0N;151,7E 110KM 22 19 30,8 (WDCB)
CLL I P	22 31 06,2	1,0 / 90		D= 76,1 DEG AZ= 28 CLL
BRG I P	22 31 07,6C	1,2 / 30		D= 76,2 DEG AZ= 28 BRG
E AP	31 28,8			
MOX E P	22 31 12	1,2 / 57	MPV =5,3	D= 77,1 DEG AZ= 27 MOX
E	31 29			
E	31 45			
LMH	51,7	T 14,5 AN 0,4 AE 0,4	MLH =5,0	(NO DEPTH CORRECTION)
LMV	58,1			
1978 APR 20	FRG, CENTRAL REGION			
	NEAR RECKLINGHAUSEN			(GRF)
MOX E	23 31 24			
E SG	32 39			
CLL E	23 32 58			
E	33 04			
1978 APR 21				
CLL E	02 13 21			
MOX E	02 13 40			
1978 APR 21	AFGHANISTAN-USSR BORDER REGION		MB=5,9(102)	36,6N; 71,3E 227KM H=15 22 57,6 (NEIS)
				36,8N; 71,3E 240KM 15 22 59,1 (WDCB)
BRG I P	15 30 34,0C	1,8 / 1120	MPV =5,9	D= 42,7 DEG AZ= 87 BRG
E AP	31 21,0			DISTANCE 45 DEG
E XP	31 46			
I PP	32 20,6			
E APP	32 56,0			
E XPP	33 26,0			
E S	36 42			
E XS	38 08			
E SS	39 57			
CLL I P	15 30 38,2C	1,8 / 900		D= 43,3 DEG AZ= 86 CLL
E	30 52			DISTANCE 44 DEG DEPTH 220 KM
E AP	31 24			
E XP	31 51			
E	32 18			
I PP	32 23,4			
E PPPP	33 24			
E	33 33			
E S	36 46			
E(PS)	37 24			
E XS	38 12			
E SS	40,2			
E	42,1			
LM	51			
MOX I P	15 30 45,5C	2,0 / 1368	MPV =6,0	D= 44,2 DEG AZ= 85 MOX
E AP	31 32			DEPTH 227 KM
E XP	32 00			
E PP	32 30	2,1 / 498	MPPV =5,9	
		T 10 AV 2,0	MPPV =5,8	

(CONT.)

(CONT.)

I APP	15 33 10,0			
E XPP	33 40			
E S	37 00	T 20,5 AN 2,7 AE 2,0	MSH =5,8	
E XPS	38 20			
E SS	40 10			
E XSS	41 10			
1978 APR 21	AFGHANISTAN-USSR BORDER REGION		MB=4,8 (7)	36,4N; 71,0E 254KM H=15 36 34,0 (NEIS)
BRG E P	15 44 09,5			D= 42,7 DEG AZ= 87 BRG
1978 APR 21				
CLL E	17 33 56	TRACES		
1978 APR 21	TAJIK SSR		MB=4,0 (5)	40,4N; 71,5E 17KM H=19 56 47,2 (NEIS)
BRG E P	20 04 20,8			D= 40,6 DEG AZ= 82 BRG
1978 APR 21				
BRG E(P)	23 40 33,0			
1978 APR 21	WESTERN TURKEY		NO MB COMP.	36,7N; 29,0E 10KM H=23 37 48,2 (NEIS)
				36,5N; 28,9E 10KM 23 37 47,5 (CSEM)
CLL E PP	23 42 21	TRACES		D= 18,5 DEG AZ=136 CLL
1978 APR 21				
CLL E	23 47 19			
1978 APR 22				
CLL E	02 52 43			
1978 APR 22	UNDERGROUND EXPLOSION		MB=5,3 (65)	49,7N; 78,2E 0KM H=03 06 57,6 (NEIS)
BRG I P	03 14 34,9C	0,9 / 22		D= 39,9 DEG AZ= 66 BRG
E PN	16 03,0			
CLL I P	03 14 37,8C	0,7 / 80		D= 40,3 DEG AZ= 66 CLL
E PN	16 06			
MOX I P	03 14 46,8C	0,8 / 69	MPV =5,4	D= 41,3 DEG AZ= 64 MOX
E PN	16 20			
1978 APR 22	NORTH ATLANTIC RIDGE		MB=4,8 (10)	12,0N; 43,8W 33KM H=13 07 23,8 (NEIS)
MOX E P	13 17 23			D= 59,1 DEG AZ=250 MOX
CLL E P	13 17 31			D= 60,2 DEG AZ=251 CLL
E	17 37			
BRG E P	13 17 33,7			D= 60,6 DEG AZ=252 BRG
1978 APR 22				
CLL E	13 19 19			
E	19 25			
1978 APR 22	KODIAK ISLAND REGION		MB=4,7 (18)	56,5N;152,8W 33KM H=13 24 04,8 (NEIS)
BRG E P	13 35 30,0			D= 72,4 DEG AZ=352 BRG
MOX E(P)	13 35 31			D= 72,4 DEG AZ=351 MOX
1978 APR 22	NORTHERN SINKIANG PROV., CHINA		MB=5,3 (79)	42,0N; 85,9E 20KM H=15 04 15,6 (NEIS)
				42,1N; 85,8E 33KM 15 04 17,7 (WDCB)
BRG I P	15 12 59,1C			D= 48,5 DEG AZ= 71 BRG
I API	13 06,7			
I PCP	14 32,6			
LMI	34	T 13. AN 0,4 AE 1,6 AV 2,3. MLV =5,4		D= 49,0 DEG AZ= 71. CLL
CLL I P	15 13 01,9C	1,5 / 105	MLH =5,2 MLV =5,2	
I API	13 09,0		MPV =5,5	
LMI	34	T 12 AN 1,5 AE 1 AV 1,5		D= 50,0 DEG AZ= 69 MOX
MOX I P	15 13 10,3	1,4 / 67		DEPTH 30 KM
I API	13 17,5	1,3 / 57		
LMI	35,2	T 13,5 AE 1,4 AV 1,7	MLH =5,1 MLV =5,3	
1978 APR 22	POLAND, UPPER SILESIA			
BRG E PQ	21 00 42,9			
E SG	01 24,7			
CLL E SG	21 01 48			
MOX E SG	21 02 20			
1978 APR 23	NEAR COAST OF ECUADOR		MB=4,8 (18)	2,1S; 81,1W 33KM H=01 58 49,1 (NEIS)
CLL E P	02 12 07	TRACES		D= 94,2 DEG AZ=272 CLL
BRG E P	02 12 09,0			D= 94,8 DEG AZ=273 BRG
1978 APR 23				
CLL E	02 57 40			
1978 APR 23	SAMOA ISLANDS REGION		/MB=5,1 (16)/	17,0S;172,3W 0KM H=03 22 24,8 (ISC)
CLL I PKP	03 42 06,3D	1,5 / 25		D=145,5 DEG AZ= 9 CLL
BRG I PKP	03 42 08,0C	1,0 / 18		D=145,8 DEG AZ= 11 BRG
MOX E PKP	03 42 09	1,4 / 37		D=146,3 DEG AZ= 7 MOX
LMV	04 55	T 20 AV 0,1	MLV =4,6	
LMH	58	T 16 AN 0,2	MLH =5,0	
1978 APR 23	NORTHERN ITALY		NO MB COMP.	46,1N; 13,6E 10KM H=11 23 03,6 (CSEM)
	ITALY-YUGOSLAVIA BORDER REGION			46,1N; 13,3E 10KM 11 23 04,0 (NEIS)
MOX E PN	11 24 15			D= 4,7 DEG AZ=163 MOX
E PQ	24 32,5			
E SN	25 09,5			
E SG	25 35			D= 4,8 DEG AZ=183 BRG
BRG E PN	11 24 14,3			
E PQ	24 33,5			
E SN	25 09,8			
I SG	25 40,5			D= 5,2 DEG AZ=175 CLL
CLL E PN	11 24 22			
E PQ	24 44			
E SG	25 49			

1978 APR 23 NORTHERN ITALY — NO MB COMP. — 46.1N; 13.7E 10KM H=11 33 41.2 (CSEM)
ITALY-YUGOSLAVIA BORDER REGION — 46.1N; 13.4E 10KM 11 33 39.6 (NEIS)
D= 4.8 DEG AZ=162 MOX

MOX	E	PN	11 34 52								
	E	PG	35 09,5								
	E	SN	35 45								
	E	SG	36 12								
BRG	E	PG	11 35 09,7							D= 4.8 DEG AZ=182	BRG
	E	SG	36 12,2								
CLL	E	PG	11 35 20							D= 5.2 DEG AZ=175	CLL
	E	SG	36 28								

1978 APR 23 CHILE-BOLIVIA BORDER REGION — MB=5.2 (27) — 20.8S; 68.6W 110KM H=17 50 06.9 (NEIS)
21.0S; 68.9W 33KM 17 49 58.6 (WDCB)
D=100.9 DEG AZ=250 CLL

CLL	E(PP)		18 07 49	TRACES							

1978 APR 23

CLL	E	P	20 44 44								
	E		44 50								
BRG	E	P	20 44 45,3								

1978 APR 23

CLL	E		21 54 48	TRACES							

1978 APR 23

CLL	E		22 08 46	TRACES							

1978 APR 23

BRG	E(P)		23 20 56,8								
CLL	E		23 21 28								

1978 APR 24 MONTANA — MB=4,5 (9) — 47.0N;113.3W 5KM H=23 24 37.0 (NEIS)

MOX	LM		00 02,5	T 28	AN	0,6	AE	0,4	MLH =4,8	D= 71.8 DEG AZ=324	MOX

1978 APR 24 SOUTHEASTERN AUSTRIA — 47.7N; 15.9E H=02 34 01 (VKA)

MOX	E		02 36 10							D= 4.1 DEG AZ=135	MOX
CLL	E	SG	02 36 10							D= 4.1 DEG AZ=151	CLL

1978 APR 24 POLAND, UPPER SILESIA

CLL	E	SG	04 01 51								

1978 APR 24 ANDREANOF ISLANDS, ALEUTIAN IS. — MB=5.2 (74) — 51.6N;176.1W 53KM H=04 28 47.0 (NEIS)
51.8N;176.1W 33KM 04 28 45.5 (WDCB)

CLL	E	P	04 40 35							D= 77.2 DEG AZ= 6	CLL
BRG	I	P	04 40 37,8D	0,9 / 8						D= 77,5 DEG AZ= 6	BRG
MOX	E	P	04 40 40							D= 77.9 DEG AZ= 5	MOX
	LMH		05 09,8	T 25,5	AN	0,7			MLH =4,9		
	LMV		10,6	T 24			AV	0,4	MLV =4,7		

1978 APR 24 SOLOMON ISLANDS — MB=4,8 (6) — 6.6S;155.1E 61KM H=14 59 21.0 (NEIS)

BRG	I	PKP	15 18 25,3							D=125,3 DEG AZ= 50	BRG

1978 APR 24

MOX	E		15 54 08								

1978 APR 24 TONGA ISLANDS — MB=5,4 (28) — 21.3S;174.4W 33KM H=15 44 18.9 (NEIS)
20.9S;174.6W 33KM 15 44 16.0 (WDCB)
D=149,5 DEG AZ= 14 CLL

CLL	E	PKP1	16 04 04	1,5 / 79							
	E(PP)		07 50								
	E	SKKS	14 36								
	E	PSKS	17 52								
	LM		17 11	T 20	AN	1,5		AV 1,5	MLH =5,7 MLV =5,9		
BRG	E	PKIKP	16 04 03,4	1,2 / 13							
	I	PKP1	04 08,0	1,3 / 58						D=149,8 DEG AZ= 16	BRG
	LM		17 12	T 20	AN	1,5	AE	1,6 AV 2,4	MLV =6.0		
MOX	E	PKIKP	16 04 05,5	1,3 / 44							
	I	PKHKP	04 09,4	1,4 / 37						D=150,3 DEG AZ= 11	MOX
	E	PKP2	04 14,5	2,0 / 171							
	E	PP	07 55								
	E	PPP	11 12								
	E	SKKS	14 35								
	E	SKSP	18 00								
	E		23 00								
	LM		17 17	T 19	AN	1,1	AE	2,2 AV 1,8	MLH =6.0 MLV =5,9		

1978 APR 25 MINDANAO, PHILIPPINE ISLANDS — MB=5.4 (39) — 6.4N;124.0E 33KM H=00 34 15.1 (NEIS)
6.8N;124.0E 33KM 00 34 12.4 (WDCB)

BRG	E	P	00 47 49,3								
	E	S	59 12,0							D= 97,5 DEG AZ= 70	BRG
	LM		01 35	T 16	AN	0,6	AE	1,9 AV 1,4	MLH =5.7 MLV =5,6		
CLL	E		00 47 56								
	E		48 14								
	E		51 09							D= 97,9 DEG AZ= 70	CLL
	E	PP	51 56								
	E	S	59 18								
	LM		01 40	T 16	AN	1,5	AE	0,5 AV 1,5	MLH =5,6 MLV =5,6		
MOX	E		00 48 18	1,9 / 27							
	E	PP	52 12							D= 98,9 DEG AZ= 68	MOX
	E	SKKS	59 26								
	E	SS	01 06 02								
	LM		41,5	T 15,5	AN	0,9	AE	0,9 AV 1,6	MLH =5,5 MLV =5,6		

1978 APR 25 POLAND, UPPER SILESIA

CLL	E	SG	04 36 27								

1978 APR 25 CELEBES SEA — MB=5,9 (49) — 4.7N;124.6E 43KM H=04 24 53.7 (NEIS)
4.9N;124.6E 50KM 04 24 55.4 (WDCB)
D= 99,2 DEG AZ= 71 BRG
DISTANCE 98 DEG

BRG	I	P	04 38 33,0	1,0 / 15							
	E	PP	42 38,0								
	E	S	50 02,0								

(CONT.)

	E	PS	04 51 22								
	E	SS	57 03								
	LM		05 26	T 22	AN	2,5	AE	3,3 AV 3,1	MLH =5,9 MLV =5,8		
CLL	E	P	04 38 35								
	E		41 53							D= 99,6 DEG AZ= 70	CLL
	E	PP	42 41							DISTANCE 100 DEG	
	E		44,0								
	E	SKS	49,0								
	E	S	50,1								
	E	(PS)	51 26								
	E	SS	57,1								
	E		58,8								
	LMH		05 23	T 18	AN	2,5	AE	2,5 AV 1,5	MLH =5,9		
	LMV		31	T 16	AN	1,5	AE	2 AV 3	MLV =5,9		
MOX	E	P	04 38 40	2,0 / 34					MPV =5,5	D=100.7 DEG AZ= 69	MOX
	E	AP	38 55								
	E	PP	42 35	1,8 / 30					MPPV =5,5		
	E	SKS	49 10								
	E	S	50 20								
	E	PS	51 40								
	E	SS	57 25								
	LMH		05 28,4	T 18,5	AN	1,6	AE	3,4	MLH =5,9		
	LMV		31	T 16,5				AV 2,9	MLV =5,9		

1978 APR 25 POLAND, UPPER SILESIA

BRG	E	PG	05 19 38,8								
	E	SG	20 18,8								
CLL	E	SG	05 20 43								

1978 APR 25 SOUTH OF HONSHU, JAPAN — MB=4,9 (55) — 31.9N;138.0E 343KM H=07 01 40.5 (NEIS)
31.4N;138.4E 220KM 07 01 24.8 (WDCB)

BRG	I	P	07 13 33,8D	0,9 / 16						D= 84,0 DEG AZ= 45	BRG
CLL	I	P	07 13 34,1	1,0 / 26						D= 84,1 DEG AZ= 44	CLL

1978 APR 25 NEAR N. COAST OF WEST IRIAN — MB=5,5 (26) — 2.8S;139.0E 45KM H=07 34 54.0 (NEIS)
2.8S;139.2E 33KM 07 34 52.8 (WDCB)

CLL		LM	08 46	T 19	AN	1	AE	1 AV 1,5	MLV =5,7	D=114,0 DEG AZ= 62	CLL
MOX		LMH	08 47,0	T 20	AN	0,8	AE	0,7	MLH =5,5	D=115,1 DEG AZ= 61	MOX
		LMV	47,2	T 19				AV 1,3	MLV =5,5		

1978 APR 25 UZBEK SSR — MB=4,5 (22) — 40.3N; 63.7E 18KM H=09 07 11.1 (NEIS)
40.2N; 63.7E 33KM 09 07 12.5 (WDCB)

BRG	I	P	09 14 11,0							D= 35,8 DEG AZ= 87	BRG
	I	AP	14 14,4								
CLL	E	P	09 14 16							D= 36,3 DEG AZ= 87	CLL
MOX	E	P	09 14 24	TRACES						D= 37,2 DEG AZ= 85	MOX

1978 APR 25 TONGA ISLANDS — /MB=4,9 (2)/ 21.4S;173.7W 33KM H=12 12 32.3 (ISC)

CLL	E	(PKP1)	12 32 21	1,3 / 17						D=149,7 DEG AZ= 12	CLL
BRG	E	PKP1	12 32 20,7							D=150,0 DEG AZ= 14	BRG

1978 APR 25 TONGA ISLANDS — MB=4,9 (3) — 21.3S;174.2W 33KM H=13 50 52.5 (NEIS)

CLL	E	PKP1	14 10 41	1,7 / 44						D=149,5 DEG AZ= 13	CLL
	E	APKP	10 54								
BRG	E	PKP1	14 10 42,0							D=149,8 DEG AZ= 13	BRG
MOX	E	PKHKP	14 10 43							D=150,4 DEG AZ= 11	MOX
	E	PKP2	10 56								

1978 APR 25 POLAND, UPPER SILESIA

CLL	E	SG	15 32 49								

1978 APR 26 AFGHANISTAN-USSR BORDER REGION (QUESTIONABLY) — NO MB COMP. — 37.7N; 67.7E 214KM H=04 49 40.5 (NEIS)

BRG	E	P	04 56 54,4							D= 39,8 DEG AZ= 88	BRG
CLL	E		04 56 53							D= 40,4 DEG AZ= 88	CLL

1978 APR 26

CLL	E		07 13 21								

1978 APR 26 PAPUA NEW GUINEA — MB=5,3 (22) — 5.6S;142.1E 43KM H=10 10 09.6 (NEIS)
5.7S;142.3E 33KM 10 10 07.8 (WDCB)

BRG	E	PKP	10 28 53,1							D=117,7 DEG AZ= 62	BRG
CLL	E	APKP	10 29 08							D=118,0 DEG AZ= 61	CLL
MOX		LMH	11 17,5	T 22	AN	0,5	AE	0,4	MLH =5,2	D=119,1 DEG AZ= 60	MOX
		LMV	21,7	T 24				AV 0,2	MLV =4,7		

1978 APR 26

BRG	E	P	11 10 46,2								

1978 APR 26 EASTER ISLAND CORDILLERA — MB=4,3 (2) — 34.2S;107.6W 33KM H=10 56 30.0 (NEIS)

MOX		LMV	12 04,3							D=133,6 DEG AZ=267	MOX
		LMH	04,6								

1978 APR 26

CLL	E		12 06 59								

1978 APR 26 SOUTH OF FIJI ISLANDS — MB=4,6 (2) — 24.9S;179.9E 303KM H=12 08 55.4 (NEIS)

CLL	E	APKP	12 29 56							D=151,8 DEG AZ= 26	CLL
BRG	E	APKP	12 29 56,1							D=151,9 DEG AZ= 28	BRG

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1978 APR 29    TAIWAN REGION                                   MB=5.4 (56)   24.7N;122.7E  18KM H=19 25 20.9 (NEIS)
                                                                             24.6N;122.9E  33KM   19 25 21.3 (WDCB)
                                                                                  D= 82.2 DEG   AZ= 60        BRG
BRG E P        19 37 42,0
    E             40 37,8
    E S           48 00,0
      LMH      20 17         T 16   AN  10,2 AE  14,8         MLH  =6.6
      LMV         19         T 15                   AV   9.6  MLV  =6.3
CLL E P        19 37 43                                                           D= 82.5 DEG   AZ= 60        CLL
    E             38 23                                                           DISTANCE  82.5DEG
    I PP          41 05,3
    E PPP         42 56
    E S           48 04
      LMH      20 13         T 15   AN  18    AE   9,5         MLH  =6.6
      LMV         15         T 14   AN   7,5 AE   8   AV  10,5 MLV  =6.4
MOX E P        19 37 49                                                           D= 83.6 DEG   AZ= 59        MOX
    E PP          41 08      2,2 /   55                       MPPV =5.5
    E S           48 00
    E PS          48 30
    E PPS         49 25
    E SS          53 30
      LMH      20 13,6       T 16   AN  13,8                  MLH  =6.4
      LMV         22,0       T 16                   AV   9.1  MLV  =6.2

1978 APR 29    SICILY                                          MB=4.1 (21)    38.8N; 13.9E 442KM H=23 49 21.5 (NEIS)
                                                                            (31.3N; 23.1E  10KM   23 47 02.8)(CSEM)
MOX E P        23 52 00     1,0 /   16                                            D= 12.0 DEG   AZ=171        MOX
BRG E P        23 52 03,1   0,7 /    9                                            D= 12.1 DEG   AZ=180        BRG
CLL I P        23 52 08,0   0,8 /   18                                            D= 12.5 DEG   AZ=177        CLL

1978 APR 30    NORTHERN ITALY              FRIULI              NO MB COMP.    46.2N; 13.2E  10KM H=02 04 42.9 (CSEM)
                                                                              46.2N; 13.1E  10KM   02 04 41.8 (NEIS)
MOX E PN       02 05 51                                                           D=  4,6 DEG   AZ=166        MOX
    E PG          06 10
    E SN          06 41
    E SG          07 03
BRG E PN       02 05 54,4                                                         D=  4,7 DEG   AZ=186        BRG
    I             06 10,6
    E SN          06 44,8
    I SG          07 15,8
CLL E PG       02 06 17                                                           D=  5,1 DEG   AZ=178        CLL
    E             06 57
    E SG          07 20

1978 APR 30    FRG, CENTRAL REGION                             NO MB COMP.    50.6N;  7.1E  10KM H=05 23 26.6 (CSEM)
                                                                             (50.2N;  6,5E  10KM   05 23 30.1)(NEIS)
MOX E          05 24 11                                                           D=  2,9 DEG   AZ=271        MOX
    E PG          24 18
    E SN          24 55
CLL I PG       05 24 37,6                                                         D=  3,8 DEG   AZ=262        CLL
    I SG          25 31,5
BRG E PG       05 24 50,2                                                         D=  4,4 DEG   AZ=269        BRG
    E SG          25 45

1978 APR 30    SOUTHEASTERN AUSTRIA
MOX E SG       06 58 22                                                       47.8N; 15,3E       H=06 56 21    (VKA)
CLL E SG       06 58 20                                                           D=  3,7 DEG   AZ=138        MOX
                                                                                  D=  3,8 DEG   AZ=156        CLL

1978 APR 30    FIJI ISLANDS REGION                             MB=5.0 ( 3)    19.8S;178,0W 604KM H=13 55 17.5 (NEIS)
CLL I PKP1     14 13 56,1D 0,9 /   25                                             D=147,4 DEG   AZ= 19        CLL
    I PKP2        13 59,8
BRG I PKP1     14 13 56,6  0,9 /   13                                             D=147,6 DEG   AZ= 21        BRG
MOX E PKHKP    14 13 58                                                           D=148,3 DEG   AZ= 17        MOX

1978 APR 30    TONGA ISLANDS REGION                           /MB=4,7 ( 1)/   22,6S;175,5W  33KM H=17 09 39,7  (ISC)
CLL I PKP1     17 29 30,4C 1,0 /   19                                             D=150,6 DEG   AZ= 16        CLL
BRG I PKP1     17 29 31.0D 0,7 /   14                                             D=150,8 DEG   AZ= 18        BRG

1978 APR 30    CENTRAL ITALY                                   NO MB COMP.    43.8N; 13.4E  33KM H=17 35 48.7 (NEIS)
BRG E(PN)      17 37 43,2                                                         D=  7.1 DEG   AZ=183        BRG
    E(SG)         39 42,0
CLL E SG       17 39 50                                                           D=  7,5 DEG   AZ=178        CLL

1978 APR 30    VANUATU ISLANDS                                 MB=5.2 (23)    14,8S;167,3E 141KM H=18 59 07.5 (NEIS)
                                                                              14.8S;167,1E  33KM   18 58 49.2 (WDCB)
BRG E PKP      19 18 17,5  1,2 /   11                                             D=138,1 DEG   AZ= 40        BRG
CLL E PKP      19 18 17                                                           D=138,1 DEG   AZ= 39        CLL
MOX E PKIKP    19 18 16                                                           D=139,2 DEG   AZ= 38        MOX
      LMH      20 03,0        T 30   AN   0,4                 MLH  =4.7  (NO DEPTH CORRECTION)

1978 APR 30
CLL E          19 42 07   TRACES

1978 APR 30    FRG, SOUTHWESTERN REGION                        NO MB COMP.    48.1N;  7.6E   6KM H=23 26 39.6 (NEIS)
                                                                              48.1N;  7.6E  15KM   23 26 39.7 (CSEM)
MOX E PN       23 27 31                                                           D=  3,7 DEG   AZ=227        MOX
    E PG          27 48
    E SN          28 12
    E SG          28 34
CLL E SG       23 29 19                                                           D=  4.8 DEG   AZ=230        CLL
BRG E(PG)      23 28 13,2                                                         D=  5.0 DEG   AZ=239        BRG
    E(SG)         29 22,4
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1978 MAY 01
CLL E          01 06 13

1978 MAY 01    NORTHERN ITALY                                  NO MB COMP.    46.2N; 12.6E  20KM H=01 50 42.8 (NEIS)
MOX E PN       01 51 53                                                           D=  4.5 DEG   AZ=171        MOX
    E SN          52 42
BRG E PG       01 52 16,2                                                         D=  4.8 DEG   AZ=191        BRG
    E SN          52 59,3
    E SG          53 16,2
CLL E SG       01 53 28                                                           D=  5.1 DEG   AZ=183        CLL

1978 MAY 01    CRETE                                           MB=4.3 (16)    35.0N; 25.7E  33KM H=04 37 32.7 (NEIS)
                                                                              34.9N; 25.8E  34KM   04 37 34.5 (CSEM)
                                                                              34.4N; 25.6E  33KM   04 37 29.2 (WDCB)
BRG E(P)       04 41 46.0                                                         D= 18.0 DEG   AZ=147        BRG
CLL E          04 41 59                                                           D= 18.7 DEG   AZ=146        CLL
    E             42 29

1978 MAY 01
BRG E P        05 40 06,4  1.2 /    7

1978 MAY 01    FIJI ISLANDS REGION                             MB=5.5 (28)    19.3S;177.5W 578KM H=06 06 57.1 (NEIS)
                                                                              19.3S;178.0W 550KM   06 06 55.8 (WDCB)
CLL E PKIKP    06 25 33  C                                                        D=147.0 DEG   AZ= 18        CLL
    I PKP1        25 37,3C 1.5 /  125                                             DISTANCE 147 DEG  DEPTH 560 KM
    I PKP2        25 40.2  1.2 /   51                         MC   =4.9
    E APKP        27 48
    E PP          29 11
BRG I PKIKP    06 25 34,5  1.3 /   22                                             D=147.2 DEG   AZ= 20        BRG
    I PKP1        25 37,9                                                         DISTANCE 148 DEG
    I PKP2        25 41,5
    E APKP        27 49,8
MOX E PKIKP    06 25 35                                                           D=147.9 DEG   AZ= 16        MOX
    E PKHKP       25 39    1,9 /  114
    E PKP2        25 44    1.4 /   22
      LMH      07 39       T 20          AE   0,9
      LMV         46       T 16                      AV   0.5

1978 MAY 01    KURILE ISLANDS                                  MB=5.1 (63)    44.0N;149.2E  33KM H=06 54 05.3 (NEIS)
                                                                              44.2N;149.1E  33KM   06 54 06.5 (WDCB)
CLL I P        07 06 00.7D 1.6 /   50                                             D= 77.8 DEG   AZ= 31        CLL
    I AP          06 15,9
    I             06 35,3
      LMH         38
      LV          45
BRG I P        07 06 01,0D 1.1 /   19                                             D= 77.8 DEG   AZ= 31        BRG
    I AP          06 16,5
      LMH         37       T 20   AN   0.4 AE   1,3
      LMV         44       T 16                    AV   1.0   MLV  =5.3
MOX E P        07 06 06    1.4 /   28                         MPV  =5.1           D= 78.8 DEG   AZ= 30        MOX
    E AP          06 19                                                                              DEPTH  74 KM

1978 MAY 01    SOUTH OF FIJI ISLANDS                           MB=5.2 (17)    24.0S;179.8E 479KM H=09 06 26.8 (NEIS)
CLL I PKP2     09 25 33,8C                                                        D=150.9 DEG   AZ= 25        CLL
    I APKP        27 30.6    EVENTUALLY A NEW QUAKE
BRG E PKP1     09 25 24,6                                                         D=151.0 DEG   AZ= 27        BRG
    I PKP2        25 34,6
    I APKP        27 31,1
MOX E PKP2     09 25 37,5                                                         D=151.9 DEG   AZ= 23        MOX
    E APKP        27 33    1.0 /   12                                                                DEPTH 600 KM

1978 MAY 01    POLAND, UPPER SILESIA
BRG I(PG)      09 37 41,0
    I SG          38 27,8
CLL E SG       09 38 42
MOX E SG       09 39 05,5

1978 MAY 01    TIMOR                                           MB=5.5 (31)     9.3S;124.9E  53KM H=11 41 24.2 (NEIS)
                                                                               9.1S;124.9E  40KM   11 41 23.3 (WDCB)
BRG E PKP      11 59 53,6                                                         D=110.4 DEG   AZ= 79        BRG
CLL E          12 00 27                                                           D=110.9 DEG   AZ= 79        CLL
    E PP          00 41

1978 MAY 01    BONIN ISLANDS REGION                            MB=4.9 (45)    28.3N;139.9E 426KM H=15 12 37.2 (NEIS)
                                                                              26.1N;140.9E  33KM   15 11 43.4 (WDCB)
BRG E P        15 24 40,6  0.6 /   12                                             D= 87.9 DEG   AZ= 46        BRG
CLL E P        15 24 41                                                           D= 88.0 DEG   AZ= 45        CLL
    E PP          28 12
MOX E P        15 24 46   TRACES                                                  D= 89.1 DEG   AZ= 44        MOX

1978 MAY 01    KURILE ISLANDS                                  MB=4.5 ( 3)    45.1N;149.2E  33KM H=16 31 50.0 (NEIS)
CLL I P        16 43 41,3D 0.9 /   15                                             D= 76.8 DEG   AZ= 30        CLL
    I AP          43 53.2
BRG E P        16 43 40.6                                                         D= 76.9 DEG   AZ= 31        BRG

1978 MAY 01    KURILE ISLANDS REGION                           MB=5.1 (52)    43.9N;149.1E  33KM H=17 59 06.4 (NEIS)
                                                                              44.8N;148.8E  70KM   17 59 15.0 (WDCB)
CLL I P        18 11 01,4C 1.1 /   24                                             D= 77.8 DEG   AZ= 31        CLL
    I             11 26,6
    E             11 44
      LMH         47
      L           49
BRG E P        18 11 02,1  1.1 /    9                                             D= 77.9 DEG   AZ= 31        BRG
    I AP          11 14,8
      LMH         46       T 16   AN   0,5 AE   1,7                MLH  =5.4
      LMV         49       T 15                    AV   1.8        MLV  =5.5
MOX E P        18 11 07,5  2.2 /   65                              MPV  =5.2      D= 78.8 DEG   AZ= 30        MOX
    E S           21 05
      LMH         44.1     T 20   AN   0.7 AE   1,2                MLH  =5.4
      LMV         50.7     T 16                    AV   0.9        MLV  =5.2
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1978 MAY 01
CLL I(P)        18 11 13.8C 0.9 /   38

1978 MAY 01
CLL E           22 01 58

1978 MAY 02     HOKKAIDO, JAPAN, REGION                          MB=4.6 (30)   42.3N;143.4E  95KM H=01 40 57.4 (NEIS)
                                                                               43.3N;142.9E 140KM   01 41 07.9 (WDCB)
                                                                                     D= 77.3 DEG   AZ= 35    CLL
                                                                                     D= 78.3 DEG   AZ= 34    MOX
CLL I P         01 52 42.2D
MOX E P         01 52 48

1978 MAY 02     KURILE ISLANDS                                   MB=4.8 (45)   47.5N;153.0E 109KM H=05 15 18.6 (NEIS)
                                                                               47.7N;152.9E 100KM   05 15 19.2 (WDCB)
                                                                                     D= 75.7 DEG   AZ= 27    CLL
                                                                                     D= 75.9 DEG   AZ= 27    BRG
                                                                                     D= 76.7 DEG   AZ= 26    MOX
CLL I P         05 26 54.0D 1.0 /   48
BRG I P         05 26 54.6D 0.9 /   18
MOX E P         05 27 00.5

1978 MAY 02     SOUTH OF HONSHU, JAPAN                           MB=4.6 (20)   31.0N;138.3E 417KM H=06 01 42.3 (NEIS)
                                                                               29.4N;139.0E  33KM   06 00 55.3 (WDCB)
                                                                                     D= 85.0 DEG   AZ= 45    CLL
CLL I P         06 13 32.2

CLL  INTERRUPTION OF ONE SHORTPERIODIC RECORD FROM 13H 40M TO 05H 59M (AT MAY 03)

1978 MAY 02
CLL E           21 42 17

1978 MAY 02     SOUTH SANDWICH ISLANDS REGION                    MB=5.8 (12)   58.3S; 25.8W  73KM H=23 18 28.0 (NEIS)
                                                                               58.5S; 26.9W  33KM   23 18 22.3 (WDCB)
                                                                                     D=113.6 DEG   AZ=202    BRG
                                                                                     D=113.8 DEG   AZ=201    CLL
BRG E PKKP      23 47 42.3
CLL E PP        23 37 53
    E PKKP         47 41

1978 MAY 03
BRG E(P)        00 20 56.6  0.8 /    8
CLL E           00 21 18

1978 MAY 03     TALAUD ISLANDS                                   MB=5.7 (44)    3.6N;127.2E  43KM H=02 29 54.8 (NEIS)
                                                                                3.6N;127.4E  50KM   02 29 55.9 (WDCB)
                                                                                     D=101.6 DEG   AZ= 69    BRG
BRG E P         02 43 45.5
    I PP           48 05.4
      LM        03 41
                                                                                     D=102.0 DEG   AZ= 69    CLL
CLL E P         02 43 45
    E              47 29
                                                                                     D=103.1 DEG   AZ= 68    MOX
MOX E S         02 55 40
    E PS           57 20
      LMH       03 36.2     T 20          AE   0.5          MLH  =5.1
      LMV          36.3     T 20               AV   0.4    MLV  =5.0

1978 MAY 03     FIJI ISLANDS REGION                              MB=5.4 (31)   21.4S;177.4W 319KM H=07 41 48.0 (NEIS)
                                                                               21.5S;177.3W  33KM   07 41 14.3 (WDCB)
                                                                                     D=149.1 DEG   AZ= 19    CLL
                                                                                     DISTANCE 148.5DEG DEPTH 330 KM
CLL I PKIKP     08 00 55.0D
    I PKP1         00 59.5C 0.8 /  135
    I PKP2         01 05.2  1.0 /   48
    E APKP         02 19
BRG E PKIKP     08 00 55.5                                                   D=149.3 DEG   AZ= 21    BRG
    I PKP2         01 05.2
    I APKP         02 21.0
MOX E PKIKP     08 00 56    1.2 /   12                                      D=150.0 DEG   AZ= 17    MOX
    E PKHKP        01 02    1.2 /   65                                                  DEPTH 344 KM
    E APKP         02 40
    ENEAR CST OF   7*.0     T 20   AN   0.4 AE   0.1
      LMV       09 57.4     T 22               AV   0.2

1978 MAY 03     RYUKYU ISLANDS                                   MB=4.4 ( 5)   25.9N;126.1E 112KM H=08 04 24.0 (NEIS)
BRG E           08 16 47.6                                                   D= 83.1 DEG   AZ= 57    BRG

1978 MAY 03
CLL E P         10 31 22    0.9 /   12
BRG E P         10 31 23.5

1978 MAY 03     NORTH ATLANTIC RIDGE                             MB=4.5 (12)   50.4N; 32.0W  10KM H=11 48 32.3 (NEIS)
                                                                               50.0N; 32.5W  10KM   11 48 30.5 (CSEM)
                                                                                     D= 27.4 DEG   AZ=287    MOX
                                                                                     D= 28.1 DEG   AZ=286    CLL
MOX E P         11 54 19
CLL E P         11 54 25
    E           11 54 35
BRG E P         11 54 31.3                                                   D= 28.8 DEG   AZ=287    BRG

1978 MAY 03
CLL E           12 48 57

1978 MAY 03     POLAND, UPPER SILESIA
BRG I(PG)       22 32 36.6
    E SG           33 23.6
CLL E SG        22 33 41

1978 MAY 04     ICELAND                                          MB=3.9 ( 4)   64.7N; 17.6W  10KM H=23 59 25.5 (NEIS)
MOX E P         00 04 07.5                                                   D= 20.8 DEG   AZ=324    MOX
    E              04 18
CLL E P         00 04 08                                                     D= 20.8 DEG   AZ=322    CLL
BRG E P         00 04 15.0                                                   D= 21.5 DEG   AZ=322    BRG

1978 MAY 04     FIJI ISLANDS REGION                              MB=5.2 (18)   20.3S;177.9W 516KM H=23 50 21.7 (NEIS)
CLL E PKIKP     00 09 05    1.2 /   20                                       D=147.9 DEG   AZ= 20    CLL
    I PKP1         09 09.4C 0.9 /  130                                       DISTANCE 147.5DEG DEPTH 520 KM
    I PKP2         09 13.3  1.1 /   67          MC   =5.2
    E              09 36
    E APKP         11 12
BRG I PKIKP     00 09 05.8                                                   D=148.1 DEG   AZ= 21    BRG
    I PKP1         09 10.0
    E PKP2         09 14.0
    E APKP         11 11.6
  (CONT.)
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  (CONT.)

MOX E PKIKP     00 09 06.5                                                   D=148.8 DEG   AZ= 17    MOX
    E PKHKP        09 11    1.2 /   69
    E PKP2         09 16.5
      LMH          13.2     T 17   AN   0.5
      LMV          13.2     T 20               AV   0.2

1978 MAY 04     SOUTHEASTERN AUSTRIA                                                  47.2N; 14.6E      H=00 32 55    (VKA)
CLL E(SG)       00 35 09                                                                    D=  4.2 DEG   AZ=165    CLL

1978 MAY 04     SOUTHERN IRAN                                    MB=4.5 (11)   27.9N; 54.8E  33KM H=16 18 39.2 (NEIS)
                                                                               28.1N; 54.5E  10KM   16 18 40.5 (CSEM)
                                                                               28.0N; 55.2E  33KM   16 18 36.5 (WDCB)
                                                                                     D= 38.3 DEG   AZ=111    BRG
BRG E(P)        16 26 03.7                                                           D= 39.1 DEG   AZ=111    CLL
CLL E AP        16 26 10

1978 MAY 04     POLAND, UPPER SILESIA
BRG I(PG)       17 53 54.7
    E SG           54 35.6
CLL E           17 54 56
MOX E           17 55 25

1978 MAY 04
CLL E           18 34 59

1978 MAY 04     SOUTH OF SUMBAWA ISLAND                          /MB=5.4 (29)/ 10.4S;117.0E  43KM H=18 11 44.1  (ISC)
MOX   LMH       19 21.5     T 21   AN   0.3 AE   0.3          MLH  =5.0          D=107.7 DEG   AZ= 85    MOX
      LMV          21.5     T 20               AV   0.5    MLV  =5.1

1978 MAY 04     KURILE ISLANDS                                   MB=5.3 (51)   44.0N;149.1E  33KM H=21 40 50.4 (NEIS)
                                                                               44.9N;148.8E  80KM   21 40 59.9 (WDCB)
                                                                                     D= 77.7 DEG   AZ= 31    CLL
CLL I P         21 52 45.3C 1.0 /   47
    I              52 52.0
    I AP           52 59.0
      LM        22 31
BRG I P         21 52 45.6C 0.9 /   14                                       D= 77.8 DEG   AZ= 31    BRG
    I AP           52 59.2
MOX E P         21 52 50.5  1.8 /   41          MPV  =5.1                    D= 78.7 DEG   AZ= 30    MOX
    E AP           53 04                                                                DEPTH  54 KM
      LMH       22 25.7     T 20   AN   0.8 AE   0.7          MLH  =5.2
      LMV          32.5     T 15               AV   0.3    MLV  =4.8

1978 MAY 05     KURILE ISLANDS                                   MB=5.0 (31)   44.0N;149.0E  33KM H=02 03 32.8 (NEIS)
                                                                               44.0N;149.2E  33KM   02 03 27.0 (WDCB)
                                                                                     D= 77.7 DEG   AZ= 31    CLL
CLL E P         02 15 27    1.0 /   19
    I AP           15 41.5                                                      D= 77.8 DEG   AZ= 31    BRG
BRG E(P)        02 15 27.0                                                       D= 78.7 DEG   AZ= 30    MOX
MOX E P         02 15 34

1978 MAY 05     BELGIUM                                          /NO MB COMP./ 50.5N;   5.8E  10KM H=03 52 05.4  (ISC)
MOX E SG        03 54 13                                                     D=  3.7 DEG   AZ=270    MOX

1978 MAY 05     SOUTHEASTERN AUSTRIA                             NO MB COMP.   47.6N; 14.1E  28KM H=04 33 48.4 (NEIS)
                                                                               47.6N; 14.2E  10KM   04 33 48.0 (CSEM)
                                                                                     D=  3.3 DEG   AZ=178    BRG
BRG I(PN)       04 34 42.5                                                           DISTANCE  3.5DEG
    E PG           34 49.5
    I SG           35 33.5                                                      D=  3.5 DEG   AZ=151    MOX
MOX E PN        04 34 42                                                         DISTANCE  3.5DEG
    E PG           34 54
    E SN           35 23.5
    E SG           35 41                                                        D=  3.8 DEG   AZ=169    CLL
CLL E PG        04 34 59                                                         DISTANCE  3.9DEG
    E              35 36
    I SG           35 49.3

1978 MAY 05     CENTRAL ALASKA                                   MB=5.2 (55)   63.3N;151.0W 134KM H=05 32 47.4 (NEIS)
                                                                               62.0N;150.1W  33KM   05 32 28.2 (WDCB)
                                                                                     D= 65.0 DEG   AZ=352    CLL
CLL I P         05 43 14.2  1.3 /   17
    E AP           43 45                                                        D= 65.6 DEG   AZ=353    BRG
BRG I P         05 43 17.7C 1.0 /   26          MPV  =5.0                    D= 65.6 DEG   AZ=351    MOX
MOX E P         05 43 17.5  1.2 /   24                                                    DEPTH 139 KM
    E AP           43 51

1978 MAY 05     CENTRAL YUGOSLAVIA                               NO MB COMP.   43.2N; 18.9E  20KM H=09 33 20.9 (NEIS)
                                                                               43.0N; 18.6E  10KM   09 33 21.6 (CSEM)
                                                                                     D=  8.4 DEG   AZ=154    BRG
BRG E           09 37 05.3                                                         D=  9.0 DEG   AZ=143    MOX
MOX E           09 37 39                                                           D=  9.0 DEG   AZ=151    CLL
CLL E SG        09 38 18

1978 MAY 05     POLAND, UPPER SILESIA

BRG I(PG)       10 45 37.8
    E(SG)          46 25.1
CLL E SG        10 46 45

1978 MAY 05     SOUTH OF FIJI ISLANDS                            MB=4.6 ( 2)   24.2S;179.7W 476KM H=10 34 23.7 (NEIS)
CLL I PKP1      10 53 21.2C 1.2 /   27                                       D=151.2 DEG   AZ= 25    CLL
    E PKP2         53 31
    I APKP         55 26.0  1.1 /   20                                       D=151.4 DEG   AZ= 27    BRG
BRG I PKP1      10 53 21.5  0.9 /   18
    I APKP         55 26.3
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1978 MAY 05 MOLUCCA PASSAGE MB=5.2 (12) 0.8N;126.2E 47KM H=10 39 44.0 (NEIS)
1.7N;125.8E 33KM 10 39 48.1 (WDCB)
CLL E P 10 53 42 D=103.7 DEG AZ= 71 CLL

1978 MAY 05 POLAND, UPPER SILESIA
CLL E 19 08 03

1978 MAY 05 VANUATU ISLANDS MB=4.9 (3) 14.2S;167.2E 220KM H=19 55 00.6 (NEIS)
BRG E PKP 20 14 00.4 D=137.5 DEG AZ= 40 BRG
CLL E PKP 20 14 03 TRACES D=137.5 DEG AZ= 39 CLL

1978 MAY 05 CALIFORNIA-MEXICO BORDER REGION MB=4.8 (28) 32.2N;115.3W 5KM H=21 03 15.8 (NEIS)
MOX E P 21 15 53.5 D= 85.1 DEG AZ=317 MOX
LMH 51 T 20 AE 0.3 MLH =4.6
CLL E P 21 15 55 TRACES D= 85.2 DEG AZ=318 CLL
BRG E P 21 15 56.9 0.6 / 7 D= 86.0 DEG AZ=319 BRG

1978 MAY 05
BRG E(P) 23 55 14.0

1978 MAY 06
CLL E 03 05 18

1978 MAY 06 SVALBARD REGION MB=4.6 (15) 80.0N; 5.5E 33KM H=04 19 16.1 (NEIS)
80.0N; 4.6E 33KM 04 19 10.1 (WDCB)
CLL E 04 25 21 D= 28.9 DEG AZ=357 CLL
BRG E(P) 04 25 22.0 D= 29.4 DEG AZ=357 BRG
MOX E P 04 25 24 D= 29.6 DEG AZ=358 MOX
LM 39 T 15 AN 0.2 AE 0.2 AV 0.3 MLH =4.1 MLV =4.2

1978 MAY 06
CLL E 07 28 03

1978 MAY 06
CLL E P 09 14 29

1978 MAY 06 PAKISTAN MB=5.5 (74) 29.8N; 66.2E 33KM H=11 16 09.9 (NEIS)
30.1N; 66.2E 33KM 11 16 11.9 (WDCB)
BRG E P 11 24 16.6 1.5 / 204 D= 44.0 DEG AZ= 98 BRG
I PP 26 04.8
I S 30 49.4
CLL I P 11 24 21.5 2.1 / 155 D= 44.6 DEG AZ= 98 CLL
I PP 26 13.2 DISTANCE 45 DEG
I PPP 26 34
E S 30 50
E SS 34.6
LMH 44 T 20 AN 17 AE 5 MLH =5.9
LMV 47 T 14 AV 5 MLV =5.7
MOX E P(1) 11 24 28 2.0 / 248 MPV =5.7 D= 45.4 DEG AZ= 96 MOX
E P(2) 24 32 1.6 / 231 MPV =5.8
T 4 AV 0.8 MPV =5.9
E PP 26 24 T 6 AV 0.4 MPPV =5.4
E S 31 05
E LQ 34 35
LMH 45.5 T 19.5 AN 13.0 AE 4.4 MLH =5.9
LMV 48.4 T 15 AV 5.3 MLV =5.7

1978 MAY 06
BRG E(P) 11 44 31.6

1978 MAY 06
CLL E 17 35 23

1978 MAY 06
CLL E 19 42 29 TRACES

1978 MAY 06
CLL I PKP 22 58 50.5 1.2 / 42
I 58 57.4
BRG E PKP 22 58 50.6D 1.2 / 34

1978 MAY 07 NORTH ATLANTIC RIDGE MB=4.1 (5) 51.6N; 29.6W 33KM H=02 27 37.0 (NEIS)
CLL E P 02 33 11 TRACES D= 26.3 DEG AZ=288 CLL

1978 MAY 07 SOUTH OF HONSHU, JAPAN MB=4.8 (24) 29.8N;137.8E 510KM H=09 39 46.4 (NEIS)
27.3N;138.5E 33KM 09 38 44.7 (WDCB)
CLL E P 09 51 32 D= 85.8 DEG AZ= 46 CLL

1978 MAY 07 PAKISTAN MB=5.0 (33) 33.4N; 73.5E 27KM H=10 32 26.0 (NEIS)
33.4N; 73.7E 33KM 10 32 21.5 (WDCB)
BRG E P 10 40 50.1 1.1 / 10 D= 46.2 DEG AZ= 88 BRG
CLL E P 10 40 55 D= 46.8 DEG AZ= 88 CLL
MOX E P 10 41 02 D= 47.7 DEG AZ= 87 MOX

1978 MAY 07 SAMOA ISLANDS REGION MB=4.6 (3) 16.6S;172.5W 33KM H=12 16 47.5 (NEIS)
CLL E PKP 12 36 24 D=145.1 DEG AZ= 9 CLL
BRG E PKP 12 36 28.2 1.3 / 16 D=145.4 DEG AZ= 11 BRG
MOX E PKP 12 36 25.5 D=145.9 DEG AZ= 7 MOX

1978 MAY 07 WESTERN AUSTRIA NO MB COMP. 47.7N; 12.9E 10KM H=15 32 14.0 (NEIS)
47.8N; 12.8E 10KM 15 32 15.4 (CSEM)
MOX E PG 15 33 12 D= 3,1 DEG AZ=164 MOX
E SG 33 39
BRG E PG 15 33 13,9 D= 3,2 DEG AZ=193 BRG
E SG 33 39
CLL E SG 15 34 12 D= 3,6 DEG AZ=181 CLL

1978 MAY 07
MOX LM 15 55

1978 MAY 07 CENTRAL MID-ATLANTIC RIDGE MB=4.7 (7) 8.2N; 38,3W 33KM H=22 44 46,1 (NEIS)
MOX E P 22 54 44,5 D= 59,0 DEG AZ=242 MOX
CLL E(P) 22 54 55 TRACES D= 60,1 DEG AZ=243 CLL
BRG E(P) 22 54 52,0 D= 60,4 DEG AZ=244 BRG

1978 MAY 08 KAMCHATKA MB=4.7 (28) 54.8N;158.8E 31KM H=00 07 41.1 (NEIS)
54.9N;158,9E 33KM 00 07 42.2 (WDCB)
CLL E P 00 18 53 1,3 / 25 D= 70,5 DEG AZ= 20 CLL
BRG E P 00 18 55,0 1.4 / 14 D= 70,7 DEG AZ= 21 BRG
MOX E P 00 19 00 D= 71,4 DEG AZ= 19 MOX

1978 MAY 08 POLAND, UPPER SILESIA
BRG E(PG) 03 43 30,2
E SG 44 16,2
CLL E 03 43 47
E 44 17
E SG 44 39
MOX E SG 03 45 02

1978 MAY 08
CLL E 05 39 21

1978 MAY 08 POLAND, UPPER SILESIA
BRG E(PG) 05 39 30,2
E SG 40 32,6
CLL E SG 05 40 57
MOX E 05 41 25

1978 MAY 08 NEAR EAST COAST OF KAMCHATKA MB=4.6 (22) 53.1N;159,3E 119KM H=13 25 09,6 (NEIS)
52.9N;161,6E 33KM 13 24 56,4 (WDCB)
CLL I P 13 36 23,0C 0,3 / 27 D= 72,2 DEG AZ= 21 CLL
BRG I P 13 36 23,9 0,7 / 9 D= 72,4 DEG AZ= 21 BRG
MOX E P 13 36 28,5 0,3 / 19 MPV =4,9 D= 73,1 DEG AZ= 20 MOX

1978 MAY 08 POLAND, UPPER SILESIA /NO MB COMP./ 50.2N; 19,0E 0KM H=13 47 17 (ISC)
BRG E PG 13 48 16,9 D= 3,3 DEG AZ=100 BRG
E SN 48 42,8
E SG 49 01,4
CLL I PG 13 48 29,2 D= 4,0 DEG AZ=104 CLL
I SG 49 20,5 DISTANCE 3,9DEG
MOX E 13 48 39 D= 4,7 DEG AZ= 93 MOX
E 48 50 DISTANCE 3,8DEG
E SG 49 42

1978 MAY 08 GREECE MB=4,2 (11) 40.7N; 23,3E 34KM H=14 38 56,4 (NEIS)
40.7N; 23,4E 10KM 14 38 58,5 (CSEM)
40.7N; 23,2E 33KM 14 38 58,9 (WDCB)
BRG E(P) 14 41 49,5 D= 12,1 DEG AZ=144 BRG
CLL E 14 42 19 D= 12,8 DEG AZ=142 CLL
E(SS) 44 54
MOX E P 14 42 13 D= 12,9 DEG AZ=136 MOX
E 46 09,5
LMH 46,3 T 11 AN 0,7 AE 0,7 MLH =4,1
LMV 47,5 T 13 AV 0.5

~~1978 MAY 08 GREECE MB=4,0 (3) 40.7N; 23,3E 35KM H=15 00 18,0 (NEIS)~~
40.7N; 23,4E 10KM 15 00 09,6 (CSEM)
CLL E L 15 07 17 D= 12,8 DEG AZ=142 CLL
MOX LMH 15 07,5 T 10 AN 0,4 AE 0,4 MLH =4,0 D= 12,9 DEG AZ=136 MOX
LMV 08,7 T 12 AV 0.2

1978 MAY 08 VANUATU ISLANDS MB=5,4 (11) 17.0S;167,5E 33KM H=16 35 38,0 (NEIS)
15.9S;166,8E 33KM 16 35 44,6 (WDCB)
BRG E PKP 16 55 02,8 D=140,1 DEG AZ= 42 BRG
E SKP 58 43,2
CLL E PKP 16 55 09 D=140,2 DEG AZ= 40 CLL
E PP 58 08
MOX E PKP 16 55 05 D=141,3 DEG AZ= 39 MOX
E PP 58 17

1978 MAY 08 VANUATU ISLANDS MB=4,9 (6) 17.0S;167,6E 33KM H=18 12 00,4 (NEIS)
BRG E PKP 18 31 29,4 D=140,2 DEG AZ= 42 BRG

1978 MAY 08 KURILE ISLANDS MB=4,6 (8) 46.7N;153,1E 45KM H=18 27 05,0 (NEIS)
46.5N;153,4E 33KM 18 27 02,6 (WDCB)
CLL E P 18 38 52 D= 76,5 DEG AZ= 27 CLL

1978 MAY 08 VANUATU ISLANDS MB=5,1 (4) 17.0S;167,6E 33KM H=19 05 39,4 (NEIS)
16.7S;167,9E 33KM 19 05 40,4 (WDCB)
BRG E PKP 19 25 02,2 D=140,2 DEG AZ= 42 BRG
CLL E PKP 19 25 05 D=140,2 DEG AZ= 40 CLL
MOX E PKP 19 25 12 TRACES D=141,3 DEG AZ= 39 MOX

1978 MAY 08
BRG E P 19 26 39,2

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1978 MAY 08
CLL E          21 51 43

1978 MAY 09
CLL E          00 44 54

1978 MAY 09    NEAR EAST COAST OF KAMCHATKA                    MB=5.1 (58)   52.5N;158.1E 109KM H=07 31 05.9 (NEIS)
                                                                             52.7N;157.9E 100KM   07 31 06.0 (WDCB)
CLL E P        07 42 20    1.2 /   24                                        D= 72.5 DEG   AZ= 22      CLL
BRG E P        07 42 22.3                                                    D= 72.6 DEG   AZ= 22      BRG
     I         42 39.5
MOX E P        07 42 27                                                      D= 73.4 DEG   AZ= 21      MOX

1978 MAY 09    SOUTH OF TONGA ISLANDS                          MB=4.9 ( 3)   24.5S;175.5W  33KM H=09 29 14.0 (NEIS)
CLL E PKP1     09 49 10                                                      D=152.4 DEG   AZ= 17      CLL
BRG E PKP1     09 49 09.2                                                    D=152.7 DEG   AZ= 19      BRG

1978 MAY 09
CLL E          11 45 03

1978 MAY 09
CLL E          16 00 05

1978 MAY 09
MOX E PG       17 45 52                                                      DISTANCE= 1.4DEG
    E SG          46 12

1978 MAY 09    TONGA ISLANDS REGION                            MB=5.4 (13)   22.0S;174.5W  33KM H=17 55 48.5 (NEIS)
                                                                             19.9S;175.2W  33KM   17 55 53.9 (WDCB)
CLL I PKP1     18 15 37.5  1.3 /   58                                        D=150.2 DEG   AZ= 14      CLL
    E          15 54
    E APKP     16 07
    E          16 40
    E PP       19 19
BRG E PKIKP    18 15 34.0                                                    D=150.4 DEG   AZ= 16      BRG
    I PKP1        15 38.6  1.0 /   31
    I PKP2        15 45.5
MOX E PKHKP    18 15 40    1.7 /   42                                        D=151.0 DEG   AZ= 12      MOX
     LMV       19 30       T 19          AV  0.3  MLV =5.1
     LMH          30       T 18      AE  0.3      MLH =5.0

1978 MAY 10    KURILE ISLANDS                                  MB=4.5 ( 4)   44.5N;149.8E  33KM H=01 24 39.1 (NEIS)
CLL E P        01 36 33                                                      D= 77.5 DEG   AZ= 30      CLL
    E          36 40

1978 MAY 10    CENTRAL YUGOSLAVIA                              MB=4.8 (10)   43.2N; 18.7E  10KM H=01 37 07.9 (NEIS)
                                                                             43.1N; 18.7E  10KM   01 37 07.1 (CSEM)
BRG E          01 39 42                                                      D=  8.3 DEG   AZ=155      BRG
     E            41 49
MOX E SN       01 40 45                                                      D=  8.9 DEG   AZ=144      MOX
     E            42 20
CLL E PG       01 40 08                                                      D=  9.0 DEG   AZ=152      CLL
    E SG          42 09

1978 MAY 10    BONIN ISLANDS REGION                            MB=5.0 (47)   27.8N;139.7E 493KM H=03 51 38.1 (NEIS)
                                                                             27.8N;139.8E 500KM   03 51 38.0 (WDCB)
BRG E P        04 03 36.1                                                    D= 88.2 DEG   AZ= 46      BRG
CLL E P        04 03 36    1.5 /   27                                        D= 88.3 DEG   AZ= 45      CLL
     E            06 08
MOX E P        04 03 42    1.8 /   27                MPV =4.8              D= 89.4 DEG   AZ= 44      MOX
     LMH          44.5
     LMV          47

1978 MAY 10
BRG E          09 07 36.8
     E            09 45
CLL E          09 10 08

1978 MAY 10
CLL I(P)       12 57 03.6
     E            57 19

1978 MAY 10    GREECE                                          MB=4.1 (18)   40.7N; 23.3E  19KM H=13 12 50.2 (NEIS)
                                                                             40.7N; 23.4E  10KM   13 12 51.3 (CSEM)
BRG E          13 16 03.0                                                    40.8N; 23.4E  33KM   13 12 49.7 (WDCB)
     E            19 26.6                                                   D= 12.1 DEG   AZ=144      BRG
CLL E          13 16 03                                                      D= 12.8 DEG   AZ=142      CLL
     E            17 22
     E L          20 36
MOX E P        13 16 05                                                      D= 12.9 DEG   AZ=136      MOX
     LMH          20.3      T 10   AN  1.3 AE  1.3          MLH =4.4

1978 MAY 10    NEAR EAST COAST OF HONSHU, JAPAN                MB=5.5 (80)   37.3N;141.8E  40KM H=15 36 25.8 (NEIS)
                                                                             37.9N;141.4E  50KM   15 36 29.8 (WDCB)
BRG I P        15 48 37.3C 1.1 /   78                                        D= 81.0 DEG   AZ= 40      BRG
    I AP          48 41.0
     LMV       16 27       T 15          AV  1.2  MLV =5.4
CLL I P        15 48 37.1C 1.3 /  140                                        D= 81.0 DEG   AZ= 39      CLL
    E AP          48 48
    E PP          51 38
     LM        16 27
MOX E P        15 48 43    1.4 /   84                MPV =5.6              D= 82.1 DEG   AZ= 38      MOX
     LMH       16 22.5     T 24      AE  0.9      MLH =5.0
     LMV          31.2     T 16          AV  0.5  MLV =5.0

1978 MAY 10
CLL E          17 43 33   TRACES
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1978 MAY 10    SOUTH OF PANAMA                                 MB=4.6 ( 3)    6.0N; 79.2W  33KM H=18 37 57.9 (NEIS)
CLL E          18 51 16                                                      D= 86.7 DEG   AZ=275      CLL

1978 MAY 10    SICILY                                          NO MB COMP.   38.1N; 15.0E  24KM H=18 51 14.2 (NEIS)
MOX E P        18 54 18                                                      D= 12.8 DEG   AZ=168      MOX
    E             54 33
     LMH          59.2      T 16          AE  0.8      MLH =3.8
     LMV       19 00.3      T 12          AV  0.6
BRG E P        18 54 22.2                                                    D= 12.8 DEG   AZ=176      BRG
CLL E          18 54 39                                                      D= 13.3 DEG   AZ=173      CLL

1978 MAY 10
BRG I P        20 16 42.4
     I            16 45.3
CLL E P        20 16 45

1978 MAY 10    KURILE ISLANDS                                  MB=4.6 (19)   44.3N;148.9E  44KM H=20 45 47.4 (NEIS)
                                                                             44.3N;149.1E  33KM   20 45 45.5 (WDCB)
CLL I P        20 57 38.9                                                    D= 77.4 DEG   AZ= 31      CLL
BRG E P        20 57 40.5                                                    D= 77.5 DEG   AZ= 31      BRG

1978 MAY 11    ANDREANOF ISLANDS, ALEUTIAN IS,                 MB=5.6 (97)   51.7N;176.1W  59KM H=00 23 37.6 (NEIS)
                                                                             51.8N;176.3W  50KM   00 23 37.8 (WDCB)
CLL I P        00 35 25.7C 1.3 /   44                                        D= 77.1 DEG   AZ=  6      CLL
    E             36 17                                                     DISTANCE= 78 DEG
    E PP          38 20
    E S           45 12
    E SS          50.8
    E PKPPKP   01 02 37
     LM           05       T 25   AN  4.5 AE  4   AV  5     MLH =5.8 MLV =5.8 (NO DEPTH CORRECTION)
BRG E P        00 35 27.1C 1.0 /   31                                        D= 77.4 DEG   AZ=  6      BRG
    E PP          38 27.6                                                   DISTANCE= 77 DEG
    E S           45 15.5
    E SS          50 42
     LM        01 04       T 24   AN  4.6 AE  4.0 AV  4.5   MLH =5.8 MLV =5.9 (NO DEPTH CORRECTION)
MOX E P        00 35 29.5C 1.5 /   50                MPV =5.3              D= 77.8 DEG   AZ=  5      MOX
    E             36 29.5
    E PP          38 35
    E PPP         40 30
    E S           45 15
    E PS          45 55
    E SS          50 30
     LMH       01 06       T 24   AN  3.0 AE  2.8          MLH =5.7 (NO DEPTH CORRECTION)
     LMV          09       T 22          AV  4.0  MLV =5.7 (NO DEPTH CORRECTION)

1978 MAY 11    SICILY                                          MB=4.5 ( 4)   38.3N; 15.1E  11KM H=02 46 58.2 (NEIS)
                                                                             38.1N; 15.1E  10KM   02 46 59.8 (CSEM)
MOX E P        02 49 58                                                      38.6N; 15.3E  33KM   02 47 04.2 (WDCB)
     LMH          54.4      T 15          AE  1.3      MLH =4.1              D= 12.6 DEG   AZ=167      MOX
     LMV          55.7      T 14          AV  1.1
BRG E P        02 50 00.7                                                    D= 12.6 DEG   AZ=176      BRG
     LMV          55.8      T 14          AV  2.0  MLV =4.3
CLL E P        02 50 06                                                      D= 13.1 DEG   AZ=173      CLL
    E             50 23
     LM           56.0

1978 MAY 11    ICELAND REGION                                  MB=4.8 (45)   61.3N; 27.4W  10KM H=06 05 59.0 (NEIS)
                                                                             61.5N; 27.2W  10KM   06 06 01.4 (CSEM)
MOX E P        06 11 13    1.7 /   97                                        61.1N; 27.8W  33KM   06 05 59.9 (WDCB)
    E S           15 35                MPV =5.1              D= 23.9 DEG   AZ=311      MOX
     LMH          21.2      T 13.5 AN  1.1 AE  1.0      MLH =4.6
     LMV          24.4      T 11          AV  1.6  MLV =4.9
CLL E P        06 11 15    2.0 /   66                                        D= 24.1 DEG   AZ=310      CLL
    E(S)          15 44
     LM           22        T 14   AN  1.5 AE  1   AV  1     MLH =4.7
BRG I P        06 11 22.8  1.5 /   34                                        D= 24.9 DEG   AZ=311      BRG
    E S           15 52
     LM           23        T 12          AV  1.6  MLV =4.9

1978 MAY 11    SOUTHERN IRAN                                   MB=4.5 (29)   28.1N; 54.1E  33KM H=09 55 41.3 (NEIS)
                                                                             27.7N; 53.7E  10KM   09 55 40.7 (CSEM)
CLL E P        10 03 02                                                      28.2N; 54.4E  33KM   09 55 43.2 (WDCB)
    E             03 18                                                     D= 38.5 DEG   AZ=111      CLL

1978 MAY 11    TONGA ISLANDS REGION                            MB=5.0 ( 6)   17.1S;172.3W  33KM H=11 03 18.0 (NEIS)
CLL E PKP      11 22 55    1.6 /   40                                        D=145.6 DEG   AZ=  9      CLL
BRG E PKP      11 22 56.0  1.4 /   23                                        D=145.9 DEG   AZ= 11      BRG
MOX E PKP      11 22 58    1.4 /   56                                        D=146.4 DEG   AZ=  7      MOX
    E             23 09

1978 MAY 11    SOUTHERN SUMATERA                               MB=5.1 (33)    5.4S;104.1E  83KM H=14 01 33.9 (NEIS)
BRG E P        14 14 46.0                                                    D= 94.2 DEG   AZ= 93      BRG

1978 MAY 11
CLL E          17 19 02

1978 MAY 11
CLL E          18 38 09

1978 MAY 11    NEAR COAST OF CHIAPAS, MEXICO                   MB=4.9 ( 7)   14.2N; 92.1W  86KM H=21 05 22.2 (NEIS)
MOX   LMH      22 00.1     T 16          AE  0.4                             D= 87.6 DEG   AZ=289      MOX
      LMV         00.2     T 16          AV  0.5
CLL   LM       22 04                                                         D= 88.2 DEG   AZ=290      CLL
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1978 MAY 11 /   OFF COAST OF CHIAPAS, MEXICO                     MB=4.9 (35)
     MAY 12                                                                   13.9N; 92.2W  59KM H=23 18 25.4 (NEIS)
                                                                              10.2N; 93.5W  33KM   23 18 06.1 (WDCB)
MOX E P         23 31 10.5  T 8                 AV   0.9  MPV  =6.1                 D= 87.9 DEG   AZ=289        MOX
    E PP           34 36
    E S            41 45
    E PS           42 50
      LMH       00 11.2     T 18   AN   0.8 AE   1.2      MLH  =5.4   (NO DEPTH CORRECTION)
      LMV          13.5     T 17                AV   1.3  MLV  =5.5   (NO DEPTH CORRECTION)
CLL E P         23 31 14                                                        D= 88.5 DEG   AZ=290        CLL
    E(S)           41 46
    E PS           43.1
      LM        00 13
BRG I P         23 31 16.9                                                      D= 89.2 DEG   AZ=291        BRG
    E PP           34 45.6
    E SKS          41 49
    E PS           43 16
      LM        00 15       T 16   AN   0.0 AE   1.1 AV   1.3  MLV  =5.6   (NO DEPTH CORRECTION)

1978 MAY 12
BRG E(P)        02 04 53.0  1.1 /    8

1978 MAY 12
CLL E           04 44 10

1978 MAY 12     TAIWAN REGION                                    MB=4.5 ( 4)  23.2N;122.2E  29KM H=05 12 32.0 (NEIS)
CLL E P         05 24 58                                                        D= 83.4 DEG   AZ= 61        CLL

1978 MAY 12     ETHIOPIA                                         MB=4.8 ( 8)  13.0N; 40.0E  33KM H=06 20 06.5 (NEIS)
                                                                              11.4N; 40.0E  33KM   06 19 54.5 (WDCB)
BRG E P         06 28 07.0  0.9 /   11                                          D= 43.3 DEG   AZ=141        BRG
CLL E P         06 28 12                                                        D= 44.0 DEG   AZ=140        CLL
MOX E P         06 28 13.5                                                      D= 44.1 DEG   AZ=138        MOX

1978 MAY 12     FIJI ISLANDS REGION                              MB=4.5 ( 1)  19.2S;177.8W 620KM H=08 21 59.6 (NEIS)
CLL I PKP1      08 40 35.4D 0.9 /   27                                          D=146.8 DEG   AZ= 19        CLL
BRG I PKP1      08 40 36.0                                                      D=147.1 DEG   AZ= 21        BRG
MOX E PKHKP     08 40 38                                                        D=147.7 DEG   AZ= 17        MOX

1978 MAY 12
CLL E           11 06 51

1978 MAY 12     CENTRAL ALASKA                                   MB=5.1 (35)  62.3N;149.4W  67KM H=12 16 03.9 (NEIS)
                                                                              62.1N;149.2W  33KM   12 15 59.0 (WDCB)
CLL E P         12 26 44                                                        D= 65.9 DEG   AZ=351        CLL
    E              26 50
    E AP           26 59
MOX E P         12 26 47    0.8 /   12                            MPV  =4.9     D= 66.4 DEG   AZ=350        MOX
BRG E P         12 26 47.6  1.0 /    8                                          D= 66.4 DEG   AZ=352        BRG
    I              26 54.2

1978 MAY 12
MOX E PN        14 48 22                                                        DISTANCE  1.5DEG
    E SG           48 43

1978 MAY 12
CLL E           20 04 18

1978 MAY 12     NEAR EAST COAST OF HONSHU, JAPAN                 MB=5.3 (76)  36.3N;141.4E  37KM H=22 47 32.7 (NEIS)
                                                                              36.9N;141.0E  50KM   22 47 37.8 (WDCB)
BRG I P         22 59 48.7C 1.0 /   26                                          D= 81.7 DEG   AZ= 40        BRG
    I AP        23 00 00.3
    E S            10 12
      LM           39       T 14   AN   0.9 AE   1.2 AV   2.1  MLV  =5.7
CLL I P         22 59 48.4C 1.2 /   45                                          D= 81.7 DEG   AZ= 40        CLL
    I AP        23 00 00.0
    E PP           02 50
      LM           39
MOX E P         22 59 54.5  2.0 /   60                            MPV  =5.3     D= 82.8 DEG   AZ= 39        MOX
      LMH       23 41.3     T 17   AN   1.1 AE   0.4              MLH  =5.4
      LMV          41.4     T 16                AV   1.2          MLV  =5.4

1978 MAY 13
CLL E           02 40 18

1978 MAY 13     NEAR COAST OF CHIAPAS, MEXICO                    MB=4.8 (23)  14.1N; 92.0W  68KM H=03 36 09.5 (NEIS)
MOX   LMH       04 30.0                                                         D= 87.6 DEG   AZ=289        MOX
      LMV          31
CLL E P         03 48 56                                                        D= 88.2 DEG   AZ=290        CLL

1978 MAY 13     VANUATU ISLANDS                                  MB=5.3 (10)  17.0S;167.5E  15KM H=04 07 26.2 (NEIS)
BRG E PKP       04 26 49.7                                                    17.0S;168.2E  33KM   04 07 21.9 (WDCB)
    E              26 56.8                                                      D=140.1 DEG   AZ= 42        BRG
CLL E(PKP)      04 26 51
                                                                                D=140.2 DEG   AZ= 40        CLL
1978 MAY 13
CLL E           06 21 45

1978 MAY 13
CLL E           07 17 17

1978 MAY 13     VANUATU ISLANDS                                  MB=6.7 (56)  14.5S;167.3E 160KM H=07 08 46.2 (NEIS)
BRG I PKHKP     07 27 41.8                                                    14.5S;167.0E 150KM   07 08 46.1 (WDCB)
    I PKIKP        27 53.7                                                      D=137.8 DEG   AZ= 40        BRG
    E APKP         28 39
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 (CONT.)
    E PP        07 30 41.0
    I SKP          31 11.2
    I PKS          31 30.0
    E SKKS         37 19
    E SS           48 50
CLL E(PDIF)     07 24 56
    E              26 15                                                        D=137.9 DEG   AZ= 39        CLL
    E(PKHKP)       27 41                                                        DISTANCE 136 DEG
    I              27 46.0
    I PKIKP        27 53.7  1.0 /( 930)
    E              28 14
    E              28 39
    I              30 24.8
    E PP           30 41    T 11                    AV   4.2  MPPV =6.3
    I SKP          31 09.8  2.3 / 1020
    I              31 25.4
    E PKS          31 29
    I              31 37.4
    E APKS         32 06
    E              32 24
    E PPP          33 41
    E SKKS         37 17
    E SKKKS        37 45
    E              42 33
    E              50.4
      LM        08 31
      FINAL     10
MOX E(PKHKP)    07 27 45.5  1.3 /  175                                          D=138.9 DEG   AZ= 37        MOX
    E PKIKP        27 56    1.6 / 1038                                                              DEPTH 148 KM
    E APKP         28 35
    E PP           30 48
    E SKP          31 20
    E SKKS         37 25
    E SKSP         40 44
      LMH       08 24.3     T 20            AE   6.2
      LMV          27       T 20                     AV   8.0

1978 MAY 13     GREECE                                           MB=4.1 ( 1)  40.7N; 23.3E  33KM H=08 35 37.0 (NEIS)
CLL E           08 41 58                                                      40.6N; 23.2E  10KM   08 35 35.0 (CSEM)
    E L            42 45                                                        D= 12.8 DEG   AZ=142        CLL

1978 MAY 13
MOX E PN        12 32 51                                                        DISTANCE  1.6DEG
    E PG           32 52
    E SG           33 14

1978 MAY 13     TONGA ISLANDS                                    MB=5.4 (25)  15.2S;173.4W  33KM H=16 41 12.1 (NEIS)
                                                                              14.6S;172.8W  33KM   16 41 14.1 (WDCB)
CLL E PKP       17 00 43                                                        D=143.6 DEG   AZ= 10        CLL
    E PP           04 02
      LM        18 02
BRG E PKP       17 00 46.1  0.9 /   12                                          D=143.9 DEG   AZ= 12        BRG
MOX E PKP       17 00 46    1.8 /   47                                          D=144.4 DEG   AZ=  8        MOX
                            T 11            AE   0.6
      LM           59       T 23   AN   0.7 AE   0.5 AV   0.9  MLH  =5.4 MLV  =5.5

1978 MAY 13     TONGA ISLANDS REGION                             MB=5.0 ( 2)  22.4S;174.2W  33KM H=22 38 13.9 (NEIS)
CLL E PKP1      22 58 06                                                        D=150.6 DEG   AZ= 14        CLL
    E              58 15
BRG E PKP1      22 58 05.0                                                      D=150.9 DEG   AZ= 16        BRG

1978 MAY 13     WINDWARD ISLANDS                                 MB=4.5 (29)  14.6N; 61.4W 164KM H=23 04 03.0 (NEIS)
CLL I P         23 14 52.4D                                                     D= 69.0 DEG   AZ=267        CLL
BRG I P         23 14 55.9                                                      D= 69.6 DEG   AZ=268        BRG

1978 MAY 14     KURILE ISLANDS                                   MB=4.8 (24)  44.6N;149.4E  42KM H=06 30 41.2 (NEIS)
                                                                              44.4N;149.5E  33KM   06 30 38.8 (WDCB)
CLL I P         06 42 31.8  0.8 /   25                                          D= 77.3 DEG   AZ= 30        CLL
BRG E P         06 42 32.4  0.9 /    8                                          D= 77.4 DEG   AZ= 31        BRG
MOX E P         06 42 38.5                                                      D= 78.3 DEG   AZ= 29        MOX

1978 MAY 14     MEXICO-GUATEMALA BORDER REGION                   MB=4.8 (29)  15.3N; 92.1W 101KM H=08 32 14.6 (NEIS)
CLL E           08 45 37   TRACES                                               D= 87.3 DEG   AZ=291        CLL

1978 MAY 14     BALLENY ISLANDS REGION                           MB=5.2 ( 5)  61.5S;154.3E  33KM H=12 06 27.3 (NEIS)
                                                                              61.0S;153.3E  33KM   12 06 26.7 (WDCB)
BRG I PKP1      12 26 27.9                                                      D=155.9 DEG   AZ=131        BRG
    E              27 08.6
CLL E PKP2      12 26 46                                                        D=156.6 DEG   AZ=131        CLL
    E              26 55
MOX E PKP2      12 26 55                                                        D=156.9 DEG   AZ=132        MOX
      LMH       13 55
      LMV          04

1978 MAY 14
BRG E P         13 39 36.2
CLL E P         13 39 42

1978 MAY 14
CLL E P         15 30 48
    E              30 57
BRG E(P)        15 30 56.0

1978 MAY 14     NEAR EAST COAST OF HONSHU, JAPAN                 MB=5.1 (56)  40.2N;142.4E  47KM H=17 41 39.4 (NEIS)
                                                                              40.6N;142.1E  33KM   17 41 40.6 (WDCB)
BRG E P         17 53 38.1                                                      D= 78.7 DEG   AZ= 38        BRG
    E AP           53 51.4
CLL I P         17 53 38.1                                                      D= 78.7 DEG   AZ= 37        CLL
    I AP           53 51.3
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(CONT.)

MOX E P        17 53 44                                                D= 79.8 DEG   AZ= 36       MOX
    E AP          53 57                                                                DEPTH  47 KM

1978 MAY 14    SOUTH SANDWICH ISLANDS REGION             MB=5.4 ( 7)  56.8S; 25.5W  33KM H=18 17 01.4 (NEIS)
                                                                      57.5S; 28.0W  33KM   18 16 57.0 (WDCB)
MOX   LMV      19 19.2      T 18                 AV   2.2  MLV =5.7        D=111.4 DEG   AZ=201       MOX
      LMH         19.4      T 19  AN  1.6 AE  1.1          MLH =5.7
BRG E PS       18 45 55                                                    D=112.1 DEG   AZ=202       BRG
    E SS          52 10
      LMV      19 19        T 18                 AV   2.2
CLL E PS       18 45 54                                                    D=112.3 DEG   AZ=202       CLL
    E SS          52.3
    E SCPPKP      54 26
      LM       19 20        T 18  AN  1.5 AE  0.5 AV  1    MLH =5.7

1978 MAY 14    KIRGHIZ SSR                               MB=4.6 ( 8)  42.7N; 74.9E  33KM H=20 18 56.3 (NEIS)
BRG E          20 26 49.0                                                  D= 41.4 DEG   AZ= 77       BRG

1978 MAY 14    BRITISH COLUMBIA                          MB=4.8 (25)  52.7N;118.7W  10KM H=22 37 04.1 (NEIS)
                                                                      53.1N;119.0W  33KM   22 37 09.9 (WDCB)
CLL E P        22 48 09                                                    D= 68.7 DEG   AZ=331       CLL
    E             48 17
    E PPP         52 22
MOX E P        22 48 10                                                    D= 68.8 DEG   AZ=330       MOX
      LMH      23 19.0      T 21  AN  0.3 AE  0.2          MLH =4.5
      LMV         19.3      T 19                 AV   0.2  MLV =4.4
BRG E P        22 48 13.5  1.1 /   12                                      D= 69.3 DEG   AZ=331       BRG

1978 MAY 14    CENTRAL ITALY                                          43.2N; 13.8E   5KM H=22 48 18.7  (ING)
CLL E L        22 53 12                                                    D=  8.1 DEG   AZ=176       CLL

1978 MAY 15    VANUATU ISLANDS                           MB=5.6 (19)  20.9S;169.7E  95KM H=00 36 12.8 (NEIS)
                                                                      21.0S;169.6E  33KM   00 36 05.6 (WDCB)
BRG I PKP      00 55 38.2  1.0 /   94                                      D=144.5 DEG   AZ= 41       BRG
    E APKP        56 01.6
    E SKP         59 12.5
CLL I PKP      00 55 38.1D 1.1 /   88                                      D=144.6 DEG   AZ= 40       CLL
    I             55 42.8
    E SKP         59 12    1.6 /   45
MOX E PKP      00 55 41.5  0.9 /   27                                      D=145.7 DEG   AZ= 38       MOX
    E APKP        56 00.5                                                              DEPTH  70 KM
    E SKP         59 14    1.7 /   24

1978 MAY 15    CENTRAL MID-ATLANTIC RIDGE                MB=4.7 ( 5)   0.8N; 27.8W  33KM H=07 27 07.3 (NEIS)
MOX E          07 37 20                                                    D= 59.8 DEG   AZ=227       MOX
CLL E P        07 37 19                                                    D= 60.9 DEG   AZ=228       CLL

1978 MAY 15
BRG E(SG)      09 00 42.0
MOX E          09 01 27

1978 MAY 15
CLL E          10 20 29   TRACES

1978 MAY 15
BRG E(P)       20 02 35.4

1978 MAY 15    VANCOUVER ISLAND REGION                   MB=4.5 ( 8)  49.3N;129.1W  10KM H=22 24 28.6 (NEIS)
BRG E P        22 36 17.3  0.7 /   48                                      D= 75.3 DEG   AZ=336       BRG

1978 MAY 16    AFGHANISTAN-USSR BORDER REGION            MB=4.5 ( 9)  37.8N; 69.8E  20KM H=02 33 10.7 (NEIS)
BRG E(P)       02 40 59.5                                                  D= 41.1 DEG   AZ= 86       BRG

1978 MAY 16    AFGHANISTAN-USSR BORDER REGION            MB=4.7 (10)  37.7N; 69.9E  12KM H=03 40 46.2 (NEIS)
                                                                      37.9N; 69.9E  33KM   03 40 45.6 (WDCB)
BRG E P        03 48 32.5                                                  D= 41.2 DEG   AZ= 86       BRG
CLL E P        03 48 36                                                    D= 41.8 DEG   AZ= 86       CLL

1978 MAY 16    CENTRAL YUGOSLAVIA                        NO MB COMP.  43.2N; 18.7E  33KM H=05 32 09.5 (NEIS)
                                                                      43.2N; 18.8E  10KM   05 32 09.6 (CSEM)
BRG E PN       05 34 10.5                                                  D=  8.3 DEG   AZ=155       BRG
    E SN          35 37
    E SG          36 47
MOX E PN       05 34 18    1.1 /   16                      MPV =5.1        D=  8.9 DEG   AZ=144       MOX
    E SN          35 54
    E(SG)         36 44
    E             37 06
      LMH         37.4      T  6         AE  0.5           MLH =3.8
      LMV         38.4      T  9                 AV   0.6
CLL E PN       05 34 20
    E PG          35 55                                                    D=  9.0 DEG   AZ=152       CLL
    E             36 25
    E(SG)         37 16
      LM          38.0

1978 MAY 16    SOUTH OF FIJI ISLANDS                     /NO MB COMP./ 23.1S;179.5EK 33KM H=05 49 05.6) (ISC)
CLL I PKP1     06 08 46.6  0.8 /   14                                      D=150.0 DEG   AZ= 25       CLL
    E             08 56
BRG I PKP1     06 08 47.0  0.7 /   12
    E             08 56.7                                                  D=150.1 DEG   AZ= 27       BRG

1978 MAY 16    HOKKAIDO, JAPAN, REGION                   MB=5.7 (99)  41.0N;141.3E  32KM H=07 35 47.0 (NEIS)
                                                                      41.5N;141.2E  60KM   07 35 51.9 (WDCB)
BRG I P        07 47 41.6C 0.9 /   43                                      D= 77.6 DEG   AZ= 38       BRG
    E S           57 28.0                                                  DISTANCE  77 DEG
      LMH      08 23        T 17  AN  0.5 AE  1.1
      LMV         25        T 15                 AV   1.7  MLV =5.5
CLL I P        07 47 41.2C 1.3 /   86
    E             48 19                                                    D= 77.6 DEG   AZ= 37       CLL
    E(SCS)        58.0
      LM       08 25        T 14  AN  1   AE  1   AV  1.5  MLV =5.5
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(CONT.)
MOX I P        07 47 47.0C 1.8 /   88
    E PP          50 52                                    MPV =5.5        D= 78.7 DEG   AZ= 36       MOX
      LMH      08 27.0      T 14  AN  1.0 AE  0.7          MLH =5.4
      LMV         28.2      T 14                 AV   1.0  MLV =5.3

1978 MAY 16    ALBANIA                                   MB=3.5 ( 1)  41.1N; 20.9E  19KM H=08 23 43.2 (NEIS)
                                                                      41.1N; 21.0E  10KM   08 23 44.7 (CSEM)
BRG E(P)       08 26 29.0                                                  D= 10.9 DEG   AZ=151       BRG
    E             29 42
MOX E(P)       08 26 49                                                    D= 11.5 DEG   AZ=142       MOX
CLL E          08 27 47                                                    D= 11.6 DEG   AZ=149       CLL
    E(SG)         30 09

1978 MAY 16    HOKKAIDO, JAPAN, REGION                   MB=5.8(101)  41.0N;141.3E  23KM H=08 23 58.0 (NEIS)
                                                                      41.7N;141.2E  60KM   08 24 04.9 (WDCB)
BRG I P        08 35 53.6C 1.0 /   48                                      D= 77.6 DEG   AZ= 38       BRG
    I             36 10.8                                                  DISTANCE  76 DEG
    E S           45 44.0
      LMH      09 07        T 17  AN  1.0 AE  2.8
      LMV         14        T 13                 AV   2.6  MLV =5.8
CLL I P        08 35 53.5C 1.2 /  105                                      D= 77.6 DEG   AZ= 37       CLL
    E             36 14                                                    DISTANCE  77 DEG
    E PP          38 55
    E S           45 42
      LMH      09 08        T 16  AN  2   AE  3.5          MLH =5.8
      LMV         13        T 14                 AV   2    MLV =5.7
MOX I P        08 35 59.5C 1.0 /   55                      MPV =5.5        D= 78.7 DEG   AZ= 36       MOX
    E S           45 56
      LMH      09 00.0      T 17  AN  2.1 AE  3.3          MLH =5.8
      LMV         17.8      T 16                 AV   1.6  MLV =5.5

1978 MAY 16
BRG I P        08 52 07.0  0.6 /   14
CLL I P        08 52 07.4  0.6 /   13

1978 MAY 16
BRG E(P)       17 08 09.5

1978 MAY 16
CLL I PKP      23 22 54.3  1.4 /   30
    E             23 03
BRG E PKP      23 22 55.2  1.3 /   16
    E             23 03.8
MOX E PKP      23 22 56.5

1978 MAY 17    VANUATU ISLANDS                           MB=5.0 (13)  14.3S;167.4E 207KM H=01 21 08.7 (NEIS)
                                                                      14.3S;167.3E  33KM   01 20 48.9 (WDCB)
BRG E PKP      01 40 10.6  1.4 /   14                                      D=137.7 DEG   AZ= 40       BRG
CLL E PKP      01 40 09                                                    D=137.7 DEG   AZ= 39       CLL

1978 MAY 17
MOX E P        03 34 21    1.3 /    9
BRG E(P)       03 34 27.0

1978 MAY 17    CENTRAL YUGOSLAVIA                        NO MB COMP.  43.2N; 18.7E  33KM H=04 35 14.8 (NEIS)
                                                                      43.1N; 18.8E  10KM   04 35 14.4 (CSEM)
BRG E PN       04 37 15.6                                                  D=  8.3 DEG   AZ=155       BRG
    E             39 14
    E SG          39 50.5
MOX E PN       04 37 23    1.1 /   12                      MPV =5.0        D=  8.9 DEG   AZ=144       MOX
      LM          41.5
CLL E PN       04 37 26                                                    D=  9.0 DEG   AZ=152       CLL
    E             38 48
    E SN          39 07
    E             39 30
    E SG          40 08
      LM          41.0

1978 MAY 17    SOUTHERN YUGOSLAVIA                       /NO MB COMP./ 42.9N; 18.5E   0KM H=06 42 41.9  (ISC)
                                                                      43.2N; 18.4E         06 42 48   (CSEM)
BRG E          06 45 10.8                                                  D=  8.6 DEG   AZ=157       BRG
    E             47 34.0
MOX E PN       06 44 52.5                                                  D=  9.1 DEG   AZ=146       MOX
    E SG          47 54                                                    DISTANCE  10.0DEG
CLL E          06 46 05                                                    D=  9.2 DEG   AZ=154       CLL
    E SN          46 38
    E             47 02
    E(SG)         47 54
    E             48 15

1978 MAY 17    NEAR ISLANDS, ALEUTIAN TSIANDS            MB=5.0 (54)  53.0N;171.0E  24KM H=08 45 33.8 (NEIS)
                                                                      53.2N;170.6E  33KM   08 45 36.8 (WDCB)
CLL I P        08 57 10.2                                                  D= 74.4 DEG   AZ= 14       CLL
    I AP          57 17.8
BRG I P        08 57 12.4C                                                 D= 74.7 DEG   AZ= 14       BRG
    I AP          57 19.9
MOX E P        08 57 16    1.3 /   13                      MPV =4.8        D= 75.3 DEG   AZ= 13       MOX
    E AP          57 23                                                                DEPTH  27 KM

1978 MAY 17    OFF EAST COAST OF HONSHU, JAPAN           MB=5.2 (50)  34.2N;141.4E  40KM H=08 52 24.3 (NEIS)
                                                                      34.5N;141.2E  33KM   08 52 25.5 (WDCB)
BRG E P        09 04 49.0  1.0 /   10                                      D= 83.5 DEG   AZ= 41       BRG
CLL I P        09 04 50.2  1.1 /   22                                      D= 83.5 DEG   A7= 41       CLL
    E             05 11
    E PP          08 11
MOX E P        09 04 55    1.3 /   18                      MPV =5.0        D= 84.6 DEG   AZ= 40       MOX
    E S           15 28
      LMH         41.7      T 16.5 AN  0.4 AE  0.6         MLH =5.2
      LMV         46.8      T 20                 AV   0.5  MLV =5.0
```

1978 MAY 17 ICELAND REGION
MOX E 09 48 51
CLL E P 09 49 04 1.7 / 35
BRG E P 09 49 12.5 1.7 / 22

MB=4.2 (6) 62.5N; 25.8W 10KM H=09 43 52.5 (NEIS)
D= 23.4 DEG AZ=315 MOX
D= 23.6 DEG AZ=313 CLL
D= 24.3 DEG AZ=314 BRG

1978 MAY 17 FIJI ISLANDS REGION
CLL E PKIKP 10 21 16
I PKP1 21 17.5 1.1 / 180
E 21 38
E 23 17
BRG E PKIKP 10 21 16.3
I PKP1 21 18.2 1.4 / 110
MOX E PKP 10 21 18 1.2 / 33

MB=5.1 (35) 18.0S;178.4W 593KM H=10 02 44.0 (NEIS)
19.2S;178.0W 33KM 10 01 33.9 (WDCB)
D=145.6 DEG AZ= 19 CLL

D=145.8 DEG AZ= 21 BRG

D=146.5 DEG AZ= 17 MOX

1978 MAY 17 CENTRAL YUGOSLAVIA
MOX E 10 34 52.5
CLL E 10 34 42
E 35 44

43.1N; 18.8E 0KM H=10 30 25.3 (VKA)
D= 9.0 DEG AZ=144 MOX
D= 9.1 DEG AZ=152 CLL

1978 MAY 17 NORTHWESTERN AFGHANISTAN
BRG E P 16 16 06.7
MOX E P 16 16 19 TRACES

MB=4.5 (11) 34.6N; 62.0E 33KM H=16 08 47.9 (NEIS)
D= 38.1 DEG AZ= 96 BRG
D= 39.6 DEG AZ= 94 MOX

1978 MAY 17 WESTERN TURKEY
BRG E 21 08 41.9
CLL E 21 09 03

NO MB COMP. 37.1N; 27.5E 33KM H=21 02 07.5 (NEIS)
37.1N; 27.6E 10KM 21 02 07.6 (CSEM)
D= 16.8 DEG AZ=140 BRG
D= 17.6 DEG AZ=138 CLL

1978 MAY 17 TONGA ISLANDS
CLL I PKP1 23 43 14.3 1.2 / 58
BRG E PKIKP 23 43 11.4
I PKP1 43 15.2
MOX E PKP 23 43 16.5 1.6 / 50

MB=5.3 (16) 20.2S;173.7W 77KM H=23 23 34.7 (NEIS)
19.6S;176.2W 33KM 23 23 35.8 (WDCB)
D=148.5 DEG AZ= 12 CLL
D=148.8 DEG AZ= 14 BRG

D=149.3 DEG AZ= 10 MOX

1978 MAY 17
CLL E(P) 23 52 06
E 52 15
BRG E(P) 23 52 08.0
MOX E 23 52 09

1978 MAY 18 GREECE
CLL E 00 22 21
E 22 42

MB=3.9 (6) 38.5N; 22.0E 56KM H=00 18 51.8 (NEIS)
38.5N; 21.8E 44KM 00 18 52.5 (CSEM)
D= 14.3 DEG AZ=150 CLL

1978 MAY 18 CENTRAL YUGOSLAVIA
BRG E PN 02 39 19.9
E 40 35.4
E SG 42 10.5
CLL I PN 02 39 28.3 1.2 / 18
E(SN) 41 00
E 41 40
E SG 42 21
MOX E PN 02 39 29 1.4 / 19
E SG 42 00
LMV 43.6 T 12 AV 1.2
LMH 43.7 T 11 AN 0.8 AE 0.7 MLH =3.9

MB=5.0 (8) 43.3N; 21.0E 10KM H=02 37 06.1 (NEIS)
43.3N; 21.1E 10KM 02 37 08.5 (CSEM)
D= 9.0 DEG AZ=145 BRG
D= 9.7 DEG AZ=143 CLL
D= 9.7 DEG AZ=135 MOX

1978 MAY 18 WINDWARD ISLANDS
CLL E P 03 36 21
BRG E P 03 36 24.9

MB=4.7 (11) 11.0N; 62.5W 109KM H=03 25 04.9 (NEIS)
D= 72.4 DEG AZ=266 CLL
D= 73.0 DEG AZ=267 BRG

1978 MAY 18 VANUATU ISLANDS
BRG E PKP 05 12 47.5 1.1 / 41
CLL E PKP 05 12 48
MOX I PKP 05 12 51.5C 1.1 / 109
I APKP 13 05.5C 0.9 / 47

MB=5.3 (15) 20.1S;169.1E 67KM H=04 53 22.0 (NEIS)
20.1S;169.2E 33KM 04 53 12.2 (WDCB)
D=143.6 DEG AZ= 42 BRG
D=143.6 DEG AZ= 40 CLL
D=144.7 DEG AZ= 39 MOX
DEPTH 51 KM

1978 MAY 18 SOUTH OF FIJI ISLANDS
CLL I PKP1 07 29 04.9D 0.9 / 49
E PKP2 29 13 C 1.1 / 32
E APKP 31 21
BRG I PKP1 07 29 05.3
I PKP2 29 13.9
E APKP 31 22.4
MOX E PKHKP 07 29 07
E PKP2 29 17

MB=5.3 (15) 23.0S;180 549KM H=07 10 15.5 (NEIS)
D=150.0 DEG AZ= 24 CLL
MC =4.8 DISTANCE 149.5DEG DEPTH 590 KM
D=150.1 DEG AZ= 26 BRG

D=151.0 DEG AZ= 22 MOX

1978 MAY 18 POLAND, UPPER SILESIA
BRG E(PG) 08 35 57.8
E SG 36 44.0
CLL E 08 36 11
E SN 36 50
E SG 37 07
MOX E 08 37 12

NO MB COMP. (50.4N; 19.5E 10KM H=08 35 02.3)(NEIS)
D= 3.6 DEG AZ= 95 BRG

D= 4.2 DEG AZ=100 CLL

D= 5.0 DEG AZ= 90 MOX

1978 MAY 18 NORTHEASTERN CHINA
BRG I P 12 44 41.5 1.3 / 16
I 44 54.1
E PP 47 16.8
(CONT.)

MB=4.7 (87) 40.7N;122.5E 33KM H=12 33 34.0 (NEIS)
41.0N;122.5E 33KM 12 33 30.4 (WDCB)
D= 69.6 DEG AZ= 50 BRG
DISTANCE 69 DEG

(CONT.)
E S 12 53 52.0
LMH 13 13 T 19 AN 4.0 AE 7.1 MLH =5.9
LMV 18 T 17 AV 5.2 MLV =5.9
CLL E P 12 44 42 1.2 / 30
I 44 55.0 D= 69.7 DEG AZ= 50 CLL
E S 53 53
LH 13 13 T 17 AN 6 AE 4.5
LM 17 T 15 AN 5 AE 5 AV 3.5 MLH =6.0 MLV =5.8
MOX E P 12 44 51 1.6 / 66 MPV =5.5 D= 70.8 DEG AZ= 49 MOX
E S 54 05
E SS 58 30
LMH 13 14.0 T 17.5 AN 6.0 AE 4.9 MLH =6.0
LMV 19 T 16 AV 3.1 MLV =5.7

1978 MAY 18 FIJI ISLANDS
CLL I PKP 16 10 01.1 0.8 / 22 MB=3.6 (1) 18.0S;179.0E 586KM H=15 51 34.2 (NEIS)
BRG E PKP 16 10 02.3 0.8 / 10 D=145.0 DEG AZ= 24 CLL
D=145.1 DEG AZ= 25 BRG

1978 MAY 18 TURKMEN SSR
MB=5.0 (47) 39.7N; 54.8E 33KM H=17 14 30.1 (NEIS)
39.9N; 54.8E 49KM 17 14 34.1 (CSEM)
39.9N; 54.8E 33KM 17 14 30.5 (WDCB)
BRG E P 17 20 42.0 1.1 / 15 D= 30.5 DEG AZ= 95 BRG
CLL E P 17 20 47 D= 31.1 DEG AZ= 95 CLL
MOX E P 17 20 55 1.4 / 33 MPV =5.0 D= 31.9 DEG AZ= 93 MOX

1978 MAY 18 TURKMEN SSR
MB=5.1 (24) 39.6N; 54.4E 33KM H=17 14 41.4 (NEIS)
39.7N; 54.8E 48KM 17 14 43.4 (CSEM)
BRG I P 17 20 51.8 1.0 / 42 D= 30.3 DEG AZ= 96 BRG
CLL E P 17 20 57 1.5 / 27 D= 30.9 DEG AZ= 96 CLL
E 21 11
LH 33.3
MOX E P 17 21 05 1.3 / 79 MPV =5.4 D= 31.7 DEG AZ= 94 MOX
E S 26 20
LMH 36.3 T 16 AE 0.5 MLH =4.3
LMV 36.3 T 14 AV 0.6 MLV =4.5

1978 MAY 18
CLL E 19 20 07

1978 MAY 18
CLL E 19 25 58

1978 MAY 18 PAPUA NEW GUINEA
CLL E(PKP) 21 10 00

MB=4.1 (1) 6.0S;141.7E 56KM H=20 51 16.8 (NEIS)
D=118.1 DEG AZ= 62 CLL

1978 MAY 18 SOUTH INDIAN OCEAN
BRG E P 22 52 40.0
CLL E 22 52 50 TRACES

MB=4.9 (3) 37.4S; 51.4E 33KM H=22 39 25.2 (NEIS)
D= 93.9 DEG AZ=151 BRG
D= 94.5 DEG AZ=150 CLL

1978 MAY 18
CLL E 23 37 40

1978 MAY 19
CLL E 00 53 31

1978 MAY 19
CLL E 12 36 22

1978 MAY 19 YUNAN PROVINCE, CHINA
BRG E P 13 10 00.4
CLL E P 13 10 03
MOX E P 13 10 09.5 1.6 / 16
LMH 38.5 T 20 AN 0.9 AE 0.2 MLH =5.0
LMV 43.4

MB=4.9 (29) 25.4N;100.5E 48KM H=12 59 00.2 (NEIS)
25.3N;100.5E 33KM 12 58 57.4 (WDCB)
D= 68.6 DEG AZ= 76 BRG
D= 69.1 DEG AZ= 75 CLL
D= 70.1 DEG AZ= 74 MOX

1978 MAY 19 GREECE
CLL L 14 53
MOX LMH 14 53.6 T 10 AN 0.4 AE 0.4 MLH =3.9
LMV 54.7

MB=4.0 (1) 40.7N; 23.4E 25KM H=14 46 08.0 (NEIS)
40.7N; 23.5E 10KM 14 46 08.4 (CSEM)
D= 12.8 DEG AZ=142 CLL
D= 12.9 DEG AZ=136 MOX

1978 MAY 20 YUNAN PROVINCE, CHINA
BRG E P 01 51 55.8
CLL E P 01 51 58
MOX E P 01 52 05.5
LMH 02 20.5 T 20 AN 0.4 MLH =4.6
LMV 27.5 T 16 AV 0.2 MLV =4.5

MB=4.7 (26) 25.6N;100.3E 53KM H=01 40 57.7 (NEIS)
25.1N;100.7E 33KM 01 40 51.9 (WDCB)
D= 68.4 DEG AZ= 76 BRG
D= 68.8 DEG AZ= 75 CLL
D= 69.8 DEG AZ= 74 MOX

1978 MAY 20 NORTHERN YUGOSLAVIA (VKA)
MOX E 03 59 40
CLL E 03 59 47

1978 MAY 20 NORTHEASTERN CHINA
BRG E P 06 12 56.8
LMV 47 T 16 AV 1.5
CLL E P 06 12 58
LMH 41 T 17 AN 1.5 AE 1 MLH =5.4
L 45
(CONT.)

MB=4.8 (25) 40.8N;122.6E 33KM H=06 01 48.8 (NEIS)
41.0N;122.6E 33KM 06 01 45.5 (WDCB)
D= 69.5 DEG AZ= 50 BRG
D= 69.7 DEG AZ= 50 CLL

(CONT.)

MOX E P   06 13 07   1.8 /   20   MPV =4.9   D= 70.8 DEG   AZ= 49   MOX
LMH   42.2   T 17   AN   1.2 AE   1.0   MLH =5.3
LMV   47.2   T 16   AV   0.7   MLV =5.1

1978 MAY 20   CHAGOS ARCHIPELAGO REGION   MB=5.3 (39)   3.5S; 69.7E 33KM H=07 15 24.4 (NEIS)
3.5S; 69.6E 33KM 07 15 23.8 (WDCB)
BRG E P   07 26 45.6   D= 72.0 DEG   AZ=120   BRG
CLL I P   07 26 51.3D 1.8 /   39   D= 72.7 DEG   AZ=119   CLL
MOX E P   07 26 54   2.5 /   61   MPV =5.2   D= 73.2 DEG   AZ=118   MOX
E S   36 20
LMH   50.2   T 40   AN   1.5 AE   0.7   MLH =5.0
LMV   53.4   T 28   AV   0.3   MLV =4.4

1978 MAY 20   NEAR COAST OF PERU   MB=5.6 (68)   10.2S; 78.5W 50KM H=13 10 31.1 (NEIS)
10.4S; 79.1W 33KM 13 10 23.5 (WDCB)
D= 97.9 DEG   AZ=264   MOX
DEPTH 44 KM
MOX E P   13 24 04   TRACES
E AP   24 16
E SKS   34 40
E S   35 20
E SS   42 00
LM   14 06   T 20.5   AE   1.8 AV   2.5   MLH =5.6 MLV =5.7
CLL E P   13 24 07   D= 98.8 DEG   AZ=265   CLL
E SKS   34 44
E PPS   37,7
LM   14 05
BRG E(P)   13 24 25,0   D= 99.4 DEG   AZ=265   BRG
E PP   28 13,2
E SKS   34 46
LMV   14 07   T 21   AV   1.9   MLV =5.6

1978 MAY 20   EASTERN TURKEY   MB=4.1 (3)   40.4N; 42.6E 10KM H=18 45 08.4 (NEIS)
40.2N; 42.7E 33KM 18 45 06.1 (WDCB)
CLL E P   18 50 16   D= 23.2 DEG   AZ=106   CLL

1978 MAY 20
CLL I PKP   19 38 33.4C 1.1 /   13
BRG E PKP   19 38 34,2   0.7 /   6

1978 MAY 20   POLAND, UPPER SILESIA
CLL E SG   19 57 19
MOX E SG   19 57 50

1978 MAY 20   FIJI ISLANDS REGION   MB=4.9 (2)   20.7S;179.2W 673KM H=21 18 29.7 (NEIS)
CLL I PKP1   21 37 07.1C 0.9 /   16   D=148.0 DEG   AZ= 22   CLL
BRG I PKP1   21 37 07,4   0.6 /   9   D=148.2 DEG   AZ= 24   BRG
MOX E PKP   21 37 09.5   D=148.9 DEG   AZ= 20   MOX

1978 MAY 20   KERMADEC ISLANDS   MB=5.5 (7)   30.8S;178.0W 43KM H=21 50 47.6 (NEIS)
CLL I PKP2   22 11 13.6   1.3 /   18   D=157.9 DEG   AZ= 26   CLL
BRG E PKIKP   22 10 40.5   D=158.1 DEG   AZ= 28   BRG
E PKP1   10 52.9
I PKP2   11 14.0
MOX E PKP2   22 11 17.5   1.6 /   11   D=158.9 DEG   AZ= 24   MOX

1978 MAY 20
BRG E(P)   23 46 56.0

1978 MAY 21
CLL E   00 27 54

1978 MAY 21   POLAND, UPPER SILESIA
CLL E   02 44 18

1978 MAY 21   FIJI ISLANDS REGION   MB=4.5 (3)   20.4S;177.8W 559KM H=06 34 14.4 (NEIS)
CLL I PKP1   06 52 58.2D 0.8 /   18   D=148.0 DEG   AZ= 19   CLL
BRG E PKP1   06 52 59.0   0.8 /   10   D=148.2 DEG   AZ= 21   BRG
I PKP2   53 03.5

1978 MAY 21   TONGA ISLANDS   NO MB COMP.   19.3S;175.0W 166KM H=06 57 30.2 (NEIS)
CLL E PKP1   07 16 56   D=147.4 DEG   AZ= 14   CLL
BRG E   07 17 06.3   D=147.7 DEG   AZ= 16   BRG

1978 MAY 21   MINDANAO, PHILIPPINE ISLANDS   MB=5.3 (42)   6.2N;123.6E 572KM H=07 24 06.6 (NEIS)
5.6N;123.9E 480KM 07 23 55.6 (WDCB)
BRG I P   07 36 40.6D 1.0 /   22   D= 97.4 DEG   AZ= 71   BRG
CLL E P   07 36 42   D= 97.8 DEG   AZ= 70   CLL
E PP   40 53
MOX E P   07 36 47.5   D= 98.9 DEG   AZ= 69   MOX

1978 MAY 21
BRG E(P)   08 31 10.4   1.1 /   10

1978 MAY 21   SOUTH OF FIJI ISLANDS   MB=4.9 (9)   24.2S;180   504KM H=10 34 46.0 (NEIS)
CLL I PKP1   10 53 41.7C 1.0 /   34   D=151.1 DEG   AZ= 25   CLL
E PKP2   53 52
E APKP   55 40
BRG I PKP1   10 53 42.2   0.9 /   18   D=151.3 DEG   AZ= 27   BRG
E PKP2   53 53.4
E APKP   55 46.2
MOX E PKHKP   10 53 44   D=152.1 DEG   AZ= 23   MOX
E PKP2   53 56
E APKP   55 49

1978 MAY 21   FIJI ISLANDS REGION   MB=4.8 (4)   (14.5S;176.4W 33KM H=11 14 07.2)(NEIS)
16.4S;168.4E 33KM 11 14 19.0 (WDCB)
CLL E(APKP)   11 33 51   D=142.5 DEG   AZ= 15   CLL
BRG E   11 33 45.3   D=142.8 DEG   AZ= 17   BRG

1978 MAY 21   NEAR EAST COAST OF HONSHU, JAPAN   MB=5.2 (66)   40.8N;142.4E 55KM H=12 08 45.9 (NEIS)
40.9N;142.4E 33KM 12 08 43.5 (WDCB)
BRG I P   12 20 40.9C 1.0 /   19   D= 78.2 DEG   AZ= 37   BRG
I AP   20 55.9
CLL I P   12 20 41.2C 1.0 /   32   D= 78.2 DEG   AZ= 37   CLL
I AP   20 55.8
MOX E P   12 20 47   1.0 /   22   MPV =5.1   D= 79.3 DEG   AZ= 36   MOX
E AP   21 02   DEPTH 57 KM
LMH   54.6
LMV   55.2

1978 MAY 21   KODIAK ISLAND REGION   MB=4.7 (20)   56.4N;152.6W 33KM H=14 55 32.8 (NEIS)
55.9N;152.7W 33KM 14 55 30.7 (WDCB)
CLL E P   15 06 57   TRACES   D= 72.0 DEG   AZ=352   CLL
BRG E P   15 06 58.5   D= 72.5 DEG   AZ=352   BRG
MOX E P   15 06 59   D= 72.5 DEG   AZ=351   MOX

1978 MAY 21   NEAR EAST COAST OF KAMCHATKA   MB=4.4 (7)   56.0N;161.5E 97KM H=17 39 26.0 (NEIS)
55.9N;161.5E 100KM 17 39 25.4 (WDCB)
CLL E P   17 50 27   D= 69.9 DEG   AZ= 18   CLL
BRG E P   17 50 28.2   D= 70.1 DEG   AZ= 19   BRG
MOX E P   17 50 33   D= 70.8 DEG   AZ= 17   MOX

1978 MAY 21   CRETE   MB=4.2 (2)   35.2N; 23.1E 33KM H=23 23 08.9 (NEIS)
35.1N; 23.2E 10KM 23 23 09.0 (CSEM)
BRG E(P)   23 27 09.3   D= 17.0 DEG   AZ=154   BRG
MOX E   23 27 47   D= 17.5 DEG   AZ=147   MOX
LMH   35.5
LMV   35.5
CLL E P   23 27 16   D= 17.7 DEG   AZ=152   CLL

1978 MAY 22   PAKISTAN   MB=4.6 (19)   29.9N; 68.0E 33KM H=02 35 00.1 (NEIS)
30.0N; 68.1E 33KM 02 35 01.2 (WDCB)
BRG E P   02 43 14.9   0.7 /   9   D= 45.0 DEG   AZ= 97   BRG
CLL E P   02 43 20   D= 45.7 DEG   AZ= 96   CLL
MOX E P   02 43 26.5   D= 46.5 DEG   AZ= 94   MOX
E   43 46.5
LMH   03 07.7   T 14   AN   0.3   MLH =4.3
LMV   10.8   T 12   AV   0.5   MLV =4.8

1978 MAY 22   IRAN   MB=5.0 (49)   31.8N; 56.2E 34KM H=06 18 14.8 (NEIS)
31.8N; 56.2E 44KM 06 18 17.1 (CSEM)
31.7N; 56.3E 33KM 06 18 09.3 (WDCB)
BRG E P   06 25 17.6   1.3 /   29   D= 36.4 DEG   AZ=105   BRG
CLL I P   06 25 23.9C 1.1 /   28   D= 37.1 DEG   AZ=105   CLL
I   25 27.8
MOX E P   06 25 29   D= 37.8 DEG   AZ=103   MOX

1978 MAY 22   KERMADEC ISLANDS REGION   MB=5.5 (3)   31.6S;178.1W 33KM H=06 55 48.7 (NEIS)
CLL E PKP2   07 16 16   TRACES   D=158.7 DEG   AZ= 27   CLL
BRG I PKP2   07 16 23.2   D=158.8 DEG   AZ= 29   BRG

1978 MAY 22   EASTERN SEA OF JAPAN   MB=5.6(101)   43.4N;139.0E 31KM H=07 31 57.8 (NEIS)
43.9N;138.6E 33KM 07 31 56.1 (WDCB)
BRG I P   07 43 35.6C 1.7 /   90   D= 74.7 DEG   AZ= 38   BRG
E S   53 11.0   DISTANCE 74 DEG
LMH   08 14   T 16   AN   1.8 AE   4.3   MLH =5.9
LMV   20   T 13   AV   5.9   MLV =6.1
CLL I P   07 43 35.6C 1.5 /   145   D= 74.7 DEG   AZ= 38   CLL
I AP   43 44.2   DISTANCE 74 DEG
E S   53.2
LMH   08 14   T 15   AN   2.5 AE   3.5   MLH =5.9
LMV   19   T 12   AN   2   AE   2   AV   2.5   MLV =5.8
MOX I P   07 43 42.0C 1.9 /   144   MPV =5.7   D= 75.7 DEG   AZ= 37   MOX
E AP   43 51   DEPTH 34 KM
E S   53 25
LMH   08 15.5   T 17   AN   3.0 AE   3.4   MLH =5.9
LMV   24.2   T 11   AV   2.4   MLV =5.8

1978 MAY 22
CLL E P   08 06 26
E   06 35

1978 MAY 22
CLL E   11 48 51
E SG   49 11

1978 MAY 22   KURILE ISLANDS   MB=4.8 (4)   44.6N;148.6E(81KM)H=14 32 59.9 (NEIS)
44.0N;149.3E 33KM 14 32 45.0 (WDCB)
CLL E P   14 44 45   D= 77.0 DEG   AZ= 31   CLL
E   44 59

1978 MAY 22
BRG E(PG)   14 53 47.3
E SG   54 15.0

1978 MAY 22   POLAND, UPPER SILESIA   /NO MB COMP./   50.3N; 18.9E 0KM H=15 15 27.7 (ISC)
BRG E(PN)   15 16 19.2   D= 3.2 DEG   AZ= 98   BRG
E PG   16 33.2
E SG   17 22.1
CLL E PG   15 16 46   D= 3.9 DEG   AZ=103   CLL
E SG   17 40

1978 MAY 22
CLL E   16 09 32   TRACES

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1978 MAY 22     BOUVET ISLAND REGION                          MB=5.6 ( 7)   54.8S; 0.9E 33KM H=15 52 26.5 (NEIS)
MOX  LMH        16 53.6    T 18  AN  0.9 AE  0.8                MLH =5.5          D=105.5 DEG  AZ=186      MOX
     LMV           53.8    T 18                   AV  0.6       MLV =5.2
CLL  LM         16 54                                                             D=106.2 DEG  AZ=187      CLL

1978 MAY 22     TONGA ISLANDS                                 MB=4.8 ( 4)   19.5S;175.4W 205KM H=17 59 18.0 (NEIS)
CLL E PKP1      18 18 40                                                          D=147.6 DEG  AZ= 15      CLL
    E APKP         19 29
BRG E PKP       18 18 41.0                                                        D=147.8 DEG  AZ= 17      BRG
    E APKP         19 26.8

1978 MAY 22
CLL E(P)        18 41 39   TRACES
BRG I P         18 41 39.7

1978 MAY 22     KURILE ISLANDS                                MB=4.5 (12)   50.1N;153.4E 238KM H=19 35 07.2 (NEIS)
                                                                            50.3N;153.4E 230KM   19 35 07.8 (WDCB)
CLL I P         19 46 15.3  1.2 /  12                                             D= 73.5 DEG  AZ= 25      CLL
MOX E P         19 46 21.5                                                        D= 74.5 DEG  AZ= 24      MOX

1978 MAY 22     FIJI ISLANDS REGION                           MB=5.2 (20)   14.7S;177.6W 330KM H=20 02 13.0 (NEIS)
                                                                            15.5S;177.5W  33KM   20 01 35.2 (WDCB)
CLL E PKP       20 21 04                                                          D=142.5 DEG  AZ= 17      CLL
    E              21 11
    E              24 14
BRG E PKP       20 21 05.8                                                        D=142.7 DEG  AZ= 19      BRG
    I              21 11.3
MOX E PKP       20 21 09                                                          D=143.4 DEG  AZ= 15      MOX

1978 MAY 22     WESTERN POLAND
CLL E PG        20 36 21                                                          DISTANCE 220 KM
    E              36 44
    E SG           36 51
MOX E SG        20 37 17

1978 MAY 22
CLL E           22 45 22   TRACES

1978 MAY 23     WESTERN POLAND
BRG I PG        04 31 07.1
    I SG           31 27.1
CLL E(PG)       04 31 16
    E              31 36
    E              31 44
    E(SG)          31 49
MOX E PN        04 31 35                                                          DISTANCE  2.5DEG
    E SG           32 14

1978 MAY 23     VANUATU ISLANDS                               MB=5.2 (11)   16.1S;167.6E  47KM H=05 03 47.7 (NEIS)
                                                                            16.0S;167.4E  33KM   05 03 41.6 (WDCB)
BRG E PKP       05 23 11.1  0.9 /  20                                             D=139.4 DEG  AZ= 41      BRG
CLL E PKP       05 23 11                                                          D=139.4 DEG  AZ= 39      CLL
MOX E PKP       05 23 13                                                          D=140.5 DEG  AZ= 38      MOX

1978 MAY 23     HALMAHERA                                     MB=5.9 (36)    0.8S;127.4E  41KM H=06 01 05.0 (NEIS)
BRG E           06 15 21.2                                                        D=105.2 DEG  AZ= 72      BRG
    E              18 40.8
    E PP           19 41.2
    E SKS          25 49
      LM        07 12       T 18  AN  0.5 AE  1.6 AV  1.5      MLV =5.6
MOX E           06 19 44    2.0 /  26                                             D=106.7 DEG  AZ= 70      MOX
    E PS           29 50
    E SS           34 50
      LMH       07 09.3     T 19  AN  0.8 AE  1.2                MLH =5.6
      LMV          10.1     T 16                  AV  1.2        MLV =5.6

1978 MAY 23
CLL E           06 18 07
    E              18 55
    E SG           19 40

1978 MAY 23     KYUSHU, JAPAN                                 MB=6.3(108)   31.1N;130.1E 161KM H=07 50 28.2 (NEIS)
                                                                            31.4N;130.2E 150KM   07 50 28.0 (WDCB)
BRG I P         08 02 25.0  1.7 / 1320                                            D= 80.9 DEG  AZ= 51      BRG
    E AP           03 07.4
    E PP           05 40
    I S            12 21.0
    E XS           13 21
    E SS           17 48
    E PKKP         21 05.0
    E PKPPKP       29 05.6
    E SKPPKP       32 18.5
      LMH          38       T 18  AN  4.7 AE 18.4
      LMV          42       T 16                  AV 16.0
CLL I P         08 02 25.9C 1.0 / 1990
                            T 12                  AV  8.4      MPV =6.4           D= 81.1 DEG  AZ= 51      CLL
                                                                                  DISTANCE 82 DEG  DEPTH 170 KM
    I              02 39.6
    E AP           03 09
    I              03 16.5
    E PP           05 38
    E              09.8
    E S            12 23    T 15  AN  5.8 AE  5.4                MSH =6.5
    E(SP)          13 22
    E SS           17 46
    E XSS          19.0
    E PKKP1        21 04
    E              21 32
    E XSSS         22.4
    E SSSS         24.0
    E              28 54
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 (CONT.)
    E PKPPKP    08 29 09
    E SKPPKP       32 18
      LM           39       T 16  AN  8  AE 11.5 AV  8.5  MLH =6.4 MLV =6.2 (NO DEPTH CORRECTION)
    E PKPPKPPKP    49 18
MOX I P         08 02 33.0C 1.7 / 2788  1.9 / 1288  1.7 / 788  MPV =6.7 MPH =6.7 D= 82.2 DEG  AZ= 50   MOX
    E AP           03 16                                                                  DEPTH 178 KM
    E PP           05 44    T 12                  AV  4.4      MPPV =6.5
    E APP          06 20
    E S            12 34    T 13  AN  5.5 AE  2.9              MSH =6.5
    E SP           13 16
    E SS           17 50
    E PKKP         21 03    1.5 /  50
    E PKPPKP       29 02    1.5 /  30
    E LV           29 20
    E SKPPKP       32 13    3.0 / 500
      LMH          39       T 17.5 AN  5.6 AE  9.6
      LMV          43       T 16                  AV 10.8

1978 MAY 23
CLL E           11 03 19

1978 MAY 23     IRAN                                          MB=5.0 (37)   31.9N; 56.2E  25KM H=11 31 43.2 (NEIS)
                                                                            32.0N; 56.3E  51KM   11 31 48.3 (CSEM)
                                                                            31.7N; 56.4E  33KM   11 31 39.4 (WDCB)
BRG E P         11 38 50.1  1.1 /  10                                             D= 36.3 DEG  AZ=105      BRG
CLL I P         11 38 53.5  1.2 /  27                                             D= 37.0 DEG  AZ=105      CLL
    E              39 10
    E PCP          41 13

1978 MAY 23     FIJI ISLANDS REGION                          /MB=4.5 ( 4)/  20.3S;178.4W 584KM H=12 19 08.3  (ISC)
CLL I PKP1      12 37 51.1  1.0 /  18                                             D=147.8 DEG  AZ= 20      CLL
    I PKP2         37 55.6
BRG I PKP1      12 37 51.8  0.9 /  13                                             D=148.0 DEG  AZ= 22      BRG
    I PKP2         37 56.4
MOX E PKP       12 37 54                                                          D=148.7 DEG  AZ= 18      MOX

1978 MAY 23     KURILE ISLANDS                                MB=4.9 (30)   44.2N;149.2E  33KM H=15 22 52.0 (NEIS)
                                                                            44.1N;149.3E  33KM   15 22 45.9 (WDCB)
CLL I P         15 34 46.1  1.1 /  20                                             D= 77.6 DEG  AZ= 31      CLL
    E AP           34 57
BRG E P         15 34 46.9                                                        D= 77.7 DEG  AZ= 31      BRG
MOX E P         15 34 52                                                          D= 78.6 DEG  AZ= 30      MOX
    E AP           35 05                                                                  DEPTH  50 KM

1978 MAY 23     EASTER ISLAND CORDILLERA                      MB=5.0 ( 3)   53.2S;118.3W  33KM H=19 08 48.2 (NEIS)
                                                                            53.9S;120.5W  33KM   19 08 46.9 (WDCB)
MOX E PKHKP     19 28 36    1.5 /  50                                             D=149.5 DEG  AZ=245      MOX
    E PKP2         28 42    1.4 /  70
      LMH       20 28       T 20          AE  0.4              MLH =5.1
      LMV          28       T 20                  AV  0.7      MLV =5.4
CLL I PKP1      19 28 38.3C 1.6 /  56                                             D=150.6 DEG  AZ=247      CLL
BRG I PKP1      19 28 39.1  1.4 /  29                                             D=151.0 DEG  AZ=247      BRG
    I              28 45.7

1978 MAY 23     HOKKAIDO, JAPAN, REGION                       MB=5.6 (96)   42.7N;144.7E  78KM H=20 11 42.5 (NEIS)
                                                                            43.2N;144.8E 100KM   20 11 45.6 (WDCB)
CLL I P         20 23 30.1C 1.2 / 125                                             D= 77.4 DEG  AZ= 34      CLL
    I              23 34.5
    I AP           23 48.4
    E(PP)          26 08
    E(PPP)         28 08
BRG I P         20 23 30.4C 1.3 /  47                                             D= 77.4 DEG  AZ= 35      BRG
    I AP           23 48.0
    E PP           26 16
MOX I P         20 23 36.0C 1.7 /  85                          MPV =5.4           D= 78.4 DEG  AZ= 33      MOX
    E AP           23 54                                                                  DEPTH  69 KM

1978 MAY 23
BRG I(P)        20 38 19.5  0.8 /   8

1978 MAY 23     EASTER ISLAND CORDILLERA                      MB=4.9 ( 2)   52.9S;118.5W  33KM H=21 05 27.5 (NEIS)
                                                                            53.9S;118.9W  33KM   21 05 30.3 (WDCB)
MOX E PKHKP     21 25 14    2.0 /  60                                             D=149.5 DEG  AZ=246      MOX
    E PKP2         25 18.5
      LMV       22 24.9     T 20                  AV  0.7      MLV =5.4
      LMH          27       T 21          AE  0.6              MLH =5.3
CLL E PKP1      21 25 17                                                          D=150.6 DEG  AZ=248      CLL
    I              25 21.5  1.5 /  35
BRG E PKP1      21 25 15.8                                                        D=151.0 DEG  AZ=247      BRG

1978 MAY 23     FIJI ISLANDS REGION                           MB=4.9 ( 6)   15.1S;176.8W  33KM H=22 37 58.9 (NEIS)
CLL E PKP       22 57 31                                                          D=143.0 DEG  AZ= 16      CLL
BRG E PKP       22 57 33.1                                                        D=143.3 DEG  AZ= 18      BRG
MOX E PKP       22 57 33.5                                                        D=143.9 DEG  AZ= 14      MOX

1978 MAY 23 /   GREECE                                        MB=5.7 (93)
    MAY 24                                                                  40.8N; 23.3E  10KM H=23 34 11.4 (NEIS)
                                                                            40.7N; 23.3E  12KM   23 34 14.0 (CSEM)
                                                                            40.8N; 23.3E  33KM   23 34 10.5 (WDCB)
BRG E P         23 37 05.0  1.9 / 108                                             D= 12.0 DEG  AZ=144      BRG
    E S            39 42                                                          DISTANCE 12 DEG
      LM           41       T 10  AN 13.3 AE 50.0 AV 63.2      MLH =5.8
CLL E P         23 37 14    2.0 / 215                                             D= 12.7 DEG  AZ=142      CLL
    E PP           37 26                                                          DISTANCE 13 DEG
    E              37 46
    E              39 36
    E S            39 45
    E              39 54
    E SS           40 04
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    E SSSS      23 40 32
      LM            42        T 10   AN  40   AE  52.5 AV( 48.5)  MLH  =6.0
      FINAL         01
MOX E P         23 37 16  C 1.7 /  352  1.8 /  284  1.8 /  149  MPV  =6.3 MPH  =6.4 D= 12.8 DEG   AZ=136        MOX
                          T  5.5                          AV   3.0  MPV  =6.7
    E PP            37 28     T  6                       AV   4.9
    E S             39 56
      LMH           41.7      T 12   AN  80.7 AE  77.1             MLH  =6.1
      LMV           42.8      T 12.5 AN  57.7

1978 MAY 24     SOUTHERN SUMATERA                                   MB=5.1 ( 4)    5.3S;102.8E  33KM H=01 50 58.8 (NEIS)
CLL E AP        02 04 25                                                           D= 94.0 DEG   AZ= 93        CLL

1978 MAY 24     NEAR COAST OF PAKISTAN                              MB=5.1 (51)   23.8N; 65.4E  30KM H=01 56 10.2 (NEIS)
                                                                                  24.1N; 65.6E  33KM   01 56 08.7 (WDCB)
BRG E P         02 04 47.2  1.1 /   14                                           D= 47.8 DEG   AZ=105        BRG
    E           04 57.1
CLL I P         02 04 53.1  1.2 /   38                                           D= 48.5 DEG   AZ=104        CLL
    E           05 02
    E           05 38
MOX E P         02 04 58.5  0.7 /   23                              MPV  =5.3    D= 49.2 DEG   AZ=102        MOX
    E AP        05 07       1.8 /   81                                                                DEPTH  36 KM

1978 MAY 24     GREECE                                              MB=4.6 (34)   40.7N; 23.4E  10KM H=02 12 27.9 (NEIS)
                                                                                  40.7N; 23.4E  10KM   02 12 30.3 (CSEM)
                                                                                  40.4N; 23.4E  33KM   02 12 27.4 (WDCB)
BRG E P         02 15 24.3                                                       D= 12.1 DEG   AZ=143        BRG
    E           17 21.3                                                          DISTANCE  12 DEG
      LM            20        T  9   AN   1.1 AE   3.2 AV   4.2  MLH  =3.4
CLL E P         02 15 33    2.0 /   50                                         D= 12.8 DEG   AZ=142        CLL
    E PPPP          15 56                                                      DISTANCE  13 DEG
    E           17 30
    E S         17 55
    E SS        18 17
      LM            20        T  9   AN   2.5 AE   2.5 AV   2.5  MLH  =4.7
MOX E P         02 15 35    2.0 /   68                              MPV  =5.5    D= 12.9 DEG   AZ=136        MOX
    E           15 44       1.5 /   45
      LMH           20        T 10.5 AN   5.2 AE   5.2             MLH  =4.*
      LMV           20.9      T 10                   AV   7.0

1978 MAY 24     NEAR EAST COAST OF KAMCHATKA                        MB=4.5 ( 6)   54.8N;161.2E  33KM H=03 20 30.5 (NEIS)
CLL E P         03 31 46                                                         D= 71.0 DEG   AZ= 19        CLL
MOX E P         03 31 53                                                         D= 71.9 DEG   AZ= 18        MOX

1978 MAY 24     GREECE                                              MB=4.3 (28)   40.7N; 23.3E  16KM H=05 57 27.0 (NEIS)
                                                                                  40.7N; 23.4E  10KM   05 57 28.8 (CSEM)
                                                                                  40.8N; 23.3E  33KM   05 57 30.4 (WDCB)
BRG E(P)        06 00 28.0                                                       D= 12.1 DEG   AZ=144        BRG
      LM            04
CLL E P         06 00 31                                                         D= 12.8 DEG   AZ=142        CLL
    E L         04 40
MOX E P         06 00 32   TRACES                                               D= 12.9 DEG   AZ=136        MOX

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=6.0 (93)   51.2N;179.2W  25KM H=06 16 55.4 (NEIS)
                                                                                  51.5N;179.5W  33KM   06 16 58.6 (WDCB)
CLL I P         06 28 48.7C 1.1 /  140                                           D= 77.3 DEG   AZ=  8        CLL
    E S             38 39                                                        DISTANCE  76 DEG
    E PPS           39 36
    E SS            44.1
    E PKPPKP        57 05
      LM        07 10       T 16   AN  27.5 AE  11   AV  32.5  MLH  =6.7 MLV  =6.8
BRG I P         06 28 50.3C 1.0 /  122                                           D= 77.7 DEG   AZ=  8        BRG
    E S             38 38.0                                                      DISTANCE  77 DEG
    E SS            44 23.0
    E PKPPKP        56 14.5
      LMH       07 03       T 20   AN  12.8 AE  29.4             MLH  =6.6
      LMV           08        T 19                   AV  26.9  MLV  =6.6
MOX I P         06 28 53.0C 1.0 /  150                              MPV  =6.0    D= 78.1 DEG   AZ=  7        MOX
                            T 14                                   AV   6.2  MPV  =6.5
    E S             38 40
    E SS            43 20
      LMH       07 10.2     T 17   AN  12.0 AE  23.5             MLH  =6.6
      LMV           11.5      T 17                   AV  25.7  MLV  =6.7

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=5.0 (45)   51.1N;179.1W  33KM H=06 33 17.6 (NEIS)
CLL I P         06 45 09.8C 1.0 /   19                                           D= 77.5 DEG   AZ=  8        CLL
BRG I P         06 45 12.2  0.9 /   16                                           D= 77.8 DEG   AZ=  8        BRG
MOX E P         06 45 14.5  0.8 /   15                              MPV  =5.1    D= 78.2 DEG   AZ=  7        MOX

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.5 ( 9)   51.2N;179.4W  33KM H=07 19 10.9 (NEIS)
MOX E P         07 31 08                                                         D= 78.1 DEG   AZ=  7        MOX

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.9 (30)   51.3N;179.3W  33KM H=07 20 54.4 (NEIS)
                                                                                  50.6N;179.1W  33KM   07 20 46.0 (WDCB)
CLL E P         07 32 46                                                         D= 77.2 DEG   AZ=  8        CLL
BRG E P         07 32 48.1  0.9 /   10                                           D= 77.6 DEG   AZ=  8        BRG
MOX E P         07 32 51                                                         D= 78.0 DEG   AZ=  7        MOX

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.8 (22)   51.2N;179.2W  33KM H=09 23 56.7 (NEIS)
                                                                                  50.8N;179.2W  33KM   09 23 54.7 (WDCB)
CLL E P         09 35 49                                                         D= 77.3 DEG   AZ=  8        CLL
BRG E P         09 35 50.9                                                       D= 77.7 DEG   AZ=  8        BRG
MOX E P         09 35 54                                                         D= 78.1 DEG   AZ=  7        MOX

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.3 ( 4)   51.4N;179.1W  33KM H=09 25 46.5 (NEIS)
CLL E P         09 37 36   TRACES                                                D= 77.2 DEG   AZ=  8        CLL

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=5.2 (77)   51.1N;179.2W  33KM H=09 53 03.4 (NEIS)
                                                                                  51.8N;179.7W  60KM   09 53 10.5 (WDCB)
CLL I P         10 04 55.8C 0.9 /   21                                           D= 77.4 DEG   AZ=  8        CLL
    I AP            05 07.2
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BRG I P         10 04 57.9C 0.9 /   18                                           D= 77.8 DEG   AZ=  8        BRG
MOX E P         10 05 00.5  0.9 /   23                                           D= 78.2 DEG   AZ=  7        MOX
      LMH           39.8      T 20   AN   0.7 AE   0.7             MPV  =5.2
      LMV           47.5      T 17                   AV   0.8  MLV  =5.1

1978 MAY 24     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.8 (22)   51.5N;179.4W  33KM H=18 54 29.8 (NEIS)
BRG E P         19 06 22.2  1.0 /    6                                           D= 77.4 DEG   AZ=  9        BRG
MOX E P         19 06 25                                                         D= 77.8 DEG   AZ=  7        MOX

1978 MAY 24     AFGHANISTAN-USSR BORDER REGION                      MB=4.7 (23)   36.5N; 71.4E  89KM H=22 13 56.4 (NEIS)
                                                                                  37.0N; 71.3E 100KM   22 14 00.8 (WDCB)
BRG E P         22 21 48.0  1.2 /   17                                           D= 42.9 DEG   AZ= 87        BRG
    E AP            22 17.3
CLL E P         22 21 52                                                         D= 43.4 DEG   AZ= 86        CLL
    E(PP)           23 47
MOX E P         22 22 01                                                         D= 44.4 DEG   AZ= 85        MOX

1978 MAY 25     ANDREANOF ISLANDS, ALEUTIAN IS.                     MB=4.5 (18)   51.2N;179.3W  33KM H=23 49 37.3 (NEIS)
                                                                                  50.8N;178.7W  33KM   23 49 35.3 (WDCB)
CLL E P         00 01 29                                                         D= 77.3 DEG   AZ=  8        CLL
BRG I P         00 01 31.2                                                       D= 77.7 DEG   AZ=  8        BRG

1978 MAY 25     SANTA CRUZ ISLANDS                                  MB=5.1 (10)   12.7S;166.7E 121KM H=00 35 09.9 (NEIS)
BRG E PKP       00 54 19.2                                                       D=135.9 DEG   AZ= 40        BRG
    E SKP           57 44.4
CLL E(PKP)      00 54 21                                                         D=136.0 DEG   AZ= 38        CLL
    E SKP           57 45

1978 MAY 25
CLL E           02 55 13

1978 MAY 25     HOKKAIDO, JAPAN, REGION                             MB=4.9 (33)   41.2N;142.2E  47KM H=02 43 33.9 (NEIS)
                                                                                  41.9N;142.1E  60KM   02 43 39.2 (WDCB)
BRG E P         02 55 30.2                                                       D= 77.8 DEG   AZ= 37        BRG
CLL E P         02 55 28                                                         D= 77.8 DEG   AZ= 37        CLL
    E               55 36
MOX E P         02 55 34                                                         D= 78.8 DEG   AZ= 36        MOX

1978 MAY 25     TONGA ISLANDS                                       /NO MB COMP./ 20.3S;175.4W 225KM H=03 22 13   (ISC)
CLL E PKP1      03 41 36                                                         D=148.4 DEG   AZ= 15        CLL
BRG E PKIKP     03 41 29.5                                                       D=148.6 DEG   AZ= 17        BRG

1978 MAY 25     NEAR COAST OF CHIAPAS, MEXICO                       MB=5.0 (12)   14.0N; 92.1W  33KM H=11 17 05.7 (NEIS)
MOX   LMH       12 11.7     T 19   AN   0.6 AE   0.5             MLH  =5.2    D= 87.8 DEG   AZ=289        MOX
      LMV           12.1      T 17                   AV   0.4  MLV  =4.9

1978 MAY 25     KURILE ISLANDS                                      MB=4.7 (17)   44.3N;149.6E  30KM H=12 41 50.7 (NEIS)
                                                                                  44.4N;149.6E  33KM   12 41 51.8 (WDCB)
CLL E P         12 53 45    0.9 /   17                                           D= 77.6 DEG   AZ= 30        CLL
BRG E P         12 53 45.6                                                       D= 77.7 DEG   AZ= 31        BRG

1978 MAY 25     MOLUCCA SEA                                         MB=5.5 (42)   0.1S;125.2E  54KM H=22 20 51.7 (NEIS)
                                                                                  0.8N;124.9E  50KM   22 20 56.1 (WDCB)
BRG I P         22 34 48.5                                                       D=103.4 DEG   AZ= 73        BRG
CLL E P         22 34 50                                                         D=103.8 DEG   AZ= 72        CLL
MOX E P         22 34 55                                                         D=104.8 DEG   AZ= 71        MOX

1978 MAY 25
CLL E           22 38 22
    E               39 09

1978 MAY 25     SOUTHEAST ASIA                                      MB=4.8 (13)   19.3N; 99.1E   8KM H=23 22 29.1 (NEIS)
                                                                                  19.2N; 99.4E  33KM   23 22 31.9 (WDCB)
BRG E P         23 33 58.0                                                       D= 72.3 DEG   AZ= 81        BRG
CLL E P         23 34 01   TRACES                                                D= 72.8 DEG   AZ= 81        CLL

1978 MAY 26     LOYALTY ISLANDS                                     MB=5.5 (13)   20.9S;168.6E  33KM H=01 41 19.8 (NEIS)
                                                                                  20.3S;170.2E  33KM   01 41 14.8 (WDCB)
BRG I PKP       02 00 51.9  1.5 /   85                                           D=144.1 DEG   AZ= 43        BRG
    I APKP          01 05.0
CLL I PKP       02 00 51.7  1.9 /  105                                          D=144.1 DEG   AZ= 41        CLL
    I APKP          01 04.7
MOX E PKP       02 00 55  D 1.6 /  137                                          D=145.2 DEG   AZ= 40        MOX
    E APKP          01 08.5  1.1 /  101                                                           DEPTH  49 KM

1978 MAY 26     HOKKAIDO, JAPAN, REGION                             MB=4.6 (15)   41.7N;141.2E 140KM H=10 19 34.9 (NEIS)
CLL E P         10 31 14                                                         D= 77.0 DEG   AZ= 37        CLL

1978 MAY 26
CLL E           11 35 08

1978 MAY 26
CLL I PKP       12 29 32.9C 1.0 /   33
BRG I PKP       12 29 33.3C

1978 MAY 26     NEAR N. COAST OF WEST IRIAN                         MB=5.3 (24)   1.8S;139.2E  33KM H=12 30 04.2 (NEIS)
                                                                                  1.6S;139.2E  33KM   12 30 00.5 (WDCB)
CLL   LM        13 41                                                            D=113.3 DEG   AZ= 61        CLL
MOX   LMH       13 41.8     T 19   AN   0.5 AE   0.4             MLH  =5.3    D=114.3 DEG   AZ= 60        MOX
      LMV           41.9      T 18                   AV   0.8  MLV  =5.4

1978 MAY 26     EASTERN CAUCASUS                                    MB=5.6 (99)   42.0N; 46.5E  38KM H=13 43 38.2 (NEIS)
                                                                                  42.0N; 46.7E  57KM   13 43 41.0 (CSEM)
                                                                                  41.9N; 46.5E  70KM   13 43 40.1 (WDCB)
BRG I P         13 48 51.4C 1.4 /  410                                           D= 24.0 DEG   AZ= 99        BRG
    I               48 56.2                                                      DISTANCE  24 DEG
    I               49 07.4
    E S             53 07.0
      LMV       14 01       T 12                   AV   1.3  MLV  =4.8
  (CONT.)
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(CONT.)

CLL I P       13 48 57.0  1.0 / 1000                                  D= 24.6 DEG   AZ= 99      CLL
    I            49 10.5                                              DISTANCE! 25 DEG
    E(PP)        49 24
    E S          53 16
    E            53 28
    E L          57 26
      LM         59
MOX E P       13 49 04    1.1 /  161                     MPV  =5.5    D= 25.4 DEG   AZ= 96      MOX
    E S          53 40
      LMH     14 00.4     T 10   AN   1.1 AE   0.8       MLH  =4.8
      LMV        00.6     T 16                AV   1.1   MLV  =4.6

1978 MAY 26
BRG I P       13 55 07.4D 1.2 /   64

1978 MAY 26   FRG, CENTRAL REGION                    NO MB COMP.
                                                                   51.3N;  9.2E( 10KM H=14 23 22.0)(CSEM)
                                                                  (50.8N;  9.1E! 10KM   14 23 23.7)(NEIS)
MOX I PG      14 23 52.0                                                  D=  7.2 DEG   AZ=280      MOX
    I SG         24 12.0                                                  DISTANCE!  1.6DEG
CLL I PG      14 24 06.1                                                  D=  8.0 DEG   AZ=275      CLL
    E SG         24 38
BRG I PG      14 24 20.0                                                  D=  8.7 DEG   AZ=278      BRG
    E SG         24 58.0

1978 MAY 26   VOLCANO ISLANDS REGION                 MB=5.0 (23)  24.3N;142.8E! 33KM! H=17 02 56.8 (NEIS)
                                                                  24.4N;142.8E! 33KM!   17 02 57.5 (WDCB)
CLL E P       17 16 06                                                  D= 92.8 DEG   AZ= 45      CLL

1978 MAY 26
CLL E         18 26 15
    E            27 09

1978 MAY 26   CZECHOSLOVAKIA
              OSTRAVA REGION                                                                      (PRU)
BRG E(PG)     19 12 48.0
    E(SG)        13 31.2
CLL E         19 13 39

1978 MAY 26   QUEEN CHARLOTTE ISLANDS REGION         MB=4.9 (18)  51.2N;130.4W  17KM H=20 01 57.8 (NEIS)
MOX   LMH     20 47.8                                                   D= 73.5 DEG   AZ=336      MOX
      LMV        50.6
BRG E P       20 13 34.1                                                D= 73.9 DEG   AZ=338      BRG

1978 MAY 26   VOLCANO ISLANDS REGION                 MB=5.1 (24)  24.5N;142.7E! 33KM! H=23 10 55.4 (NEIS)
                                                                  24.4N;142.5E! 33KM    23 10 50.3 (WDCB)
BRG E P       23 24 04.6                                                D= 92.4 DEG   AZ= 45      BRG
    E PP         27 43.7
CLL E P       23 24 04                                                  D= 92.5 DEG   AZ= 45      CLL

1978 MAY 27   VOLCANO ISLANDS REGION                 MB=5.8 (73)  24.3N;142.7E! 33KM! H=23 58 22.0 (NEIS)
                                                                  24.6N;142.5E! 50KM!   23 58 26.2 (WDCB)
BRG I P       00 11 31.3C 2.0 /   94                                    D= 92.6 DEG   AZ= 45      BRG
    E PP         15 13.6                                                DISTANCE! 92 DEG
    I SKS        22 10.0
    E S          22 37.0
    I PS         23 50.0
    I SS         28 52.0
      LMH        50       T 20   AN  13.2 AE  51.6            MLH  =7.0
      LMV     01 00       T 15                     AV  56.0   MLV  =7.1
CLL I P       00 11 31.3  1.8 /  140                                    D= 92.7 DEG   AZ= 45      CLL
    E PP         15 17    T 12   AN   1.8 AE   1.8 AV   3.5   MPPH =6.9 MPPV =6.7 DISTANCE! 93 DEG
    E            16.0
    E SKS        22 10
    E(SKKS)      22 30
    E S          22 40
    E PS         23.9
    E PPS        24 20
    E SS         28 55
      L          56       T 16   AN  21.5 AE  24.5 AV  21.5
      LM      01 01       T 16   AN  31.5 AE  16.5 AV  29     MLH  =6.9 MLV  =6.9
MOX E P       00 11 37    1.7 /   85                          MPV  =5.9     D= 93.8 DEG   AZ= 44      MOX
                          T 13                     AV   3.0   MPV  =6.6
    E            13 04
    E PP         15 28    T 10                     AV   3.6   MPPV =6.8
    E SKS        22 15
    E S          22 40    T 15            AE   7.0            MSH  =6.7
    E SS         29 00
      LMH        57.4     T 16.5 AN  25.8 AE  21.4            MLH  =6.9
      LMV     01 00.8     T 16.5                   AV  23.5   MLV  =6.7

1978 MAY 27   VOLCANO ISLANDS REGION                 MB=5.0 (19)  24.2N;142.8E! 33KM H=02 05 38.3 (NEIS)
                                                                  24.3N;142.7E  33KM    02 05 39.0 (WDCB)
BRG E P       02 18 48.0                                                D= 92.7 DEG   AZ= 45      BRG
CLL E P       02 18 48                                                  D= 92.8 DEG   AZ= 45      CLL

1978 MAY 27   ARABIAN SEA                            MB=5.2 (63)  11.0N; 57.3E  33KM H=03 36 16.0 (NEIS)
                                                                  10.9N; 57.3E! 33KM    03 36 16.0 (WDCB)
BRG I P       03 45 32.8C 1.0 /   11                                    D= 53.2 DEG   AZ=123      BRG
CLL E P       03 45 38    1.8 /   33                                    D= 53.9 DEG   AZ=122      CLL
    E AP         45 50
    E            46 21
    E            47 16
MOX E P       03 45 41.5
    E            45 51.5                                                D= 54.3 DEG   AZ=120      MOX

1978 MAY 27
BRG I PG      07 31 25.1
    I SG         31 45.8
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1978 MAY 27   NORTHEAST OF TAIWAN
CLL E P       07 46 38   TRACES                      MB=4.5 ( 7)  25.8N;124.2E! 152KM H=07 34 32.0 (NEIS)
                                                                        D= 82.4 DEG   AZ= 58      CLL
1978 MAY 27   VOLCANO ISLANDS REGION
                                                     MB=5.4 (46)  24.2N;142.8E! 33KM H=10 17 16.7 (NEIS)
BRG I P       10 30 25.8                                          24.3N;142.6E! 33KM!   10 17 17.8 (WDCB)
    E PP         34 10.0                                                D= 92.7 DEG   AZ= 45      BRG
    E PPPP       37 38.0                                                DISTANCE! 91 DEG
    E SKS        41 07.0
    E S          41 32.0
    E SS         47 57
      LMH     11 08       T 20   AN   1.7 AE   6.6            MLH  =6.1
      LMV        19       T 15                     AV   5.0   MLV  =6.3
CLL E P       10 30 27    1.9 /   45                                    D= 92.8 DEG   AZ= 45      CLL
    E PP         34 12                                                  DISTANCE! 93 DEG
    E SKS        41.1
    E SS         48.0
      LM      11 20       T 16   AN   3   AE   2   AV   3.5   MLH  =6.0 MLV  =6.0
MOX E P       10 30 32.5  2.0 /   38                          MPV  =5.5   D= 93.9 DEG   AZ= 44      MOX
    E PP         34 20
    E SKS        41 05
    E S          41 35
    E SS         48 05
      LMH     11 14.4     T 16   AN   2.7 AE   2.5            MLH  =5.9
      LMV        19.8     T 16                     AV   2.8   MLV  =5.8

1978 MAY 27   TAIWAN                                 MB=4.9 (17)  24.0N;121.8E! 33KM! H=13 44 10.7 (NEIS)
                                                                  24.9N;121.7E! 33KM!   13 44 16.7 (WDCB)
BRG E P       13 56 32.3                                                D= 82.2 DEG   AZ= 61      BRG
CLL E P       13 56 33                                                  D= 82.5 DEG   AZ= 61      CLL
    E            57 04
      LM      14 37
MOX   LMV     14 38.8     T 16                     AV   0.7   MLV  =5.4   D= 83.6 DEG   AZ= 60      MOX
      LMH        38.9     T 17   AN   0.4 AE   0.6            MLH  =5.4

1978 MAY 27   MINDANAO, PHILIPPINE ISLANDS           MB=5.2 (23)   5.8N;126.8E! 77KM! H=14 58 37.2 (NEIS)
                                                                   6.3N;126.6E! 33KM!   14 58 35.1 (WDCB)
BRG E P       15 12 13.9  1.0 /   19                                    D= 99.6 DEG   AZ= 68      BRG
CLL E P       15 12 16    1.3 /   18                                    D=100.0 DEG   AZ= 68      CLL
MOX E P       15 12 21.5  1.0 /   12                      MPV  =5.5     D=101.1 DEG   AZ= 67      MOX

1978 MAY 27   MINAHASSA PENINSULA                    MB=5.2 (28)   1.2N;124.3E! 230KM! H=16 39 42.6 (NEIS)
                                                                   1.4N;124.1E 180KM!   16 39 38.6 (WDCB)
BRG E P       16 53 10.9  1.0 /    8                                    D=101.8 DEG   AZ= 73      BRG
CLL E P       16 53 13                                                  D=102.2 DEG   AZ= 72      CLL

1978 MAY 27   POLAND, UPPER SILESIA
BRG E SG      17 24 21
CLL E SG      17 24 47

1978 MAY 27   TONGA ISLANDS                          MB=5.0 ( 6)  21.5S;174.3W  33KM! H=17 16 55.1 (NEIS)
CLL I PKP1    17 36 43.5  1.1 /   26                                    D=149.7 DEG   AZ= 14      CLL
BRG I PKP1    17 36 44.0  1.0 /   20                                    D=150.0 DEG   AZ= 15      BRG
MOX E PKHKP   17 36 45    0.8 /   19                                    D=150.5 DEG   AZ= 11      MOX

1978 MAY 27
CLL E         18 30 13

1978 MAY 27
CLL E PKP     20 45 13    1.2 /   14
BRG E PKP     20 45 13.9  0.6 /    8

1978 MAY 28   TONGA ISLANDS                          MB=4.9 ( 5)  21.6S;174.4W  33KM H=07 45 00.6 (NEIS)
CLL E PKP1    08 04 49                                                  D=149.8 DEG   AZ= 14      CLL
BRG E PKP     08 04 47.0                                                D=150.1 DEG   AZ= 16      BRG
    I            04 52.0
    E            05 01.8
MOX E PKHKP   08 04 51                                                  D=150.6 DEG   AZ= 11      MOX

1978 MAY 28   KERMADEC ISLANDS REGION                MB=4.5 ( 4)  28.9S;176.7W  68KM H=09 03 48.1 (NEIS)
CLL E PKP2    09 23 55                                                  D=156.5 DEG   AZ= 22      CLL
BRG E PKP2    09 23 59.2                                                D=156.6 DEG   AZ= 24      BRG

1978 MAY 28   POLAND, UPPER SILESIA
CLL E         14 23 34

1978 MAY 28   NORTH ATLANTIC OCEAN                   MB=4.5 (28)  57.2N; 33.6W  25KM H=19 17 07.3 (NEIS)
                                                                  57.4N; 33.4W  33KM    19 17 04.7 (WDCB)
MOX E P       19 22 48                                                  D= 27.0 DEG   AZ=302      MOX
      LMH        33.3     T 17            AE   1.0            MLH  =4.4
      LMV        33.5     T 16                     AV   0.9   MLV  =4.5
CLL E P       19 22 51                                                  D= 27.4 DEG   AZ=301      CLL.
      LM         34
BRG E(P)      19 23 02.0                                                D= 28.1 DEG   AZ=302      BRG

1978 MAY 28   OFF E. COAST OF N. ISLAND, N.Z.       /MB=4.7 ( 1)/ 38.3S;179.5E! 52KM H=21 37 55    (ISC)
BRG E PKP2    21 58 46.0                                                D=163.8 DEG   AZ= 45      BRG
CLL E PKP2    21 58 45   TRACES                                         D=163.9 DEG   AZ= 41      CLL

1978 MAY 29   NEAR N. COAST OF WEST IRIAN            MB=5.6 (31)   1.8S;139.1E! 15KM H=00 19 15.9 (NEIS)
                                                                   1.9S;139.4E! 33KM!   00 19 12.0 (WDCB)
BRG E         00 37 59.6                                                D=112.9 DEG   AZ= 62      BRG
    E PS         48 11
      LMV     01 34       T 18                     AV   2.2   MLV  =5.8
CLL E PP      00 38 40                                                  D=113.2 DEG   AZ= 61      CLL
      LM      01 34       T 16   AN   1   AE   1   AV   1.5   MLV  =5.7
MOX   LMH     01 34.4     T 17.5 AN   0.8 AE   0.7            MLH  =5.5   D=114.3 DEG   AZ= 60      MOX
      LMV        34.7     T 18                     AV   1.7   MLV  =5.7
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1978 MAY 29      OFF COAST OF NORTHERN CALIFORNIA               MB=4.5 ( 9)   40.3N;125.8W  15KM H=00 46 39.5 (NEIS)
BRG E P          00 59 04.1                                                          D= 82.6 DEG   AZ=330        BRG

1978 MAY 29
BRG E(P)         02 00 36.0

1978 MAY 29      LEEWARD ISLANDS                                MB=5.2 (66)   17.7N; 61.6W  46KM H=03 09 22.3 (NEIS)
                                                                              18.3N; 61.8W  33KM   03 09 18.1 (WDCB)
MOX E P          03 20 05    2.0 /   34                         MPV  =5.0            D= 65.9 DEG   AZ=269        MOX
      LMV           44.3     T 20                     AV   1.3  MLV  =5.2
      LMH           44.4     T 20              AE   0.9         MLH  =5.0
CLL I P          03 20 10.9D 1.4 /   52                                              D= 66.8 DEG   AZ=270        CLL
      LM            45
BRG I P          03 20 14.9D 1.1 /   36                                              D= 67.4 DEG   AZ=270        BRG
    E               21 17.0
      LM            46       T 19   AN   0.0 AE   1.1 AV   1.3  MLV  =5.2

1978 MAY 29      UNDERGROUND EXPLOSION(UPP)                     MB=4.7 (30)   49.9N; 78.2E   0KM H=04 56 57.4 (NEIS)
BRG I P          05 04 34.5                                                          D= 39.8 DEG   AZ= 65        BRG
CLL I P          05 04 36.8C 0.6 /   23                                              D= 40.2 DEG   AZ= 65        CLL
MOX E P          05 04 46.5C 0.6 /   19                         MPV  =5.0            D= 41.3 DEG   AZ= 64        MOX

1978 MAY 29      NORWEGIAN SEA                                  MB=4.2 ( 4)   66.6N;  0.9W  10KM H=06 12 54.4 (NEIS)
CLL E            06 16 59    TRACES                                                  D= 16.9 DEG   AZ=341        CLL

1978 MAY 29      KURILE ISLANDS                                 MB=4.7 (16)   44.3N;149.6E  33KM H=06 25 02.2 (NEIS)
CLL I P          06 36 56.0  0.8 /   17                                              D= 77.6 DEG   AZ= 30        CLL
MOX E P          06 37 03    1.0 /    8                         MPV  =4.7            D= 78.6 DEG   AZ= 29        MOX

1978 MAY 29
CLL E P          10 43 56  C

1978 MAY 29
BRG E(P)         10 54 34.9
CLL E            10 54 35    TRACES

1978 MAY 29      OFF EAST COAST OF HONSHU, JAPAN                MB=4.6 ( 8)   40.8N;144.7E  21KM H=13 16 08.2 (NEIS)
CLL E P          13 28 12    TRACES                                                  D= 79.1 DEG   AZ= 35        CLL

1978 MAY 29      KURILE ISLANDS                                 MB=4.8 (13)   44.3N;149.5E  38KM H=15 03 22.7 (NEIS)
                                                                              44.4N;149.7E  33KM   15 03 17.3 (WDCB)
CLL E P          15 15 16                                                            D= 77.6 DEG   AZ= 30        CLL
BRG E(P)         15 15 16.8                                                          D= 77.7 DEG   AZ= 31        BRG

1978 MAY 29
CLL E            15 24 13

1978 MAY 29      KURILE ISLANDS                                 MB=4.6 ( 4)   44.4N;149.5E  33KM H=15 45 10.1 (NEIS)
CLL E P          15 57 04                                                            D= 77.5 DEG   AZ= 30        CLL

1978 MAY 29      OFF COAST OF SOUTHERN CHILE                    MB=5.5 (14)   44.9S; 79.4W  33KM H=17 20 28.6 (NEIS)
MOX E            17 39 30                                                            D=123.4 DEG   AZ=238        MOX
    E PP            41 16
    E PS            51 00
    E SS            58 20
    E SSS        18 02 50
    E LH            12 00
    E LV            19 40
      LMH           34       T 18.5            AE   1.2         MLH  =5.6
      LMV           34       T 18.5                   AV   1.6  MLV  =5.7
CLL E(PKP)       17 39 34                                                            D=124.5 DEG   AZ=239        CLL
    E(PP)           41 24
      LM         18 35       T 17   AN   1   AE   1   AV   1.5  MLH  =5.7
BRG E            17 39 33.3                                                          D=124.8 DEG   AZ=240        BRG
    E PP            41 26
    E PS            51 24
      LM         18 36       T 18                     AV   1.1  MLV  =5.6

1978 MAY 29      SICILY                                                       36.4N; 15.0E  10KM H=18 47 15.5 (CSEM)
CLL E P          18 50 46                                                            D= 15.0 DEG   AZ=174        CLL

1978 MAY 29      MARIANA ISLANDS                                MB=5.3 (38)   14.7N;146.8E  29KM H=19 26 54.8 (NEIS)
BRG E            19 44 50.7                                                          D=102.8 DEG   AZ= 47        BRG
CLL E PP         19 45 06                                                            D=102.9 DEG   AZ= 46        CLL
MOX E PP         19 45 15    1.4 /   12                         MPPV =5.2            D=104.0 DEG   AZ= 45        MOX

1978 MAY 29      SOUTH OF FIJI ISLANDS                          MB=5.1 ( 7)   23.1S;179.7W 586KM H=22 36 38.7 (NEIS)
CLL I PKP1       22 55 28.8  1.0 /   24                                              D=150.2 DEG   AZ= 24        CLL
    E APKP          57 40
BRG I PKP1       22 55 29.0  0.9 /   14                                              D=150.3 DEG   AZ= 26        BRG
    E APKP          57 40.7
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1978 MAY 30      SICHUAN PROVINCE, CHINA                        MB=4.9 (33)   32.8N;104.4E  33KM H=03 57 37.9 (NEIS)
                                                                              32.7N;104.4E  33KM   03 57 37.1 (WDCB)
BRG E P          04 08 20.0                                                          D= 65.6 DEG   AZ= 68        BRG
CLL E P          04 08 22                                                            D= 66.0 DEG   AZ= 67        CLL

1978 MAY 30      KURILE ISLANDS                                 MB=5.4 (64)   44.5N;149.2E  33KM H=06 57 50.0 (NEIS)
                                                                              44.4N;149.3E  33KM   06 57 49.4 (WDCB)
CLL I P          07 09 42.2C 1.1 /  130                                              D= 77.3 DEG   AZ= 31        CLL
BRG I P          07 09 42.9C 1.0 /   52                                              D= 77.4 DEG   AZ= 31        BRG
MOX E P          07 09 48  C 1.4 /   72                         MPV  =5.5            D= 78.3 DEG   AZ= 30        MOX
      LMH           47
      LMV           48

1978 MAY 30      SOLOMON ISLANDS                                MB=4.9 ( 7)   10.1S;161.2E  53KM H=08 03 11.4 (NEIS)
BRG E SKP        08 25 42.2                                                          D=131.3 DEG   AZ= 45        BRG
CLL E SKP        08 25 41                                                            D=131.4 DEG   AZ= 44        CLL

1978 MAY 30      SOUTH OF FIJI ISLANDS                          MB=4.4 ( 1)   26.9S;177.5W 127KM H=13 04 55.6 (NEIS)
CLL E PKP1       13 24 42                                                            D=154.4 DEG   AZ= 22        CLL
BRG I PKP1       13 24 42.7                                                          D=154.5 DEG   AZ= 24        BRG
    E PKP2          24 56.8

1978 MAY 30      TAIWAN REGION                                  MB=5.0 (15)   24.4N;122.0E   2KM H=15 09 04.5 (NEIS)
                                                                              24.6N;122.1E  33KM   15 09 10.6 (WDCB)
BRG E P          15 21 33.4                                                          D= 82.0 DEG   AZ= 61        BRG
CLL E(P)         15 21 32                                                            D= 82.3 DEG   AZ= 60        CLL

1978 MAY 30      SAMOA ISLANDS REGION                           MB=5.1 (15)   15.3S;172.9W  38KM H=18 57 42.2 (NEIS)
                                                                              14.6S;172.9W  33KM   18 57 37.8 (WDCB)
CLL E PKP        19 17 19                                                            D=143.8 DEG   AZ= 10        CLL
    E(PP)           20 29
BRG E PKP        19 17 13.8                                                          D=144.1 DEG   AZ= 11        BRG
MOX E PKP        19 17 14    1.6 /   22                                              D=144.6 DEG   AZ=  8        MOX

1978 MAY 30      ARABIAN SEA                                    MB=5.3 (75)   11.1N; 57.3E  33KM H=20 17 15.2 (NEIS)
                                                                              10.9N; 57.3E  33KM   20 17 14.3 (WDCB)
BRG I P          20 26 31.0D 1.3 /   29                                              D= 53.1 DEG   AZ=123        BRG
    E PP            28 36.2                                                          DISTANCE  52 DEG
    I S             34 05.0
    I SCS           36 26.0
    E SS            37 44
      LMH           51       T 20   AN   1.1 AE   2.2           MLH  =5.2
      LMV           54       T 17                     AV   2.7  MLV  =5.4
CLL I P          20 26 36.8                                                          D= 53.9 DEG   AZ=122        CLL
    E               26 39    1.8 /  130
    E               26 51
    E               30.0
    E S             34 10
      LM            54       T 13   AN   1.5 AE   1.5 AV   2    MLH  =5.4 MLV  =5.5
MOX E P          20 26 40    1.6 /   55                         MPV  =5.3            D= 54.3 DEG   AZ=120        MOX
    E S             34 15
    E PS            34 50
    E SS            38 20
      LMV           53.2     T 17                     AV   2.2  MLV  =5.4
      LMH           53.6     T 16              AE   2.0         MLH  =5.3

1978 MAY 31
CLL E            00 42 41    TRACES

1978 MAY 31      NEAR COAST OF NICARAGUA                        MB=5.4 (81)   12.8N; 87.2W  76KM H=01 07 22.4 (NEIS)
                                                                              12.1N; 87.6W  33KM   01 07 09.5 (WDCB)
MOX E P          01 19 53.5  1.6 /   50                         MPV  =5.3            D= 85.7 DEG   AZ=285        MOX
    E AP            20 14    2.5 /  284                                                          DEPTH  78 KM
    E PP            23 20    3.0 /  171                         MPPV =6.0
                             T  4                     AV   0.6  MPPV =6.4
    E APP           23 38    2.8 /  322
                             T  5                     AV   1.0
    E SKS           30 14
    E PS            31 33
      LMV           52.7     T 22                     AV   9.4  MLV  =6.2  (NO DEPTH CORRECTION)
      LMH           52.9     T 22   AN   6   AE   7.3           MLH  =6.1  (NO DEPTH CORRECTION)
CLL I P          01 19 57.6  1.8 /   62                                              D= 86.4 DEG   AZ=286        CLL
    I AP            20 17.9                                                          DISTANCE  89 DEG  DEPTH  75 KM
    E               20 57
    E               22 09
    E               23 10
    E PP            23 26
    E APP           23 42
    E SKS           30 24
    E PS            31 40
    E PKKP1         37 54
      LM            53       T 21   AN   4.5 AE   5   AV   5    MLH  =6.0 MLV  =5.9 (NO DEPTH CORRECTION)
BRG E P          01 20 00.4C 1.6 /   37                                              D= 87.1 DEG   AZ=287        BRG
    I AP            20 21.4                                                          DISTANCE  88 DEG  DEPTH  75 KM
    E PP            23 31.0
    E APP           23 48.3
    I SKS           30 20.0
    E PKKP1         37 53.0
    E PKPPKP        46 08.5
      LM            54       T 20   AN   3.5 AE   3.6 AV   5.5  MLH  =5.9 MLV  =6.0 (NO DEPTH CORRECTION)

1978 MAY 31      TONGA ISLANDS REGION                          .MB=4.6 ( 4)   22.5S;174.7W( 33KM H=02 10 08.6)(NEIS)
CLL E PKP1       02 29 59    1.9 /   47                                              D=150.6 DEG   AZ= 15        CLL
    E               31 12
BRG E PKP1       02 29 59.3  1.4 /   24                                              D=150.9 DEG   AZ= 17        BRG
    I PKP2          30 07.1
    E               31 13.0
MOX E PKHKP      02 30 01    1.8 /   30                                              D=151.5 DEG   AZ= 12        MOX
    E PKP2          30 08
```

1978 MAY 31	MINDANAO, PHILIPPINE ISLANDS	MB=5.2 (19)	7.6N;126.5E 144KM H=02 26 31.8 (NEIS)	
			7.5N;126.6E 33KM 02 26 18.3 (WDCB)	
BRG E P	02 39 53.2 1.0 / 12		D= 98.0 DEG AZ= 68	BRG
E PP	43 56.0			
CLL E P	02 39 54		D= 98.4 DEG AZ= 67	CLL
1978 MAY 31				
CLL E	02 43 26			
1978 MAY 31	POLAND, UPPER SILESIA			
BRG I PN	02 55 20.6		DISTANCE 3.5DEG	
E PG	55 33.6			
E SG	56 17.0			
CLL E PG	02 55 46			
E SG	56 39			
MOX E SG	02 57 02			
1978 MAY 31				
CLL E	03 10 14			
1978 MAY 31				
BRG E(P)	07 31 48.3			
E	32 22.0			
1978 MAY 31				
CLL E	09 37 44			
1978 MAY 31	POLAND, UPPER SILESIA			
CLL E SG	15 15 01			
1978 MAY 31				
BRG E(P)	17 01 38.0			
1978 MAY 31	HINDU KUSH REGION	MB=4.4 (13)	35.7N; 69.5E 109KM H=17 24 30.6 (NEIS)	
BRG I P	17 32 15.3		D= 42.2 DEG AZ= 89	BRG
1978 MAY 31	SOUTH OF FIJI ISLANDS	/MB=4.7 (1)/	22.1S;177.5W 550KM H=18 45 27	(ISC)
CLL E PKP1	19 04 18		D=149.7 DEG AZ= 20	CLL
BRG E PKP1	19 04 20.0		D=149.9 DEG AZ= 22	BRG
1978 MAY 31	OFF EAST COAST OF HONSHU, JAPAN	MB=4.6 (6)	33.1N;141.0E 49KM H=22 29 35.2 (NEIS)	
BRG E P	22 42 03.0		D= 84.3 DEG AZ= 42	BRG
CLL E P	22 42 03		D= 84.3 DEG AZ= 42	CLL
1978 MAY 31				
CLL E	23 03 28			
1978 MAY 31				
CLL E	23 18 06			

1978 JUN 01	TAJIK-SINKIANG BORDER REGION	MB=4.7 (52)	38.3N; 74.0E 150KM H=01 04 34.8 (NEIS)	
			38.5N; 73.8E 150KM 01 04 36.7 (WDCB)	
BRG I P	01 12 24.8 0.7 / 21		D= 43.4 DEG AZ= 83	BRG
E AP	12 58.2			
CLL I P	01 12 28.6C 0.6 / 20			
E PP	14 19		D= 44.0 DEG AZ= 83	CLL
MOX E P	01 12 36.5 0.8 / 8			
E AP	13 10	MPV =4.4	D= 44.9 DEG AZ= 81	MOX
			DEPTH 155 KM	
1978 JUN 01				
CLL E	02 27 05			
1978 JUN 01	CHAGOS ARCHIPELAGO REGION	MB=5.3 (61)	7.1S; 68.0E 33KM H=04 29 25.8 (NEIS)	
			7.1S; 68.1E 33KM 04 29 19.9 (WDCB)	
BRG E P	04 41 01.8 1.2 / 38		D= 74.1 DEG AZ=123	BRG
LM	05 37 T 17 AN 1.0 AE 0.3 AV 1.3 MLV =5.3			
CLL I P	04 41 06.1C 1.7 / 90			
E	43 37		D= 74.8 DEG AZ=123	CLL
LM	05 36			
MOX I P	04 41 08.0C			
E PP	43 40		D= 75.2 DEG AZ=121	MOX
E S	50 40			
E SS	55 30			
LM	05 36.4 T 18 AN 0.5 AE 0.7 AV 0.9 MLH =5.1 MLV =5.2			
1978 JUN 01	PAKISTAN	/MB=4.4 (3)/	29.8N; 66.3E 35KM H=08 19 52.4	(ISC)
BRG E(P)	08 27 58.5 0.8 / 11		D= 44.0 DEG AZ= 98	BRG
1978 JUN 01	SOUTH OF FIJI ISLANDS	MB=4.9 (14)	23.6S;179.9W 524KM H=09 03 49.9 (NEIS)	
CLL I PKP1	09 22(44) D 1.0 / 18		D=150.6 DEG AZ= 25	CLL
BRG I PKP1	09 22 43.1 0.8 / 14		D=150.7 DEG AZ= 27	BRG
1978 JUN 01				
CLL E	11 06 16 1.0 / 18			
1978 JUN 01	NEAR N. COAST OF WEST IRIAN	/NO MB COMP./	1.7S;139.1E 33KM H=11 36 41	(ISC)
BRG E PP	11 56 22.6		D=112.8 DEG AZ= 62	BRG
1978 JUN 01	SOUTH OF KERMADEC ISLANDS	/MB=4.9 (2)/	32.9S;176.8W 12KM H=19 21 07	(ISC)
CLL E	19 42 08 TRACES		D=150.3 DEG AZ= 25	CLL
BRG E	19 41 56.5		D=160.4 DEG AZ= 28	BRG
1978 JUN 01	KURILE ISLANDS	MB=4.8 (43)	44.4N;149.2E 33KM H=23 37 12.1 (NEIS)	
			44.2N;149.4E 33KM 23 37 10.3 (WDCB)	
CLL I P	23 49 04.7 1.2 / 31		D= 77.4 DEG AZ= 31	CLL
BRG E P	23 49 05.7 1.0 / 11		D= 77.5 DEG AZ= 31	BRG
MOX E P	23 49 11 1.0 / 16	MPV =5.0	D= 78.4 DEG AZ= 30	MOX
1978 JUN 02				
CLL E	04 08 19			
1978 JUN 02				
CLL E	08 25 08			
1978 JUN 02	ADMIRALTY ISLANDS REGION	MB=5.9 (70)	1.1S;146.5E 22KM H=11 30 06.2 (NEIS)	
			0.7S;146.6E 50KM 11 30 11.3 (WDCB)	
BRG I PDIF	11 45 03.0		D=116.3 DEG AZ= 55	BRG
I PKP	48 49.6 1.1 / 25			
E PP	49 56.0			
E SKS	59 38			
LM	12 42 T 18 AV 1.3 MLV =5.6			
CLL E PDIF	11 45 04		D=116.5 DEG AZ= 54	CLL
I PKP	48 49.8 1.0 / 19			
E	49 42			
E PP	50 08			
E PPP	52 26			
E(PS)	59 30			
LM	12 40			
MOX E PKP	11 48 52 1.0 / 14		D=117.6 DEG AZ= 53	MOX
E PP	50 05			
E PS	59 52			
E PPS	12 01 00			
E SS	06 25			
LMH	31.6 T 22 AN 1.1 AE 0.5 MLH =5.5			
LMV	38.7 T 24 AV 1.0 MLV =5.4			
1978 JUN 02	NORTH OF ASCENSION ISLAND	MB=4.9 (39)	4.4S; 12.3W 21KM H=12 44 48.3 (NEIS)	
			4.1S; 12.1W 33KM 12 44 47.2 (WDCB)	
MOX E P	12 54 45.5 2.0 / 51	MPV =5.3	D= 58.6 DEG AZ=208	MOX
LM	13 20.6 T 16 AN 0.5 AV 0.6 MLH =4.7 MLV =4.8			
BRG E P	12 54 52.0 1.3 / 13		D= 59.5 DEG AZ=211	BRG
CLL E P	12 54 54		D= 59.6 DEG AZ=210	CLL
E PP	57 03			
1978 JUN 02	ALASKA PENINSULA	MB=4.4 (24)	54.2N;162.5W 21KM H=16 23 45.1 (NEIS)	
CLL E P	16 35 25		D= 74.8 DEG AZ=357	CLL
BRG E P	16 35 27.2 0.9 / 10		D= 75.3 DEG AZ=358	BRG
MOX E P	16 35 29 1.0 / 12	MPV =4.9	D= 75.4 DEG AZ=356	MOX
1978 JUN 02	NORTH ATLANTIC RIDGE	MB=4.4 (28)	43.8N; 28.6W 10KM H=19 17 06.0 (NEIS)	
			43.7N; 28.4W 10KM 19 17 09.4 (CSEM)	
CLL E P	19 23 05		D= 28.7 DEG AZ=271	CLL
LM	33			
1978 JUN 02	VANCOUVER ISLAND REGION	MB=5.1 (75)	50.3N;127.7W 21KM H=20 41 43.7 (NEIS)	
			50.3N;128.3W 33KM 20 41 40.4 (WDCB)	
CLL E P	20 53 18 1.3 / 22		D= 73.4 DEG AZ=335	CLL
E	53 38			
E	54 09			
E S	21 02 48			
LM	29 T 16 AN 1 AE 0.5 AV 1 MLH =5.2 MLV =5.2			

(CONT.)

(CONT.)
D= 73.6 DEG AZ=334 MOX
MOX E P 20 53 19
E S 21 02 50
E PS 03 25
E SS 07 30
E SSS 11 20
LMH 30.0 T 15 AN 0.5 AE 0.6 MLH =5.0
LMV 31.1 T 16 AV 0.8 MLV =5.1
D= 74.0 DEG AZ=336 BRG
BRG I P 20 53 22.3C 1.0 / 20 DISTANCE 74 DEG
E 54 12.0
E S 21 02 55.0
E SS 07 38.0
LM 29 T 13 AN 0.2 AE 0.7 AV 1.5 MLH =5.2 MLV =5.5

1978 JUN 02 GREECE MB=4.6 (46) 40.7N; 23.2E 19KM H=22 31 24.4 (NEIS)
40.8N; 23.3E 20KM 22 31 27.1 (CSEM)
40.8N; 23.1E 33KM 22 31 22.4 (WDCB)
D= 12.0 DEG AZ=144 BRG
BRG E P 22 34 18.0 DISTANCE 12 DEG
LM 38 T 11 AN 1.0 AE 2.2 AV 3.4 MLH =4.5
D= 12.7 DEG AZ=142 CLL
CLL I P 22 34 25.7
E PPP 34 42
E 35 44
E 38 32
LM 39 T 11 AN 2.5 AE 3 AV 2 MLH =4.7
MOX E P 22 34 27 1.6 / 22 MPV =5.1 D= 12.8 DEG AZ=136 MOX
E S 37 06
LMH 38.8 T 12 AN 5.0 AE 5.0 MLH =4.9
LMV 39.8 T 12 AV 2.5

CLL INTERRUPTION OF ONE LONGPERIODIC RECORD FROM 23H 20M TO 07H 17M (AT JUN 05)

1978 JUN 03
MOX E SG 00 19 58

1978 JUN 03 FIJI ISLANDS REGION MB=5.1 (13) 21.3S;179.2W 634KM H=02 54 32.2 (NEIS)
CLL I PKP1 03 13 11.1 1.2 / 35 D=148.6 DEG AZ= 22 CLL
I PKP2 13 17.0
BRG E PKIKP 03 13 05.2 D=148.7 DEG AZ= 24 BRG
I PKP1 13 11.2
I PKP2 13 17.7
MOX E PKHKP 03 13 13.5 1.0 / 24 D=149.5 DEG AZ= 20 MOX
E PKP2 13 20

1978 JUN 03 SOUTH PACIFIC CORDILLERA NO MB COMP. 57.1S;140.9W 33KM H=04 57 12.5 (NEIS)
58.5S;142.5W 33KM 04 57 19.6 (WDCB)
MOX LMH 06 38.0 T 20 AN 1.0 AE 1.1 MLH =5.7 D=162.6 DEG AZ=238 MOX
LMV 41.8 T 16 AV 1.1 MLV =5.8
CLL E(PKP) 05 17 29 D=163.7 DEG AZ=239 CLL
E APKP2 18 23
BRG E 05 17 30.0 D=164.0 DEG AZ=237 BRG

1978 JUN 03 POLAND, UPPER SILESIA
CLL E SG 09 34 37
MOX E SG 09 35 10

1978 JUN 03 KURILE ISLANDS MB=4.6 (15) 44.6N;146.6E 150KM H=09 34 37.5 (NEIS)
CLL E P 09 46 13 D= 76.4 DEG AZ= 32 CLL

1978 JUN 03 VANCOUVER ISLAND REGION MB=4.6 (12) 50.3N;127.6W 30KM H=11 54 39.1 (NEIS)
CLL E P 12 06 11 D= 73.4 DEG AZ=335 CLL
BRG E P 12 06 14.3 D= 74.0 DEG AZ=335 BRG

1978 JUN 03
CLL E 18 03(11)

1978 JUN 03 SOUTH OF PANAMA MB=4.9 (15) 6.2N; 82.3W 33KM H=18 49 54.6 (NEIS)
MOX E(P) 19 02 43 TRACES D= 87.7 DEG AZ=277 MOX
CLL E P 19 02(47) D= 88.5 DEG AZ=278 CLL
BRG E(P) 19 02 50.0 D= 89.2 DEG AZ=279 BRG

1978 JUN 03 SOUTHERN HONSHU, JAPAN MB=5.2 (71) 35.1N;132.6E 4KM H=20 03 52.5 (NEIS)
35.4N;132.7E 33KM 20 03 57.4 (WDCB)
BRG I P 20 15 59.0C D= 78.8 DEG AZ= 47 BRG
E S 25 54.0 DISTANCE 78 DEG
LMH 48 T 16 AN 3.2 AE 6.8 MLH =6.1
LMV 54 T 15 AV 6.6 MLV =6.1
CLL I P 20 15(57)
E 15(59) C 1.2 / 75 D= 79.0 DEG AZ= 47 CLL
E S 26.1
LMH 50 T 14 AN 5.5 AE 4 MLH =6.1
MOX E P 20 16 05 1.7 / 36 MPV =5.1
E S 26 10 D= 80.1 DEG AZ= 46 MOX
LMH 51.1 T 14 AN 5.3 MLH =6.0
LMV 55.5 T 14 AV 3.4 MLV =5.9

1978 JUN 03 SOUTHERN HONSHU, JAPAN MB=4.9 (16) 35.2N;132.7E 19KM H=21 03 11.5 (NEIS)
35.8N;132.4E 33KM 21 03 18.1 (WDCB)
BRG E(P) 21 15 19.8 D= 78.8 DEG AZ= 47 BRG
CLL E P 21 15(15) 1.1 / 16 D= 78.9 DEG AZ= 46 CLL

1978 JUN 03 SOUTHERN HONSHU, JAPAN MB=5.2 (43) 35.1N;132.6E 5KM H=21 20 56.8 (NEIS)
34.9N;132.8E 33KM 21 20 52.8 (WDCB)
BRG E P 21 33 02.0 D= 78.8 DEG AZ= 47 BRG
LMH 22 06 T 16 AN 1.4 AE 2.8
LMV 11 T 15 AV 2.7 MLV =5.7
CLL I P 21 33(02) C 1.3 / 26
E 34(57) D= 79.0 DEG AZ= 47 CLL
E PP 36(03)
LMH 22 05 T 16 AN 2 AE 2
MOX E P 21 33 08 MLH =5.6
LMH 22 08.9 T 14 AN 2.3 D= 80.1 DEG AZ= 46 MOX
LMV 12.6 T 16 MLH =5.5
AV 1.6 MLV =5.3

1978 JUN 03
CLL E 21 44(59)
MOX E(P) 21 45 05 TRACES

1978 JUN 04 GULF OF CALIFORNIA MB=4.3 (5) 23.7N;108.1W 33KM H=23 54 29.1 (NEIS)
MOX LMH 00 49.0 T 20 AN 0.4 MLH =4.8 D= 88.9 DEG AZ=307 MOX
LMV 49.8 T 16 AV 0.3 MLV =4.9

1978 JUN 04 AROE ISLANDS REGION MB=5.2 (12) 5.0S;133.8E 33KM H=03 48 43.1 (NEIS)
MOX LMH 04 52.5 T 20 AN 0.6 AE 0.5 MLH =5.3 D=113.9 DEG AZ= 67 MOX

1978 JUN 04 PHILIPPINE ISLANDS REGION MB=5.2 (38) 19.3N;121.2E 48KM H=09 50 32.0 (NEIS)
19.3N;121.5E 33KM 09 50 29.6 (WDCB)
BRG E P 10 03 07.5D 1.2 / 15 D= 85.6 DEG AZ= 65 BRG
E S 13 37.0 DISTANCE 85 DEG
LM 44 T 16 AN 0.0 AE 0.6 AV 1.0 MLH =5.1 MLV =5.3
CLL E P 10 03(08) D= 85.9 DEG AZ= 64 CLL
E SKS 13.6
LMH 47
MOX E P 10 03(15) D= 87.0 DEG AZ= 63 MOX
E S 13 40
E PS 14 40
LM 47.8 T 16 AN 1.1 AV 1.0 MLH =5.4 MLV =5.3

1978 JUN 04 ALASKA PENINSULA /MB=4.0 (20)/ 56.6N;161.0W(247KM H=12 06 40) (ISC)
CLL I P 12 17(53) C 1.0 / 17 D= 72.3 DEG AZ=357 CLL
BRG E P 12 17 56.4C 1.1 / 14 D= 72.8 DEG AZ=357 BRG
MOX E(P) 12 17 44 D= 72.9 DEG AZ=356 MOX
E 17 57.5 1.4 / 21

1978 JUN 04 NEAR EAST COAST OF HONSHU, JAPAN MB=5.0 (36) 36.5N;141.0E 50KM H=18 40 07.6 (NEIS)
36.6N;140.9E 50KM 18 40 08.2 (WDCB)
BRG E P 18 52 20.3 0.9 / 12 D= 81.3 DEG AZ= 41 BRG
CLL I P 18 52(20) 1.0 / 15 D= 81.4 DEG AZ= 40 CLL
E 52(34)
MOX E P 18 52 26 TRACES D= 82.5 DEG AZ= 39 MOX
E AP 52 40 DEPTH 50 KM

1978 JUN 04 UZBEK SSR MB=6.0(108) 40.4N; 63.6E 33KM H=19 30 23.4 (NEIS)
40.6N; 63.7E 33KM 19 30 18.1 (WDCB)
BRG I P 19 37 20.4C 1.2 / 366 D= 35.6 DEG AZ= 87 BRG
I PP 38 40.6 DISTANCE 36 DEG
I PCP 39 47.4
E S 43 03.0
E SS 45 26.0
LM 56 T 11 AN 2.8 AE 12.6 AV 17.5 MLH =5.9 MLV =6.2
CLL I P 19 37 24.5 1.5 / 390 D= 36.2 DEG AZ= 87 CLL
I 37 35.0 DISTANCE 36 DEG
E PP 38 39
E(PCP) 39 44
E(S) 43.2
E SS 45.6
LMH 55 T 12 AN 10 AE 10.5 MLH =6.0
FINAL 21
MOX I P 19 37 32.5C 1.5 / 251 MPV =6.1 D= 37.1 DEG AZ= 85 MOX
E PP 38 53
E S 43 25
E SS 45 08
E LH 47 55
LM 57.5 T 11.5 AN 7.6 AE 9.0 AV 13.8 MLH =5.9 MLV =6.1

1978 JUN 04
CLL E 23 48 44

1978 JUN 05 UZBEK SSR MB=4.5 (10) 40.3N; 63.6E 33KM H=00 37 24.2 (NEIS)
BRG E P 00 44 21.8 D= 35.7 DEG AZ= 88 BRG

1978 JUN 05 EASTERN SIBERIA MB=5.1 (35) 60.1N;160.3E 33KM H=07 05 56.3 (NEIS)
60.2N;160.1E 33KM 07 05 52.8 (WDCB)
CLL E P 07 16 41 D= 65.9 DEG AZ= 17 CLL
E 16 45 1.2 / 31
BRG E P 07 16 42.3 0.9 / 14 D= 66.1 DEG AZ= 18 BRG
MOX E P 07 16 46 D= 66.7 DEG AZ= 16 MOX
E 16 49 1.8 / 34

1978 JUN 05 EASTERN SIBERIA MB=4.6 (15) 60.2N;160.4E 33KM H=21 01 38.1 (NEIS)
60.2N;160.4E 33KM 21 01 38.1 (WDCB)
CLL E(P) 21 12 24 D= 65.8 DEG AZ= 17 CLL

1978 JUN 05 DOMINICAN REPUBLIC REGION MB=4.6 (5) 19.8N; 70.6W 33KM H=22 11 19.5 (NEIS)
BRG E(P) 22 22 44.7 D= 71.5 DEG AZ=279 BRG

1978 JUN 06 NEAR EAST COAST OF KAMCHATKA MB=5.4 (85) 51.2N;157.6E 66KM H=03 58 33.0 (NEIS)
51.6N;157.3E 33KM 03 58 31.7 (WDCB)
CLL I P 04 09 59.7C 1.2 / 42 D= 73.5 DEG AZ= 22 CLL
E AP 10 26
E S 19.6
LM 47 T 16 AN 1 AE 1 AV 1.5 MLV =5.4 (NO DEPTH CORRECTION)
D= 73.7 DEG AZ= 23 BRG
BRG E P 04 10 00.6 1.5 / 26
LM 48 T 16 AN 0.7 AE 1.4 AV 2.8 MLH =5.4 MLV =5.7 (NO DEPTH CORRECTION)
MPV =5.3 D= 74.5 DEG AZ= 21 MOX
MOX E P 04 10 05.5C 2.2 / 93
E 10 32
E S 19 30
LM 48.1 T 17 AN 1.1 AV 1.3 MLH =5.2 MLV =5.4 (NO DEPTH CORRECTION)

1978 JUN 06 TONGA ISLANDS MB=4.7 (5) 20.0S;175.5W 267KM H=10 52 59.0 (NEIS)
CLL E PKP1 11 12 16 D=148.0 DEG AZ= 15 CLL

1978 JUN 06 FRANCE /NO MB COMP./ 46.6N; 2.8E 5KM H=23 23 06.0 (ISC)
CLL E 23 32 47 D= 8.2 DEG AZ=239 CLL

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1978 JUN 07
CLL E           00 00 32
MOX E P         00 00 37,5

1978 JUN 07     TONGA ISLANDS REGION                          MB=4,1 ( 1)   22,4S;174,8W  33KM H=00 17 59,5 (NEIS)
CLL E PKP1      00 37 49                                                    D=150,5 DEG   AZ= 15       CLL
     E          38 04                                                       D=150,8 DEG   AZ= 17       BRG
BRG E PKIKP     00 37 44,6
     E PKP2     38 04,0                                                     D=151,4 DEG   AZ= 12       MOX
MOX E PKHKP     00 37 52

1978 JUN 07
BRG E(P)        01 07 24,0
CLL E           01 07 48   TRACES

1978 JUN 07     CENTRAL YUGOSLAVIA                                          NO MB COMP.   43,2N; 18,8E  10KM H=02 40 38,9 (NEIS)
BRG E SN        02 44 18,8                                                                D=  8,4 DEG   AZ=155       BRG
MOX E SG        02 45 39                                                                  D=  8,9 DEG   AZ=144       MOX
CLL E           02 45 03                                                                  D=  9,0 DEG   AZ=152       CLL

1978 JUN 07     KERMADEC ISLANDS                                            MB=5,1 ( 8)   30,4S;178,2W 127KM H=04 37 15,5 (NEIS)
CLL E PKP2      04 57 27                                                                  D=157,5 DEG   AZ= 26       CLL
BRG E PKP2      04 57 28,0  0,9 /   11                                                    D=157,6 DEG   AZ= 29       BRG
     I          57 38,4

1978 JUN 07     HOKKAIDO, JAPAN, REGION                                     MB=4,9 (51)   42,2N;142,9E  69KM H=05 41 38,7 (NEIS)
                                                                                          42,3N;143,1E 100KM    05 41 41,3 (WDCB)
CLL I P         05 53 26,2C 0,9 /   22                                                    D= 77,2 DEG   AZ= 36       CLL
     E AP       53 48
BRG E P         05 53 26,2                                                  MPV  =4,8     D= 77,2 DEG   AZ= 36       BRG
MOX E P         05 53 32,5  2,0 /   26                                                    D= 78,2 DEG   AZ= 35       MOX

1978 JUN 07     SOLOMON ISLANDS                                             MB=5,0 ( 2)    8,3S;158,5E 521KM H=05 53 39,6 (NEIS)
MOX   LM        06 50,1     T 16   AN   0,2          AV   0,3                          D=129,7 DEG   AZ= 45       MOX

1978 JUN 07     LIBYA                                                       MB=4,1 ( 8)   25,8N; 15,1E  33KM H=07 21 21,5 (NEIS)
MOX E           07 27 07                                                                  D= 25,0 DEG   AZ=173       MOX
     LMH        37,2        T 16   AN   0,2 AE   0,4          MLH  =4,3
BRG E P         07 26 45,5  1,2 /   14                                                    D= 25,1 DEG   AZ=178       BRG
CLL E P         07 26 51                                                                  D= 25,5 DEG   AZ=176       CLL

1978 JUN 07     TAIWAN REGION                                               MB=4,5 ( 5)   21,8N;121,3E  33KM H=07 29 43,3 (NEIS)
CLL E P         07 42 12                                                                  D= 84,0 DEG   AZ= 63       CLL
     E AP       42 24

1978 JUN 07     ECUADOR                                                     MB=4,9 (27)    0,7S; 78,3W  12KM H=08 00 34,2 (NEIS)
CLL E P         08 13 44                                                                  D= 91,4 DEG   AZ=271       CLL
BRG E P         08 13 46,0                                                                D= 92,0 DEG   AZ=271       BRG

1978 JUN 07     SOUTH OF FIJI ISLANDS                                      /MB=4,8 ( 1)/  23,5S;179,5E 548KM H=08 05 02,3  (ISC)
CLL I PKP1      08 23 54,1D 0,9 /   27                                                    D=150,3 DEG   AZ= 26       CLL
BRG I PKP1      08 23 53,4D 0,8 /   19                                                    D=150,5 DEG   AZ= 28       BRG

1978 JUN 07     NICOBAR ISLANDS REGION                                      MB=5,0 (53)    6,3N; 94,2E  33KM H=10 26 19,9 (NEIS)
                                                                                           6,1N; 94,3E  33KM    10 26 17,6 (WDCB)
BRG E P         10 38 22,2  0,8 /   14                                                    D= 79,0 DEG   AZ= 94       BRG
     I AP       38 31,0
CLL E P         10 38 25                                                                  D= 79,6 DEG   AZ= 93       CLL
     I AP       38 34,6
     E          38 45
MOX E P         10 38 30    1,2 /   12                                  MPV  =4,8     D= 80,5 DEG   AZ= 92       MOX
     E AP       38 39                                                                                DEPTH  33 KM

1978 JUN 07     POLAND, UPPER SILESIA
CLL E SG        13 23 19
MOX E           13 23 43
     E          24 05

1978 JUN 07     CHILE-ARGENTINA BORDER REGION                               MB=5,3 (46)   23,6S; 67,8W 114KM H=14 08 46,5 (NEIS)
                                                                                          24,1S; 68,5W  33KM    14 08 36,8 (WDCB)
MOX   LMV       15 03,5     T 24                AV   0,4                              D=101,5 DEG   AZ=247       MOX
CLL E PP        14 26 44                                                              D=102,6 DEG   AZ=248       CLL
BRG E PP        14 26 49                                                              D=103,0 DEG   AZ=249       BRG

1978 JUN 07     ATLANTIC-INDIAN RISE                                        MB=5,1 ( 1)   38,0S; 49,2E  33KM H=19 42 02,9 (NEIS)
BRG E P         19 55 21,5                                                                D= 93,8 DEG   AZ=153       BRG
MOX   LMV       20 43,5     T 20                AV   0,3  MLV  =4,8       D= 94,3 DEG   AZ=151       MOX
      LMH       45,5        T 18   AN   0,2          MLH  =4,6

1978 JUN 07
CLL E           23 37 17

1978 JUN 08     UZBEK SSR                                                   MB=4,6 (23)   40,4N; 63,7E  33KM H=02 31 33,5 (NEIS)
                                                                                          40,5N; 63,7E  33KM    02 31 33,0 (WDCB)
BRG E P         02 38 31,2  0,8 /   13                                                    D= 35,7 DEG   AZ= 87       BRG
     I          38 35,0
CLL E P         02 38 36                                                                  D= 36,3 DEG   AZ= 87       CLL

1978 JUN 08
CLL E           07 06 54

1978 JUN 08     SOUTH OF FIJI ISLANDS                                       MB=4,2 ( 2)   22,2S;176,4W 190KM H=09 45 30,5 (NEIS)
CLL E PKP1      10 05 01                                                                  D=150,0 DEG   AZ= 18       CLL
BRG E PKP1      10 05 01,1                                                                D=150,3 DEG   AZ= 20       BRG

1978 JUN 08
MOX E           10 23 27
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1978 JUN 08     KURILE ISLANDS                                              MB=4,6 ( 4)   44,4N;149,6E  33KM H=13 41 17,0 (NEIS)
CLL E P         13 52 11                                                                  D= 77,5 DEG   AZ= 30       CLL

1978 JUN 08
MOX E(SG)       15 11 33

1978 JUN 08     SOUTH OF HONSHU, JAPAN                                      MB=5,3 (60)   29,6N;141,2E  66KM H=16 02 45,0 (NEIS)
                                                                                          29,6N;141,1E  50KM    16 02 43,6 (WDCB)
BRG E P         16 15 26,0  0,9 /   13                                                    D= 87,4 DEG   AZ= 44       BRG
     E AP       15 44,8
     E PP       18 53,3
CLL I P         16 15 26,5C 1,1 /   20                                                    D= 87,4 DEG   AZ= 43       CLL
     I          15 45,5
     E APP      19 09
MOX   LMV       16 56,8     T 24                AV   0,2
      LMH       57,1        T 17   AN   0,5 AE   0,2                                   D= 88,5 DEG   AZ= 42       MOX

1978 JUN 08     MARIANA ISLANDS REGION                                      MB=5,0 (13)   17,9N;147,1E  50KM H=18 02 28,5 (NEIS)
BRG E PP        18 20 17,0  1,1 /   14                                                    D=100,2 DEG   AZ= 45       BRG
CLL E PP        18 20 16   TRACES                                                         D=100,3 DEG   AZ= 44       CLL

1978 JUN 08     KURILE ISLANDS                                              MB=4,8 ( 4)   43,9N;147,3E  94KM H=19 58 31,5 (NEIS)
CLL I P         20 10 17,8  0,8 /   18                                                    D= 77,2 DEG   AZ= 32       CLL

1978 JUN 08
CLL E           22 05 46

1978 JUN 08     LEEWARD ISLANDS                                             MB=4,9 (42)   16,2N; 61,8W 111KM H=23 43 50,7 (NEIS)
CLL I P         23 54 39,6  1,5 /   32                                                    D= 68,0 DEG   AZ=269       CLL
     E AP       55 07
BRG E P         23 54 43,3  1,1 /   21                                                    D= 68,6 DEG   AZ=270       BRG
     E AP       55 11,0

1978 JUN 09     EASTERN CAUCASUS                                            MB=4,6 (13)   41,0N; 48,5E  33KM H=00 13 40,7 (NEIS)
                                                                                          41,3N; 48,5E  33KM    00 13 38,9 (WDCB)
BRG E P         00 19 11,9                                                                D= 25,8 DEG   AZ= 99       BRG
CLL E           00 19 30                                                                  D= 26,4 DEG   AZ= 99       CLL

1978 JUN 09     KURILE ISLANDS                                              MB=4,6 ( 2)   44,0N;148,8E  33KM H=00 45 21,8 (NEIS)
CLL E P         00 57 19                                                                  D= 77,6 DEG   AZ= 31       CLL

1978 JUN 09
CLL E           02 01 22

1978 JUN 09
CLL E           02 28 15

1978 JUN 09     LOYALTY ISLANDS REGION                                     /NO MB COMP./  18,8S;179,5E 495KM H=02 05 04    (ISC)
CLL I PKP       06 19 25,1  0,6 /   14                                                    D=145,8 DEG   AZ= 23       CLL
                                                                                          D=146,0 DEG   AZ= 25       BRG

1978 JUN 09     FOX ISLANDS, ALEUTIAN ISLANDS                               MB=4,9 (50)   52,4N;168,7W  33KM H=22 08 11,0 (NEIS)
                                                                                          52,1N;168,6W  33KM    22 08 03,6 (WDCB)
CLL E P         22 20 00                                                                  D= 76,7 DEG   AZ=  1       CLL
BRG E P         22 20 02,0  1,2 /   13                                                    D= 77,1 DEG   AZ=  2       BRG
MOX E P         22 20 03    1,2 /   20                                  MPV  =5,0     D= 77,3 DEG   AZ=  0       MOX

1978 JUN 10     NEW BRITAIN REGION                                          MB=5,3 ( 2)    4,9S;152,7E  60KM H=00 21 04,6 (NEIS)
CLL E           00 40 21                                                                  D=122,9 DEG   AZ= 50       CLL

1978 JUN 10
CLL E           00 58 39

1978 JUN 10
CLL E P         01 16 39

1978 JUN 10     FIJI ISLANDS                                               /NO MB COMP./  18,8S;179,5E 495KM H=02 05 04    (ISC)
CLL E PKP       02 23 29                                                                  D=145,8 DEG   AZ= 23       CLL
BRG E(PKP)      02 23 30,8                                                                D=146,0 DEG   AZ= 25       BRG

1978 JUN 10     NEAR WEST COAST OF COLOMBIA                                 MB=4,7 (25)    2,9N; 78,9W  33KM H=04 29 46,1 (NEIS)
MOX E           04 42 42    1,6 /   22                                                    D= 88,1 DEG   AZ=272       MOX
CLL E(P)        04 42 46                                                                  D= 89,0 DEG   AZ=273       CLL
BRG E(P)        04 42 41,5                                                                D= 89,6 DEG   AZ=274       BRG

1978 JUN 10
CLL I PKP       05 29 36,3D 0,8 /   20
BRG I PKP       05 29 36,0  0,8 /   11

1978 JUN 10     BLACK SEA                                                   MB=4,4 (21)   42,5N; 31,5E  33KM H=05 35 05,3 (NEIS)
                                                                                          42,4N; 31,5E  22KM    05 35 06,3 (CSEM)
                                                                                          42,4N; 31,5E  33KM    05 35 05,4 (WDCB)
BRG E P         05 38 49,8                                                                D= 14,6 DEG   AZ=118       BRG
CLL E(P)        05 38 49                                                                  D= 15,4 DEG   AZ=118       CLL
MOX E           05 39 30                                                                  D= 15,9 DEG   AZ=113       MOX
      LMH       47,8        T 16                AE   0,3          MLH  =3,5
      LMV       50,3        T 16          AV    0,3  MLV  =3,7

1978 JUN 10     FIJI ISLANDS REGION                                         MB=4,5 ( 4)   17,5S;178,9W 534KM H=05 40 00,6 (NEIS)
CLL I PKP       05 58 38,5  1,3 /   43                                                    D=145,0 DEG   AZ= 20       CLL
BRG I PKP       05 58 39,4  0,8 /   18                                                    D=145,2 DEG   AZ= 22       BRG
MOX E PKP       05 58 41                                                                  D=145,9 DEG   AZ= 18       MOX

1978 JUN 10     SOLOMON ISLANDS                                             MB=5,4 ( 8)    6,4S;154,9E  70KM H=08 00 17,8 (NEIS)
BRG E PKP       08 19 10,4  0,9 /    8                                                    D=125,1 DEG   AZ= 50       BRG

1978 JUN 10
MOX E           09 30 19
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1978 JUN 10
CLL E          10 50 33

1978 JUN 10    POLAND, UPPER SILESIA
CLL E SG       11 35 46
MOX E          11 36 11

1978 JUN 10    POLAND, UPPER SILESIA
CLL E SG       13 42 53
MOX E          13 43 22

1978 JUN 10    FRG, CENTRAL REGION                          NO MB COMP.   50.6N; 6.1E   5KM H=13 58 21.3 (CSEM)
                                                                          50.6N; 6.1E  14KM   13 58 20.5 (NEIS)
                                                                          D=  4.4 DEG   AZ=263        CLL
CLL E SG       14 00 40

1978 JUN 10    BALI SEA                                     MB=5.5 (51)   6.1S;114.2E 520KM H=17 38 19.9 (NEIS)
                                                                          6.2S;114.3E 475KM   17 38 10.3 (WDCB)
                                                                          D=101.2 DEG   AZ= 86        BRG
BRG I P        17 51 17.0
    E AP           53 14.4
    E PP           55 30.2  0.9 /   12
    I APP          57 15.8  1 4 /   26
    I SKS      18 01 03.0
    E PS           04 49
CLL E(PP)      17 55 25                                                   D=101.7 DEG   AZ= 85        CLL
    E APP          57 18
    E SKS      18 01 02
    E PS           04.8
MOX E PP       17 55 42                                                   D=102.7 DEG   AZ= 84        MOX
    E APP          57 18                                                                DEPTH 424 KM
    E SKS      18 01 05
    E S            02 20
    E PS           04 50
    E              05 05
    E              07 15
    E SS           09 40
      LMH          33       T 32   AN   0.9
      LMV          45       T 20              AV   0.3

1978 JUN 10    SOUTHERN ALASKA                              MB=4.8 (46)   60.3N;146.5W  20KM H=19 35 10.2 (NEIS)
                                                                          60.8N;146.5W  33KM   19 35 14.8 (WDCB)
CLL E P        19 46 06  C 1.1 /   14                                     D= 67.5 DEG   AZ=349        CLL
MOX I P        19 46 09.5C 1.2 /   20                      MPV =5.1       D= 68.0 DEG   AZ=348        MOX
BRG E P        19 46 09.5  1.2 /   15                                     D= 68.1 DEG   AZ=350        BRG
    E              46 20.4

1978 JUN 10
CLL E          23 05 30

1978 JUN 11    UNDERGROUND EXPLOSION                        MB=5.9 (70)   49.9N; 78.8E   0KM H=02 56 57.7 (NEIS)
BRG I P        03 04 37.2C 1.0 /  104                                     D= 40.2 DEG   AZ= 65        BRG
    I PN           06 06.8                                                DISTANCE  38 DEG
    I PP           06 11.5
CLL I P        03 04 40.1C 1.1 /  210                                     D= 40.5 DEG   AZ= 65        CLL
    I PN           06 08.9
    E PP           06 13
    E              16 22
    E              18 21
      LM           21.5     T 10   AN   1   AE   0.5 AV   1     MLH =5.0 MLV =5.1
MOX I P        03 04 49.0C 1.1 /  182                      MPV =5.7       D= 41.6 DEG   AZ= 64        MOX
    E PN           06 27
      LMV          22.5     T 12              AV   0.8   MLV =4.9
      LMH          22.6     T 10         AE   0.5        MLH =4.6

1978 JUN 11    NEAR EAST COAST OF KAMCHATKA                 MB=4.4 ( 8)   56.0N;162.5E  33KM H=04 45 47.8 (NEIS)
                                                                          55.9N;162.5E  33KM   04 45 47.1 (WDCB)
CLL E P        04 56 58                                                   D= 70.1 DEG   AZ= 18        CLL
BRG E P        04 57 01.8                                                 D= 70.3 DEG   AZ= 18        BRG
MOX E P        04 57 03.5                                                 D= 71.0 DEG   AZ= 17        MOX

1978 JUN 11    TALAUD ISLANDS                               MB=5.6 (50)    4.7N;126.6E  78KM H=10 22 05.1 (NEIS)
                                                                           4.7N;126.4E  33KM   10 22 00.8 (WDCB)
BRG I P        10 35 45.3C 0.8 /   47                                     D=100.4 DEG   AZ= 69        BRG
    E              40 19.0
CLL I P        10 35 46.8C 1.1 /   24                                     D=100.8 DEG   AZ= 68        CLL
MOX E P        10 35 52.5  1.0 /   20                      MPV =5.8       D=101.8 DEG   AZ= 67        MOX

1978 JUN 11    TONGA ISLANDS                                MB=5.6 (34)   15.3S;173.6W  33KM H=14 27 55.3 (NEIS)
                                                                          15.0S;173.8W  33KM   14 27 51.4 (WDCB)
CLL I PKP      14 47 26.4D                                                D=143.7 DEG   AZ= 11        CLL
    I              47 29.7  1.7 /   70
    E APKP         47 41
    E              48 11
    E(PKS)         51.2
BRG E PKP      14 47 27.0C 1.2 /   19                                     D=144.0 DEG   AZ= 12        BRG
    I              47 30.5
MOX I PKP      14 47 29.0  1.7 /  133                                     D=144.5 DEG   AZ=  9        MOX
    E APKP         47 42
    E PP           50 45
    E APP          51 00
    E SKKS         57 30
    E SKSP     15 00 40

1978 JUN 11
BRG E(P)       14 57 49.4
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1978 JUN 11    VANCOUVER ISLAND REGION                                    MB=5.3 (65)   49.3N;129.5W  10KM H=14 55 25.5 (NEIS)
                                                                                       49.3N;129.8W  33KM   14 55 28.9 (WDCB)
CLL E P        15 07 08    1.5 /   27                                                  D= 74.8 DEG   AZ=336        CLL
    E              07 26                                                              DISTANCE  76 DEG
    E(PP)          10 16
    E S        15 16 48
    E PS           17.4
    E SS           21.5
    E SSS          25.3
      L            36       T 20   AN   9.5 AE   9.5 AV   7
      LM           41       T 19   AN  16.5 AE   6.5 AV  15.5   MLH =6.4 MLV =6.4
MOX I P        15 07 12.5C 1.2 /   26                                              MPV =5.1       D= 75.0 DEG   AZ=335        MOX
    E S            16 44    T 15   AN   2.1 AE   1.8            MSH =6.2
    E PS           17 20
    E SS           21 35
      LMH          42.8     T 16   AN   4.6 AE  13.7            MLH =6.4
      LMV          44.5     T 15              AV  12.2          MLV =6.4
BRG I P        15 07 11.8                                                         D= 75.4 DEG   AZ=336        BRG
    E AP           07 14.7                                                        DISTANCE  76 DEG
    E              07 30.3
    E S            16 56
    E SS           21 48
      LM           41       T 17   AN   6.8 AE  11.0 AV  12.4   MLH =6.3 MLV =6.3

1978 JUN 11    NORTHERN ITALY                                             NO MB COMP.   44.6N; 11.9E  10KM H=17 31 15.1 (NEIS)
                                                                                       44.5N; 12.1E  10KM   17 31 15.3 (CSEM)
MOX E PN       17 32 48                                                           D=  6.1 DEG   AZ=178        MOX
    E PG           33 18
    E SG           34 35
BRG E PG       17 33 23.7                                                         D=  6.4 DEG   AZ=193        BRG
    E(SN)          34 04.5
    E SG           34 54.0
CLL E(SG)      17 35 03                                                           D=  6.8 DEG   AZ=187        CLL

1978 JUN 12    SOUTHERN SUMATERA                                          MB=5.7 (29)    5.1S;102.8E  33KM H=00 06 18.9 (NEIS)
                                                                                        5.0S;102.7E  33KM   00 06 14.6 (WDCB)
BRG I P        00 19 32.0C 0.8 /   37                                              D= 93.2 DEG   AZ= 94        BRG
    I AP           19 43.0
    E PP           23 16.4
CLL I P        00 19 34.9  1.3 /   28                                             D= 93.8 DEG   AZ= 93        CLL
    E AP           19 45
    E              23 05
    E(PKKP)        37 02
MOX E P        00 19 38    1.1 /   26                                     MPV =5.6        D= 94.7 DEG   AZ= 92        MOX
    E PP           23 27
      LM       01 11.7     T 18              AE   0.4 AV   0.4   MLH =4.9 MLV =5.0

1978 JUN 12
CLL E          03 32 56

1978 JUN 12
CLL E          06 48 20

1978 JUN 12    NEAR EAST COAST OF HONSHU, JAPAN             MB=5.7 (81)   38.2N;142.0E  45KM H=08 06 10.9 (NEIS)
                                                                          38.6N;142.0E  50KM   08 06 13.1 (WDCB)
BRG I P        08 18 18.8C 1.8 /  135                                     D= 80.3 DEG   AZ= 39        BRG
    I AP           18 30.4                                                DISTANCE  80 DEG
    E PP           21 23.3
CLL E P        08 18 18    1.7 /  150                                     D= 80.3 DEG   AZ= 38        CLL
    E AP           18 30
MOX I P        08 18 24.5C 1.9 /  167                      MPV =5.7       D= 81.4 DEG   AZ= 37        MOX
    E AP           18 36.5                                                            DEPTH  43 KM
    E PP           21 30
    E PPP          23 20

1978 JUN 12    NEAR EAST COAST OF HONSHU, JAPAN             MB=6.8 (83)   38.2N;142.0E  44KM H=08 14 26.4 (NEIS)
               MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE                   38.4N;142.0E  33KM   08 14 26.1 (WDCB)
BRG I P        08 26 34.1C 2.4 / 4900                                             D= 80.3 DEG   AZ= 39        BRG
    I PP           29 31.0                                                        DISTANCE  79 DEG
    E S            36 36.0
    E SS           41 52.0
      LM       09 05
CLL I P(1)     08 26 34.1C 1.4 /  320                                             D= 80.3 DEG   AZ= 38        CLL
                               T 22   AN  37.1 AE  24.9 AV  72.6   MPH =7.4 MPV =7.2 DISTANCE  79 DEG
    I P(2)         26 41.2  0.9 / 1300
    E PP(1)        29 31
    E PP(2)        29 40    T 22   AN  29.8 AE  20.3 AV  33.4   MPPH =7.3 MPPV =7.1
    E(PPP)         31 50
    E              33.6
    E S            36 36    T 21   AN  33.6 AE  72.0            MSH =7.3
    E(PS)          37 12
    E              38.5
    E(SS)          41.5
    E SSS          45.8
    E PKPPKP       53 41
      LMH          58       T 24   AN 560   AE 570              MLH =8.0
      L        09 05
      FINAL    13
MOX I P        08 26 40.0C 3.0 / 8684                                     MPV =7.3        D= 81.4 DEG   AZ= 37        MOX
                               T 18                    AV  52.1   MPV =7.3
    E PP           29 46    T 19                    AV  25.2   MPPV =7.2
    E PPP          31 50
    E              36 00
    E S            36 50    T 18         AE 117.0              MSH =7.7
    E PKPPKP       53 23
      LMH      09 00.5     T 22   AN 514   AE 666              MLH =8.1
      LMV          05.9     T 17.5                  AV 513.6   MLV =7.9
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1978 JUN 12    NEAR EAST COAST OF HONSHU, JAPAN                    MB=5.4 (56)   38.5N;142.2E  44KM H=09 12 56.9 (NEIS)
                                                                                 38.5N;142.4E  33KM   09 12 55.7 (WDCB)
                                                                                       D= 80.1 DEG   AZ= 39       BRG
BRG I P        09 25 04.1C 1.5 /  41
    E AP          25 15.6
CLL I P        09 25 03.8C 1.5 /  69                                             D= 80.1 DEG   AZ= 38       CLL
    E AP          25 15
MOX E P        09 25 10    1.5 /  50                          MPV  =5.3          D= 81.2 DEG   AZ= 37       MOX
    E AP          25 22                                                                      DEPTH  44 KM

1978 JUN 12    NEAR EAST COAST OF HONSHU, JAPAN                    MB=4.9 (30)   38.5N;142.0E  46KM H=09 40 30.6 (NEIS)
                                                                                 38.6N;142.1E  33KM   09 40 29.1 (WDCB)
                                                                                       D= 80.0 DEG   AZ= 39       BRG
BRG E P        09 52 37.4
    E AP          52 49.5
CLL E P        09 52 37                                                          D= 80.1 DEG   AZ= 38       CLL
    I AP          52 50.2

1978 JUN 12    NEAR EAST COAST OF HONSHU, JAPAN                    MB=4.9 (13)   38.2N;142.2E  45KM H=11 14 18.0 (NEIS)
                                                                                 38.1N;142.3E  33KM   11 14 16.0 (WDCB)
                                                                                       D= 80.4 DEG   AZ= 39       BRG
BRG E P        11 26 26.2                                                        D= 80.4 DEG   AZ= 38       CLL
CLL E P        11 26 27                                                          D= 81.5 DEG   AZ= 37       MOX
MOX E P        11 26 33   TRACES

1978 JUN 12    CENTRAL ITALY                                       NO MB COMP.   43.8N; 12.0E  17KM H=17 27 07.8 (CSEM)
                                                                                 (44.0N; 11.7E) 29KM   17 27 10.5 (NEIS)
                                                                                       D=  6.9 DEG   AZ=178       MOX
MOX E PN       17 28 52.5
    E SG          30 51                                                          D=  7.2 DEG   AZ=191       BRG
BRG E PG       17 29 27.8
    E SG          31 04.3                                                        D=  7.5 DEG   AZ=186       CLL
CLL E SN       17 30 36
    E SG          31 27

1978 JUN 12    GREECE                                              MB=4.1 ( 8)   40.7N; 23.3E  20KM H=17 44 48.1 (NEIS)
                                                                                 40.7N; 23.4E  10KM   17 44 49.2 (CSEM)
                                                                                 40.9N; 23.3E  33KM   17 44 52.2 (WDCB)
BRG E          17 48 09.6                                                        D= 12.1 DEG   AZ=144       BRG
CLL E          17 48 23                                                          D= 12.8 DEG   AZ=142       CLL
    E             51 51
      L           52.5
MOX   LMH      17 52.2     T  9   AN   1.1 AE   0.9          MLH  =4.4          D= 12.9 DEG   AZ=136       MOX
      LMV         53.2     T  9                    AV   1.4

1978 JUN 12    NEAR S. COAST OF SOUTHERN HONSHU                    MB=4.5 ( 4)   33.7N;136.4E 397KM H=17 45 53.3 (NEIS)
BRG I P        17 57 30.3                                                        D= 81.7 DEG   AZ= 45       BRG
CLL E P        17 57 31                                                          D= 81.8 DEG   AZ= 45       CLL

1978 JUN 12    NORTHERN ITALY          FRIULI                      NO MB COMP.   46.3N; 13.1E  10KM H=22 24 05.8 (CSEM)
                                                                                 46.3N; 13.1E  10KM   22 24 04.4 (NEIS)
                                                                                       D=  4.5 DEG   AZ=167       MOX
MOX E PN       22 25 13
    E PG          25 31
    E SN          26 04
    E SG          26 25
BRG E PN       22 25 16.2                                                        D=  4.6 DEG   AZ=187       BRG
    E PG          25 35.4                                                      DISTANCE   4.3DEG
    I SN          26 09.3
    I SG          26 31.8
CLL I PN       22 25 21.1                                                        D=  5.0 DEG   AZ=179       CLL
    I SN          26 16.1
    E SG          26 44

1978 JUN 12    GREECE                                              MB=4.2 (10)   40.8N; 23.2E  27KM H=23 36 43.1 (NEIS)
                                                                                 40.8N; 23.3E  10KM   23 36 43.4 (CSEM)
                                                                                 41.2N; 23.8E  33KM   23 36 52.8 (WDCB)
BRG E(PP)      23 39 44.4                                                        D= 12.0 DEG   AZ=144       BRG
CLL E(PPP)     23 40 03                                                          D= 12.7 DEG   AZ=142       CLL
    E             41 20
    E             43 26
    E             44 08
      LM          44.5
MOX E          23 39 58    1.3 /  17                                           D= 12.7 DEG   AZ=136       MOX
      LMH         44.2     T 10   AN   1.0 AE   0.9          MLH  =4.4
      LMV         45.1     T 10                    AV   1.0

1978 JUN 13
BRG E(P)       18 31 32.7

1978 JUN 13    SOUTHERN HONSHU, JAPAN                              MB=4.8 (63)   35.4N;135.6E 366KM H=18 24 43.8 (NEIS)
                                                                                 35.8N;135.6E 390KM   18 24 47.6 (WDCB)
BRG I P        18 36 13.9D 0.9 /  14                                             D= 79.9 DEG   AZ= 45       BRG
CLL I P        18 36 14.6D 1.0 /  27                                             D= 80.1 DEG   AZ= 44       CLL
    E AP          37 36
MOX E P        18 36 20    1.8 /  41                          MPV  =4.9          D= 81.1 DEG   AZ= 43       MOX

1978 JUN 13    NEAR EAST COAST OF KAMCHATKA                        MB=4.7 (30)   56.1N;162.4E  33KM H=19 41 07.9 (NEIS)
                                                                                 55.9N;162.9E  33KM   19 41 00.9 (WDCB)
CLL E P        19 52 18    1.4 /  27                                             D= 70.0 DEG   AZ= 18       CLL
BRG E P        19 52 19.2  1.1 /  12                                             D= 70.2 DEG   AZ= 18       BRG
MOX E P        19 52 24                                                          D= 70.9 DEG   AZ= 17       MOX

1978 JUN 13    NEAR EAST COAST OF HONSHU, JAPAN                    MB=4.9 (26)   38.1N;141.9E  42KM H=20 45 18.6 (NEIS)
                                                                                 38.3N;141.9E  33KM   20 45 18.5 (WDCB)
BRG E P        20 57 27.1D                                                       D= 80.3 DEG   AZ= 39       BRG
CLL E P        20 57 26    1.3 /  15                                             D= 80.4 DEG   AZ= 39       CLL

1978 JUN 13 /  HOKKAIDO, JAPAN, REGION                             MB=5.3 (77)
     JUN 14

                                                                                 42.9N;145.4E  41KM H=23 17 32.5 (NEIS)
                                                                                 43.1N;145.5E  33KM   23 17 31.4 (WDCB)
CLL I P        23 29 24.5C 1.0 /  86                                             D= 77.5 DEG   AZ= 34       CLL
    I AP          29 36.2                                                                                DEPTH  45 KM
    I XP          29 40.9
 (CONT.)
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 (CONT.)

BRG E P        23 29 24.6C 1.0 /  30                                             D= 77.5 DEG   AZ= 34       BRG
    E AP          29 36.8
    E XP          29 41.3
MOX E P        23 29 30.5  1.3 /  35                          MPV  =5.2          D= 78.5 DEG   AZ= 33       MOX
    E AP          29 42.5                                                                    DEPTH  44 KM
    E XP          29 46
      LM       00 07.2

1978 JUN 14
BRG E(P)       00 07 11.8

1978 JUN 14
MOX E SG       02 04 54.5

1978 JUN 14
MOX E          07 59 31

1978 JUN 14
BRG E P        08 01 52.2
    E             02 11.0

1978 JUN 14    NEAR EAST COAST OF HONSHU, JAPAN                    MB=6.0 (85)   38.3N;142.4E  40KM H=11 34 20.0 (NEIS)
                                                                                 38.5N;142.3E  33KM   11 34 19.8 (WDCB)
                                                                                       D= 80.4 DEG   AZ= 39       BRG
                                                                                 DISTANCE  79 DEG
BRG I P        11 46 28.3C 1.9 /  257
    I AP          46 40.1
    I S           56 31.0
    I SS       12 01 38.0
      LM          25          T 16   AN  19.4 AE  15.7 AV  59.8   MLH  =6.6 MLV  =7.1
CLL I P        11 46 27.4C 1.9 /  340                                MPV  =6.0          D= 80.4 DEG   AZ= 38       CLL
                               T  8                    AV   3.1   MPV  =6.3          DISTANCE  79 DEG
    I AP          46 39.4
    E PP          49 28
    E(PPP)        51 09
    E             52 16
    E S           56 27
    E SCS         56 42
      LMH      12 24          T 24   AN  66   AE  24              (MLH  =6.9)
      LMV         25          T 16                    AV  28     (MLV  =6.8)
MOX I P        11 46 34.5C 2.0 /  308                                MPV  =6.0          D= 81.4 DEG   AZ= 37       MOX
    E AP          46 46                                                                                  DEPTH  44 KM
    E PP          49 39
    E PPP         51 28
    E SKS         56 40
    E S           57 05
      LMH      12 20.7        T 20   AN  14.5 AE  19.3              MLH  =6.6
      LMV         25.9        T 17                    AV  25.7     MLV  =6.7

1978 JUN 14    MINDANAO, PHILIPPINE ISLANDS                        MB=6.1 (80)
               HEAVILY SUPERPOSED BY PRECEDING QUAKE                             8.2N;122.4E  24KM H=12 32 33.9 (NEIS)
                                                                                 8.4N;122.5E  33KM   12 32 35.1 (WDCB)
                                                                                       D= 95.1 DEG   AZ= 71       BRG
                                                                                 DISTANCE  94 DEG
BRG I P        12 45 56.9D 1.4 /  62
    I             46 05.4
    I             46 20.0
    E PP          49 51.2
    I S           57 13.0
    I SS       13 03 44.0
      LM          30          T 18   AN  24.3 AE  62.0 AV  80.0   MLH  =7.1 MLV  =7.2
CLL I P        12 45 58.4D 1.9 /  92                                             D= 95.5 DEG   AZ= 70       CLL
    E             49 16                                                        DISTANCE ( 96)DEG
    E             52 19
    E             52 33
    E S           57 12
    E SS       13 03.9
      LM          31          T(18)  AN( 41)  AE( 46.5)AV( 66)   (MLH  =7.2 MLV  =7.2)
      L           35
MOX E P        12 46 03    1.7 /  67                              MPV  =5.9          D= 96.6 DEG   AZ= 69       MOX
    E PP          50 04    2.3 / 183                              MPPV =6.1
    E S           57 45
    E PS          58 40
    E SS       13 04 00
      LMV         32.4        T 18.5                  AV  53.0   MLV  =7.1
      LMH         32.6        T 18   AN  34.4 AE  26.0          MLH  =6.9

1978 JUN 14    MINDANAO, PHILIPPINE ISLANDS                        MB=5.9 (48)   8.2N;122.4E  79KM H=13 34 09.6 (NEIS)
                                                                                 8.2N;122.5E  33KM   13 34 03.9 (WDCB)
                                                                                       D= 95.1 DEG   AZ= 71       BRG
                                                                                 DISTANCE  94 DEG
BRG I P        13 47 25.5D                                                       D= 95.5 DEG   AZ= 70       CLL
    I AP          47 47.8
    I PP          51 14.0
      LM       14 32          T 17   AN   7.1 AE  30.9 AV  36.6   MLH  =6.8 MLV  =6.9 (NO DEPTH CORRECTION)
CLL E P        13 47 26
    E AP          47 48
    E PP          51 20
      LM       14 32          T(20)  AN( 17)  AE( 28)  AV( 30)   (MLH  =6.8 MLV  =6.8)(NO DEPTH CORRECTION)
MOX E P        13 47 32    2.2 /  44                              MPV  =5.6          D= 96.6 DEG   AZ= 69       MOX
    E AP          47 53                                                                                  DEPTH  81 KM
    E(XP)         48 03
    E PP          51 47
    E APP         51 52
      LMV      14 33.6        T 19                    AV  25.0
      LMH         34.1        T 16   AN  13.5 AE  15.6

1978 JUN 14    KASHMIR-INDIA BORDER REGION                         MB=5.0 (39)   32.3N; 76.5E  13KM H=16 12 06.8 (NEIS)
                                                                                 32.5N; 76.5E  33KM   16 12 10.5 (WDCB)
                                                                                       D= 48.8 DEG   AZ= 87       BRG
BRG E P        16 20 52.4  1.1 /  26
    E AP          20 57.9                                                        D= 49.4 DEG   AZ= 87       CLL
CLL E P        16 20 57
    E             21 06
    E             21 22
    E(PPP)        23 37
      LM          45
MOX E P        16 21 04    1.6 /  19                              MPV  =4.8          D= 50.3 DEG   AZ= 85       MOX
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1978 JUN 14 IRAN-USSR BORDER REGION MB=4,8 (24) 38,0N; 56.3E 20KM H=16 25 34.3 (NEIS)
38,2N; 56.5E 33KM 16 25 32.0 (WDCB)
D= 32.4 DEG AZ= 97 BRG
BRG E P 16 32 04,0
E 32 17,4
I 32 38,2
CLL E AP 16 32 18 D= 33.1 DEG AZ= 97 CLL
E 32 50
E PP 33 20
E(PPP) 33 31
E(SSS) 40 13
MOX E P 16 32 19 D= 33.9 DEG AZ= 94 MOX
E S 37 48
LMH 46,4 T 17 AN 0,7 AE 1,1 MLH =4.7
LMV 48,4 T 16 AV 1.1 MLV =4.8

1978 JUN 14
CLL E 20 54 35

1978 JUN 14
CLL E 22 39 39

1978 JUN 15 WESTERN TURKEY MB=4.4 (33) 40.8N; 27.7E 16KM H=00 26 43.3 (NEIS)
40.8N; 27.8E 10KM 00 26 44.6 (CSEM)
41.0N; 27.8E 33KM 00 26 42.6 (WDCB)
BRG E(P) 00 30 08,6 D= 13.9 DEG AZ=131 BRG
CLL E P 00 30 12 D= 14.6 DEG AZ=130 CLL
E PP 30 22
LM 36 T 12 AN 1,5 AE 1 AV 1.5 MLH =4.4
MOX E 00 30 19 D= 14.9 DEG AZ=125 MOX
E PP 30 29
LM 37,2 T 10 AN 1.0 AE 1.1 AV 1.6 MLH =4.3

1978 JUN 15 NORTH ATLANTIC RIDGE MB=5.0 (44) 10.8N; 43.3W 33KM H=00 40 11.2 (NEIS)
10.9N; 43.7W 33KM 00 40 05.5 (WDCB)
MOX E P 00 50 18 D= 59.8 DEG AZ=248 MOX
E S 58 38
LMH 01 13,5 T 20 AE 0.7 MLH =4.8
LMV 13.7 T 20 AV 0.7 MLV =4.8
CLL E P 00 50 22 D= 60.9 DEG AZ=249 CLL
LM 01 12
BRG E P 00 50 26.0 D= 61.3 DEG AZ=250 BRG

1978 JUN 15 GREECE-BULGARIA BORDER REGION MB=3.4 (1) 41.4N; 23.1E 10KM H=01 10 41.3 (NEIS)
CLL E 01 15 47 D= 12.1 DEG AZ=141 CLL
E LG2 17 30
E 17 45

1978 JUN 15 NEAR E. COAST OF USSR MB=5.2 (78) 43.4N;135.4E 375KM H=03 19 09.5 (NEIS)
43.6N;135.5E 390KM 03 19 11.2 (WDCB)
BRG E P 03 30 02.0 0.9 / 39 D= 73.2 DEG AZ= 40 BRG
E AP 31 27,6 DISTANCE 68 DEG
E PP 32 52,5
I S 39 00,0
CLL I P 03 30 02.2D 1.6 / 130 D= 73.3 DEG AZ= 40 CLL
I 30 10,0 DISTANCE (72)DEG
E PCP 30 18
E AP 31 25
E(PP) 32 45
E 34 30
E S 39 00
E SCS 39 25
E SSS 49,3
MOX E P 03 30 09 2.0 / 120 MPV =5.3 D= 74.3 DEG AZ= 39 MOX
E AP 31 34 DEPTH 385 KM
E 32 45
E PP 33 03
E S 39 10 T 12 AE 0.9 MSH =5.3
E SKS 39 40

1978 JUN 15 SOUTH OF FIJI ISLANDS MB=4.9 (1) 23.2S;178.7W 369KM H=04 59 11.6 (NEIS)
CLL I PKP1 05 18 20,0 0.8 / 16 D=150.5 DEG AZ= 22 CLL
BRG I PKP1 05 18 20.9 D=150.7 DEG AZ= 24 BRG

1978 JUN 15 SOUTH OF PANAMA MB=5.3 (66) 6.1N; 82.7W 33KM H=08 18 31.3 (NEIS)
MOX E P 08 31 20.5 1.4 / 19 MPV =5.2 D= 88.1 DEG AZ=277 MOX
E SKS 41 50
E S 42 10
E PS 43 05
E SS 48 00
E LH 54 15
E LV 59 30
LM 09 05,3 T 21.5 AN 1.8 AE 4.0 AV 4.3 MLH =5.9 MLV =5.9
CLL I P 08 31 24.5 1.5 / 37 D= 88.8 DEG AZ=278 CLL
E 31 40 DISTANCE 89 DEG
E PP 34 55
E SKS 41 54
E S 42 13
E(SS) 48 20
LM 09 05 T 20 AN 2 AE 2.5 AV 3 MLH =5.7 MLV =5.7
BRG I P 08 31 27,5 D= 89.5 DEG AZ=279 BRG
E SKS 42 00
E PS 43 28
E SS 48 30 1.0 / 14
LM 09 06 T 22 AN 1.2 AE 2.7 AV 2.6 MLV =5.6

1978 JUN 15 KURILE ISLANDS MB=5.6 (79) 44.0N;149.2E 63KM H=09 28 57.2 (NEIS)
44.4N;149.2E 33KM 09 28 55.2 (WDCB)
CLL I P 09 40 48.3C 1.2 / 130 D= 77.8 DEG AZ= 31 CLL
E 41 03
E 41 33
E S 50 36
LM 10 20 T 16 AN 2 AE 1.5 AV 2.5 MLH =5.6 MLV =5.7 (NO DEPTH CORRECTION)
(CONT.)

(CONT.)
BRG I P 09 40 49.0C 1.1 / 48 D= 77.8 DEG AZ= 31 BRG
E AP 41 03,4
LMH 10 12
LMV 19 T 16 AV 3.3 MLV =5.8 (NO DEPTH CORRECTION)
MOX I P 09 40 54.5C 1.4 / 70 MPV =5.4 D= 78.8 DEG AZ= 30 MOX
LMH 10 17.2 T 16.5 AN 1.7 AE 2.0 MLH =5.7 (NO DEPTH CORRECTION)
LMV 20.5 T 16 AV 2.0 MLV =5.6 (NO DEPTH CORRECTION)

1978 JUN 15 BANDA SEA MB=5.8 (55) 7.3S;128.9E 155KM H=13 30 45.6 (NEIS)
7.1S;128.9E 160KM 13 30 46.8 (WDCB)
BRG I PKP 13 49 02,8 1.0 / 14 D=111.3 DEG AZ= 75 BRG
E PP 49 51,0
E SKP 52 22,0
CLL I PKP 13 49 03.4 0.9 / 17 D=111.7 DEG AZ= 74 CLL
E(APKP) 49 48
E SKP 52 23 0.9 / 15
I PKKP2 14 00 07.0 1.4 / 17
MOX E PKP 13 49 06 D=112.8 DEG AZ= 73 MOX
E APKP 49 45 DEPTH 162 KM
E PP 50 00
E SS 14 05 30

1978 JUN 15
MOX E(SG) 14 43 02

1978 JUN 15 NEAR EAST COAST OF HONSHU, JAPAN MB=5.4 (77) 38.0N;141.8E 42KM H=15 03 38.7 (NEIS)
38.1N;141.8E 33KM 15 03 38.0 (WDCB)
BRG I P 15 15 47.0C 1.1 / 37 D= 80.4 DEG AZ= 39 BRG
E AP 16 03.0
LM 54 T 18 AV 3.7 MLV =5.8
CLL I P 15 15 47.1C 1.3 / 84 D= 80.4 DEG AZ= 39 CLL
E S 26 20
LM 54 T 16 AN 1.5 AE 1 AV 2.5 MLH =5.5 MLV =5.6
MOX E P 15 15 53.5C 1.2 / 37 MPV =5.3 D= 81.5 DEG AZ= 38 MOX
E AP 16 09 DEPTH 63 KM
E S 26 20
LMH 55,4 T 15.5 AN 1.1 AE 0.5 MLH =5.4
LMV 56.9 T 14 AV 1.0 MLV =5.4

1978 JUN 15 WESTERN POLAND
BRG I PN 15 56 20.3
I PG 56 21.0
I SG 56 40,5
CLL I PG 15 56 27,1 DISTANCE 220 KM
I 56 32,5
I SG 56 54

1978 JUN 15 TAJIK SSR MB=4.8 (26) 39.2N; 71.7E 52KM H=17 00 10.6 (NEIS)
39.4N; 71.5E 33KM 17 00 06.5 (WDCB)
BRG E P 17 07 53,6 1.2 / 13 D= 41.4 DEG AZ= 83 BRG
CLL E P 17 07 58 D= 42.0 DEG AZ= 83 CLL
E PP 09 36
MOX E P 17 08 07 TRACES D= 42.9 DEG AZ= 81 MOX

1978 JUN 16 POLAND, UPPER SILESIA
CLL E SG 01 53 29
MOX E SG 01 54 04

1978 JUN 16 STRAITS OF GIBRALTAR MB=4.7 (12) 36.2N; 7.7W 33KM H=02 33 41.4 (NEIS)
36.1N; 7.6W 10KM 02 33 41.5 (CSEM)
MOX LM 02 47,5 D= 20.0 DEG AZ=231 MOX
CLL E(P) 02 38 30 D= 21.1 DEG AZ=232 CLL
LMV 48
BRG E(P) 02 38 34,2 D= 21.4 DEG AZ=235 BRG

1978 JUN 16
CLL E 03 51 16

1978 JUN 16 GREECE MB=4.2 (1) 38.0N; 21.8E 33KM H=04 29 07.5 (NEIS)
37.3N; 20.9E 10KM 04 28 54.7 (CSEM)
BRG E P 04 32 27,7 D= 14.0 DEG AZ=154 BRG
MOX LM 04 39,5 T 12.5 AN 0.4 AE 0.4 AV 0.5 MLH =3.9 D= 14.6 DEG AZ=146 MOX
CLL E(P) 04 32 34 D= 14.7 DEG AZ=152 CLL
LM 39

1978 JUN 16 OFF EAST COAST OF HONSHU, JAPAN MB=5.5 (67) 38.2N;143.3E 34KM H=05 33 32.0 (NEIS)
38.7N;143.0E 50KM 05 33 37.0 (WDCB)
BRG I P 05 45 43.8C 1.6 / 45 D= 80.8 DEG AZ= 38 BRG
E AP 45 54,4
E PP 48 55,4
E S 55 51
LM 06 26 T 14 AV 10.4 MLV =6.4
CLL I P 05 45 43,7C 1.9 / 90 D= 80.8 DEG AZ= 37 CLL
I AP 45 53,8 DISTANCE 81 DEG
E PP 48 48
LM 06 24 T 14 AN 6.5 AE 6.5 AV 7 MLH =6.3 MLV =6.2
MOX E P 05 45 49 3.0 / 263 MPV =5.7 D= 81.9 DEG AZ= 36 MOX
E AP 46 00 DEPTH 36 KM
E PP 49 00
E S 56 00 T 14.5 AN 1.5 MSH =5.9
LMH 06 21.9 T 16.5 AN 4.4 AE 6.7 MLH =6.2
LMV 27.8 T 14.5 AV 9.6 MLV =6.3

1978 JUN 16 OFF EAST COAST OF HONSHU, JAPAN MB=4.7 (7) 38.1N;143.4E 33KM H=05 42 43.4 (NEIS)
BRG E P 05 54 56,9 D= 80.9 DEG AZ= 38 BRG
CLL E P 05 54 56 D= 80.9 DEG AZ= 37 CLL

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1978 JUN 16     MINDANAO, PHILIPPINE ISLANDS                    MB=6.0 (91)   7.9N;126.3E 139KM H=07 57 00.1 (NEIS)
                                                                              8.0N;126.3E 160KM   07 57 02.6 (WDCB)
                                                                                    D= 97.6 DEG   AZ= 68       BRG
BRG I P         08 10 20.8  1.4 /  199
    E AP           10 57.2
    E PP           14 21.5
      LM           58
                                                                              D= 98.0 DEG   AZ= 67       CLL
CLL I P         08 10 22.3C 2.0 /  280
    E PP           14 25
    E PPP          16 32
      LM        09 01
                                                        MPV  =6.3             D= 99.1 DEG   AZ= 66       MOX
MOX I P         08 10 27.5C 1.7 /  176                                                        DEPTH 143 KM
    E AP           11 02.5
    E PP           14 32.5  2.0 /  162                MPPV =6.1
    E SP           22 56
      LMH          54.3     T 17.5 AN   1.3 AE   0.9
      LMV          57.8     T 24                AV   1.2

1978 JUN 16     OFF EAST COAST OF HONSHU, JAPAN                 MB=4.9 (21)   38.2N;143.3E  33KM H=08 35 55.2 (NEIS)
                                                                              38.5N;143.2E  33KM   08 35 57.5 (WDCB)
                                                                                    D= 80.8 DEG   AZ= 38       BRG
BRG E P         08 48 07.4
    E AP           48 16.3
                                                                              D= 80.8 DEG   AZ= 37       CLL
CLL I P         08 48 07.1  1.6 /   27
    I AP           48 16.5
                                                                              D= 81.9 DEG   AZ= 36       MOX
MOX E P         08 48 13   TRACES

1978 JUN 16     WESTERN POLAND
BRG I PG        09 19 39.7
    I SG           19 59.1
                                                                              DISTANCE 220 KM
CLL E PG        09 19 49
    I SG           20 13.5

1978 JUN 16
CLL E           09 42 59

1978 JUN 16     OFF EAST COAST OF HONSHU, JAPAN                 MB=5.2 (43)   38.3N;143.3E  33KM H=10 15 17.6 (NEIS)
                                                                              38.4N;143.2E  33KM   10 15 13.6 (WDCB)
                                                                                    D= 80.7 DEG   AZ= 38       BRG
BRG I P         10 27 29.5  1.0 /   14
    E AP           27 38.6
                                                                              D= 80.7 DEG   AZ= 37       CLL
CLL I P         10 27 29.4C 1.3 /   30
    I AP           27 38.0
    E(PP)          30 29
                                                        MPV  =4.9             D= 81.8 DEG   AZ= 36       MOX
MOX E P         10 27 35    1.4 /   19                                                       DEPTH  30 KM
    E AP           27 43

1978 JUN 16
MOX E(P)        10 51 44    1.6 /   19

1978 JUN 16
CLL E           12 01 16

1978 JUN 16     OFF EAST COAST OF HONSHU, JAPAN                 MB=4.9 (21)   38.5N;143.2E  33KM H=11 58 33.6 (NEIS)
                                                                              38.8N;142.6E  33KM   11 58 31.8 (WDCB)
BRG E P         12 10 43.9  0.7 /   12                                D= 80.5 DEG   AZ= 38       BRG
CLL E P         12 10 44    0.9 /   15                                D= 80.5 DEG   AZ= 37       CLL
MOX E P         12 10 50                                              D= 81.6 DEG   AZ= 36       MOX
      LMH          48.5     T 16            AE   0.4          MLH  =4.8
      LMV          52.6     T 16                AV   0.6     MLV  =5.1

1978 JUN 16 /   OFF EAST COAST OF HONSHU, JAPAN                 MB=5.0 (31)
    JUN 17                                                                    38.2N;143.2E  33KM H=23 24 21.9 (NEIS)
                                                                              38.5N;142.9E  33KM   23 24 24.8 (WDCB)
BRG E P         23 36 33.2                                            D= 80.8 DEG   AZ= 38       BRG
    E AP           36 43.5
                                                                              D= 80.8 DEG   AZ= 38       CLL
CLL I P         23 36 33.9C 1.1 /   20
    E AP           36 43
                                                        MPV  =4.8             D= 81.8 DEG   AZ= 37       MOX
MOX E P         23 36 39.5  1.2 /   12
      LMH          00 14.6     T 18   AN   0.4 AE   0.3          MLH  =4.9
      LMV          18.5        T 16                AV   0.3     MLV  =4.8

1978 JUN 17     SOUTHERN PACIFIC OCEAN                          MB=5.1 ( 9)   36.1S;100.6W  33KM H=08 47 03.7 (NEIS)
MOX   LM        09 50.8                                               D=130.3 DEG   AZ=260       MOX

1978 JUN 17     KURILE ISLANDS                                  MB=5.0 (43)   44.1N;149.2E  37KM H=10 30 54.6 (NEIS)
                                                                              44.1N;149.3E  33KM   10 30 54.0 (WDCB)
CLL I P         10 42 48.6C 1.0 /   31                                D= 77.7 DEG   AZ= 31       CLL
    E              43 01
BRG E P         10 42 48.6                                            D= 77.7 DEG   AZ= 31       BRG
MOX E P         10 42 55    1.9 /   38                                D= 78.7 DEG   AZ= 30       MOX
      LM        11 22.5                                 MPV  =5.1

1978 JUN 17     GERMAN DEMOCRATIC REPUBLIC

CLL I PG        11 41 17.6
    I SG           41 31.6  0.4 /   21

1978 JUN 17     TONGA ISLANDS                                   MB=4.9 (15)   17.6S;174.3W 105KM H=14 21 22.3 (NEIS)
CLL I PKP1      14 40 51.1C 1.2 /   92                                D=145.9 DEG   AZ= 12       CLL
    E APKP         41 28
BRG I PKP1      14 40 50.9  1.2 /   45                                D=146.2 DEG   AZ= 14       BRG
MOX E PKP       14 40 53.5  2.0 /   60                                D=146.7 DEG   AZ= 10       MOX
    E APKP         41 33.5                                                                 DEPTH 155 KM

1978 JUN 17
CLL E           15 23 37
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1978 JUN 17     TONGA ISLANDS REGION                            MB=6.6 (48)   17.1S;172.3W  33KM H=15 11 33.5 (NEIS)
                                                                              17.0S;172.4W  33KM   15 11 34.2 (WDCB)
CLL I PKIKP     15 31 09.6D 1.5 /  150                                D=145.6 DEG   AZ=  9       CLL
    I PKP1         31 11.1  T 12   AN   6.2          AV  33.4
    I              31 16.9  1.8 / 1800
    E              31 32
    E              31 40
    E           15 31 48
    E              33 50
    E PP           34 26    T 12
    I              34 34.6                           AV   6.5   MPPV =6.6
    E PPP          37 40
    E              42 36
    E              43 12
    E PSKS         44 40
    E PPS          47.0
    E              48 50
    E SS           53.5
      LM        16 40       T 18   AN  26   AE  17.5 AV  34     MLH  =7.0 MLV  =7.2
BRG E PKIKP     15 31 09.9D                                                   D=145.9 DEG   AZ= 11       BRG
    E PP           34 32
    E SS           53 49
      LM        16 40
MOX E PKP       15 31 11.5  1.6 / 2088                                        D=146.4 DEG   AZ=  7       MOX
    E              31 52
    E PP           34 30    T 16                AV   7.1   MPPV =6.6
    E SKSP         44 45
      LMV       16 41.4     T 18.5              AV  38.0     MLV  =7.2
      LMH          42.0     T 18   AN  22.3 AE  26.8          MLH  =7.1

1978 JUN 17     TONGA ISLANDS REGION                            NO MB COMP.   17.1S;172.1W  33KM H=15 31 15.0 (NEIS)
CLL I PKP1      15 50 51.9  0.9 /   21                                D=145.6 DEG   AZ=  9       CLL
    E              51 03
BRG I PKP1      15 50 53.0C 1.0 /   23                                D=146.0 DEG   AZ= 10       BRG
MOX E PKHKP     15 50 54.5  1.4 /   47                                D=146.4 DEG   AZ=  6       MOX

1978 JUN 17     SAMOA ISLANDS REGION                            /MB=5.0 ( 2)/ 16.5S;172.8W  33KM H=16 17 20.9  (ISC)
CLL I PKP       16 29 57.2  1.3 /   17                                D=145.0 DEG   AZ= 10       CLL
    E              30 07
BRG I PKP       16 29 58.6C 1.0 /   19                                D=145.3 DEG   AZ= 11       BRG
MOX E PKP       16 30 00    1.2 /   20                                D=145.8 DEG   AZ=  8       MOX
    E              30 08

1978 JUN 17     AEGEAN SEA                                      MB=4.3 (11)   39.1N; 24.5E  12KM H=21 19 30.8 (NEIS)
                                                                              39.2N; 24.6E  10KM   21 19 32.1 (CSEM)
                                                                              39.5N; 24.8E  33KM   21 19 38.3 (WDCB)
BRG E(PP)       21 22 57.3                                            D= 13.9 DEG   AZ=144       BRG
CLL E           21 23 07                                              D= 14.6 DEG   AZ=142       CLL
MOX E P         21 23 02    1.4 /   14                  MPV  =4.3     D= 14.7 DEG   AZ=137       MOX
      LMH          28.2     T 12   AN   0.7 AE   0.6          MLH  =4.1
      LMV          29.8     T 10                AV   0.5     MLV  =4.1

1978 JUN 17     SOUTH OF FIJI ISLANDS                           MB=5.6 (43)   23.1S;179.6W 523KM H=23 12 11.0 (NEIS)
                                                                              22.9S;179.8E 500KM   23 12 09.9 (WDCB)
CLL I PKIKP     23 30 57.3C 1.5 /   69                                D=150.2 DEG   AZ= 24       CLL
    I PKP1         31 03.3  0.9 /  620                                DISTANCE 150 DEG  DEPTH 520 KM
    I PKP2         31 11.2  1.3 /  250          MC   =5.8
    E APKP         33 09
    E(PP)          34 40
BRG I PKIKP     23 30 57.6                                                    D=150.3 DEG   AZ= 26       BRG
    I PKP1         31 04.1                                                   DISTANCE 151 DEG
    I PKP2         31 12.7
    I APKP         33 06.0
MOX E PKIKP     23 30 59    1.2 /   37                                        D=151.1 DEG   AZ= 22       MOX
    E PKHKP        31 05.5  1.4 /  234                                                            DEPTH 556 KM
    E PKP2         31 15.5  1.3 /  175
    E APKP         33 10

1978 JUN 18     SOUTH OF FIJI ISLANDS                           /MB=4.7 ( 1)/ 26.9S;178.8W  33KM H=01 43 45    (ISC)
MOX E           02 04 24   TRACES                                     D=155.0 DEG   AZ= 22       MOX

1978 JUN 18     ICELAND REGION                                  MB=4.1 ( 5)   61.8N; 26.5W  10KM H=02 33 52.6 (NEIS)
MOX E P         02 39 04    1.4 /   16          MPV  =4.4             D= 23.6 DEG   AZ=313       MOX
CLL E P         02 39 06                                              D= 23.8 DEG   AZ=311       CLL

1978 JUN 18
CLL E           03 28 26

1978 JUN 18     TONGA ISLANDS                                   MB=4.4 ( 2)   16.1S;173.5W  33KM H=09 33 00.2 (NEIS)
CLL E PKP       09 54 35                                              D=144.5 DEG   AZ= 11       CLL
    E APKP         54 45
    E              55 19
BRG E PKP       09 54 35.1                                            D=144.8 DEG   AZ= 12       BRG
MOX E PKP       09 54 36.5  1.8 /   20                                D=145.3 DEG   AZ=  9       MOX
    E APKP         54 48

1978 JUN 18     NEAR EAST COAST OF HONSHU, JAPAN                MB=5.1 (52)   38.5N;142.8E  33KM H=14 59 59.9 (NEIS)
                                                                              38.6N;142.7E  33KM   14 59 55.2 (WDCB)
BRG I P         15 12 09.1  1.0 /   18                                D= 80.3 DEG   AZ= 38       BRG
    I AP           12 18.1
      LM        51          T 16                AV   4.5     MLV  =5.9
CLL I P         15 12 09.0  1.2 /   32                                D= 80.4 DEG   AZ= 38       CLL
    I AP           12 18.8                                            DISTANCE  82 DEG
    E(SKS)         22 27
      LM        51          T 16   AN   2.5 AE   1.3 AV   3     MLH  =5.7 MLV  =5.8
MOX E P         15 12 14.5  1.0 /   12          MPV  =4.9             D= 81.4 DEG   AZ= 37       MOX
    E PP           15 25
    E S            22 25
      LMH       50.2        T 17   AN   1.7 AE   1.3          MLH  =5.6
      LMV       51.9        T 15                AV   1.5     MLV  =5.5
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1978 JUN 18     SOUTHERN IRAN                                          MB=4.7 (39)   27.4N; 56.6E  33KM H=19 26 26.8 (NEIS)
                                                                                     27.7N; 56.5E  95KM   19 26 36.5 (CSEM)
                                                                                     27.3N; 56.6E  33KM   19 26 25.3 (WDCB)
BRG E(P)        19 33 57.0                                                                    D= 39.8 DEG   AZ=110       BRG
CLL E P         19 34 03                                                                      D= 40.5 DEG   AZ=109       CLL

1978 JUN 19     NEAR EAST COAST OF HONSHU, JAPAN                       MB=4.9 (15)   38.0N;142.8E  33KM H=02 58 52.6 (NEIS)
                                                                                     38.1N;142.9E  33KM   02 58 53.1 (WDCB)
BRG E P         03 11 05.0  1.1 /  10                                                         D= 80.8 DEG   AZ= 39       BRG
CLL E P         03 11 04                                                                      D= 80.8 DEG   AZ= 38       CLL
    E           11 24
      LMH       44                                                                            D= 81.9 DEG   AZ= 37       MOX
MOX E           03 11 31
      LMH       45.2      T 18   AN   0.3 AE   0.5          MLH  =5.1

1978 JUN 19     GREECE                                                 MB=4.0 ( 8)   40.7N; 23.4E  10KM H=03 12 54.5 (NEIS)
                                                                                     40.7N; 23.4E  10KM   03 12 56.6 (CSEM)
                                                                                               D= 12.8 DEG   AZ=142       CLL
CLL E PP        03 16 12
    E L         20 12
      LM        20.4
MOX   LMH       03 20.4     T 10   AN   0.4 AE   0.4          MLH  =3.9          D= 12.9 DEG   AZ=136       MOX
      LMV       21.3        T  9.5                 AV   0.3

1978 JUN 19     POLAND, UPPER SILESIA
CLL E           04 17 07
MOX E SG        04 17 33

1978 JUN 19     NEAR EAST COAST OF HONSHU, JAPAN                       MB=4.8 (21)   38.4N;142.4E  28KM H=07 30 10.0 (NEIS)
                                                                                     38.3N;142.6E  33KM   07 30 09.4 (WDCB)
BRG E AP        07 42 27.9                                                                    D= 80.3 DEG   AZ= 39       BRG
CLL E P         07 42 19                                                                      D= 80.3 DEG   AZ= 38       CLL

1978 JUN 19     GREECE                                                 MB=5.3 (81)   40.7N; 23.2E  10KM H=10 31 05.4 (NEIS)
                                                                                     40.8N; 23.3E  13KM   10 31 07.9 (CSEM)
                                                                                     41.0N; 23.3E  33KM   10 31 10.1 (WDCB)
BRG E P         10 33 58.0  2.4 /  127                                                        D= 12.0 DEG   AZ=144       BRG
    E S         36 38.4                                                                       DISTANCE  12 DEG
      LM        38          T 10                   AV  10.7
CLL E P         10 34 07    2.3 /  145                                                        D= 12.7 DEG   AZ=142       CLL
    E PPP       34 24                                                                         DISTANCE  13 DEG
    E           35 32
    E S         36 48
    E SSS       37 16
    E SSSS      37.5
      LM        39.0        T 10   AN   6.5 AE   8.5 AV   9     MLH  =5.2
MOX E P         10 34 09.5  1.9 /  167                          MPV  =5.7          D= 12.8 DEG   AZ=136       MOX
    E PP        34 22.5
    E PPP       34 26
    E S         36 40
    E SS        37 00
      LMH       38.5        T 12   AN  13.0 AE  13.0          MLH  =5.0
      LMV       39.5        T  9                   AV  12.9

1978 JUN 19     GREECE                                                 MB=4.6 (38)   40.7N; 23.2E  10KM H=10 48 10.8 (NEIS)
                                                                                     40.7N; 23.3E  10KM   10 48 12.6 (CSEM)
                                                                                     40.7N; 23.2E  33KM   10 48 13.7 (WDCB)
BRG E P         10 51 06.7                                                                    D= 12.0 DEG   AZ=144       BRG
CLL E P         10 51 15                                                                      D= 12.7 DEG   AZ=142       CLL
    E           53 08
      LM        56.0        T 10   AN   1   AE   1   AV   1
MOX E P         10 51 15.5  1.7 /  30                          MPV  =5.0          D= 12.8 DEG   AZ=136       MOX
      LMH       55.6        T 10   AN   1.7 AE   1.6          MLH  =2.*
      LMV       56.6        T  9                   AV   1.5

1978 JUN 19     KURILE ISLANDS                                        /MB=4.7 ( 2)/  48.0N;151.7E  70KM H=11 42 48.9  (ISC)
CLL I P         11 54 24.1                                                    D= 74.9 DEG   AZ= 27       CLL

1978 JUN 19     SOUTHERN GREECE                                        MB=4.0 ( 3)   37.3N; 23.5E  68KM H=16 15 14.9 (NEIS)
                                                                                     36.6N; 23.3E  10KM   16 15 05.7 (CSEM)
CLL E(P)        16 18 59                                                                      D= 15.9 DEG   AZ=148       CLL

1978 JUN 19     CELEBES SEA                                            MB=4.9 (26)    3.2N;124.3E 355KM H=16 34 36.7 (NEIS)
                                                                                      3.0N;124.4E  33KM   16 34 00.7 (WDCB)
BRG E P         16 47 45.7  0.8 /  10                                                         D=100.2 DEG   AZ= 72       BRG
CLL E P         16 47 47    TRACES                                                            D=100.6 DEG   AZ= 71       CLL

1978 JUN 19     ANDREANOF ISLANDS, ALEUTIAN IS.                        MB=4.9 (43)   51.7N;174.2W  33KM H=19 05 03.2 (NEIS)
                                                                                     51.5N;174.1W  33KM   19 05 01.9 (WDCB)
CLL I P         19 16 55.0D 0.8 /  15                                                         D= 77.2 DEG   AZ=  5       CLL
BRG E P         19 16 56.7  1.0 /  14                                                         D= 77.6 DEG   AZ=  5       BRG
MOX E P         19 16 59                                                                      D= 77.9 DEG   AZ=  4       MOX

1978 JUN 19
CLL E           21 33 52

1978 JUN 19
CLL I PKP       22 42 33.4D 0.6 /  21
BRG I PKP       22 42 34.1

1978 JUN 20
CLL E           00 40 35

1978 JUN 20     ALASKA PENINSULA                                       MB=4.6 (32)   56.9N;157.1W  99KM H=02 30 08.6 (NEIS)
CLL E P         02 41 21                                                              D= 71.8 DEG   AZ=354       CLL
BRG E P         02 41 24.4                                                            D= 72.3 DEG   AZ=355       BRG
MOX E P         02 41 25    1.3 /  13                          MPV  =4.6          D= 72.4 DEG   AZ=354       MOX

1978 JUN 20     CRETE                                                  MB=3.7 ( 2)   35.5N; 23.3E  69KM H=04 03 55.5 (NEIS)
BRG E(P)        04 07 50.8                                                            D= 16.8 DEG   AZ=153       BRG
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1978 JUN 20     TONGA ISLANDS REGION                                   MB=5.0 ( 5)   17.5S;172.0W  33KM H=07 57 23.4 (NEIS)
CLL I PKP1      08 17 00.0C                                                           D=146.0 DEG   AZ=  9       CLL
    E APKP      17 10
BRG I PKP1      08 17 01.3  1.3 /  20                                                 D=146.4 DEG   AZ= 10       BRG
MOX E PKHKP     08 17 02.5  1.2 /  30                                                 D=146.8 DEG   AZ=  6       MOX
    E APKP      17 12                                                                         DEPTH  32 KM

1978 JUN 20     SOUTHERN YUGOSLAVIA
                MONTENEGRO
BRG E           16 33 35.5                                                                                      (VKA)
CLL E           16 33 38
MOX E           16 33 56
    E           34 07

1978 JUN 20     MINDANAO, PHILIPPINE ISLANDS                           MB=4.9 (21)    8.6N;126.6E  46KM H=17 02 38.6 (NEIS)
BRG I P         17 16 08.3D                                                           D= 97.3 DEG   AZ= 67       BRG

1978 JUN 20     GREECE                                                 MB=6.1 (80)   40.7N; 23.2E   3KM H=20 03 21.0 (NEIS)
                                                                                     40.8N; 23.3E  15KM   20 03 25.1 (CSEM)
                                                                                     40.7N; 23.1E  33KM   20 03 19.6 (WDCB)
BRG I P         20 06 14.9D 2.4 /  907                          MPV  =6.5          D= 12.0 DEG   AZ=144       BRG
    E PP        06 22.0                                                           DISTANCE  12.5DEG
    I PPP       06 32.2
    E S         08 34
      LM        11
CLL I P         20 06 24.3D 2.0 /  750                                                        D= 12.7 DEG   AZ=142       CLL
                            T  7   AN   4.5 AE   3.6 AV   4.1                    DISTANCE  13 DEG
    E PP        06 32       1.8 / 1300
                            T 12   AN  13.1 AE  10.4 AV  16.2
    I           07 28.7
    E           08 30
    E S         08 44
      LM        11          T 12   AN 172   AE 274          MLH  =6.6
    E(PKPPKPPKP)  59 47
MOX E P         20 06 26  D 2.1 / 1581                       MPV  =6.7          D= 12.8 DEG   AZ=136       MOX
    E PP        06 36
    E S         09 00
    E SS        09 20
      LMH       10.9        T 13   AN 491.1 AE 471.2        MLH  =6.9
      LMV       11.7        T 10                   AV 318.9
    E PKPPKPPKP   59 40

1978 JUN 20     GREECE                                                 MB=3.8 ( 6)   40.7N; 23.1E  10KM H=20 37 37.6 (NEIS)
                                                                                     40.7N; 23.1E  39KM   20 37 42.0 (CSEM)
BRG E P         20 40 42.5                                                                    D= 12.0 DEG   AZ=144       BRG
CLL E           20 40 56                                                                      D= 12.7 DEG   AZ=143       CLL
    E SSS       43 31
    E           44 56
MOX E           20 40 53                                                                      D= 12.8 DEG   AZ=137       MOX

1978 JUN 20     GREECE                                                 MB=4.1 ( 9)   40.8N; 23.2E  10KM H=20 45 23.0 (NEIS)
                                                                                     40.8N; 23.3E  10KM   20 45 24.7 (CSEM)
BRG E P         20 48 09.2                                                                    D= 12.0 DEG   AZ=144       BRG
CLL E(P)        20 48 23                                                                      D= 12.7 DEG   AZ=142       CLL
MOX E           20 48 35                                                                      D= 12.7 DEG   AZ=136       MOX

1978 JUN 20
CLL E           20 52 13

1978 JUN 20     GREECE                                                 MB=3.8 ( 4)   40.7N; 23.3E  10KM H=20 59 44.5 (NEIS)
MOX E P         21 02 53                                                              D= 12.9 DEG   AZ=136       MOX

1978 JUN 20     GREECE                                                 MB=4.3 (30)   40.7N; 23.2E  10KM H=21 51 03.6 (NEIS)
                                                                                     40.7N; 23.3E  10KM   21 51 06.0 (CSEM)
                                                                                     40.8N; 23.1E  33KM   21 51 08.0 (WDCB)
BRG E P         21 53 56.8                                                            D= 12.0 DEG   AZ=144       BRG
CLL E P         21 54 08                                                              D= 12.7 DEG   AZ=142       CLL
    E           56 20
      LM        58.4
MOX E P         21 54 10.5  1.8 /  27                          MPV  =5.2          D= 12.8 DEG   AZ=136       MOX
    E PP        54 19.5
      LMH       59.5        T  9   AN   0.5 AE   0.5          MLH  =4.1
      LMV       59.6        T 10                   AV   0.9

1978 JUN 20     GREECE                                                 MB=3.6 ( 2)   40.7N; 23.1E  10KM H=22 58 40.3 (NEIS)
MOX   LMH       23 08.2     T 24   AN   0.7      MLH  =3.6          D= 12.8 DEG   AZ=137       MOX
      LMV       08.6        T 24                   AV   0.6

1978 JUN 21
CLL E PKP       00 03 50    1.1 /  14
BRG E PKP       00 03 52.6

1978 JUN 21
CLL E P         02 29 50    1.2 /  12

1978 JUN 21
CLL E           03 15 57    TRACES

1978 JUN 21     GREECE                                                 MB=4.2 ( 8)   40.7N; 23.2E  10KM H=03 20 26.1 (NEIS)
                                                                                     40.7N; 23.3E  10KM   03 20 28.0 (CSEM)
BRG E(P)        03 23 28.6                                                            D= 12.0 DEG   AZ=144       BRG
CLL E           03 23 38                                                              D= 12.7 DEG   AZ=142       CLL
    E           27 27
      LM        28
MOX E P         03 23 32    1.8 /  20                          MPV  =4.8          D= 12.8 DEG   AZ-136       MOX
    E PP        23 41
      LMH       27.9        T 10   AN   0.4 AE   0.4          MLH  =3.9
      LMV       28.8        T  9                   AV   0.4
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1978 JUN 21     GREECE                                          MB=4.2 (16)   40.8N; 23.3E  10KM H=06 00 06.0 (NEIS)
                                                                              40.7N; 23.4E  10KM   06 00 08.1 (CSEM)
                                                                              41.2N; 23.3E  33KM   06 00 10.8 (WDCB)
BRG E(P)        06 03 05,9                                                          D= 12.0 DEG   AZ=144        BRG
CLL E           06 03 20                                                            D= 12.7 DEG   AZ=142        CLL
    E LM        07 12
MOX E P         06 03 13                                                            D= 12.8 DEG   AZ=136        MOX
    E PP        03 22
      LMH       07,6      T  8   AN   0,4 AE   0,4          MLH  =4.0
      LMV       08,8      T 13                    AV   0,4

1978 JUN 21     NORTHERN ITALY                                  NO MB COMP.   46.0N; 12.1E  10KM H=06 15 37.2 (NEIS)
                                                                              46.1N; 12.1E  10KM   06 15 38.7 (CSEM)
MOX E PN        06 16 47                                                            D=  4.7 DEG   AZ=176        MOX
    E PG        17 05                                                               DISTANCE   4.5DEG
    E SN        17 41
    E SG        18 05
BRG E PG        06 17 12,0                                                          D=  5.0 DEG   AZ=195        BRG
    E SN        17 50,0
    E SG        18 19,8
CLL E PN        06 16 58                                                            D=  5.3 DEG   AZ=187        CLL
    E           18 06                                                               DISTANCE   5.0DEG
    E(SG)       18 28

1978 JUN 21
CLL E           07 47 51
BRG E P         07 47 52,3
MOX E(P)        07 47 54

1978 JUN 21     KURILE ISLANDS                                 /MB=4.2 ( 6)/  47.3N;153.1E 148KM H=08 54 53.9  (ISC)
CLL E P         09 06 25                                                            D= 76.0 DEG   AZ= 27        CLL

1978 JUN 21     NEAR EAST COAST OF HONSHU, JAPAN                MB=5.7 (83)   38.3N;141.8E  52KM H=10 54 22.6 (NEIS)
                                                                              38.7N;141.6E  50KM   10 54 24.3 (WDCB)
BRG I P         11 06 28,2  1,1 /   97                                              D= 80.1 DEG   AZ= 39        BRG
    I AP        06 44,0
CLL I P         11 06 27,8C 1,0 /  180                                              D= 80.2 DEG   AZ= 38        CLL
    I AP        06 44,4
    I           08 33
MOX I P(1)      11 06 34,0C 1,2 /   87                          MPV  =5.7           D= 81.2 DEG   AZ= 37        MOX
    E P(2)      06 37,5  1,6 /   82                             MPV  =5.5                         DEPTH  60 KM
    E AP        06 49
    E           06 53
    E PP        09 40
    E PPP       11 30
    E S         16 40
    E XS        17 04
      LMH       41        T 17   AN   2,9 AE   1,8          MLH  =5.8
      LMV       46        T 17                    AV   3,1  MLV  =5.8

1978 JUN 21     NORTHWEST OF KURILE ISLANDS                     MB=5.9 (99)   48.3N;148.6E 377KM H=11 10 38.2 (NEIS)
                                                                              48.2N;149.1E 400KM   11 10 39.4 (WDCB)
CLL I P         11 21 32,4C 1,3 /  365                                              D= 73.7 DEG   AZ= 29        CLL
    I AP        23 02                                                               DISTANCE  72 DEG  DEPTH 400 KM
    I           23 09
    E XP        23 47
    I XPP       26 26
    I S         30 27
    E SCS       31 02
    E PS        32 12
    E XS        33 08
    E(SSS)      39,4
    E SSSS      40,8
    E PKPPKP    49 11
      LM        55        T 15   AN   2   AE   2,5 AV   2
BRG I P         11 21 33,2C 1,2 /  151                          MPV  =5.5           D= 73.8 DEG   AZ= 30        BRG
    E AP        23 03,9                                                             DISTANCE  73 DEG  DEPTH 400 KM
    E PP        24 26,2
    I XPP       26 17,3
    I S         30 30,0
    E SP        31 06,5
    I XS        33 16,0
    E PKPPKP    49 12,8
MOX E P(1)      11 21 38,5C 1,4 /  191                          MPV  =5.6           D= 74.7 DEG   AZ= 28        MOX
    E P(2)      21 42       1,5 /  216                          MPV  =5.7                         DEPTH 322 KM
    E AP        23 05
    E XP        23 45
    E S         30 40
    E SKS       31 10
    E XS        33 10
      LMH       56,3      T 15   AN   1,8 AE   2,3
      LMV       57        T 13,5                  AV   2,6

1978 JUN 21     OFF EAST COAST OF HONSHU, JAPAN                 MB=5.1 (49)   38.2N;143.1E  33KM H=11 49 08.9 (NEIS)
                                                                              38.9N;143.0E  33KM   11 49 12.8 (WDCB)
BRG E P         12 01 19,4                                                          D= 80.7 DEG   AZ= 38        BRG
    E AP        01 29,3
CLL I P         12 01 20,0C 1,0 /   27                                              D= 80,7 DEG   AZ= 38        CLL
    I AP        01 28,8
MOX E P         12 01 26    1,2 /   16                          MPV  =4.9           D= 81.8 DEG   AZ= 37        MOX
    E AP        01 35                                                                             DEPTH  33 KM

1978 JUN 21     GREECE                                          MB=4,6 (46)   40.8N; 23.0E  10KM H=12 29 44.0 (NEIS)
                                                                              40.8N; 23.2E  16KM   12 29 46.5 (CSEM)
                                                                              41.0N; 23.0E  33KM   12 29 49.5 (WDCB)
BRG E P         12 32 35,6                                                          D= 11.9 DEG   AZ=145        BRG
      LM        37        T 12   AN   1,4 AE   2,0 AV   1,9
CLL E P         12 32 45                                                            D= 12,6 DEG   AZ=143        CLL
      LM        37,3      T  8   AN   1   AE   1,3 AV   1      MLH  =4.5
  (CONT.)
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  (CONT.)
MOX E P         12 32 47    1,7 /   24                          MPV  =4,9           D= 12.6 DEG   AZ=137        MOX
      LMH       37,2      T 10   AN   2,1 AE   2,0             MLH  =4.6
      LMV       37,9      T 11                    AV   1,7

1978 JUN 21     GREECE
CLL E           12 41 45                                        NO MB COMP.   40.9N; 22.7E  10KM H=12 33 32.1 (NEIS)
                                                                                    D= 12.4 DEG   AZ=143        CLL

1978 JUN 21     KIRGHIZ-SINKIANG BORDER REGION                  MB=5.0 (54)   41.5N; 79.4E  33KM H=17 27 54.9 (NEIS)
                                                                              41.5N; 79.4E  33KM   17 27 50.1 (WDCB)
BRG I P         17 36 08,3C 1,2 /   30                                              D= 44.9 DEG   AZ= 75        BRG
    I AP        36 15,7
CLL I P         17 36 11,6C 1,0 /   40                                              D= 45.4 DEG   AZ= 75        CLL
    I           36 16,5
    E(PP)       38 08
MOX I P         17 36 20,0C 1,2 /   33                          MPV  =5.2           D= 46.4 DEG   AZ= 74        MOX
      LMH       58,5      T 12   AN   0,4                     MLH  =4.5
      LMV       59,4      T 16                    AV   0,3  MLV  =4.4

1978 JUN 21     GREECE                                          MB=4.3 (15)   40.7N; 23.2E  10KM H=18 52 04.1 (NEIS)
                                                                              40.7N; 23.3E  10KM   18 52 06.0 (CSEM)
                                                                              40.5N; 23.3E  33KM   18 52 00.2 (WDCB)
BRG E(P)        18 54 49,0                                                          D= 12.0 DEG   AZ=144        BRG
CLL E P         18 55 07                                                            D= 12.7 DEG   AZ=142        CLL
    E           55 13
    E LM        59 25
MOX E P         18 55 08    1,6 /   19                          MPV  =5.1           D= 12.8 DEG   AZ=136        MOX
      LMH       59,5      T 11   AN   0,7 AE   0,8             MLH  =4.1
      LMV       19 00.5   T 11                    AV   0,6

1978 JUN 21     NORTHERN ITALY                                  NO MB COMP.   45.9N; 12.0E  10KM H=22 43 46.1 (NEIS)
                                                                              46.0N; 12.1E  10KM   22 43 47.7 (CSEM)
MOX E PN        22 44 56                                                            D=  4.8 DEG   AZ=177        MOX
    E PG        45 16
    E SN        45 51
    E           46 14
BRG E(PG)       22 45 20,0                                                          D=  5.1 DEG   AZ=195        BRG
    I SN        45 58,5
    E SG        46 28,4
CLL I SG        22 46 42,5                                                          D=  5.5 DEG   AZ=187        CLL

1978 JUN 21     ICELAND                                         MB=4.1 (11)   64.8N; 17.4W  10KM H=23 29 43.5 (NEIS)
CLL E P         23 34 26    1,4 /   21                                              D= 20.7 DEG   AZ=322        CLL
      LM        44
MOX E P         23 34 26    1,5 /   30                          MPV  =4,4           D= 20.7 DEG   AZ=324        MOX
      LMV       44,4      T 16                    AV   0,9  MLV  =4.4
      LMH       44,6      T 16   AN   0,7 AE   0,4           MLH  =4.2
BRG E P         23 34 31,4  1,4 /   21                                              D= 21.4 DEG   AZ=322        BRG
    E S         38 43,0                                                             DISTANCE  23 DEG
      LM        44        T 16   AN   0,5 AE   0,7 AV   1,2  MLH  =4.3 MLV  =4.6

1978 JUN 22     HUNGARY                                         MB=4,6 (16)   46.7N; 21.1E  10KM H=02 33 24.0 (NEIS)
                                                                              46.8N; 21.2E  10KM   02 33 25.8 (CSEM)
                                                                              46.8N; 21.1E  33KM   02 33 22.4 (WDCB)
BRG E PN        02 34 57,8                                                          D=  6.3 DEG   AZ=129        BRG
    I           35 09,3
    E SN        36 14,5
    E           37 18,1
      LM        38        T 11   AN   4,3 AE   3,5 AV   4,8
CLL I PN        02 35 09,8                                                          D=  7.0 DEG   AZ=128        CLL
    I           35 20,5
    I           36 45,5
    E SB2       37 06
    E(SG)       37 28
      LM        38,3      T 10   AN   3   AE   6   AV   4      MLH  =4.5
MOX E PN        02 35 13    1,6 /   25                          MPV  =5,1           D=  7.4 DEG   AZ=119        MOX
    E SN        36 32
    E SG        37 25
      LMH       38,1      T 13   AN   7,8 AE   3,5             MLH  =4.5
      LMV       38,9      T 10                    AV   5,7

1978 JUN 22
CLL E           02 41 22

1978 JUN 22     HUNGARY                                                       47.8N; 19.4E  10KM H=02 44 12.9 (CSEM)
BRG E PG        02 45 41,8                                                          D=  4.7 DEG   AZ=129        BRG
    E SG        46 48,5
    E           47 42,2
CLL E SG        02 47 10                                                            D=  5.4 DEG   AZ=128        CLL
    E           48 02
MOX E(SG)       02 47 25                                                            D=  5.8 DEG   AZ=116        MOX

1978 JUN 22
CLL E(P)        02 50 21

1978 JUN 22     HUNGARY                                         MB=4,4 ( 1)   46.8N; 21.1E  10KM H=02 57 54.2 (NEIS)
                                                                              46.8N; 21.2E  10KM   02 57 55.8 (CSEM)
BRG E PN        02 59 28,5                                                          D=  6,2 DEG   AZ=128        BRG
    E           59 39,3
    E SG        03 01 28,5
CLL E PN        02 59 40                                                            D=  7,0 DEG   AZ=127        CLL
    E PG        03 00 19
    E(SN)       01 02
    E           01 40
    E SG        02 04
    E LM        02 48                                                               D=  7,4 DEG   AZ=118        MOX
MOX E PN        02 59 44
    E SN        03 01 05
    E SB        01 30
    E SG        01 47
      LMH       02,6      T 13   AN   1,0 AE   0,5             MLH  =3,6
      LMV       03,3      T 10                    AV   0,7

1978 JUN 22
CLL E           03 22 39
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1978 JUN 22     MINDANAO, PHILIPPINE ISLANDS                    MB=5,4 (34)   8,7N;126,7E  47KM H=04 04 15,2 (NEIS)
                                                                              8,8N;126,4E  33KM   04 04 09,4 (WDCB)
BRG E P         04 17 44,9D 1,4 /   19                                        D= 97,2 DEG   AZ= 67       BRG
CLL E P         04 17 46    1,4 /   18                                        D= 97,6 DEG   AZ= 66       CLL
MOX E P         04 17 50    1,4 /   19                          MPV  =5,4     D= 98,7 DEG   AZ= 65       MOX

1978 JUN 22     NEAR EARTHQUAKE                                                                          (VKA)
CLL E           04 43 02

1978 JUN 22     HUNGARY                                         MB=3,2 ( 1)   47,0N; 21,2E  10KM H=05 31 00,6 (NEIS)
                                                                              46,8N; 21,1E  10KM   05 30 59,9 (CSEM)
                                                                              46,6N; 21,0E  33KM   05 31 00,4 (WDCB)
BRG E PN        05 32 36,3                                                    D=  6,2 DEG   AZ=126       BRG
    E SN           33 48,2
                                                                              D=  6,9 DEG   AZ=126       CLL
CLL E PN        05 32 44
    E              34 18
    E              35 23
MOX E PG        05 33 15                                                      D=  7,3 DEG   AZ=116       MOX
    E SN           33 57
    E SB           34 28
    E SG           34 40

1978 JUN 22     ANDREANOF ISLANDS, ALEUTIAN IS,                 MB=4,8 (21)   51,6N;179,4W  33KM H=05 41 27,7 (NEIS)
BRG E P         05 53 19,8                                                    D= 77,3 DEG   AZ=  8       BRG

1978 JUN 22     MINDANAO, PHILIPPINE ISLANDS                    MB=5,5 (44)   8,5N;126,6E  59KM H=06 37 51,5 (NEIS)
                                                                              8,7N;126,4E  33KM   06 37 44,7 (WDCB)
BRG E P         06 51 19,8  1,4 /   22                                        D= 97,3 DEG   AZ= 67       BRG
     LM         07 38       T 18   AN   0,3 AE   1,4 AV   1,1   MLV  =5,4  (NO DEPTH CORRECTION)
CLL I P         06 51 21,7  1,5 /   22                                        D= 97,7 DEG   AZ= 66       CLL
MOX E P         06 51 27                                                      D= 98,8 DEG   AZ= 65       MOX
     LMH        07 41,8     T 18   AN   0,4 AE   0,7          MLH  =5,2  (NO DEPTH CORRECTION)
     LMV           42,1     T 20                AV   0,8   MLV  =5,2  (NO DEPTH CORRECTION)

1978 JUN 22
CLL E           07 32 44   TRACES

1978 JUN 22
CLL E           07 36 16
MOX E           07 36 37

1978 JUN 22     GERMAN DEMOCRATIC REPUBLIC

MOX I PG        07 49 33
    I SG           49 46
CLL I PG        07 49 34,2
    I SG           49 48,1  0,4 /   37

1978 JUN 22     CENTRAL MID-ATLANTIC RIDGE                      MB=5,2 (40)   1,1N; 27,7W  33KM H=08 33 11,5 (NEIS)
                                                                              2,7N; 27,9W  33KM   08 33 14,5 (WDCB)
MOX E P         08 43 13,5  2,2 /   87                          MPV  =5,5     D= 59,5 DEG   AZ=227       MOX
    E AP           43 25                                                                                DEPTH  42 KM
    E PP           45 20
    E PA           47 06
    E S            51 25    T 16   AN   1,4 AE   1,0          MSH  =5,6
    E SS           55 20
    E SSS          58 00
      LMH       09 06,8     T 15,5 AN   0,8 AE   0,7          MLH  =5,1
      LMV          07       T 18                AV   1,4   MLV  =5,2
CLL I P         08 43 22,0  2,6 /  140                                       D= 60,6 DEG   AZ=228       CLL
    E PP           45 30                                                     DISTANCE  62 DEG
    E PPP          47 16
    E S            51 45
      LM        09 09       T 16   AN   1   AE   0,5 AV   1,5   MLH  =5,1 MLV  =5,2
BRG E P         08 43 22,0  2,0 /   57                                       D= 60,8 DEG   AZ=230       BRG
    I              43 34,5                                                   DISTANCE  62 DEG
    E PPP          47 16,0
    E S            51 44,0
      LM        09 07       T 17   AN   0,0 AE   1,2 AV   1,3   MLH  =5,1 MLV  =5,2

1978 JUN 22     ANDREANOF ISLANDS, ALEUTIAN IS,                 MB=4,3 ( 1)   51,9N;175,2W  33KM H=10 38 22,6 (NEIS)
BRG E P         10 50 05,2                                                    D= 77,3 DEG   AZ=  6       BRG
MOX E           10 50 05                                                      D= 77,7 DEG   AZ=  4       MOX

1978 JUN 22
MOX E           11 02 03
CLL E P         11 03 48   TRACES

1978 JUN 22
CLL E           11 21 35

1978 JUN 22
CLL E           12 22 48

1978 JUN 22     KURILE ISLANDS REGION                                         /NO MB COMP./ 43,8N;148,7E  40KM H=13 38 02     (ISC)
CLL E P         13 49 54                                                      D= 77,8 DEG   AZ= 31       CLL

1978 JUN 22     OFF EAST COAST OF KAMCHATKA                     MB=4,8 (21)   52,8N;160,4E  49KM H=16 36 17,1 (NEIS)
                                                                              52,8N;160,4E  50KM   16 36 16,8 (WDCB)
CLL E P         16 47 40    1,3 /   25                                        D= 72,7 DEG   AZ= 20       CLL
    E              48 09
BRG I P         16 47 43,0  1,1 /   10                                        D= 72,9 DEG   AZ= 21       BRG
MOX E P         16 47 48                                                      D= 73,6 DEG   AZ= 19       MOX

1978 JUN 22     OFF EAST COAST OF KAMCHATKA                     MB=4,7 ( 6)   52,9N;160,4E  33KM H=16 44 31,5 (NEIS)
CLL E P         16 55 56                                                      D= 72,6 DEG   AZ= 20       CLL

1978 JUN 22
CLL E           17 09 32   TRACES
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1978 JUN 22     FRG, SOUTHEASTERN REGION
                NEAR BAD REICHENHALL
CLL E           18 01 04                                                                                 (GRF)

1978 JUN 22
CLL E           18 35 11

1978 JUN 22     EASTERN GULF OF ADEN                            MB=4,7 (12)   12,5N; 48,0E  33KM H=21 41 05,3 (NEIS)
                                                                              12,0N; 47,9E  33KM   21 40 55,7 (WDCB)
BRG E P         21 49 36,7                                                    D= 47,2 DEG   AZ=132       BRG
CLL E P         21 49 43                                                      D= 48,0 DEG   AZ=131       CLL

1978 JUN 23     PHILIPPINE ISLANDS REGION                       MB=4,5 ( 5)   19,2N;120,9E  33KM H=23 48 52,0 (NEIS)
BRG E P         00 01 28,5                                                    D= 85,5 DEG   AZ= 65       BRG

1978 JUN 23
CLL E           00 06 33

1978 JUN 23     GERMAN DEMOCRATIC REPUBLIC

CLL I PG        01 05 42,8
    I SG           05 56,8  0,4 /   27

1978 JUN 23     GREECE                                          MB=4,1 ( 3)   40,8N; 23,1E  10KM H=01 57 01,2 (NEIS)
                                                                              40,8N; 23,2E  10KM   01 57 03,2 (CSEM)
BRG E(PP)       02 00 02,5                                                    D= 11,9 DEG   AZ=144       BRG
CLL E S         02 02 31                                                      D= 12,6 DEG   AZ=142       CLL
    E L            04 48
MOX   LMH       02 04,4     T 11,5 AN   0,9 AE   0,8          MLH  =2,*     D= 12,7 DEG   AZ=137       MOX
      LMV          05,4     T 10                AV   1,1

1978 JUN 23
CLL E           02 52 09

1978 JUN 23
CLL E           04 44 46

1978 JUN 23     UZBEK SSR                                       MB=4,7 (11)   40,2N; 63,5E  33KM H=09 40 32,7 (NEIS)
BRG E P         09 47 30,0                                                    D= 35,7 DEG   AZ= 88       BRG

1978 JUN 23
MOX E           12 33 25
BRG E           12 33 52,2
CLL E           12 35 08
    E              35 23

1978 JUN 23     CENTRAL YUGOSLAVIA                                            /NO MB COMP./
                (QUESTIONABLY)                                                43,2N; 22,1E   0KM H=12 32 04    (ISC)
BRG E           12 35 07,4                                                    D=  9,5 DEG   AZ=141       BRG
    E              35 46,5
CLL E           12 35 43                                                      D= 10,2 DEG   AZ=139       CLL
    E              36 12
MOX E           12 35 38                                                      D= 10,3 DEG   AZ=132       MOX
     LM            37

CLL   INTERRUPTION OF SOME RECORDS FROM 14H 25M TO 15H 46M

1978 JUN 23
CLL E           16 14 45

1978 JUN 23     GREECE                                          MB=4,2 ( 3)   40,7N; 23,2E  10KM H=19 58 27,9 (NEIS)
MOX E P         20 01 34   TRACES                                             D= 12,8 DEG   AZ=136       MOX
    E PP           01 43
      LMH          05,9     T 11,0 AN   0,5 AE   0,5          MLH  =4,0
      LMV          06,8     T 10                AV   0,6

1978 JUN 24     ALBANIA                                         MB=4,7 (15)   41,7N; 20,3E  10KM H=00 14 28,2 (NEIS)
                                                                              41,7N; 20,3E  10KM   00 14 30,2 (CSEM)
                                                                              41,7N; 20,2E  33KM   00 14 31,0 (WDCB)
BRG I P         00 16 57,8C 1,3 /   28                                        D= 10,2 DEG   AZ=152       BRG
    I PPP          17 14
    E              19 18,0
    E              20 09,2
      LMH          20,5     T 12   AN   1,3 AE   2,8
      LMV          21       T  8                AV   3,1
MOX E P         00 17 06    1,2 /   49          MPV  =5,8     D= 10,8 DEG   AZ=143       MOX
      LMH          20,7     T 13,5 AN   1,5 AE   2,3          MLH  =4,3
      LMV          21,8     T 11                AV   1,6
CLL I P         00 17 06,9C 1,6 /   48                                        D= 10,8 DEG   AZ=150       CLL
    E PPP          17 24                                                     DISTANCE  13 DEG
    E SS           19 36
    E LG2          20 35
      LMH          20,8     T 10   AN   2   AE   3            MLH  =4,6
      LMV          21,5     T 10                AV   2

1978 JUN 24     ANDREANOF ISLANDS, ALEUTIAN IS,                 MB=4,6 (27)   51,3N;178,9W  66KM H=01 20 42,7 (NEIS)
BRG E P         01 32 32,4                                                    D= 77,6 DEG   AZ=  8       BRG
MOX E P         01 32 35                                                      D= 78,0 DEG   AZ=  7       MOX

1978 JUN 24
CLL E           03 03 30   TRACES

1978 JUN 24     VANUATU ISLANDS                                 MB=5,5 (24)   15,0S;167,3E 122KM H=03 27 17,9 (NEIS)
                                                                              15,0S;167,1E  33KM   03 27 07,3 (WDCB)
BRG E(PKHKP)    03 46 23,0                                                    D=138,3 DEG   AZ= 41       BRG
    E PKIKP        46 31,4
CLL E(PKHKP)    03 46 19                                                      D=138,3 DEG   AZ= 39       CLL
    I PKIKP        46 31,8

1978 JUN 24     GREECE                                          MB=4,0 ( 3)   40,8N; 23,4E  10KM H=04 35 33,4 (NEIS)
BRG E P         04 38 31,0                                                    D= 12,0 DEG   AZ=143       BRG
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1978 JUN 27 BULGARIA MB=4,2 (10) 42,1N; 24,1E 14KM H=12 13 21,6 (NEIS)
42,1N; 24,1E 18KM 12 13 24,1 (CSEM)
41,9N; 23,8E 33KM 12 13 22,0 (WDCB)
D= 11,2 DEG AZ=138 BRG
D= 11,9 DEG AZ=136 CLL

BRG E(P) 12 21 09,2
CLL E(PP) 12 21 24
E(S) 23 45
E 24 23
E 24 58
LM 26,2 D= 12,1 DEG AZ=130 MOX
MOX E P 12 21 15 MLH =3,6
LMH 25,5 T 13 AN 0,4 AV 0,5
LMV 26,5 T 12

1978 JUN 27 KURILE ISLANDS MB=5,0 (30) 46,6N;153,3E 33KM H=12 43 42,9 (NEIS)
47,1N;152,7E 33KM 12 43 46,2 (WDCB)
D= 76,7 DEG AZ= 27 CLL

CLL I P 12 55 31,4 1,1 / 36
LM 13 35 D= 76,8 DEG AZ= 27 BRG
BRG E P 12 55 32,0 D= 77,6 DEG AZ= 26 MOX
MOX E P 12 55 38

1978 JUN 27
CLL E 15 01 02

1978 JUN 27 TONGA ISLANDS REGION MB=5,2 (17) 17,1S;172,5W 33KM H=14 44 45,9 (NEIS)
17,0S;173,7W 33KM 14 44 48,9 (WDCB)
D=145,6 DEG AZ= 9 CLL

CLL I PKP 15 04 24,3 1,3 / 39
E 04 46
LM 16 12 D=145,9 DEG AZ= 11 BRG
BRG E PKP 15 04 23,7 1,2 / 42 D=146,4 DEG AZ= 7 MOX
MOX E PKP 15 04 25 1,2 / 61 DEPTH 35 KM
E APKP 04 34
E 04 42
LMH 16 19 T 16,5 AN 0,5 AE 0,3 MLH =5,4
LMV 20 T 16 AV 0,5 MLV =5,4

1978 JUN 27 GERMAN DEMOCRATIC REPUBLIC

CLL I PG 16 54 23,3
I SG 54 37,3 0,4 / 27

1978 JUN 27 OFF EAST COAST OF HONSHU, JAPAN MB=5,7 (84) 37,1N;142,8E 35KM H=19 10 33,3 (NEIS)
37,6N;142,7E 33KM 19 10 30,0 (WDCB)
D= 81,6 DEG AZ= 39 BRG
DISTANCE 80 DEG

BRG I P 19 22 48,7C 2,0 / 114
I AP 22 59,6
I PP 25 53,8
I S 32 57,0
LM 20 02 T 15 AN 5,2 AE 6,5 AV 13,6 MLH =6,2 MLV =6,4
CLL I P 19 22 47,8C 1,6 / 120 D= 81,6 DEG AZ= 38 CLL
I AP 22 58,3 1,6 / 250 DISTANCE 81 DEG
E 23 45
E PP 25 54
E S 33 00
E SSSS 43,0
LM 20 03 T 14 AN 6,5 AE 5 AV 9 MLH =6,2 MLV =6,4
MOX E P 19 22 54 C 1,9 / 121 MPV =5,6 D= 82,6 DEG AZ= 37 MOX
E AP 23 05 DEPTH 40 KM
E PP 26 00
E PPP 28 10
E SKS 33 10
E S 33 25
E SS 38 20
LM 20 04,9 T 16,5 AN 7,4 AV 7,5 MLH =6,2 MLV =6,2

1978 JUN 27 SOUTH OF ALASKA MB=4,8 (41) 55,8N;154,4W 15KM H=23 40 58,0 (NEIS)
56,1N;154,7W 33KM 23 41 02,8 (WDCB)
CLL E P 23 52 27 D= 72,7 DEG AZ=353 CLL
BRG E P 23 52 29,9 D= 73,3 DEG AZ=353 BRG
MOX E P 23 52 30 1,4 / 14 MPV =4,8 D= 73,3 DEG AZ=352 MOX

1978 JUN 28
CLL E 00 28 27
E 29 14

1978 JUN 28
BRG E P 03 51 07,0
CLL E 03 51 08

1978 JUN 28 MINDORO, PHILIPPINE ISLANDS MB=5,4 (55) 13,9N;120,7E 168KM H=04 51 41,0 (NEIS)
14,3N;120,7E 220KM 04 51 48,2 (WDCB)
BRG I P 05 04 20,3C 1,3 / 32 D= 89,6 DEG AZ= 68 BRG
CLL I P 05 04 22,1C 1,6 / 35 D= 90,0 DEG AZ= 68 CLL
E S 14 58
E XS 16 02
MOX E P 05 04 27 D= 91,0 DEG AZ= 67 MOX
E PP 08 08,5
LMH 42,8 T 16 AN 0,3
LMV 44,9 T 13 AV 0,6

1978 JUN 28 SOUTH OF HONSHU, JAPAN MB=4,8 (29) 31,2N;138,6E 308KM H=10 47 42,9 (NEIS)
BRG I P 10 59 44,0 D= 84,8 DEG AZ= 45 BRG
CLL I P 10 59 44,6D 1,0 / 18 D= 84,9 DEG AZ= 44 CLL

1978 JUN 28 TONGA ISLANDS REGION MB=4,7 (5) 22,4S;174,9W 60KM H=11 42 08,5 (NEIS)
CLL I PKP1 12 01 56,0C 1,3 / 41 D=150,5 DEG AZ= 15 CLL
BRG E PKIKP 12 01 51,6 D=150,8 DEG AZ= 17 BRG
E PKP1 01 56,3
I 02 10,0
MOX E PKHKP 12 01 58 1,8 / 47 D=151,3 DEG AZ= 13 MOX
E APKP 02 11

1978 JUN 28 FIJI ISLANDS REGION MB=5,0 (9) 17,9S;178,6W 580KM H=14 31 55,8 (NEIS)
CLL E PKP1 14 50 31 D=145,4 DEG AZ= 20 CLL
BRG E PKP1 14 50 32,5 D=145,6 DEG AZ= 21 BRG

1978 JUN 28 AZORES ISLANDS MB=4,5 (2) 39,9N; 29,8W 10KM H=14 44 18,2 (NEIS)
MOX LMH 15 01,9 T 16 AN 0,4 MLH =4,2 D= 30,7 DEG AZ=266 MOX
LMV 02,2 T 16,5 AV 0,5 MLV =4,4
CLL E P 14 50 47 D= 31,6 DEG AZ=266 CLL

1978 JUN 28
BRG I(P) 15 13 28,0 0,9 / 8

1978 JUN 28 PAKISTAN MB=4,7 (11) 25,2N; 62,3E 33KM H=16 00 51,9 (NEIS)
25,8N; 62,3E 33KM 16 00 58,0 (WDCB)
CLL I P 16 09 12,3D 1,1 / 18 D= 45,5 DEG AZ=106 CLL

1978 JUN 28
CLL E 16 12 59

1978 JUN 28 TONGA ISLANDS /NO MB COMP./ 21,7S;174,4W 33KM H=17 34 34,6 (ISC)
CLL E PKP1 17 54 25 D=149,9 DEG AZ= 14 CLL
BRG E PKP1 17 54 25,4 D=150,2 DEG AZ= 16 BRG

1978 JUN 28
CLL E 18 01 33
BRG E P 18 01 34,0 1,0 / 10

1978 JUN 28 FIJI ISLANDS REGION MB=4,6 (3) 17,1S;177,6W 403KM H=20 29 12,8 (NEIS)
CLL I PKP 20 48 04,6D 1,1 / 55 D=144,8 DEG AZ= 18 CLL
BRG I PKP 20 48 05,1D 1,1 / 28 D=145,1 DEG AZ= 20 BRG
MOX E PKP 20 48 07,5 D=145,7 DEG AZ= 16 MOX

1978 JUN 29
CLL E 03 24 34

1978 JUN 29
CLL E 04 09 46

1978 JUN 29
CLL E 08 38 25

1978 JUN 29 ANDREANOF ISLANDS, ALEUTIAN IS, MB=5,0 (30) 52,8N;173,3W 147KM H=09 10 57,6 (NEIS)
CLL E AP 09 23 07 D= 76,1 DEG AZ= 4 CLL
BRG I P 09 22 32,6 D= 76,5 DEG AZ= 5 BRG
E AP 23 09,2 0,6 / 11
MOX E P 09 22 35 TRACES D= 76,8 DEG AZ= 3 MOX
E AP 23 12 DEPTH 154 KM
E XP 23 17

1978 JUN 29 OFF COAST OF NORTHERN CALIFORNIA MB=4,7 (9) 41,8N;127,0W 15KM H=11 28 14,0 (NEIS)
CLL E P 11 40 29 D= 80,9 DEG AZ=331 CLL
MOX LMH 12 18,3 T 16 AN 0,2 MLH =4,6 D= 81,1 DEG AZ=330 MOX
LMV 20,7 T 16 AV 0,3 MLV =4,8
BRG E(P) 11 40 34,0 D= 81,6 DEG AZ=332 BRG

1978 JUN 29 LOYALTY ISLANDS MB=5,6 (30) 20,3S;168,2E 33KM H=13 55 03,6 (NEIS)
20,2S;167,4E 33KM 13 54 59,1 (WDCB)
BRG E PKP 14 14 33,0 1,5 / 33 D=143,4 DEG AZ= 43 BRG
CLL E PKP 14 14 33 C 2,0 / 49 D=143,4 DEG AZ= 41 CLL
MOX I PKP 14 14 37,0D 1,7 / 97 D=144,5 DEG AZ= 40 MOX
E APKP 14 50

1978 JUN 29 SOUTH OF FIJI ISLANDS MB=4,8 (3) 25,0S;178,8E 582KM H=16 33 26,4 (NEIS)
CLL I PKP1 16 52 17,0D 0,9 / 37 D=151,6 DEG AZ= 28 CLL
I PKP2 52 28,2C 0,7 / 26 MC =4,9
BRG I PKP1 16 52 17,3D 0,9 / 22 D=151,7 DEG AZ= 30 BRG
I PKP2 52 28,8
MOX E PKHKP 16 52 19 D=152,5 DEG AZ= 26 MOX
E PKP2 52 32 1,2 / 12

1978 JUN 29
CLL E 21 24 45

1978 JUN 30 ROMANIA MB=4,3 (3) 47,7N; 23,3E 10KM H=01 15 29,3 (NEIS)
47,9N; 23,5E 10KM 01 15 29,9 (CSEM)
47,7N; 23,1E 33KM 01 15 28,7 (WDCB)
D= 6,9 DEG AZ=114 BRG

BRG E PN 01 17 12,7
E 17 20,8
E SN 18 39,7
E SG 19 18,7
CLL E PN 01 17 21 D= 7,6 DEG AZ=114 CLL
E SN 18 47
E SG 19 48
MOX E PN 01 17 31 D= 8,2 DEG AZ=107 MOX
E PG 18 15
E SN 19 02
E SG 20 00
LM 21,1 T 10 AE 0,3 AV 0,4 MLH =3,3

1978 JUN 30
CLL E 02 56 09

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1978 JUN 30
CLL E          03 53 58
                                                  MB=3,5 ( 1)   46,8N; 21,0E  10KM H=07 34 16,1 (NEIS)
1978 JUN 30    HUNGARY                                          46,8N; 21,1E  10KM   07 34 16,7 (CSEM)
                                                                47,3N; 20,5E  33KM   07 34 26,4 (WDCB)
                                                                        D=  6,2 DEG   AZ=128        BRG

BRG E PN       07 35 49,6
    E             36 28,0
    E             37 28,9
    E             38 06,6                                                D=  6,9 DEG   AZ=128        CLL
CLL E PN       07 36 02
    E             37 38
    E             38 40                                                  D=  7,3 DEG   AZ=118        MOX
MOX E PN       07 36 04
    E PG          36 42
    E SG          38 18
      LM          39,5     T 11   AN   0,4          AV   0,5   MLH  =3,3

1978 JUN 30    VANUATU ISLANDS REGION                   MB=4,6 ( 1)   15,5S;167,5E 115KM H=13 27 41,9 (NEIS)
BRG E PKP      13 46 48,2                                              D=138,8 DEG   AZ= 41        BRG

1978 JUN 30    LUZON, PHILIPPINE ISLANDS                MB=4,7 ( 7)   18,8N;121,0E  21KM H=16 10 39,1 (NEIS)
BRG E P        16 23 19,2  1,2 /   15                                  D= 85,9 DEG   AZ= 65        BRG
CLL E P        16 23 20                                                D= 86,2 DEG   AZ= 65        CLL

1978 JUN 30
CLL E          19 17 05
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1978 JUL 01     TONGA ISLANDS REGION                          /NO MB COMP./  22.5S;175.3W  33KM H=00 43 45.3  (ISC)
CLL E PKP1      01 03 33                                                     D=150.5 DEG   AZ= 16       CLL
BRG E PKP1      01 03 34.2                                                   D=150.8 DEG   AZ= 18       BRG

1978 JUL 01
CLL E           02 54 41

1978 JUL 01
MOX E SG        04 07 31

1978 JUL 01     HOKKAIDO, JAPAN, REGION                       /MB=4.8 ( 7)/  42.8N;145.6E  81KM H=04 12 40.7  (ISC)
CLL E P         04 24 31                                                     D= 77.6 DEG   AZ= 34       CLL

1978 JUL 01     PANAMA                                          MB=5.3 (79)    9.3N; 78.5W  92KM H=08 53 57.6 (NEIS)
                                                                              9.1N; 78.5W  33KM   08 53 50.6 (WDCB)
MOX E P         09 06 14  D 1.6 /   55                          MPV  =5.2      D= 83.0 DEG   AZ=276       MOX
    E           06 33
    E           06 40
    E S         16 28
    E XS        17 00
      LMH       47.7      T 18   AN   0.2 AE   0.3
      LMV       47.8      T 17                AV   0.6
CLL E P         09 06 18  D 1.5 /   61                          D= 83.8 DEG   AZ=277       CLL
    E           06 37
    I           06 44.7
    E S         16 36
      LM        42
BRG I P         09 06 22.1D 1.3 /   41                          D= 84.4 DEG   AZ=278       BRG
    E           06 40.8                                       DISTANCE  82 DEG
    I           06 47.9
    E S         16 44.0
      LM        42

1978 JUL 01     SOUTH OF FIJI ISLANDS                           MB=5.1 ( 5)   22.4S;177.8W(348KM H=09 35 08.4)(NEIS)
CLL I PKP1      09 54 26.1C 1.0 /   23                                       D=149.9 DEG   AZ= 20       CLL

1978 JUL 01     SOUTH OF FIJI ISLANDS                         /MB=5.0 ( 1)/  25.8S;176.7W 121KM H=10 18 36     (ISC)
CLL I PKP1      10 38 23.2                                                   D=153.5 DEG   AZ= 20       CLL
    I PKP2      38 35.9
BRG E PKP1      10 38 23.5                                                   D=153.7 DEG   AZ= 22       BRG
    I PKP2      38 36.6

1978 JUL 02     EAST CHINA SEA                                /MB=4.5 ( 5)/  29.7N;128.3E  33KM H=00 11 34     (ISC)
CLL E P         00 23 48                                                     D= 91.4 DEG   AZ= 53       CLL

1978 JUL 02     WESTERN POLAND
CLL E PG        03 59 11                                                   DISTANCE 220 KM
    E SG        59 34
MOX E SG        04 00 05.5

1978 JUL 02     TONGA ISLANDS                                   MB=5.9 (39)   15.3S;175.5W  25KM H=04 01 33.3 (NEIS)
                                                                             15.3S;175.6W  33KM   04 01 29.4 (WDCB)
CLL E PKP       04 21 05                                                     D=143.4 DEG   AZ= 14       CLL
    E           23 06
    E(PP)       24 14
    E PPS       36 59
    E           38.3
    E SS        43.1
      LM        05 12       T 30   AN  15   AE   6   AV  13     MLH  =6.6 MLV  =6.6
      L         24          T 21   AN   6.5 AE   7   AV   8
BRG E PKP       04 21 08.2  1.0 /   24                                       D=143.7 DEG   AZ= 16       BRG
    E           23 07
    E SS        43 06
      LMV       05 20       T 24                   AV   1.2   MLV  =6.4
MOX E PKP       04 21 07  D 2.0 /  120                                       D=144.3 DEG   AZ= 12       MOX
    E           21 39
    E           23 00
    E PPS       36 50
    E           38 14
    E SS        43 00
    E PSPS      44 10
      LMV       05 22.9     T 23                   AV   7.9   MLV  =6.4
      LMH       29          T 18.5 AN   5.3                  MLH  =6.3

1978 JUL 02     SOUTH OF FIJI ISLANDS                         /NO MB COMP./  21.0S;175.1E 362KM H=13 14 54     (ISC)
CLL I PKP1      13 33 51.2                                                   D=146.7 DEG   AZ= 32       CLL
BRG E PKP1      13 33 51.6                                                   D=146.7 DEG   AZ= 33       BRG

1978 JUL 02     SOUTHWEST OF SUMATERA                           MB=5.3 (22)    6.2S;103.9E  56KM H=13 24 33.9 (NEIS)
BRG E P         13 37 51.7                                                   D= 94.7 DEG   AZ= 94       BRG
    E PP        41 38.0

1978 JUL 02
BRG E(P)        16 54 29.0

1978 JUL 02     GERMAN DEMOCRATIC REPUBLIC

CLL I PG        21 03 35.3
    I SG        03 49.2  0.4 /   27
BRG E SG        21 04 09

1978 JUL 03     TONGA ISLANDS REGION                            MB=5.1 ( 8)   17.5S;172.5W  33KM H=00 14 26.8 (NEIS)
                                                                             16.7S;177.0W  33KM   00 14 33.8 (WDCB)
CLL I PKP       00 34 05.4C 2.0 /   90                                       D=146.0 DEG   AZ=  9       CLL
    E           34 18
    E           34 27
    E PKS       37 39
BRG E PKP       00 34 05.7  1.8 /   49                                       D=146.3 DEG   AZ= 11       BRG
MOX E PKP       00 34 07.5  2.0 /   86                                       D=146.8 DEG   AZ=  7       MOX
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1978 JUL 03   IRAN
BRG E P       01 42 03,0
CLL E P       01 42 10
MOX   LMV     02 02,5

1978 JUL 03   WALLENV ISLANDS REGION
BRG E PKIKP   01 52 34,3
   E PKP2     53 22,6
CLL E PKP2    01 53 25

1978 JUL 03   CCLEBES SEA
BRG E P       01 58 37,9  1,0 /   8
                                        BRG

1978 JUL 03
CLL E         02 29 55

1978 JUL 03
CLL   L       03 08
MOX   LMH     03 10,1     T 20,5 AN   0,8 AE   0,9
      LMV     22,6        T 18                      AV   0,6

1978 JUL 03   POLAND, UPPER SILESIA
BRG E PKP     03 25 02,0
   E SKP      28 38,5
CLL E PKP     03 25 01
   E PKS      28 36
MOX E PKP     03 25 00

1978 JUL 03   VANUATU ISLANDS
BRG E PKP     03 25 02,0
   E SKP      28 38,5
CLL E PKP     03 25 01
   E PKS      28 36
MOX E PKP     03 25 00

1978 JUL 03   SOLOMON ISLANDS
BRG E PKP     03 31 36,2  1,2 /  14
CLL E PKP     03 31 37

1978 JUL 03   SOUTHERN SUMATERA
BRG E P       06 31 20,5
CLL E(P)      06 31 21
MOX E         06 31 27    TRACES

1978 JUL 03   KURILE ISLANDS
CLL I P       07 00 05,7  1,1 /  17
BRG I P       07 00 07,2

1978 JUL 03   ?: USSR-W.C. CHINA BORDER REGION
BRG I P       21 12 15,5  0,7 /  12
   E P2P      12 33,3
   E A3       14 13,5
CLL I P       21 12 16,1C 1,0 /  23
   E P       21 12 22,3  1,2 /  16
MOX E P

1978 JUL 03   GREECE
CLL E         16 31 37

1978 JUL 03
CLL I SG      11 11 39,9  0,4 /  15

1978 JUL 03   GERMAN DEMOCRATIC REPUBLIC
BRG E P       20 13 05,0
   E          17 39
CLL E L       20 17 19
   E          17 39
MOX   LMH     20 17,3     T 10      AV   0,3 AE   0,3
      LMV     18,2        T 10                        AV   0,3

1978 JUL 03   TIBET
BRG E P       08 56 37,5  0,9 /   9
   E          56 57,0
CLL E P       08 56 40
MOX E P       08 56 49    1,8 /  20

1978 JUL 03   ?
CLL E         07 35 53    TRACES

1978 JUL 03
CLL E         04 44
   E PP       32 22
   E          28 54
CLL E PKP2    07 28 34    1,6 /  27
   E          32 54
   E PP       28 47
   LMV        08 45       T 18                        AV   0,9
MOX E PKP2    07 28 38    1,7 /  24                        AV   0,9
   LMV        08 45       T 20                        AV   0,9
   LMH        45          T 20,5 AN   0,5 AE   0,8
   E XPP      56 40,6
   E S        03 02 45,0
   E XS       03 39,0
   E          32
   LMV        T 16
CLL I P       02 52 53,4C(1,2 / 200)                  AV   3,0
   I AP       53 23,7
   E PP       55 58
   E APP      56 27
   E S        03 02 46
   E XS       03 38
   E XSS      08 54
   E          33
   LM         T 16   AN   1,5 AE   2   AV   2,5
MOX I P       02 52 59,0C 2,0 / 333
   E AP       53 29,5
   E APP      56 50
   E          59 52
   E S        03 02 58
   E XS       03 44
   E SS       08 24
   E XSS      09 10
   E          33
   LMV        T 14                                    AV   1,8
   LMH        33          T 12                  V   1,7

1978 JUL 04   KYUSHU, JAPAN
BRG I P       02 52 52,3C 1,6 / 129
   E AP       53 22,4
   E          53 46,0
   E PP       02 55 57,6
   E APP      56 25,0
   E XPP      56 40,6
   E S        03 02 45,0
   E XS       03 39,0
   E          32
   LMV        T 16
CLL I P       02 52 53,4C(1,2 / 200)                  AV   3,0
   I AP       53 23,7
   E PP       55 58
   E APP      56 27
   E S        03 02 46
   E XS       03 38
   E XSS      08 54
   E          33
   LM         T 16   AN   1,5 AE   2   AV   2,5
MOX I P       02 52 59,0C 2,0 / 333
   E AP       53 29,5
   E APP      56 50
   E          59 52
   E S        03 02 58
   E XS       03 44
   E SS       08 24
   E XSS      09 10
   E          33
   LMV        T 14                                    AV   1,8
   LMH        33          T 12                  V   1,7

1978 JUL 04   SOUTH OF FIJI ISLANDS
CLL I PKP1    09 19 01,4C 0,7 /  20
   I PKP2     19 14,0C 0,6 /  15
   E APKP     21 28
BRG E PKP1    09 19 01,8
   E PKP2     19 14,5
   E APKP     21 29,2
                                        BRG

1978 JUL 04   SAMOA ISLANDS REGION
BRG E(P)      09 44 04,0
                                        CLL

1978 JUL 04
CLL E PKP     13 03 13
BRG E PKP     13 03 12,6
   E          03 22,6
MOX E PKP     13 03 14,5  1,8 /  47
   E          03 32
                                        MOX

1978 JUL 04   NEAR EAST_COAST OF HONSHU, JAPAN
CLL E AP      15 59 23

1978 JUL 04   TONGA ISLANDS
CLL I PKP     16 28 18,4
BRG E PKP     16 28 19,0
MOX E PKP     16 28 21    1,1 /  14

1978 JUL 04   WESTERN POLAND
BRG E PN      18 35 28,2
   I PG       35 30,4
   I SG       35 50,0
CLL E PN      18 35 36
   I PG       35 38,4
   I SG       36 04,9
   I          36 10,1
MOX I PN      18 35 57,5
   E SG       36 37

1978 JUL 04   NEAR N. COAST OF WEST IRIAN
MOX   LMV     21 54,6     T 19      AV   0,9 AE   0,3
      LMH     54,7        T 18      AN   0,4 AE   0,3

1978 JUL 04   SOUTH PACIFIC CORDILLERA
CLL E PKIKP   22 08 51
   E PKP2     09 23

1978 JUL 04   SWITZERLAND
MOX E PN      04 38 37
   E PG       38 50,5
   E SN       39 17
   E SG       39 30,5
BRG I PG      04 39 02,5
   I SG       39 58,4
CLL E(PG)     04 39 03
   E SG       40 02

1978 JUL 04   TONGA ISLANDS REGION
CLL I PKP1    03 47 23,4  1,1 /  20
   E          47 39
BRG E PKP1    03 47 24,0  0,9 /  10
   E          47 40,6
MOX E PKHKP   03 47 26
   E          47 42

1978 JUL 04   NEAR EAST_COAST OF HONSHU, JAPAN
BRG E(P)      09 44 04,0
                                        CLL

1978 JUL 04   SAMOA ISLANDS REGION
CLL E PKP     13 03 13
BRG E PKP     13 03 12,6
   E          03 22,6
MOX E PKP     13 03 14,5  1,8 /  47
   E          03 32
                                        MOX

1978 JUL 04   TONGA ISLANDS
CLL I PKP     16 28 18,4
BRG E PKP     16 28 19,0
MOX E PKP     16 28 21    1,1 /  14

1978 JUL 04   WESTERN POLAND
BRG E PN      18 35 28,2
   I PG       35 30,4
   I SG       35 50,0
CLL E PN      18 35 36
   I PG       35 38,4
   I SG       36 04,9
   I          36 10,1
MOX I PN      18 35 57,5
   E SG       36 37

1978 JUL 04   NEAR N. COAST OF WEST IRIAN
MOX   LMV     21 54,6     T 19      AV   0,9 AE   0,3
      LMH     54,7        T 18      AN   0,4 AE   0,3

1978 JUL 04   SOUTH PACIFIC CORDILLERA
CLL E PKIKP   22 08 51
   E PKP2     09 23

1978 JUL 04   SOUTH OF FIJI ISLANDS
CLL I PKP1    09 19 01,4C 0,7 /  20
   I PKP2     19 14,0C 0,6 /  15
   E APKP     21 28
BRG E PKP1    09 19 01,8
   E PKP2     19 14,5
   E APKP     21 29,2
                                        BRG

1978 JUL 04   SAMOA ISLANDS REGION
BRG E(P)      09 44 04,0
                                        CLL

1978 JUL 04
CLL E PKP     13 03 13
BRG E PKP     13 03 12,6
   E          03 22,6
MOX E PKP     13 03 14,5  1,8 /  47
   E          03 32
                                        MOX

1978 JUL 04   NEAR EAST_COAST OF HONSHU, JAPAN
CLL E AP      15 59 23

1978 JUL 04   TONGA ISLANDS
CLL I PKP     16 28 18,4
BRG E PKP     16 28 19,0
MOX E PKP     16 28 21    1,1 /  14

1978 JUL 04   WESTERN POLAND
BRG E PN      18 35 28,2
   I PG       35 30,4
   I SG       35 50,0
CLL E PN      18 35 36
   I PG       35 38,4
   I SG       36 04,9
   I          36 10,1
MOX I PN      18 35 57,5
   E SG       36 37

1978 JUL 04   NEAR N. COAST OF WEST IRIAN
MOX   LMV     21 54,6     T 19      AV   0,9 AE   0,3
      LMH     54,7        T 18      AN   0,4 AE   0,3

1978 JUL 04   SOUTH PACIFIC CORDILLERA
CLL E PKIKP   22 08 51
   E PKP2     09 23

1978 JUL 04   SOUTH OF FIJI ISLANDS
CLL I PKP1    09 19 01,4C 0,7 /  20
   I PKP2     19 14,0C 0,6 /  15
   E APKP     21 28
BRG E PKP1    09 19 01,8
   E PKP2     19 14,5
   E APKP     21 29,2
                                        BRG

1978 JUL 04   KYUSHU, JAPAN
BRG I P       02 52 52,3C 1,6 / 129
   E AP       53 22,4
   E          53 46,0
   E PP       02 55 57,6
   E APP      56 25,0
   E XPP      56 40,6
   E S        03 02 45,0
   E XS       03 39,0
   E          32
   LMV        T 16
CLL I P       02 52 53,4C(1,2 / 200)                  AV   3,0
   I AP       53 23,7
   E PP       55 58
   E APP      56 27
   E S        03 02 46
   E XS       03 38
   E XSS      08 54
   E          33
   LM         T 16   AN   1,5 AE   2   AV   2,5
MOX I P       02 52 59,0C 2,0 / 333
   E AP       53 29,5
   E APP      56 50
   E          59 52
   E S        03 02 58
   E XS       03 44
   E SS       08 24
   E XSS      09 10
   E          33
   LMV        T 14                                    AV   1,8
   LMH        33          T 12                  V   1,7
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1978 JUL 04      GREECE                                              MB=5,1 (64)   40.8N; 23.1E  19KM H=22 23 28.0 (NEIS)
                                                                                   40.8N; 23.2E  27KM    22 23 31.4 (CSEM)
                                                                                   40.6N; 22.9E  33KM    22 23 23.9 (WDCB)
                                                                                          D= 11.9 DEG   AZ=144        BRG
BRG E P          22 26 18.5  1.7 /   25
    E               26 30.0
      LM            31                                                                    D= 12.6 DEG   AZ=142        CLL
CLL E P          22 26 28    1.8 /   50                                                   DISTANCE  13 DEG
    I PP            26 35.2
    I S             28 45.8
    E L             30 58
      LM            31       T 10   AN   2   AE   2   AV   2    MLH  =4.6                 D= 12.7 DEG   AZ=137        MOX
MOX E P          22 26 31  D 1.5 /   60                             MPV  =5.6
    E S             29 12                                           MLH  =4.9
      LMH           30.9     T 12   AN   4.5 AE   4.5
      LMV           31.8     T 10                      AV   4.9

1978 JUL 04      WESTERN TURKEY                                      MB=4,9 (54)   39.5N; 33.2E  13KM H=22 39 15.0 (NEIS)
                                                                                   39.5N; 33.2E  15KM    22 39 17.7 (CSEM)
                                                                                   39.8N; 33.2E  33KM    22 39 19.3 (WDCB)
                                                                                          D= 17.6 DEG   AZ=123        BRG
BRG E P          22 43 22.5C 1.6 /   50
      LM            51       T 10                      AV   2.8   MLV  =4.0                D= 18.4 DEG   AZ=122        CLL
CLL I P          22 43 31.5C 1.6 /   53
    I PP            43 43.8
    E               44 51
      LM            51.9
      LM            53
MOX E P          22 43 38    2.8 /  109                             MPV  =4.6                D= 18.8 DEG   AZ=118        MOX
    E S             47 12
      LMV           52.7     T 16                      AV   1.1   MLV  =4.4
      LMH           53       T 12.5 AN   1.0                      MLH  =4.3

1978 JUL 04      OFF EAST COAST OF HONSHU, JAPAN                     MB=5,0 ( 5)   33.6N;141.2E  46KM H=23 04 49.7 (NEIS)
BRG E P          23 17 16.0                                                               D= 83.9 DEG   AZ= 42        BRG
CLL E P          23 17 16                                                                 D= 84.0 DEG   AZ= 41        CLL

1978 JUL 05      UNDERGROUND EXPLOSION                               MB=5,8 (70)   49.8N; 78.9E   0KM H=02 46 57.3 (NEIS)
BRG I P          02 54 37.4C 0.8 /   70                                                   D= 40.3 DEG   AZ= 65        BRG
    I PN            56 07.2                                                               DISTANCE  38 DEG
    I PP            56 13.6
      LM         03 12       T 11                      AV   0.7
CLL I P          02 54 39.9C 0.7 /  165                                                   D= 40.6 DEG   AZ= 65        CLL
    I PN            56 09.8
MOX I P          02 54 49.5C 0;6 /  138                             MPV  =5.9                D= 41.7 DEG   AZ= 64        MOX
    E PN            56 28    1.2 /   61
      LMH        03 12.6
      LMV           12.8     T 12                      AV   0.4   MLV  =4.6

1978 JUL 05      POLAND, UPPER SILESIA
CLL E            04 03 15

1978 JUL 05      JAN MAYEN ISLAND REGION                             MB=4,5 (23)   70.6N; 15.1W  10KM H=06 38 53.6 (NEIS)
                                                                                   70.7N; 15.9W  10KM    06 38 54.0 (CSEM)
                                                                                   70.7N; 16.0W  33KM    06 39 50.2 (WDCB)
CLL E P          06 44 01    1.8 /   46                                                   D= 23.3 DEG   AZ=337        CLL
    E(S)            48 20
      LM            53
MOX E P          06 44 05    1.9 /   46                             MPV  =4.7                D= 23.5 DEG   AZ=338        MOX
    E S             48 25
      LMH           55.6     T 14   AN   0.4                        MLH  =4.0
      LMV           55.7     T 14                      AV   0.5   MLV  =4.3
BRG E P          06 44 08.0D 1.6 /   31                                                   D= 23.9 DEG   AZ=336        BRG
    E S             48 32.0                                                               DISTANCE  25 DEG
      LMV           54       T 17                      AV   1.1   MLV  =4.6

1978 JUL 05
CLL E            10 33 08

1978 JUL 05      SOUTHERN GREECE                                     MB=3,7 ( 1)   37.4N; 21.0E  10KM H=14 38 27.0 (NEIS)
BRG E(P)         14 41 56.3                                                               D= 14.4 DEG   AZ=157        BRG
CLL E(P)         14 42 09                                                                 D= 15.0 DEG   AZ=155        CLL

1978 JUL 05
CLL E            17 07 08   TRACES

1978 JUL 05
CLL E            18 44 04

CLL  INTERRUPTION OF ALL SHORTPERIODIC RECORDS FROM 18H 56M TO 19H 06M

1978 JUL 05      GREECE                                              NO MB COMP.   40.9N; 23.3E  10KM H=19 54 05.8 (NEIS)
                                                                                   40.9N; 23.3E  10KM    19 54 07.3 (CSEM)
CLL E            19 57 18                                                                 D= 12.6 DEG   AZ=142        CLL

1978 JUL 05
CLL E            20 06 13

1978 JUL 05      GUERRERO, MEXICO                                    MB=5,6 (60)   18.5N;100.0W  62KM H=20 15 16.3 (NEIS)
                                                                                   18.4N;100.1W  33KM    20 15 12.6 (WDCB)
MOX I P          20 28 05.3D 1.3 /   50                             MPV  =5.6                D= 88.8 DEG   AZ=298        MOX
    E               28 25.5
    E S             38 52
      LMV        21 07.6     T 24                      AV   0.6
      LMH           10.8     T 20           AE   0.3
CLL I P          20 28 07.4D 1.5 /   52                                                   D= 89.3 DEG   AZ=299        CLL
    I               28 28.7
    E               31 16
    E S             38 58
BRG I P          20 28 10.7D 1.4 /   62                                                   D= 90.0 DEG   AZ=300        BRG
    E               28 27.0
    E S             39 04
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1978 JUL 05
CLL E            23 37 35   TRACES

1978 JUL 06
CLL E            00 25 36

1978 JUL 06
CLL E            00 43 17

1978 JUL 06      GREECE                                                            40.8N; 23.1E  10KM H=02 23 01.8 (CSEM)
CLL E L          02 30 45                                                                 D= 12.6 DEG   AZ=142        CLL

1978 JUL 06      OFF EAST COAST OF HONSHU, JAPAN                     MB=4,9 (22)   38.1N;143.5E  33KM H=06 07 34.8 (NEIS)
                                                                                   38.2N;143.6E  33KM    06 07 30.5 (WDCB)
BRG E P          06 19 48.3                                                               D= 81.0 DEG   AZ= 38        BRG
CLL E P          06 19 48                                                                 D= 81.0 DEG   AZ= 37        CLL
MOX   LMH        06 55.5                                                                  D= 82.0 DEG   AZ= 36        MOX
      LMV        07 03

1978 JUL 06
CLL E P          13 57 25

1978 JUL 06      MEDITERRANEAN SEA                                   MB=4,3 ( 2)   35.2N; 22.5E  29KM H=14 54 55.8 (NEIS)
                                                                                   34.9N; 22.4E  10KM    14 54 53.5 (CSEM)
BRG E P          14 58 53.5                                                               D= 16.8 DEG   AZ=155        BRG
CLL E            14 59 13                                                                 D= 17.5 DEG   AZ=153        CLL

1978 JUL 06      MEDITERRANEAN SEA                                   MB=4,0 ( 4)   35.2N; 22.5E  33KM H=19 49 24.3 (NEIS)
                                                                                   35.1N; 22.6E  43KM    19 49 26.6 (CSEM)
BRG E(P)         19 53 24                                                                 D= 16.8 DEG   AZ=155        BRG
CLL E            19 53 47                                                                 D= 17.5 DEG   AZ=153        CLL

1978 JUL 06
CLL E P          22 48 33

1978 JUL 07
CLL E            02 31 14

1978 JUL 07
CLL E            03 08 53

1978 JUL 07      FIJI ISLANDS REGION                                 MB=4,2 ( 7)   21.0S;178.7W 496KM H=04 21 47.4 (NEIS)
CLL I PKP1       04 40 37.5D 0.9 /   17                                                   D=148.4 DEG   AZ= 21        CLL
    I PKP2          40 43.0
BRG I PKP1       04 40 37.9                                                               D=148.6 DEG   AZ= 23        BRG
    E PKP2          40 43.8
MOX E PKHKP      04 40 40   TRACES                                                        D=149.3 DEG   AZ= 19        MOX

1978 JUL 07
CLL E SG         08 55 12
MOX E SG         08 55 14

1978 JUL 07      TONGA ISLANDS REGION                                MB=4,9 ( 9)   17.3S;172.5W  41KM H=11 26 50.6 (NEIS)
CLL I PKP1       11 46 27.7  1.9 /   62                                                   D=145.8 DEG   AZ=  9        CLL
BRG E PKP1       11 46 28.7  2.0 /   48                                                   D=146.1 DEG   AZ= 11        BRG
    E APKP          46 41.0
    E               47 10.0
MOX E PKHKP      11 46 30.5C 2.2 /   98                                                   D=146.6 DEG   AZ=  7        MOX
    E APKP          46 42    1.9 /   68

1978 JUL 07      SOUTH OF FIJI ISLANDS                               MB=5,1 (17)   23.1S;177.5W 222KM H=17 14 35.3 (NEIS)
                                                                                   23.0S;179.4E  33KM    17 14 19.5 (WDCB)
CLL I PKP1       17 34 02.3D 0.9 /  145                                                   D=150.7 DEG   AZ= 20        CLL
    I               34 05.9
    E APKP          35 02
BRG E PKIKP      17 33 57.2                                                               D=150.9 DEG   AZ= 22        BRG
    I PKP1          34 03.0  0;8 /  115
    E APKP          35 01.3
MOX I PKHKP      17 34 04.5D 1.0 /   43                                                   D=151.6 DEG   AZ= 18        MOX
    E               34 09

1978 JUL 07
CLL E            21 54 45

1978 JUL 08      MOLUCCA PASSAGE                                     MB=5,8 (62)    0.6N;126.2E  41KM H=03 06 47.7 (NEIS)
                                                                                    0.7N;126.2E  70KM    03 06 52.0 (WDCB)
BRG E P          03 20 45.8  1.1 /   12                                                   D=103.4 DEG   AZ= 72        BRG
    E AP            20 57.5
    E PP            25 08
    E PS            34 04
    E PKKP          36 54.5
      LM         04 09       T 21                      AV   1.1
CLL E P          03 20 48    1.3 /   21                                                   D=103.8 DEG   AZ= 71        CLL
    E               24 36
    E PP            25 18
      LM         04 10
MOX E P          03 20 52                                                                 D=104.9 DEG   AZ= 70        MOX
    E PP            25 17    2.0 /   34                             MPPV =5.6
      LMH        04 10.7     T 22   AN   0.7 AE   0.6               MLH  =5.3
      LMV           11.4     T 18                      AV   0.8   MLV  =5.3

1978 JUL 08      GREENLAND SEA                                       MB=4,6 ( 6)   73.4N;  8.9E  10KM H=05 56 42.9 (NEIS)
                                                                                   73.7N;  7.7E  10KM    05 56 39.4 (CSEM)
                                                                                   73.3N;  9.2E  33KM    05 56 43.2 (WDCB)
CLL E P          06 01 44    1.6 /   27                                                   D= 22.2 DEG   AZ=357        CLL
BRG E P          06 01 45.5C 1.4 /   11                                                   D= 22.7 DEG   AZ=356        BRG
MOX E P          06 01 47.5                                                               D= 22.9 DEG   AZ=358        MOX
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1978 JUL 08	ANDREANOF ISLANDS, ALEUTIAN IS.	MB=4,9 (49)	51,3N;179,0W 67KM H=06 27 46,6 (NEIS)	
			50,5N;178,1W 33KM 06 27 31,5 (WDCB)	
CLL E P	06 39 34		D= 77,3 DEG AZ= 8	CLL
BRG I P	06 39 36,4 0,8 / 10		D= 77,6 DEG AZ= 8	BRG
MOX E P	06 39 39 1,0 / 8		D= 78,0 DEG AZ= 7	MOX
1978 JUL 08	SAMOA ISLANDS REGION	MB=5,1 (20)	16,7S;172,7W 33KM H=08 11 19,4 (NEIS)	
			16,6S;173,8W 33KM 08 11 17,4 (WDCB)	
CLL E PKP	08 30 58		D=145,2 DEG AZ= 10	CLL
E	31 30			
LM	09 45		D=145,5 DEG AZ= 11	BRG
BRG E PKP	08 30 56,9 1,4 / 24			
LM	09 54 T 17 AV 0,6		D=146,0 DEG AZ= 7	MOX
MOX E PKP	08 30 58 2,0 / 68			
E	31 20			
LMH	09 42 T 16,5 AN 0,4 AE 0,2		MLH =5,3	
LMV	50 T 18 AV 0,6		MLV =5,4	
1978 JUL 08	NORTHERN ITALY FRIULI		46,3N; 13,1E 18KM H=15 13 09,9 (ING)	
MOX E SG	15 15 35		D= 4,5 DEG AZ=167	MOX
CLL E SG	15 15 50		D= 5,0 DEG AZ=179	CLL
1978 JUL 08	RYUKYU ISLANDS	MB=4,9 (17)	27,5N;130,2E 33KM H=19 08 04,5 (NEIS)	
			28,7N;129,5E 33KM 19 08 13,6 (WDCB)	
BRG E(P)	19 20 33,0		D= 83,9 DEG AZ= 53	BRG
CLL E P	19 20 36		D= 84,1 DEG AZ= 53	CLL
1978 JUL 08	ASCENSION ISLAND REGION	MB=4,8 (29)	6,3S; 11,3W 33KM H=22 29 35,4 (NEIS)	
MOX E P	22 39 41 1,7 / 42	MPV =5,3	D= 60,1 DEG AZ=207	MOX
BRG I P	22 39 47,0 1,4 / 12		D= 61,0 DEG AZ=209	BRG
CLL E P	22 39 47 1,6 / 18		D= 61,1 DEG AZ=208	CLL
1978 JUL 09				
CLL E	01 48 25			
1978 JUL 09	FIJI ISLANDS	MB=5,4 (21)	15,8S;178,7E 33KM H=02 13 31,4 (NEIS)	
			15,3S;179,2E 33KM 02 13 27,8 (WDCB)	
CLL E PKP	02 33 01		D=142,8 DEG AZ= 23	CLL
LM	03 43			
BRG E PKP	02 33 05,0 1,1 / 16		D=142,9 DEG AZ= 25	BRG
MOX E PKP	02 33 05		D=143,7 DEG AZ= 21	MOX
LMV	03 37 T 20 AV 0,7		MLV =5,4	
LMH	39 T 20 AN 0,4 AE 0,4		MLH =5,3	
1978 JUL 09				
MOX LMH	05 49,1			
LMV	49,3			
1978 JUL 09	TONGA ISLANDS	MB=4,9 (2)	17,7S;173,5W 33KM H=09 22 00,5 (NEIS)	
CLL E PKP1	09 41 39		D=146,1 DEG AZ= 11	CLL
BRG E PKP1	09 41 40,6		D=146,4 DEG AZ= 13	BRG
1978 JUL 09	FIJI ISLANDS REGION	MB=4,7 (10)	17,8S;178,7W 551KM H=16 15 57,9 (NEIS)	
CLL I PKP	16 34 34,5C 1,3 / 52		D=145,3 DEG AZ= 20	CLL
E APKP	36 45			
BRG E PKP	16 34 34,2 1,0 / 32		D=145,5 DEG AZ= 22	BRG
E APKP	36 46,4			
MOX E PKP	16 34 36 1,6 / 28		D=146,2 DEG AZ= 18	MOX
1978 JUL 09	SOUTH ATLANTIC RIDGE	MB=4,5 (5)	17,7S; 13,4W 33KM H=17 11 56,0 (NEIS)	
MOX E P	17 23 15,5 1,1 / 8	MPV =4,6	D= 71,5 DEG AZ=205	MOX
BRG E P	17 23 20,5		D= 72,4 DEG AZ=207	BRG
1978 JUL 09	HOKKAIDO, JAPAN, REGION	MB=4,7 (25)	41,0N;141,2E 33KM H=23 20 03,4 (NEIS)	
			40,8N;141,3E 33KM 23 20 01,4 (WDCB)	
CLL E(P)	23 32 01 TRACES		D= 77,6 DEG AZ= 38	CLL
1978 JUL 10	UNIMAK ISLAND REGION	MB=4,9 (46)	53,7N;163,6W 33KM H=00 14 31,9 (NEIS)	
CLL I P	00 26 13,4D 1,3 / 25		54,3N;164,1W 33KM 00 14 36,1 (WDCB)	
I AP	26 24,6		D= 75,3 DEG AZ=358	CLL
BRG I P	00 26 15,9C 1,1 / 18		D= 75,8 DEG AZ=358	BRG
I AP	26 27,0			
MOX E P	00 26 17 1,2 / 24	MPV =5,1	D= 75,9 DEG AZ=357	MOX
E AP	26 28		DEPTH 41 KM	
1978 JUL 10	NEAR COAST OF GUERRERO, MEXICO	MB=4,5 (10)	16,0N; 98,3W 33KM H=04 13 27,3 (NEIS)	
CLL E P	04 26 26 TRACES		D= 90,3 DEG AZ=296	CLL
1978 JUL 10	NORTHWEST OF KURILE ISLANDS	MB=5,1 (82)	48,8N;150,1E 342KM H=06 02 20,6 (NEIS)	
			48,8N;150,3E 350KM 06 02 20,6 (WDCB)	
CLL I P	06 13 18,2D 0,9 / 66		D= 73,7 DEG AZ= 28	CLL
E AP	14 40			
BRG I P	06 13 18,9D 0,9 / 22		D= 73,8 DEG AZ= 28	BRG
E AP	14 43,0			
E PP	16 10,0			
1978 JUL 10	MEDITERRANEAN SEA	NO MB COMP.	33,9N; 24,8E 33KM H=09 41 54,4 (NEIS)	
BRG E(P)	09 46 14,9		D= 18,7 DEG AZ=151	BRG
MOX E	09 46 27 TRACES		D= 19,3 DEG AZ=145	MOX
1978 JUL 10	TONGA ISLANDS	MB=4,9 (6)	17,8S;174,4W 121KM H=13 02 18,6 (NEIS)	
CLL E PKP1	13 21 46 1,2 / 17		D=146,1 DEG AZ= 13	CLL
BRG E PKP1	13 21 46,7		D=146,3 DEG AZ= 14	BRG
1978 JUL 10	OFF EAST COAST OF HONSHU, JAPAN	MB=4,7 (7)	38,1N;143,5E 36KM H=13 21 39,2 (NEIS)	
CLL E	13 34 02		D= 91,0 DEG AZ= 37	CLL

1978 JUL 10	CENTRAL YUGOSLAVIA		45,0N; 18,1E 10KM H=19 19 51,8 (CSEM)	
BRG E SG	19 23 25		D= 6,5 DEG AZ=153	BRG
MOX E SG	19 23 56		D= 7,1 DEG AZ=140	MOX
CLL E L	19 24 16 TRACES		D= 7,2 DEG AZ=150	CLL
1978 JUL 11	HOKKAIDO, JAPAN, REGION	MB=4,4 (12)	41,9N;142,7E 65KM H=02 26 27,2 (NEIS)	
CLL E P	02 38 16		D= 77,4 DEG AZ= 36	CLL
E AP	38 34			
1978 JUL 11				
CLL E	02 56 30 TRACES			
1978 JUL 11	QUEEN CHARLOTTE ISLANDS REGION	MB=5,4 (94)	52,8N;132,1W 10KM H=02 55 01,6 (NEIS)	
			53,1N;132,4W 33KM 02 55 01,7 (WDCB)	
CLL I P	03 06 28,7C 2,3 / 130		D= 72,2 DEG AZ=339	CLL
I AP	06 34,7			
LM	39			
MOX E P	03 06 30 C 1,1 / 36	MPV =5,4	D= 72,5 DEG AZ=338	MOX
LMH	42,6 T 16,5 AN 0,4 AE 0,6	MLH =5,0		
LMV	42,6 T 16 AN 1,0	MLV =5,2		
BRG I P	03 06 32,2C 1,3 / 49			
E AP	06 38,0		D= 72,8 DEG AZ=339	BRG
1978 JUL 11	VANUATU ISLANDS	MB=5,2 (15)	14,1S;166,8E 47KM H=05 33 55,1 (NEIS)	
			14,0S;165,7E 33KM 05 33 55,6 (WDCB)	
BRG E PKP	05 53 15,4 1,1 / 10		D=137,2 DEG AZ= 41	BRG
E SKP	56 55,8			
CLL E PKP	05 53 17		D=137,3 DEG AZ= 39	CLL
E SKP	56 54			
MOX E PKP	05 53 16		D=138,4 DEG AZ= 38	MOX
1978 JUL 11	VANUATU ISLANDS	MB=4,9 (5)	14,0S;166,6E 35KM H=05 41 53,3 (NEIS)	
BRG E(PKP)	06 01 17		D=137,1 DEG AZ= 41	BRG
E SKP	04 47,4			
1978 JUL 11	WESTERN BRAZIL	MB=5,8 (58)	7,9S; 71,4W 645KM H=12 17 07,8 (NEIS)	
MOX I P	12 29 09,0D 1,8 / 182	MPV =5,8	7,7S; 71,3W 600KM 12 17 04,6 (WDCB)	
E	43,5		D= 91,6 DEG AZ=260	MOX
CLL I P	12 29 13,7D 2,1 / 230		D= 92,6 DEG AZ=261	CLL
I	29 23,2			
E XP	32 34			
E S	39 22			
E(XS)	43,1			
E PKKP1	46 22			
E PKPPKP	54 33			
BRG I P	12 29 16,0 1,7 / 195		D= 93,1 DEG AZ=261	BRG
I AP	31 33,2			
E XP	32 35,6			
E PP	33 20,0			
E S	39 25			
E XS	43 31			
E PKKP	46 21			
1978 JUL 11	SEA OF OKHOTSK	MB=4,9 (60)	47,3N;145,8E 408KM H=13 36 01,2 (NEIS)	
			47,5N;145,8E 410KM 13 36 02,5 (WDCB)	
CLL I P	13 46 53,2D 1,0 / 59		D= 73,7 DEG AZ= 31	CLL
BRG I P	13 46 53,2 1,1 / 19		D= 73,8 DEG AZ= 32	BRG
E PP	49 45,0			
MOX E P	13 46 59 1,0 / 24	MPV =4,8	D= 74,8 DEG AZ= 30	MOX
1978 JUL 11				
CLL I	14 31 08,3			
1978 JUL 11				
CLL E	18 04 05			
1978 JUL 11				
CLL E	18 16 39			
1978 JUL 11	PAKISTAN	MB=4,4 (16)	30,1N; 67,5E 10KM H=22 50 39,0 (NEIS)	
BRG E P	22 58 54,2		D= 44,6 DEG AZ= 97	BRG
MOX E P	22 59 06		D= 46,0 DEG AZ= 95	MOX
1978 JUL 11	KURILE ISLANDS	MB=4,9 (39)	43,4N;146,5E 42KM H=22 48 42,4 (NEIS)	
CLL I P	23 00 34,0C 1,0 / 36		D= 77,4 DEG AZ= 33	CLL
I AP	00 45,4			
I XP	00 49,8			
BRG E P	23 00 34,3 1,0 / 12		D= 77,4 DEG AZ= 33	BRG
MOX E P	23 00 40 1,1 / 16	MPV =4,9	D= 78,4 DEG AZ= 32	MOX
1978 JUL 12	KURILE ISLANDS	MB=4,5 (3)	43,8N;146,1E 33KM H=00 02 54,0 (NEIS)	
CLL I P	00 14 44,3 1,2 / 12		D= 76,9 DEG AZ= 33	CLL
1978 JUL 12	CRETE	MB=3,8 (15)	34,9N; 25,0E 80KM H=00 32 21,0 (NEIS)	
			34,7N; 25,0E 62KM 00 32 21,4 (CSEM)	
BRG E P	00 36 26,9		34,2N; 24,5E 33KM 00 32 08,6 (WDCB)	
MOX E P	00 36 35 1,0 / 8		D= 17,9 DEG AZ=149	BRG
CLL E P	00 36 35	MPV =3,9	D= 18,5 DEG AZ=143	MOX
			D= 18,6 DEG AZ=148	CLL
1978 JUL 12	TONGA ISLANDS REGION	/MB=4,2 (1)/	17,2S;171,9W 33KM H=00 25 01 (ISC)	
CLL E PKP1	00 44 41		D=145,7 DEG AZ= 8	CLL
BRG E PKP1	00 44 42,0		D=146,1 DEG AZ= 10	BRG
MOX E PKHKP	00 44 43 1,7 / 24		D=146,5 DEG AZ= 6	MOX
1978 JUL 12				
CLL E	02 20 48			

CLL INTERRUPTION OF ALL SHORTPERIODIC RECORDS FROM 05H 23M TO 05H 50M

1978 JUL 12 EASTERN CAUCASUS MB=4,7 (25) 43,3N; 45,1E 43KM H=11 52 18,6 (NEIS)
43,5N; 44,9E 44KM 11 52 22,6 (CSEM)
43,5N; 45,1E 33KM 11 52 17,7 (WDCB)

BRG E P	11 57 16,9D	1,4 /	21						D= 22,4 DEG	AZ= 98	BRG
CLL E P	11 57 22								D= 23,0 DEG	AZ= 98	CLL
E	57 27	1,5 /	24								
E	57 37										
E S	12 01 32										
E LH	05 28										
LMV	07,3										
MOX E P	11 57 29	1,7 /	18					MPV =4,3	D= 23,8 DEG	AZ= 95	MOX
E	57 35,5	2,0 /	30								
E S	12 01 50										
LMH	08,4	T 12,5	AN	0,5	AE	0,4		MLH =4,3			
LMV	08,6	T 12				AV	0,7	MLV =4,5			

1978 JUL 12
MOX E(P) 15 01 14 1,4 / 14
BRG E P 15 01 20,2 1,1 / 10
CLL E 15 01 21

1978 JUL 12 UNDERGROUND EXPLOSION MB=5,5 (67) 37,1N;116,0W 0KM H=17 00 00,1 (NEIS)
>LOWBALL< D= 81,2 DEG AZ=320 MOX
MOX E P 17 12 18 1,2 / 49 MPV =5,5 D= 81,3 DEG AZ=321 CLL
CLL I P 17 12 18,0C 1,3 / 56 D= 82,0 DEG AZ=322 BRG
BRG I P 17 12 22,3C 1,0 / 38

1978 JUL 12 ICELAND REGION MB=4,0 (12) 66,0N; 16,1W 10KM H=17 59 02,6 (NEIS)

CLL E P	18 03 46								D= 20,8 DEG	AZ=326	CLL
MOX E P	18 03 47	1,6 /	17					MPV =4,2	D= 20,9 DEG	AZ=328	MOX
BRG E P	18 03 53,9	1,5 /	11						D= 21,5 DEG	AZ=326	BRG

1978 JUL 12 SICHUAN PROVINCE, CHINA MB=5,1 (72) 31,9N;103,0E 33KM H=21 49 57,9 (NEIS)
31,9N;103,1E 33KM 21 49 52,4 (WDCB)

BRG E P	22 00 40,0	1,3 /	29						D= 65,4 DEG	AZ= 69	BRG
CLL E P	22 00 41	1,6 /	35						D= 65,8 DEG	AZ= 69	CLL
E	01 15										
E	25,6										
LM	30										
MOX E P	22 00 50	1,7 /	36					MPV =5,2	D= 66,9 DEG	AZ= 68	MOX
LMH	26,7	T 18	AN	0,5	AE	0,4		MLH =4,9			
LMV	31	T 14				AV	0,5	MLV =4,9			

1978 JUL 12
CLL E 23 27 19

1978 JUL 13 SOUTH OF FIJI ISLANDS MB=5,0 (8) 26,0S;178,4E 537KM H=03 42 46,4 (NEIS)

CLL I PKP1	04 01 33,0	1,2 /	16						D=152,4 DEG	AZ= 29	CLL
I PKP2	01 46,4	1,7 /	38					MC =4,6			
E APKP	03 57										
BRG E PKP1	04 01 33,3								D=152,5 DEG	AZ= 31	BRG
I PKP2	01 47,4	1,4 /	19								
E APKP	03 57,0										
MOX E PKP2	04 01 51	1,4 /	23						D=153,4 DEG	AZ= 27	MOX
E APKP	04 05										

1978 JUL 13 KURILE ISLANDS MB=4,8 (37) 44,7N;149,0E 33KM H=03 55 43,0 (NEIS)

CLL I P	04 07 33,7C	1,0 /	40						D= 77,1 DEG	AZ= 31	CLL
BRG I P	04 07 34,5D	1,0 /	10						D= 77,1 DEG	AZ= 31	BRG
MOX E P	04 07 40	1,2 /	20					MPV =5,0	D= 78,1 DEG	AZ= 30	MOX

1978 JUL 13
CLL E 04 24 41 TRACES

1978 JUL 13 FOX ISLANDS, ALEUTIAN ISLANDS MB=5,8 (96) 52,2N;168,8W 33KM H=13 25 19,7 (NEIS)
52,7N;169,2W 33KM 13 25 17,2 (WDCB)

CLL I P	13 37 09,6C	1,5 /	170						D= 76,9 DEG	AZ= 1	CLL
I AP	37 20,8								DISTANCE 78 DEG		
E(S)	47 06										
E SKS	47 23										
L	14 15	T 17	AN	2	AE	1,5	AV	2			
LM	23	T 15	AN	2	AE	1	AV	2	MLH =5,6 MLV =5,6		
BRG I P	13 37 12,0C	1,2 /	150						D= 77,3 DEG	AZ= 2	BRG
E S	47 00,0								DISTANCE 78 DEG		
LM	14 24	T 16					AV	1,7	MLV =5,5		
MOX I P	13 37 13,5C	1,2 /	183						MPV =6,0		
		T 5					AV	1,3	MPV =6,2	D= 77,5 DEG	AZ= 0 MOX
E S	47 00										
E SS	52 20										
LMH	14 22,4	T 16,5	AN	1,0	AE	1,5					
LMV	24,3	T 15				AV	0,9	MLH =5,5			
								MLV =5,3			

1978 JUL 13 GREECE MB=3,9 (13) 40,8N; 23,2E 10KM H=17 26 57,2 (NEIS)
40,8N; 23,3E 10KM 17 26 59,1 (CSEM)
41,0N; 23,3E 33KM 17 26 58,6 (WDCB)

BRG E P	17 29 50,7								D= 12,0 DEG	AZ=144	BRG
CLL E(PP)	17 30 08								D= 12,7 DEG	AZ=142	CLL
E L	34 22										

1978 JUL 13 NEAR COAST OF NICARAGUA MB=4,7 (15) 11,6N; 86,8W 65KM H=17 16 14,2 (NEIS)

MOX LMV	18 06,2	T 18					AV	0,7	D= 86,4 DEG	AZ=284	MOX
LMH	06,5	T 18	AN	0,6	AE	0,4					
CLL LM	18 35								D= 87,1 DEG	AZ=285	CLL

1978 JUL 13
CLL E 23 14 54

1978 JUL 13
CLL E 23 29 31

1978 JUL 14 SOLOMON ISLANDS MB=5,3 (6) 7,1S;155,6E 71KM H=23 57 27,2 (NEIS)

BRG I PKP	00 16 23,4D	1,0 /	13						D=126,0 DEG	AZ= 50	BRG
CLL I PKP	00 16 23,2D								D=126,2 DEG	AZ= 48	CLL
MOX E PKP	00 16 26	TRACES							D=127,3 DEG	AZ= 47	MOX

1978 JUL 14 SOUTH OF FIJI ISLANDS MB=5,2 (11) 22,3S;179,1W 469KM H=05 30 48,4 (NEIS)

CLL I PKIKP	05 49 39,5								D=149,5 DEG	AZ= 23	CLL
I PKP1	49 45,1								DISTANCE 149 DEG	DEPTH 480 KM	
E PKP2	49 52										
E APKP	51 38										
BRG I PKIKP	05 49 40,0								D=149,7 DEG	AZ= 24	BRG
I PKP1	49 45,4	1,0 /	87								
E PKP2	49 52,1										
E APKP	51 39,2										
MOX E PKIKP	05 49 41	TRACES							D=150,5 DEG	AZ= 20	MOX
E PKHKP	49 46,5	1,2 /	45								
E PKP2	49 54,5										

1978 JUL 14
CLL E 11 06 01

1978 JUL 14 OFF EAST COAST OF HONSHU, JAPAN MB=4,5 (7) 37,5N;142,7E 52KM H=11 00 25,6 (NEIS)

CLL E P	11 12 36	TRACES							D= 81,2 DEG	AZ= 38	CLL
MOX LMH	11 46,7								D= 82,3 DEG	AZ= 37	MOX
LMV	53,3										

1978 JUL 14 POLAND, UPPER SILESIA
(QUESTIONABLY)
CLL E 12 12 58

1978 JUL 14 ARABIAN SEA MB=4,5 (7) 12,7N; 57,2E 33KM H=12 32 24,5 (NEIS)
CLL E P 12 41 36 D= 52,5 DEG AZ=121 CLL

1978 JUL 14 NEAR EAST COAST OF HONSHU, JAPAN MB=5,0 (47) 37,5N;141,4E 57KM H=14 04 56,5 (NEIS)
37,4N;141,5E 33KM 14 04 52,6 (WDCB)

BRG I P	14 17 04,8C	1,0 /	11						D= 80,6 DEG	AZ= 40	BRG
CLL I P	14 17 05,2	1,2 /	23						D= 80,7 DEG	AZ= 39	CLL
MOX E P	14 17 10,5								D= 81,8 DEG	AZ= 38	MOX

1978 JUL 14 KURILE ISLANDS MB=4,8 (33) 43,9N;147,8E 80KM H=15 57 40,9 (NEIS)
44,9N;147,5E 100KM 15 57 49,6 (WDCB)

CLL I P	16 09 28,3								D= 77,4 DEG	AZ= 32	CLL
BRG E P	16 09 28,4								D= 77,5 DEG	AZ= 32	BRG
MOX E P	16 09 34								D= 78,4 DEG	AZ= 31	MOX

1978 JUL 14 FIJI ISLANDS REGION /MB=4,5 (4)/ 20,1S;177,5W 534KM H=16 06 33,6 (ISC)

CLL I PKP1	16 25 18,9D	0,8 /	20						D=147,8 DEG	AZ= 19	CLL
I PKP2	25 22,7										
BRG I PKP1	16 25 19,6D	1,0 /	12						D=148,0 DEG	AZ= 21	BRG
MOX E PKHKP	16 25 21	1,2 /	10						D=148,7 DEG	AZ= 17	MOX

1978 JUL 14 SAMAR, PHILIPPINE ISLANDS MB=5,3 (35) 12,1N;124,0E 33KM H=17 12 55,0 (NEIS)
13,1N;123,8E 33KM 17 13 00,9 (WDCB)

BRG E P	17 26 06,5								D= 92,9 DEG	AZ= 67	BRG
E	26 10,3										
CLL I P	17 26 11,5								D= 93,3 DEG	AZ= 66	CLL
MOX E P	17 26 17	1,5 /	18					MPV =5,3	D= 94,4 DEG	AZ= 65	MOX
LMH	18 05,6	T 20	AN	0,3	AE	0,4		MLH =5,0			
LMV	09,8	T 20				AV	0,5	MLV =5,0			

1978 JUL 14 SOUTH OF KERMADEC ISLANDS MB=5,2 (5) 32,7S;178,9W 53KM H=20 19 21,1 (NEIS)
32,8S;179,9E 33KM 20 19 20,1 (WDCB)

CLL E PKP2	20 39 52								D=159,5 DEG	AZ= 30	CLL
E	40 09										
BRG E PKP2	20 39 52,3								D=159,5 DEG	AZ= 32	BRG

1978 JUL 15 TAJIK-SINKIANG BORDER REGION MB=5,0 (66) 38,2N; 73,7E 161KM H=02 27 15,3 (NEIS)
38,4N; 73,6E 160KM 02 27 16,4 (WDCB)

BRG I P	02 35 03,3D	1,2 /	55						D= 43,3 DEG	AZ= 83	BRG
E PP	36 52,7										
CLL I P	02 35 07,2								D= 43,8 DEG	AZ= 83	CLL
E PP	36 53										
MOX E P	02 35 15	1,2 /	28					MPV =4,8	D= 44,8 DEG	AZ= 81	MOX
E	36 11										

1978 JUL 15 FIJI ISLANDS REGION MB=4,6 (7) 19,0S;177,7W 543KM H=03 32 03,7 (NEIS)

CLL I PKP1	03 50 45,8								D=146,7 DEG	AZ= 19	CLL
BRG I PKP1	03 50 46,9								D=146,9 DEG	AZ= 20	BRG

1978 JUL 15
CLL E 09 36 34 TRACES

1978 JUL 15 OFF EAST COAST OF HONSHU, JAPAN MB=5,3 (64) 33,3N;141,7E 14KM H=10 18 39,9 (NEIS)
33,6N;141,6E 33KM 10 18 38,5 (WDCB)

BRG E P	10 31 12,6C	1,0 /	17						D= 84,4 DEG	AZ= 42	BRG
E PP	34 29,0										
E S	41 40										
LMV	11 17	T 14				AV	0,8				
CLL I P	10 31 12,7								D= 84,4 DEG	AZ= 41	CLL
E PP	34 24										
LM	11 09										
MOX E P	10 31 18	1,4 /	33					MPV =5,4	D= 85,5 DEG	AZ= 40	MOX
E PP	34 38										
E S	41 45										
LMH	11 11,1	T 14,5	AN	0,5	AE	0,3		MLH =5,1			
LMV	19,2	T 13				AV	0,5	MLV =5,1			

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1978 JUL 15
CLL E          13 29 20
1978 JUL 15
BRG I P   17 56 44.7C 1.7 /  50   VB=5.4 (B9)   41.9NJ142.5E  62KM H=17 44 55.4 (NEIS)
I Ap      57 05.6                                42.6NJ142.3E  50KM   17 44 57.4 (WDCB)
1978 JUL 15   4OKKAIDO, JAPAN, PEGION
MOX E PKP      13 45 11.2C 1.2 / 130
CLL I PKP      07 52 18.5                        D=143.0 DEG   AZ= 14       CLL
E Ap           52 30                             D= 84.4 DEG   AZ= 41
MOX E P        07 52 26   TRACES                 D= 95.4 DEG   AZ= 40       MOX
LMH            08 32
LMV            38
1978 JUL 16   FIJI ISLANDS REGION                VB=4.3 ( 2)   20.5SJ178.1W 339KM H=14 23 36.9 (NEIS)
CLL I PKP1     14 42 18.2                        D=148.0 DEG   AZ= 20       CLL
BRG I PKP1     14 42 19.0                        D=148.2 DEG   AZ= 22       BRG
1978 JUL 16   PAPUA NEW GUINEA                    VB=5.5 (33)   6.6SJ143.8E   33KM H=22 13 25.8 (NEIS)
BRG E PKP      22 32 13.7  1.0 /  13             6.3SJ143.9E   33KM   22 13 21.7 (WDCB)
CLL E PKP      22 32 14                          D=119.5 DEG   AZ= 61       BRG
MOX E PKP      22 32 16    1.2 /  12             D=119.6 DEG   AZ= 60       CLL
LMH            23 29.0     T 18.5 AN  0.2 AE  0.2 AV  0.5  VLV =5.2  VLH =5.0
LMV            29.5        T 20                                          MOX
1978 JUL 17   SOUTH OF FIJI ISLANDS               VB=4.9 ( 9)   23.6SJ180    545KM H=00 09 39.4 (NEIS)
CLL I PKIKP    00 28 24.3                        D=150.6 DEG   AZ= 25       CLL
I PKP1         28 31.0                           DISTANCE 150.5DEG DEPTH 540 KM
I PKP2         28 40.4
I          I   30 33.8
I APKP         30 37.9
BRG E PKIKP    00 28 25.2                        D=150.7 DEG   AZ= 27       BRG
I PKP1         28 31.4
E PKP2         28 41.7
I APKP         30 38.6
MOX E PKIKP    00 28 26    1.1 /  12
E PKHKP        28 33       1.4 /  47
E APKP         30 36                             D=151.5 DEG   AZ= 23       MOX
1978 JUL 17   SOUTH OF FIJI ISLANDS               VB=4.9 ( 9)   22.1SJ179.2W 530KM H=03 59 11.9 (NEIS)
CLL I PKP1     04 17 01.1                        D=149.3 DEG   AZ= 23       CLL
BRG I PKP1     04 17 01.7  0.7 /  21             D=149.5 DEG   AZ= 25       BRG
MOX E PKHKP    04 17 03.5                        D=150.3 DEG   AZ= 21       MOX
1978 JUL 17   LEEWARD ISLANDS                    VB=4.5 ( 7)   17.6NJ 61.2W  45KM H=09 17 08.0 (NEIS)
CLL E AP       09 28 10                          D= 66.6 DEG   AZ=269       CLL
1978 JUL 17
MOX E(P)       11 35 14    1.8 /  20
1978 JUL 17   SAMOA ISLANDS REGION                VB=6.0 (56)   14.9SJ175.8W 292KM H=13 26 14.9 (NEIS)
CLL I PKP      13 45 11.2C 1.2 / 130                             14.8SJ175.8W 300KM   13 26 15.6 (WDCB)
E APKP         46 23       T 7                   AV  2.1       D=143.0 DEG   AZ= 14       CLL
E PP(OR SKP)   48 26       2.4 / 570                           DISTANCE 142 DEG
               T 13                              AV  3.5  MPPV =6.5  MPPV =6.4
E(APKS)        50 04
E          E   53 12
E SKKS         54 49
E          E   55 40
E SKKP         56 39
E SKSP         58 04
BRG E PKP      13 45 11.9C
E SKP          48 16.0
E APKP         46 28.0
E PP           48 28.2
E SS           14 06 40
(CONT.)
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(CONT.)
MOX E PKP      13 45 13  C 2.0 / 487             D=143.8 DEG   AZ= 12       MOX
               T 12                              AV  4.0                   DEPTH 290 KM
E APKP         46 24
E XPKP         46 56
E PP           48 25       2.5 / 612                         MPPV =6.3
E XPP          50 05
E          E   54 48
E SKSP         58 04
E SPP          14 00 30
E SS           06 35
LM             39          T 19.5 AN  1.0 AE  1.3 AV  0.8
1978 JUL 18   CARLSBERG RIDGE                    VB=4.5 ( 2)   5.2NJ 62.4E  33KM H=00 03 51.3 (NEIS)
BRG E P        00 14 02.2                        D= 60.8 DEG   AZ=121       BRG
CLL E P        00 14 08                          D= 61.5 DEG   AZ=121       CLL
1978 JUL 18   WEST OF GALAPAGOS ISLANDS           VB=5.1 (11)   2.2NJ 97.9W  33KM H=01 41 51.6 (NEIS)
MOX   LMH      02 38.5                           D=100.6 DEG   AZ=287       MOX
      LMV             46.5
1978 JUL 18   VEW BRITAIN REGION                 VB=5.7 (28)   6.4SJ153.2E   28KM H=22 43 00.2 (NEIS)
BRG I PKP      23 06 58.3C 1.2 /  21                             6.3SJ153.1E   4OKM   22 43 02.1 (WDCB)
I          I   07 02.4                           D=124.2 DEG   AZ= 52       BRG
I APKP         07 09.3
E PP           08 52.0
CLL I PKP      23 06 58.2  1.2 /  17             D=124.4 DEG   AZ= 50       CLL
I          I   07 02.7
I APKP         07 09.4
E PP           08 46
MOX E PKP      23 07 01    1.3 /  13             D=125.5 DEG   AZ= 49       MOX
E PP           09 46
1978 JUL 19
BRG E(P)       00 13 52.5
1978 JUL 19
CLL E          00 59 35
E SG           01 00 13
BRG E SG       00 59 41.8
MOX E SG       01 00 26.5
1978 JUL 19
CLL E          02 17 21   TRACES
1978 JUL 19   KODIAK ISLAND REGION                VB=5.7 (92)   56.8NJ151.6W  33KM H=09 32 08.6 (NEIS)
CLL I P        09 43 27.5C 2.1 / 205                           56.8NJ151.8W  33KM   09 32 03.6 (WDCB)
E          E   44 23       D= 71.5 DEG   AZ=351       CLL
E S            52 46                             DISTANCE  72 DEG
E SS           58.0
LM             22          T 18   AN   2.5 AE   2.5 AV   2.5
MOX I P        09 43 31.0C 1.8 /  223                        MPV =5.9  MLV =5.6  MLH =5.9
               T  4.5                            AV  1.0   MPV =6.1
E S            52 54
(CONT.)
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(CONT.)

E SS 09 58 00
LMH 10 22.8 T 15 AN 1.6 AE 0.8 MLH =5.4
LMV 23.8 T 15 AV 2.6 MLV =5.7
BRG I P 09 43 31.0C 1.5 / 132 D= 72.0 DEG AZ=352 BRG
I 43 36.3 DISTANCE 73 DEG
I 44 05.6
E PPP 48 04
E S 52 54.5
E PKPPKP 10 11 28.5
LMV 22 T 17 AV 4.1 MLV =5.8

1978 JUL 19 CRETE MB=4.6 (37) 34.2N; 26.1E 34KM H=16 08 32.8 (NEIS)
34.2N; 26.2E 45KM 16 08 34.9 (CSEM)
34.5N; 26.1E 33KM 16 08 34.6 (WDCB)
BRG E P 16 12 52.3 1.1 / 10 D= 18.9 DEG AZ=147 BRG
MOX E P 16 13 00 D= 19.5 DEG AZ=142 MOX
E 13 06
LMH 22.4 T 11 AN 0.3 AE 0.2 MLH =4.0
LMV 22.5 T 12 AV 0.4 MLV =4.1
CLL I P 16 12 58,7D 1.3 / 23 D= 19.6 DEG AZ=146 CLL

1978 JUL 19 FRG, CENTRAL REGION 51.10N; 9.30E (GRF)

MOX I PG 16 45 53.0 D= 170 KM AZ=288 MOX
I SG 46 14.5 DISTANCE 1.5DEG
CLL I PG 16 46 08.5 D= 260 KM AZ=266 CLL
E SG 46 41
BRG E PG 16 46 19.0 D= 330 KM AZ=276 BRG
E SG 47 02.2

1978 JUL 19
CLL E 20 48 40

1978 JUL 19 NORTHERN ITALY NO MB COMP. 44.3N; 10.8E 10KM H=21 57 17.0 (NEIS)
BRG E SN 22 00 14.4 D= 6.9 DEG AZ=199 BRG
E(SG) 01 07.4

1978 JUL 20 FIJI ISLANDS REGION NO MB COMP. 19.3S;177.2W 585KM H=04 47 26.6 (NEIS)
CLL I PKP1 05 06 07 D=147.1 DEG AZ= 18 CLL
I PKP2 06 10
BRG E PKP1 05 06 07.6 D=147.3 DEG AZ= 20 BRG

1978 JUL 20
BRG E PG 09 45 16.2
E SG 45 57

1978 JUL 20 NICARAGUA MB=5.3 (50) 12.2N; 86.6W 121KM H=09 34 47.2 (NEIS)
MOX E P 09 47 13.5 1.4 / 23 MPV =4.9 D= 85.8 DEG AZ=284 MOX
E AP 47 37 DEPTH 91 KM
I PP 50 42.5 2.3 / 73 MPPV =5.6
E SKS 57 30
LMH 10 22.7 T 19 AN 0.7 AE 0.6
LMV 22.8 T 20 AV 0.7
CLL E P 09 47 17 1.2 / 27 D= 86.5 DEG AZ=285 CLL
E AP 47 42 DISTANCE 87 DEG
E PP 50 43
E(S) 57 38
LM 10 26
BRG E P 09 47 21.2 1.2 / 13 D= 87.2 DEG AZ=286 BRG
I AP 47 46.0
E XP 48 04.2
E PP 50 52.6
E APP 51 13.2
E(S) 57 55.0
LM 10 25

1978 JUL 20
CLL E 10 05 37 TRACES

1978 JUL 20 OFF W. COAST OF S. ISLAND, N.Z. MB=4.9 (3) 45.3S;166.7E 33KM H=17 25 30.7 (NEIS)
BRG E PKP2 17 46 11.7 D=161.0 DEG AZ= 84 BRG
CLL E 17 46 06 D=161.6 DEG AZ= 81 CLL

1978 JUL 20
CLL I P 18 02 39.8C 0.6 / 12

1978 JUL 20
CLL I P 18 21 03.9

1978 JUL 20 RAT ISLANDS, ALEUTIAN ISLANDS MB=5.2 (65) 51.1N;175.1E 33KM H=18 15 08.7 (NEIS)
51.4N;174.9E 33KM 18 15 05.3 (WDCB)
CLL E P 18 26 57 D= 76.8 DEG AZ= 11 CLL
E AP 27 14
BRG I P 18 26 59.9D 1.0 / 14 D= 77.1 DEG AZ= 12 BRG
I AP 27 15.7
I 27 34.0
MOX E P 18 27 03 1.5 / 20 MPV =4.9 D= 77.7 DEG AZ= 11 MOX
LMH 19 04.4 T 18 AN 0.3 MLH =4.7
LMV 10.9 T 16 AV 0.3 MLV =4.8

1978 JUL 20 POLAND, UPPER SILESIA
BRG E PG 23 51 22.0
E SG 52 07.0
CLL E PG 23 51 35
E SG 52 27

1978 JUL 21
CLL I P 00 03 15.7D 0.8 / 15
BRG I P 00 03 16.9

1978 JUL 21
CLL E P 03 03 02 1.0 / 14
BRG E P 03 03 03.0 0.9 / 6

1978 JUL 21 EASTER ISLAND CORDILLERA /NO MB COMP./ 55.0S;120.4W 33KM H=15 03 27 (ISC)
MOX E PKHKP 15 23 15 D=151.1 DEG AZ=242 MOX
CLL E PKP 15 23 14 D=152.2 DEG AZ=244 CLL
BRG E PKP 15 23 23.0 D=152.6 DEG AZ=243 BRG

1978 JUL 21 SOUTHERN IRAN MB=4.3 (10) 27.9N; 57.6E 33KM H=18 40 48.2 (NEIS)
26.7N; 58.6E 10KM 18 40 34.4 (CSEM)
27.1N; 57.6E 33KM 18 40 36.7 (WDCB)
BRG E P 18 48 20.8 D= 40.0 DEG AZ=108 BRG
CLL E P 18 48 27 D= 40.7 DEG AZ=108 CLL

1978 JUL 21 ANDREANOF ISLANDS, ALEUTIAN IS. MB=4.9 (31) 51.4N;178.3W 54KM H=20 50 30.8 (NEIS)
51.1N;177.9W 33KM 20 50 26.4 (WDCB)
CLL E P 21 02 20 D= 77.2 DEG AZ= 7 CLL
BRG E P 21 02 22.1 D= 77.6 DEG AZ= 8 BRG

1978 JUL 21
CLL E 23 09 16

1978 JUL 22 NORTHERN ITALY NO MB COMP. 44.3N; 11.9E 10KM H=01 17 50.2 (NEIS)
44.2N; 12.0E 19KM 01 17 51.8 (CSEM)
MOX I PN 01 19 25.2 D= 6.4 DEG AZ=178 MOX
E 20 17
E 21 31
BRG I PN 01 19 31.0 D= 6.7 DEG AZ=193 BRG
E SN 20 46.4
E SG 21 36.5
CLL E 01 21 20 D= 7.1 DEG AZ=186 CLL
E 21 49
E SG 21 54

1978 JUL 22
CLL E P 02 18 38 TRACES

1978 JUL 22
CLL E 03 53 54

CLL INTERRUPTION OF SOME SHORTPERIODIC RECORDS FROM 05H 42M TO 06H 26M (AT JUL 24)

1978 JUL 22 EAST PAPUA NEW GUINEA REGION MB=5.2 (19) 6.5S;146.9E 24KM H=06 09 08.5 (NEIS)
6.4S;146.9E 33KM 06 09 04.9 (WDCB)
BRG I PKP 06 28 01.8 D=121.1 DEG AZ= 58 BRG
I 28 07.3
CLL E PKP 06 28 01 D=121.3 DEG AZ= 57 CLL
MOX E PKP 06 28 04 TRACES D=122.4 DEG AZ= 56 MOX

1978 JUL 22
BRG E(P) 07 28 58.2

1978 JUL 22 NEW BRITAIN REGION MB=5.9 (38) 4.2S;152.8E 43KM H=11 51 47.0 (NEIS)
4.0S;152.5E 33KM 11 51 41.7 (WDCB)
BRG I PKP 12 10 38.6 1.2 / 26 D=122.1 DEG AZ= 51 BRG
I APKP 10 47.0 1.6 / 90 DISTANCE 121 DEG
E PP 12 14
E SKP 14 16
E SKS 17 36
E SKKS 19 12
E PKKP 20 43
E PS 22 04
E PKKS 24 22
E SKKP 24 41
E SS 29 12
LMV 13 09 T 17 AV 5.4 MLV =6.3 .
CLL E PKP 12 10 39 D=122.3 DEG AZ= 50 CLL
I(APKP) 10 47.2 DISTANCE 121 DEG
E PP 12 17
E(PKS) 14 16
E PPP 15 00
I PKKP 20 42.3C
E PS 22.1
E SKKP 24 39
LM 13 08 T 18 AN 4 AE 2 AV 6 MLH =6.1 MLV =6.2
MOX E PKP 12 10 41 1.8 / 34 D=123.4 DEG AZ= 49 MOX
E APKP 10 48
E PP 12 30 T 8 AV 1.5 MPPV =6.5
E PPP 15 08
E PKKP 20 38 1.4 / 19
E PS 22 10
E SKKP 24 35
E SS 29 30
LMH 13 09 T 19 AN 2.2 AE 3.2 MLH =6.1
LMV 09 T 18 AV 2.0 MLV =5.8

1978 JUL 22 VANUATU ISLANDS REGION MB=4.4 (1) 20.6S;172.4E 33KM H=15 07 36.2 (NEIS)
BRG E PKP 15 27 10.9 D=145.4 DEG AZ= 37 BRG
E 27 23.0 1.0 / 9
CLL E PKP 15 27 11 D=145.4 DEG AZ= 35 CLL

1978 JUL 22 NORTH ATLANTIC RIDGE MB=4,3 (11) 49,8N; 29,8W 10KM H=20 09 28,7 (NEIS)
50,1N; 29,2W 10KM 20 09 35,3 (CSEM)
D= 26,3 DEG AZ=284 MOX

MOX E P 20 15 07,5
LMH 23,2 T 16 AN 0,5 MLH =4,2
LMV 24 T 20 AV 0,2 MLV =3,8
CLL E P 20 15 12 D= 27,0 DEG AZ=284 CLL
BRG E P 20 15 17,3 D= 27,6 DEG AZ=285 BRG

1978 JUL 22
CLL E 20 50 56
1978 JUL 22 AFGHANISTAN-USSR BORDER REGION MB=4,4 (2) 37,4N; 71,3E 109KM H=22 04 49,3 (NEIS)
BRG E P 22 12 34,8 D= 42,3 DEG AZ= 86 BRG
1978 JUL 23 GDR-CZECHOSLOVAKIA BORDER REGION

CLL E 03 31 27
E LM 31 46
MOX I PG 03 31 28,0 DISTANCE 1,3DEG
E SG 31 42
1978 JUL 23
BRG E(P) 06 18 25,2

1978 JUL 23 BURMA MB=4,7 (6) 22,9N; 94,6E 147KM H=10 17 18,9 (NEIS)
BRG I P 10 27 56,8 0,7 / 10 D= 66,8 DEG AZ= 82 BRG

1978 JUL 23 TAIWAN REGION MB=6,5 (91) 22,3N;121,5E 17KM H=14 42 36,9 (NEIS)
22,7N;121,5E 50KM 14 42 42,6 (WDCB)
BRG I P 14 55 04,2C 1,8 / 1870 MPV =6,8 D= 83,4 DEG AZ= 63 BRG
I PP 58 27,2 DISTANCE 83 DEG
I S 15 05 24,4
E PKP1 13 22,4
E PKPPKP 21 27,4
LM 37 T 20 AV 470,0 MLV =7,9
CLL I P 14 55 06,9C 1,7 / 320 D= 83,7 DEG AZ= 62 CLL
T 15 AN 8,6 AE 11,5 AV 31,0 MPH =7,4 MPV =7,3 DISTANCE 83 DEG
I 55 08,8
E PP 58 24
E(PP) 58 36 T 15 AN 7,3 AE 10,7 AV 15,1 MPPH =7,4 MPPV =7,3
E 15 01,9
I S 05 24 T 15 AN 23,0 AE 42,5 AV 17,0 MSH =7,4
E SCS 05 40
E PKP1 13 23
E PKPPKP 21 29
E SKPPKP 24 47
LM 26 T 34 AN(450) AE 330
LM 37 T 14 AN 320 AE 285
FINAL 19 30 MLH =8,0 MAG =8,0
MOX E P 14 55 11 C 1,5 / 1055 MPV =6,8 D= 84,8 DEG AZ= 61 MOX
T 13 AV 31,3 MPV =7,4
E 57 40
E PP 58 32 T 13 AV 16,9 MPPV =7,3
E PPP 15 00 30
E S 05 30 T 15 AN 18,9 AE 56,6 MSH =7,4
E PS 06 24
E SS 10 55
E PKP 13 21
E SSS 15 30
E SSSS 17 40
E PKPPKP 21 27
LM 38 T 16 AN 331,7 AE 304,6 AV 635,6 MLH =8,0 MLV =8,1

1978 JUL 23
BRG E P 15 20 03,2
CLL E P 15 20 04
MOX E P 15 20 09 1,3 / 13

1978 JUL 23 TAIWAN REGION MB=5,0 (6) 22,7N;121,1E 33KM H=15 14 25,8 (NEIS)
BRG E P 15 26 49,2 D= 82,9 DEG AZ= 63 BRG
CLL I P 15 26 50,4 1,2 / 20 D= 83,2 DEG AZ= 62 CLL
MOX E P 15 26 56 1,4 / 19 MPV =5,1 D= 84,3 DEG AZ= 61 MOX

1978 JUL 23 CENTRAL ALASKA MB=5,0 (12) 63,3N;147,3W 33KM H=15 19 35,5 (NEIS)
MOX E P 15 30 15 TRACES D= 65,2 DEG AZ=350 MOX
BRG E(P) 15 30 19,0 D= 65,2 DEG AZ=351 BRG

1978 JUL 23 TAIWAN REGION MB=5,1 (21) 22,3N;121,3E 19KM H=15 52 01,9 (NEIS)
22,9N;121,3E 33KM 15 52 07,2 (WDCB)
BRG E P 16 04 28,6 D= 83,3 DEG AZ= 63 BRG
CLL E P 16 04 30 D= 83,6 DEG AZ= 62 CLL
MOX E P 16 04 36,5 D= 84,7 DEG AZ= 61 MOX

1978 JUL 23 TAIWAN REGION MB=5,0 (24) 22,3N;121,4E 25KM H=16 02 42,8 (NEIS)
22,6N;121,8E 33KM 16 02 45,7 (WDCB)
BRG E P 16 15 09,4 1,2 / 17 D= 83,3 DEG AZ= 63 BRG
CLL I P 16 15 10,8 1,4 / 23 D= 83,7 DEG AZ= 62 CLL
MOX E P 16 15 17 1,5 / 20 MPV =5,1 D= 84,8 DEG AZ= 61 MOX

1978 JUL 23 TAIWAN REGION MB=4,8 (5) 22,0N;121,5E 33KM H=16 05 30,5 (NEIS)
BRG E P 16 17 57,7 D= 83,6 DEG AZ= 63 BRG
CLL I P 16 17 59,3 TRACES D= 84,0 DEG AZ= 62 CLL
MOX E P 16 18 05 TRACES D= 85,1 DEG AZ= 61 MOX
E 18 23

1978 JUL 23 KURILE ISLANDS MB=4,8 (14) 43,4N;147,8E 33KM H=16 16 14,9 (NEIS)
43,5N;147,9E 33KM 16 16 15,5 (WDCB)
CLL I P 16 28 10,6 D= 77,8 DEG AZ= 32 CLL
BRG E P 16 28 11,0 D= 77,9 DEG AZ= 33 BRG
MOX E P 16 28 17 D= 78,9 DEG AZ= 31 MOX

1978 JUL 23 TAIWAN REGION MB=5,1 (22) 21,9N;121,5E 17KM H=16 56 11,2 (NEIS)
22,2N;121,6E 33KM 16 56 13,8 (WDCB)
BRG E P 17 08 40,2 1,4 / 12 D= 83,7 DEG AZ= 63 BRG
E 08 53,3
CLL E P 17 08 42 D= 84,0 DEG AZ= 62 CLL
MOX E P 17 08 49 D= 85,1 DEG AZ= 61 MOX

1978 JUL 23
BRG E(P) 21 46 11,4

1978 JUL 24 TAIWAN REGION MB=5,2 (52) 22,0N;121,5E 33KM H=02 36 59,9 (NEIS)
22,1N;121,6E 33KM 02 36 55,2 (WDCB)
BRG I P 02 49 27,4D 1,4 / 33 D= 83,6 DEG AZ= 63 BRG
LMV 03 31 T 12 AV 0,9 MLV =5,4
CLL I P 02 49 28,2D 1,3 / 52 D= 84,0 DEG AZ= 62 CLL
E APP 52 52
LM 03 31
MOX E P 02 49 34 1,5 / 35 MPV =5,3 D= 85,1 DEG AZ= 61 MOX
E SKS 59 55
LMH 03 29 T 14 AN 0,4 AE 0,5 MLH =5,2
LMV 32,9 T 14 AV 0,9 MLV =5,3

1978 JUL 24 POLAND, UPPER SILESIA
BRG E(PG) 03 30 04,6
E(SG) 30 45,0
CLL E 03 31 10
MOX E SG 03 31 35,5

1978 JUL 24 KURILE ISLANDS REGION MB=5,1 (69) 44,9N;150,3E 56KM H=06 23 49,0 (NEIS)
45,3N;150,1E 33KM 06 23 48,9 (WDCB)
CLL I P 06 35 38,3C 1,1 / 82 D= 77,3 DEG AZ= 30 CLL
BRG I P 06 35 38,8C 1,2 / 38 D= 77,4 DEG AZ= 30 BRG
MOX E P 06 35 44,5 1,4 / 47 MPV =5,3 D= 78,3 DEG AZ= 29 MOX
E AP 36 00 DEPTH 53 KM
LMH 07 12,7 T 22 AN 0,5
LMV 13 T 20 AV 0,2

1978 JUL 24 GULF OF MEXICO MB=4,9 (43) 26,7N; 88,7W 33KM H=08 06 17,6 (NEIS)
25,8N; 89,3W 33KM 08 06 07,5 (WDCB)
MOX E P 08 18 03,5 1,3 / 28 MPV =5,1 D= 76,0 DEG AZ=295 MOX
E AP 18 14 DEPTH 39 KM
CLL I P 08 18 06,1C 1,1 / 34 D= 76,5 DEG AZ=296 CLL
I AP 18 17,0
BRG I P 08 18 10,6C 1,2 / 38 D= 77,2 DEG AZ=296 BRG
E AP 18 21,8

1978 JUL 24 NEW BRITAIN REGION MB=5,2 (13) 6,1S;151,0E 33KM H=11 05 36,6 (NEIS)
5,4S;151,0E 33KM 11 05 33,5 (WDCB)
BRG I PKP 11 24 31,7D D=122,9 DEG AZ= 54 BRG
I 24 42,8
E 24 50,8
LMV 12 22 T 18 AV 1,8 MLV =5,8
CLL E PKP 11 24 31 D=123,1 DEG AZ= 53 CLL
E PP 26 14
LM 12 24
MOX E PKP 11 24 34 D=124,2 DEG AZ= 52 MOX
E PP 26 20
E PS 36 05
E PPS 37 35
E SS 43 15
LMH 12 23,7 T 18 AN 0,7 MLH =5,4
LMV 25,4 T 18 AV 1,0 MLV =5,5

1978 JUL 24 TAIWAN REGION MB=5,0 (35) 22,2N;121,6E 30KM H=11 41 53,0 (NEIS)
22,8N;121,7E 33KM 11 41 55,5 (WDCB)
BRG E P 11 54 19,7 1,2 / 13 D= 83,5 DEG AZ= 63 BRG
CLL I P 11 54 20,4C 1,1 / 25 D= 83,9 DEG AZ= 62 CLL
MOX E P 11 54 26,5 1,3 / 22 MPV =5,2 D= 84,9 DEG AZ= 61 MOX

1978 JUL 24
CLL E 13 02 20

1978 JUL 24 WESTERN IRAN MB=4,7 (15) 33,1N; 48,7E 55KM H=15 59 51,6 (NEIS)
33,2N; 48,7E 34KM 15 59 52,2 (CSEM)
32,7N; 48,8E 33KM 15 59 42,6 (WDCB)
CLL E P 16 06 11 D= 31,7 DEG AZ=111 CLL

1978 JUL 24 VANUATU ISLANDS REGION MB=5,7 (31) 20,7S;172,5E 37KM H=19 45 35,3 (NEIS)
20,8S;172,6E 33KM 19 45 34,4 (WDCB)
BRG I PKP 20 05 09,7 D=145,5 DEG AZ= 37 BRG
I 05 18,9
I 05 44,4
LM 21 08 T 23 AV 5,5 MLV =6,3
CLL I PKP 20 05 09,4C 1,9 / 270 D=145,5 DEG AZ= 35 CLL
I 05 18,1 1,5 / 260
E 05 22
E 05 44
E 23,4
LMH 21 08 T 22 AN 4,5 AE 4,5 AV 3,5 MLH =6,2
LMV 17 T 18 AN 3 AE 2,5 AV 4 MLV =6,3
MOX E PKP 20 05 12,5 D=146,5 DEG AZ= 34 MOX
PKPM 05 32 2,8 / 837
LMH 21 08 T 22,5 AN 4,0 AE 3,7 MLH =6,2
LMV 17 T 19 AV 3,4 MLV =6,1

1978 JUL 25 TAIWAN REGION MB=5,0 (23) 22,1N;121,4E 18KM H=23 54 44,7 (NEIS)
23,4N;121,3E 33KM 23 54 49,6 (WDCB)
BRG E P 00 07 12,9D D= 83,5 DEG AZ= 63 BRG
E 07 18,9
LM 50 T 14 AV 3,9 MLV =6,0
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CLL E P 00 07 14 1,4 / 42 D= 83,8 DEG AZ= 62 CLL
LH 42
LM 49 T 15 AN 2 AE 2 AV 2,5 MLH =5,8 MLV =5,8
MOX E P(1) 00 07 21 1,2 / 12 MPV =5,0 D= 84,9 DEG AZ= 61 MOX
E P(2) 07 26 1,7 / 55 MPV =5,5
E S 23 00
LMH 50.3 T 16 AN 1,4 AE 2,2 MLH =5,7
LMV 50.4 T 15 AV 2,8 MLV =5,8

1978 JUL 25
CLL E P 01 53 33
BRG E P 01 53 34,5 1,3 / 9

1978 JUL 25 TAIWAN REGION MB=4,5 (3) 21,9N;121.4E 33KM H=03 11 32,0 (NEIS)
BRG E P 03 24 00,0 D= 83,7 DEG AZ= 63 BRG
CLL E P 03 24 01 1,3 / 9 D= 84,0 DEG AZ= 62 CLL

1978 JUL 25 TAIWAN REGION MB=4,1 (1) 22,5N;121.3E 11KM H=04 16 25.2 (NEIS)
MOX LMH 05 12.4 D= 84,5 DEG AZ= 61 MOX
LMV 12.5

1978 JUL 25 TAIWAN REGION MB=4,5 (1) 22,1N;121.4E 10KM H=07 05 24,4 (NEIS)
CLL E P 07 17 53 TRACES D= 83,8 DEG AZ= 62 CLL

1978 JUL 25 SOLOMON ISLANDS MB=5,0 (5) 9,6S;158.9E 33KM H=07 29 06,2 (NEIS)
BRG I PKP 07 48 15,1 D=129,8 DEG AZ= 47 BRG

1978 JUL 25 TONGA ISLANDS MB=4,8 (3) 20,0S;174.1W 33KM H=10 22 44,0 (NEIS)
CLL E PKP1 10 42 26 D=148,3 DEG AZ= 13 CLL
BRG E PKP1 10 42 29,9 D=148,5 DEG AZ= 15 BRG
I 42 38,7

1978 JUL 25 TONGA ISLANDS MB=5,0 (7) 21,2S;174.4W 33KM H=10 53 30,4 (NEIS)
CLL I PKP1 11 13 17,2C 1,4 / 27 D=149,4 DEG AZ= 14 CLL
BRG I PKP1 11 13 18,9D 1,2 / 17 D=149,7 DEG AZ= 16 BRG
MOX E PKHKP 11 13 20 1,3 / 17 D=150,2 DEG AZ= 11 MOX
E PKP2 13 26 1,6 / 27
E 13 33 1,6 / 27

1978 JUL 25
CLL E P 11 36 56
BRG E(P) 11 36 56,6 1,2 / 8

1978 JUL 25 VANUATU ISLANDS REGION MB=5,1 (5) 20,8S;172.7E 19KM H=15 22 37.2 (NEIS)
21.8S;171.1E 33KM 15 22 40.5 (WDCB)
C[illegible] E PKP 15 42 14 , 1,4 / 28 D=145,6 DEG AZ= 35 CLL
E 42 29
E 44 32
BRG E PKP 15 42 15,2 1,3 / 21 D=145,7 DEG AZ= 37 BRG
E 42 26,6
MOX E PKP 15 42 24 D=146,7 DEG AZ= 34 MOX
PKPM 42 46 3,0 / 132
E 43 10

1978 JUL 25 TAIWAN REGION MB=5,2 (44) 22,3N;121.4E 28KM H=17 56 29.3 (NEIS)
22.8N;121.2E 33KM 17 56 27.8 (WDCB)
BRG E P 18 08 55,2 1,5 / 21 D= 83,3 DEG AZ= 63 BRG
E 09 04,8
LMV 51 T 13 AV 1,4
CLL E P 18 08 56 1.0 / 23 D= 83,7 DEG AZ= 62 CLL
E 09 38
E PP 12 12
LM 50 T 14 AN 1 AE 1 AV 1
MOX E P(1) 18 09 03 D= 84,8 DEG AZ= 61 MOX
E P(2) 09 07
E P(3) 09 11 1,8 / 34 MPV =5.3
LMH 44,5 T 19 AN 1.0 AE 0.7 MLH =5,3
LMV 52,6 T 16 AV 1,2 MLV =5,4

1978 JUL 25 TAIWAN REGION MB=4,4 (3) 21,8N;121.3E 32KM H=19 57 27,1 (NEIS)
CLL E P 20 09 57 TRACES D= 84,0 DEG AZ= 63 CLL

1978 JUL 25 FIJI ISLANDS REGION /MB=4,4 (2)/ 21,1S;178.7W 574KM H=20 49 02,3 (ISC)
CLL I PKP1 21 07 45,8D 1,0 / 22 D=148,5 DEG AZ= 21 CLL
BRG I PKP1 21 07 46,4 1,4 / 18 D=148,7 DEG AZ= 23 BRG
I PKP2 07 52,5
MOX E PKHKP 21 07 49 1,0 / 22 D=149,4 DEG AZ= 19 MOX

1978 JUL 25
CLL E 22 41 50

1978 JUL 25 UNIMAK ISLAND REGION MB=4,7 (19) 53,9N;164,9W 33KM H=22 58 27,4 (NEIS)
CLL E P 23 10 07 TRACES D= 75,1 DEG AZ=359 CLL
BRG E P 23 10 10,0 D= 75,6 DEG AZ=359 BRG
MOX E P 23 10 11 D= 75,8 DEG AZ=358 MOX

1978 JUL 25 / VANCOUVER ISLAND REGION MB=5,3 (78)
JUL 26
50,3N;127,6W 11KM H=23 30 50,9 (NEIS)
51.1N;128.2W 33KM 23 30 58,6 (WDCB)
CLL E P 23 42 25 1,3 / 34 D= 73,4 DEG AZ=335 CLL
E 42 51 DISTANCE 73 DEG
E S 52.0
LMH 00 17 T 13 AE 0,5
LM 18 T 15 AN 0.5 AV 0,5
MOX E P(1) 23 42 25.5
E P(2) 42 30,5 1,1 / 28 MPV =5,2 D= 73,6 DEG AZ=334 MOX
E S 52 00
E SS 56 50
LMH 00 11,3 T 23 AN 0.6
LMV 16,3 T 17 AV 0.6 MLH =4,8 MLV =5,0
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BRG I P 23 42 28,5D 1,4 / 18 D= 74,0 DEG AZ=335 BRG
I 42 33,4 DISTANCE 73 DEG
E S 52 03,0
LMV 00 19 T 14 AV 1,1 MLV =5,3

1978 JUL 26 AFGHANISTAN-USSR BORDER REGION MB=4,8 (17) 37,0N; 70.0E 46KM H=00 41 01.0 (NEIS)
36,7N; 69,9E 33KM 00 40 57,5 (WDCB)
BRG E P 00 48 50,0 D= 41,7 DEG AZ= 87 BRG
CLL E P 00 48 54 D= 42,3 DEG AZ= 87 CLL
LM 01 10
MOX LMV 01 10.8 T 14 AV 0,4 MLV =4,5 D= 43,2 DEG AZ= 85 MOX
LMH 10.9 T 16 AE 0,3 MLH =4,3

1978 JUL 26 KURILE ISLANDS MB=4,6 (2) 44,6N;148,4E 33KM H=03 26 22.1 (NEIS)
CLL E P 03 38 14 TRACES D= 77,0 DEG AZ= 31 CLL

1978 JUL 26 TAIWAN REGION MB=4,7 (14) 22,2N;121.3E 24KM H=03 34 00.2 (NEIS)
BRG E P 03 46 27,3 D= 83,4 DEG AZ= 63 BRG
CLL E P 03 46 28 D= 83,7 DEG AZ= 62 CLL
E 46 32
MOX E P 03 46 37,5 0,8 / 12 MPV =5,2 D= 84,8 DEG AZ= 61 MOX
LM 04 30,2 T 16 AV 0,3 MLV =4,8

1978 JUL 26 SOUTHERN GREECE MB=4,1 (1) 36,0N; 21,9E 33KM H=04 40 44,3 (NEIS)
36,0N; 21,9E 41KM 04 40 47,2 (CSEM)
CLL E 04 44 58 TRACES D= 16,6 DEG AZ=154 CLL

1978 JUL 26
CLL E PKP 12 13 45 1,0 / 13
BRG E PKP 12 13 46,0 1,0 / 10
MOX E PKP 12 13 48 1,5 / 13

1978 JUL 26 FIJI ISLANDS REGION MB=5,0 (22) 18,9S;178.0W 473KM H=12 20 21.9 (NEIS)
CLL E PKIKP 12 39 09 D=146,5 DEG AZ= 19 CLL
I PKP1 39 10,5 0,9 / 68
E APKP 41 08
BRG I PKP1 12 39 11,3 1,0 / 33 D=146,7 DEG AZ= 21 BRG
MOX E PKIKP 12 39 10 D=147,4 DEG AZ= 17 MOX
E PKHKP 39 12,5 1,2 / 14
E PKP2 39 17

1978 JUL 26 TAIWAN REGION MB=4,5 (2) 21.9N;121.4E 10KM H=13 58 59,6 (NEIS)
BRG E(P) 14 11 29,9 D= 83,7 DEG AZ= 63 BRG
CLL E P 14 11 32 D= 84,0 DEG AZ= 62 CLL

1978 JUL 26 OFF W. COAST OF NORTH, SUMATERA MB=4,8 (6) 3.8N; 95,8E 33KM H=14 09 22.4 (NEIS)
BRG E P 14 21 41,5 D= 91,9 DEG AZ= 94 BRG
E 21 53,6

1978 JUL 26 OFF EAST COAST OF HONSHU, JAPAN MB=4,9 (23) 39,6N;143.3E 33KM H=17 11 41.8 (NEIS)
39.7N;143.4E 33KM 17 11 37.0 (WDCB)
BRG E P 17 23 46,8 D= 79,6 DEG AZ= 37 BRG
CLL E P 17 23 47 D= 79,6 DEG AZ= 37 CLL
MOX E P 17 23 53 D= 80,6 DEG AZ= 36 MOX

1978 JUL 26 OFF EAST COAST OF HONSHU, JAPAN MB=5,2 (56) 39,7N;143.4E 33KM H=17 13 44.1 (NEIS)
39,8N;143.3E 33KM 17 13 39.1 (WDCB)
BRG I P 17 25 49,1C 1,1 / 19 D= 79,5 DEG AZ= 37 BRG
CLL I P 17 25 48,7C 1,1 / 37 D= 79,5 DEG AZ= 37 CLL
E AP 26 00
MOX E P 17 25 55 C 1,1 / 20 MPV =5.0 D= 80,6 DEG AZ= 36 MOX
LMH 18 01.5 T 14.5 AN 0.3 AE 0,4 MLH =5,0
LMV 07.4 T 16 AV 0,3 MLV =4,9

1978 JUL 26 ICELAND REGION MB=4,3 (23) 68,1N; 20.1W 10KM H=18 38 34.0 (NEIS)
68.4N; 20.9W 10KM 18 38 32.6 (CSEM)
CLL E P 18 43 42 D= 23,2 DEG AZ=329 CLL
MOX E P 18 43 44 1,5 / 30 MPV =4,6 D= 23,4 DEG AZ=330 MOX
BRG I P 18 43 50,0D 1,5 / 17 D= 23,9 DEG AZ=329 BRG

1978 JUL 26 NEAR EAST COAST OF HONSHU, JAPAN MB=4,9 (22) 36,2N;141,8E 24KM H=22 15 50.5 (NEIS)
36.4N;141.6E 33KM 22 15 48.5 (WDCB)
BRG E P 22 28 09,9 D= 81,9 DEG AZ= 40 BRG
CLL E P 22 28 10 D D= 82,0 DEG AZ= 40 CLL
MOX LMH 23 09,8 T 15 AN 0.3 MLH =4,7 D= 83,0 DEG AZ= 39 MOX
LMV 09,8 T 15 AV 0,2 MLV =4,6

1978 JUL 27 TONGA ISLANDS REGION /MB=4,8 (2)/ 18.1S;172.3W 33KM H=03 15 34.6 (ISC)
CLL E PKP1 03 35 15 D=146,6 DEG AZ= 9 CLL
BRG I PKP1 03 35 15,7 0,9 / 7 D=146,9 DEG AZ= 11 BRG

1978 JUL 27 NEAR EAST COAST OF HONSHU, JAPAN MB=5,2 (49) 37,9N;141,9E 46KM H=07 24 07,0 (NEIS)
38,0N;141.9E 33KM 07 24 05,9 (WDCB)
BRG I P 07 36 16,0D 1,0 / 14 D= 80,5 DEG AZ= 39 BRG
CLL I P 07 36 15,1C 1,1 / 42 D= 80,5 DEG AZ= 39 CLL
MOX E P 07 36 22 1,4 / 23 MPV =5,0 D= 81,6 DEG AZ= 38 MOX
LMH 08 15,5
LMV 17,5

1978 JUL 27
CLL E 07 42 47

1978 JUL 27 HINDU KUSH REGION MB=4,8 (15) 36,9N; 69,8E 33KM H=08 15 14,9 (NEIS)
BRG E P 08 23 03,3 D= 41,6 DEG AZ= 87 BRG
MOX LMH 08 39,6 T 12 AN 0,3 AE 0,2 MLH =4,4 D= 43,1 DEG AZ= 85 MOX
LMV 45,5 T 15 AV 0,3 MLV =4,3

1978 JUL 27
CLL I P 09 59 12,0

1976 JUL 27	NEAR EAST COAST OF HONSHU, JAPAN	MB=5.1 (34)	36.2N;141.8E 32KM H=13 27 14.3 (NEIS) 36.3N;141.8E 33KM 13 29 14.7 (WDCB)
BRG E P	13 41 32.2		D= 91.9 DEG AZ= 40 BRG
E AP	41 44.7		
CLL E P	13 41 32		D= 82.0 DEG AZ= 40 CLL
LM	14 23		
MOX E P	13 41 38		D= 83.0 DEG AZ= 39 MOX
LMH	14 20.8 T 14.5 AN 0.3 AE 0.5	MLH =5.1	
LMV	23.8 T 15 AV 0.7	MLV =5.2	
1978 JUL 27	TONGA ISLANDS	MB=4.9 (10)	15.5S;173.1W 33KM H=13 41 04.3 (NEIS)
MOX E PKP	14 00 35		D=144.7 DEG AZ= 8 MOX
LMH	15 05 T 19 AN 0.3	MLH =5.1	
LMV	06 T 19 AV 0.3	MLV =5.0	
1978 JUL 27	OFF EAST COAST OF HONSHU, JAPAN	MB=4.8 (12)	39.6N;143.3E 33KM H=17 43 55.8 (NEIS) 39.9N;143.6E 33KM 17 43 56.4 (WDCB)
CLL E P	17 56 01		D= 79.6 DEG AZ= 37 CLL
1978 JUL 27	TONGA ISLANDS	MB=5.7 (38)	15.6S;173.0W 33KM H=18 25 08.5 (NEIS) 15.3S;172.9W 33KM 18 25 03.7 (WDCB)
CLL E PKP	18 44 40		D=144.1 DEG AZ= 10 CLL
E	44 46		
E	52.5		
LM	19 52 T 19 AN 1 AE 0.3 AV 1		
BRG E PKP	18 44 40.6		D=144.4 DEG AZ= 12 BRG
E SS	19 06 40		
LMV	53 T 19 AV 3.0	MLV =6.1	
MOX E PKP	18 44 42 1.6 / 55		D=144.8 DEG AZ= 8 MOX
E PP	48 10 T 18 AV 0.9	MPPV =5.9	
E SS	19 06 30		
LMH	52.9 T 20 AN 1.2 AE 0.7	MLH =5.7	
LMV	56.5 T 19 AV 1.6	MLV =5.8	
1976 JUL 27			
CLL I P	22 09 51.1C		
1976 JUL 27			
CLL I PG	22 44 54.7		DISTANCE 130 KM
E SG	45 10		
E L	45 28		
1978 JUL 28	WESTERN IRAN	MB=4.4 (16)	31.2N; 49.8E 33KM H=02 42 34.3 (NEIS) 31.3N; 49.7E 10KM 02 42 34.2 (CSEM) (41.5N; 53.5E 33KM 02 43 40.5)(WDCB)
CLL E	02 49 36		D= 33.7 DEG AZ=112 CLL
1978 JUL 28	UNDERGROUND EXPLOSION	MB=5.7 (77)	49.7N; 78.2E 0KM H=02 46 57.6 (NEIS)
BRG I P	02 54 34.5C 1.0 / 64		D= 39.9 DEG AZ= 66 BRG
E	56 03.0		
CLL I P	02 54 37.2C 0.8 / 130		D= 40.3 DEG AZ= 66 CLL
E PN	56 19		
E	03 08 27		
L	12.7		
MOX I P	02 54 46.2C 1.1 / 149	MPV =5.6	D= 41.3 DEG AZ= 64 MOX
E PN	56 18.5		
LMH	03 12.9 T 9 AV 0.2 AE 0.3	MLH =4.5	
LMV	12.9 T 8.5 AV 0.4	MLV =4.7	
1978 JUL 28	VANUATU ISLANDS	MB=5.3 (27)	18.8S;169.0E 205KM H=10 46 13.7 (NEIS) 19.6S;169.4E 33KM 10 45 49.3 (WDCB)
BRG E PKP	11 05 18.3 1.1 / 15		D=142.4 DEG AZ= 41 BRG
E	06 28.7		
E SKP	08 46.1		
CLL I PKP	11 05 18.3		D=142.4 DEG AZ= 39 CLL
E(XPKP)	06 25		
E	08 03		
I SKP	08 41.5 1.4 / 24		
MOX I PKP	11 05 22.0C 1.6 / 66 1.7 / 30		D=143.5 DEG AZ= 38 MOX
I	05 33.5		
1978 JUL 28	PERU-BRAZIL BORDER REGION	MB=4.9 (55)	10.2S; 71.0W 608KM H=14 01 28.8 (NEIS) 9.9S; 72.3W 33KM 14 00 25.6 (WDCB)
MOX E P	14 13 41 2.0 / 26	MPV =5.0	D= 93.2 DEG AZ=258 MOX
CLL I P	14 13 45.3D 1.1 / 17		D= 94.2 DEG AZ=259 CLL
BRG E P	14 13 47.2 1.2 / 16		D= 94.7 DEG AZ=260 BRG
E AP	16 03.0		
1978 JUL 28			
BRG E	18 28 04.6		
CLL E	18 28 09		
1978 JUL 28			
CLL E	19 18 41		
1978 JUL 28	BALEARIC ISLANDS	NO MB COMP.	39.0N; 2.2E 33KM H=21 04 49.1 (NEIS) 39.0N; 2.2E 10KM 21 04 48.3 (CSEM)
MOX LMH	21 14.0 T 10 AN 0.3 AE 0.4	MLH =3.9	D= 13.4 DEG AZ=213 MOX
LMV	14.3 T 12 AV 0.5	MLV =4.1	
CLL E	21 13 31		D= 14.5 DEG AZ=216 CLL
LM	14		

1978 JUL 28	POLAND, UPPER SILESIA	MB=3.9 (1)	50.5N; 19.0E 10KM H=22 10 55.4 (NEIS) 50.3N; 18.9E 10KM 22 10 57.1 (CSEM)
BRG E PG	22 11 55.2		D= 3.2 DEG AZ= 95 BRG
E SN	12 23.7		
I SG	12 42.4		
CLL I PG	22 12 10.5		D= 3.9 DEG AZ=100 CLL
E SN	12 42		
I SG	13 02.5		
MOX E PN	22 12 09		D= 4.7 DEG AZ= 89 MOX
E SG	13 25		
1978 JUL 29	CARLSBERG RIDGE	MB=4.9 (31)	0.1N; 66.9E 10KM H=02 04 02.1 (NEIS) 0.1N; 66.8E 33KM 02 04 05.3 (WDCB)
BRG E P	02 14 59.4 1.6 / 16		D= 67.5 DEG AZ=120 BRG
CLL I P	02 15 04.1 1.6 / 35		D= 68.2 DEG AZ=120 CLL
E	15 14		
MOX E P	02 15 07 1.9 / 23	MPV =5.0	D= 68.7 DEG AZ=118 MOX
1978 JUL 29	WESTERN TURKEY	MB=4.6 (39)	37.6N; 30.0E 16KM H=04 34 41.9 (NEIS) 37.6N; 30.1E 10KM 04 34 43.5 (CSEM) 37.7N; 30.0E 33KM 04 34 40.3 (WDCB)
BRG E P	04 38 48.2		D= 17.5 DEG AZ=133 BRG
E PP	39 03.2		DISTANCE 19 DEG
E S	42 18.0		
LMV	46 T 14 AV 2.3	MLV =4.8	
CLL I P	04 38 56.2 1.9 / 48		D= 18.2 DEG AZ=132 CLL
E PP	39 08		
E S	42 30		
E LG2	44 40		
E	45.2		
LM	47 T 12 AN 1 AE 2 AV 1.5	MLH =4.7 MLV =4.7	
MOX E P	04 39 01 1.4 / 37		D= 18.5 DEG AZ=128 MOX
E S	42 35 T 8 AN 0.4 AE 0.6	MPV =4.4	
LMH	45.5 T 12 AN 1.6 AE 1.4	MSH =5.4	
LMV	47.3 T 13.5 AV 1.3	MLH =4.7	
		MLV =4.5	
1978 JUL 29	SOUTHERN IRAN	MB=4.4 (3)	27.7N; 56.2E 17KM H=08 08 38.7 (NEIS) 27.5N; 56.4E 10KM 08 08 38.1 (CSEM)
BRG E P	08 16 08.0		D= 39.3 DEG AZ=110 BRG
CLL E P	08 16 14		D= 40.0 DEG AZ=109 CLL
1978 JUL 29			
BRG I(P)	08 55 26.0		
1978 JUL 29			
BRG E(P)	09 33 34.0		
1978 JUL 29			
CLL E	13 09 53		
1978 JUL 29	GUATEMALA	MB=4.9 (38)	14.8N; 91.0W 10KM H=14 37 32.7 (NEIS)
MOX E P	14 50 17.5 1.3 / 22	MPV =5.2	D= 86.5 DEG AZ=289 MOX
LMH	15 31.3 T 16 AE 0.3	MLH =4.7	
LMV	35 T 16 AV 0.3	MLV =4.8	
CLL I P	14 50 20.5 1.5 / 27		D= 87.1 DEG AZ=290 CLL
E	50 44		
BRG E P	14 50 24.4 1.4 / 19		D= 87.8 DEG AZ=291 BRG
E	50 47.0		DISTANCE 87 DEG
E S	15 01 08.0		
1978 JUL 29	CENTRAL ITALY	NO MB COMP.	42.6N; 12.6E 10KM H=21 07 12.2 (NEIS)
MOX E	21 11 04		D= 8.1 DEG AZ=175 MOX
BRG E SN	21 10 44.1		D= 8.3 DEG AZ=187 BRG
CLL E	21 11 27		D= 8.7 DEG AZ=182 CLL
1978 JUL 29			
CLL E P	21 40 44		
1978 JUL 29			
CLL I P	23 24 41.5		
1978 JUL 30	SOUTHERN YUGOSLAVIA	NO MB COMP.	42.6N; 18.6E 10KM H=00 00 23.4 (NEIS) 42.5N; 18.7E 10KM 00 00 25.0 (CSEM)
BRG E(PN)	00 02 42.0		D= 8.9 DEG AZ=157 BRG
E	04 32.0		
MOX E	00 04 57		D= 9.4 DEG AZ=147 MOX
CLL E	00 03 03		D= 9.5 DEG AZ=154 CLL
E(SN)	04 20		
E SG	05 43		
1978 JUL 30	CENTRAL ITALY	MB=4.7 (12)	42.6N; 12.5E 10KM H=05 19 24.3 (NEIS)
MOX E PN	05 21 23 1.2 / 45		42.6N; 12.5E 10KM 05 19 26.4 (CSEM)
E SN	22 49		43.0N; 12.7E 33KM 05 19 30.6 (WDCB)
LM	25.3 T 10 AN 1.6 AV 1.9	MLH =4.0	D= 8.1 DEG AZ=175 MOX
BRG E PN	05 21 27.4		D= 8.3 DEG AZ=187 BRG
E	21 50.6		DISTANCE 8.1DEG
I SN	22 55.2		
CLL I PN	05 21 31.0		D= 8.7 DEG AZ=182 CLL
E	21 40		DISTANCE 8.8DEG
E SN	23 10		
E	23 50		
E L	24 27		
LM	25.3 T 10 AN 1.5 AE 1.5 AV 1.5	MLH =4.2	
1978 JUL 30			
CLL E	09 52 06 TRACES		
1978 JUL 30			
BRG E(P)	10 51 23.8		
(CONT.)			

(CONT.)

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CLL E          10 51 24

1978 JUL 30    NEAR S. COAST OF HONSHU, JAPAN                    MB=4.5 (14)   33.3N;137.8E 345KM H=14 49 11.3 (NEIS)
                                                                               32.9N;137.7E 300KM   14 49 05.9 (WDCB)
BRG I P        15 00 58.8                                                      D= 82.7 DEG   AZ= 45        BRG
CLL I P        15 00 59.1  1.1 /  20                                           D= 82.8 DEG   AZ= 44        CLL

1978 JUL 31    TAIWAN                                            MB=4.9 (39)   24.4N;121.9E  27KM H=00 20 42.4 (NEIS)
                                                                               24.8N;121.8E  33KM   00 20 40.7 (WDCB)
BRG I P        00 33 03.6D 1.1 /   7                                           D= 82.0 DEG   AZ= 61        BRG
   E S            43 18.0                                                     DISTANCE  81 DEG
     LMV       01 14       T 13                  AV  1.0   MLV =5.4
CLL E P        00 33 05                                                       D= 82.3 DEG   AZ= 61        CLL
     LM        01 14
MOX E P        00 33 11    1.7 /  15                         MPV =4.9         D= 83.4 DEG   AZ= 59        MOX
     LMH       01 13       T 16  AN  0.4 AE  0.5             MLH =5.1
     LMV          14       T 12                  AV  0.6   MLV =5.2

1978 JUL 31    SOUTHERN SINKIANG PROV., CHINA                    MB=5.0 (37)   35.4N; 81.9E  33KM H=11 55 39.7 (NEIS)
                                                                               35.9N; 81.9E  33KM   11 55 38.2 (WDCB)
BRG E P        12 04 33.4  1.4 /  18                                           D= 50.2 DEG   AZ= 80        BRG
   E S            11 48.0                                                     DISTANCE  50 DEG
   E SS           15 18.0
     LMV          27       T 17                  AV  7.5   MLV =5.8
CLL E P        12 04 39                                                       D= 50.7 DEG   AZ= 80        CLL
   E PP           06 38                                                       DISTANCE  52 DEG
   E              07 18
   E S            12 00
   E SS           15.6
     LM           27       T 17  AN  2   AE  3   AV  3.5   MLH =5.5 MLV =5.5
MOX E P        12 04 50    (1.5)/  20                        MPV =4.9         D= 51.7 DEG   AZ= 79        MOX
   E PP           06 40
   E S            12 10
   E SS           15 45
     LM           28.6     T 18.5 AN  2.0 AE  3.3 AV  4.4   MLH =5.5 MLV =5.6

1978 JUL 31
CLL E P        13 22 21
BRG E P        13 22 21.7

1978 JUL 31    TAIWAN REGION                                     MB=4.3 ( 1)   22.1N;121.7E  10KM H=16 32 23.6 (NEIS)
CLL I P        16 44 54.8C 0.8 /  12                                           D= 84.0 DEG   AZ= 62        CLL

1978 JUL 31    NEAR COAST OF GUATEMALA                           MB=5.0 (13)   13.9N; 90.1W  54KM H=20 18 48.5 (NEIS)
CLL E P        20 31 32                                                        D= 87.3 DEG   AZ=289       CLL
BRG E P        20 31 31.7                                                      D= 88.0 DEG   AZ=289       BRG

1978 JUL 31
CLL E          21 44 35

1978 JUL 31
CLL E          23 17 15
   E              19 15

1978 JUL 31
CLL I P        23 31 02.6
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1978 AUG 01    HINDU KUSH REGION                                 MB=5.2 (21)   36.1N; 70.6E  95KM H=06 20 43.0 (NEIS)
                                                                               36.4N; 70.5E 100KM   06 20 46.4 (WDCB)
BRG E P        06 28 31.3                                                      D= 42.6 DEG   AZ= 88        BRG
   E XP           29 08.6
CLL E          06 29 10                                                       D= 43.2 DEG   AZ= 87        CLL
MOX E P        06 28 45    TRACES                                             D= 44.1 DEG   AZ= 86        MOX
   E AP           29 07                                                       DEPTH 100 KM
   E PP           30 31

1978 AUG 01    NORTHERN CALIFORNIA                               MB=4.5 ( 5)   41.5N;121.9W   2KM H=09 02 34.5 (NEIS)
CLL E P        09 14 43                                                        D= 79.6 DEG   AZ=327       CLL
MOX   LMH      09 52.0     T 16                  AE  0.2   MLH =4.6          D= 79.6 DEG   AZ=326       MOX
      LMV         52.6     T 16                  AV  0.4   MLV =4.9

1978 AUG 01    KERMADEC ISLANDS REGION                          /MB=4.4 ( 2)/  31.6S;177.8W  33KM H=13 56 26    (ISC)
CLL I PKP2     14 16 54.5                                                      D=158.8 DEG   AZ= 26       CLL
BRG E PKP2     14 16 55.2  1.3 /  11                                           D=158.9 DEG   AZ= 29       BRG

1978 AUG 01
CLL E          17 57 12

1978 AUG 01
BRG E(P)       18 15 37.0

1978 AUG 01    TONGA ISLANDS                                     MB=5.3 (18)   15.3S;173.3W  33KM H=20 29 42.9 (NEIS)
                                                                               15.2S;173.7W  33KM   20 29 39.0 (WDCB)
CLL E PKP      20 49 15                                                        D=143.7 DEG   AZ= 10       CLL
   E              49 40
   E SKP          52 57
     LMH       22 03       T 17  AN  0.5 AE  0.5
BRG E PKP      20 49 18.5                                                     D=144.0 DEG   AZ= 12       BRG
   I              49 33.0
MOX E PKP      20 49 17.5                                                     D=144.5 DEG   AZ=  8       MOX
     LMH       21 56       T 20                  AE  0.7   MLH =5.4
     LMV       22 07       T 16                  AV  0.5   MLV =5.4

1978 AUG 02    NEAR N. COAST OF WEST IRIAN                       MB=5.4 (24)   1.7S;138.6E  40KM H=00 23 46.3 (NEIS)
                                                                               1.7S;138.9E  33KM   00 23 45.0 (WDCB)
BRG E          00 42 37.7                                                      D=112.5 DEG   AZ= 63       BRG
   E              43 32.5
   I              44 10.3
CLL   LMH      01 34       T 19  AN  0.5 AE  0.5
MOX   LMH      01 34.6     T 20  AN  0.6                                      D=112.8 DEG   AZ= 62       CLL
      LMV         35.8     T 19                  AV  0.8   MLH =5.2          D=113.9 DEG   AZ= 61       MOX
                                                         MLV =5.3

1978 AUG 02    SOUTHERN IRAN                                     MB=4.5 (18)   27.2N; 55.9E  38KM H=06 54 29.2 (NEIS)
                                                                               27.6N; 55.6E  73KM   06 54 38.6 (CSEM)
BRG E P        07 01 57.9  1.0 /  10                                           27.4N; 55.9E  33KM   06 54 29.8 (WDCB)
CLL E P        07 02 04                                                        D= 39.5 DEG   AZ=111       BRG
                                                                               D= 40.2 DEG   AZ=110       CLL

1978 AUG 02    SOUTHEAST ASIA                                    MB=5.1 (44)   20.5N;100.6E  33KM H=07 45 52.0 (NEIS)
                                                                               20.4N;100.6E  33KM   07 45 46.3 (WDCB)
BRG E P        07 57 15.8D 1.0 /  20                                           D= 72.3 DEG   AZ= 79       BRG
   E S            08 06 47.0
     LM           33
CLL E P        07 57 19    1.3 /  25                                          D= 72.8 DEG   AZ= 79       CLL
   E              58 16
MOX E P        07 57 25    1.2 /  24                         MPV =5.1         D= 73.8 DEG   AZ= 77       MOX
     LMH       06 33.6     T 15.5 AN  0.5 AE  0.4           MLH =4.9
     LMV          34.0     T 12                  AV  0.4   MLV =4.9

1978 AUG 02    FIJI ISLANDS REGION                               MB=5.3 (14)   18.9S;177.6W 609KM H=08 58 15.4 (NEIS)
CLL I PKP1     09 16 50.4  0.5 /  18                                           D=146.6 DEG   AZ= 18       CLL
BRG E PKP1     09 16 50.0                                                      D=146.8 DEG   AZ= 20       BRG

1978 AUG 02    ANDREANOF ISLANDS, ALEUTIAN IS,                   MB=4.8 (19)   51.7N;175.6W  49KM H=10 12 12.5 (NEIS)
                                                                               51.4N;176.0W  33KM   10 12 06.6 (WDCB)
CLL E P        10 24 03                                                        D= 77.1 DEG   AZ=  5       CLL

1978 AUG 02    VANUATU ISLANDS                                   MB=5.1 ( 6)   18.9S;169.2E 208KM H=16 23 55.5 (NEIS)
BRG E PKP      16 43 00.7                                                      D=142.5 DEG   AZ= 41       BRG
CLL E PKP      16 43 01                                                        D=142.6 DEG   AZ= 39       CLL
MOX E PKP      16 43 04    1.2 /  37                                           D=143.7 DEG   AZ= 38       MOX

1978 AUG 02
CLL E SG       18 03 53

1978 AUG 02
CLL E          20 58 06

1978 AUG 02    FIJI ISLANDS REGION                              /MB=4.9 ( 3)/  17.7S;178.6W 545KM H=23 24 04.3  (ISC)
CLL I PKP      23 42 42.3                                                      D=145.2 DEG   AZ= 20       CLL
BRG E PKP      23 42 42.2  1.0 /   8                                           D=145.4 DEG   AZ= 21       BRG

1978 AUG 03    PANAMA-COLOMBIA BORDER REGION                     MB=5.0 (56)    7.3N; 77.2W  33KM H=23 59 21.5 (NEIS)
MOX E P        00 11 48.5  1.4 /  23                         MPV =5.1         D= 83.7 DEG   AZ=274       MOX
     LM           43.6     T 22.5                AE  0.6 AV  0.7   MLH =4.9 MLV =5.0
CLL I P        00 11 53.2  1.6 /  42                                          D= 84.5 DEG   AZ=275       CLL
   I              12 01.8
     LM           44
BRG I P        00 11 55.5  1.2 /  28                                          D= 85.1 DEG   AZ=275       BRG
   E S            22 19.0                                                     DISTANCE  85 DEG
     LMV          44       T 22                  AV  0.6   MLV =5.0

1978 AUG 03
CLL E(P)       00 12 27
   E              12 35
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1978 AUG 03     SOUTH INDIAN OCEAN                          MB=5,5 (74)    0,9S; 84,3E  33KM H=01 10 26,3 (NEIS)
                                                                           1,1S; 84,4E  33KM    01 10 25,4 (WDCB)
BRG I P         01 22 25,7C 1,4 /   60                                          D= 78,4 DEG   AZ=106        BRG
    I AP           22 43.1                                                      DISTANCE  78 DEG
    I S            32 17,0
      LMV       02 03        T 17                 AV   2,1   MLV  =5,6
CLL I P         01 22 28,8C 1,4 /   82                                          D= 79,1 DEG   AZ=105        CLL
    I AP           22 46,0                                                      DISTANCE  78 DEG
    E S            32 24     T  8   AN   0.7 AE   1,2        MSH  =5,9
    E PS           33 16
      LMH          57        T 26   AN   2   AE   1,5 AV  1  MLH  =5,4
      LMV       02 03        T 17   AN   0,5 AE   1   AV 1,5 MLV  =5,4
MOX E P         01 22 33     1,6 /  98                       MPV  =5,5          D= 79,8 DEG   AZ=104        MOX
    E AP           22 44                                                                      DEPTH  40 KM
    E              25 56
    E S            32 32
    E PPS          33 30
    E SS           37 50
    E SSS          41 50
      LMH       02 00,4      T 20,5 AN   0.8 AE   1.0        MLH  =5,3
      LMV          00,8      T 16,5               AV   1,9   MLV  =5,5

1978 AUG 03
BRG E P         02 13 01,7

1978 AUG 03     AFGHANISTAN-USSR BORDER REGION              MB=4,4 (18)    36,4N; 71.1E 251KM H=02 25 14,1 (NEIS)
                                                                           36,1N; 71,4E 220KM    02 25 10,4 (WDCB)
BRG E P         02 32 49,6                                                      D= 42,7 DEG   AZ= 87        BRG
CLL E P         02 32 54                                                        D= 43,3 DEG   AZ= 87        CLL

1978 AUG 03
CLL E           02 44 02
BRG I P         02 44 04,7D

1978 AUG 03     CENTRAL USSR                                MB=5,3 (85)    52,1N; 96,9E  33KM H=06 07 35,9 (NEIS)
                                                                           52,2N; 96,9E  33KM    06 07 31,5 (WDCB)
BRG I P         06 16 20,0C                                                     D= 48,9 DEG   AZ= 54        BRG
    I              16 25,3                                                      DISTANCE  48 DEG
    E PP           18 17,3
    E S            23 25
    E SS           26 56,0
      LMV          39        T 11                 AV   9,3   MLV  =6.1
CLL I P         06 16 21,7
    I              16 25,8  1,8 / 135                                           D= 49,2 DEG   AZ= 54        CLL
    E PP           18 16                                                        DISTANCE  49 DEG
    E              18 57
    I PCS          21 43,4
    E S            23 28
    E SS           27,0
      LMH          35        T 17   AN  16   AE   9,5        MLH  =6.1
      LMV          38,8      T 15   AN   7,5 AE  10   AV  14,5  MLV  =6.1
      FINAL     07 30
MOX E P(1)      06 16 30,5  1,5 /   96                       MPV  =5,6          D= 50,3 DEG   AZ= 53        MOX
    E P(2)         16 35    2,0 /  171                       MPV  =5,7
    E              16 43
    E PP           18 24
    E S            23 45
    E PS           23 50
    E SS           27 12
      LMH          36,1      T 17,5 AN  11,4 AE   9,0        MLH  =6,0
      LMV          40        T 12                 AV  11,5   MLV  =6,1
1978 AUG 03     TONGA ISLANDS REGION                        /MB=4,9 ( 1)/  17,5S;172,9W  62KM H=07 09 32    (ISC)
CLL E(PKP)      07 29 07                                                        D=145,9 DEG   AZ= 10        CLL
    E              29 25
BRG E PKP       07 29 10,0
    E              29 27,5                                                      D=146,3 DEG   AZ= 12        BRG

1978 AUG 03     SOUTHEASTERN ALASKA                         MB=4,5 (30)    58,5N;137,8W  33KM H=07 59 36,8 (NEIS)
CLL I P         08 10 34,6C                                                     D= 68,0 DEG   AZ=344        CLL
MOX E P         08 10 37     1,0 /  16                       MPV  =5,0          D= 68,4 DEG   AZ=343        MOX
BRG E P         08 10 38,4   1,0 /  17                                          D= 68,6 DEG   AZ=345        BRG

1978 AUG 03
CLL I P         11 21 30,8C

1978 AUG 03     VANUATU ISLANDS                             MB=5,7 (33)    15,4S;167,5E 131KM H=12 41 36,7 (NEIS)
                                                                           15,3S;167,5E  33KM    12 41 25,2 (WDCB)
BRG I PKP       13 00 48,3C 1,7 /   78                                          D=138,7 DEG   AZ= 41        BRG
    E APKP         01 33,0
    E PP           03 38,0
    E SKP          04 13,0
CLL I PKP       13 00 48,1C 1,4 /   56
    E SKP          04 13                                                        D=138,8 DEG   AZ= 39        CLL
    E              04 22
MOX E PKP       13 00 50,5   1,8 /  68
    E SKP          04 15     2,2 /  65                                          D=139,8 DEG   AZ= 38        MOX

1978 AUG 03     SOUTHWEST OF SUMATERA                       MB=5,2 (34)    0.4S; 97,0E   33KM H=15 15 51,2 (NEIS)
                                                                           0,2S; 97,0E   33KM    15 15 51,9 (WDCB)
BRG I P         15 28 30,0C                                                     D= 85,9 DEG   AZ= 96        BRG
    E              28 40,6
CLL I P         15 28 32,8C 1,0 /   13                                          D= 86,5 DEG   AZ= 95        CLL
MOX E P         15 28 37                                                        D= 87,4 DEG   AZ= 94        MOX
    E AP           28 48                                                                      DEPTH  41 KM

1978 AUG 03     NEAR COAST OF NORTHERN CHILE                MB=6,3 (62)    26,5S; 70,5W  58KM H=18 11 17,1 (NEIS)
                                                                           26,9S; 70,4W  90KM    18 11 21,7 (WDCB)
MOX E P         18 25 21     1,6 /  33                                          D=105,3 DEG   AZ=247        MOX
    E AP           25 40                                                                      DEPTH  73 KM
    E PP           29 58
 (CONT.)
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 (CONT.)
    E SKS       18 35 58
    E S            37 10
    E XS           37 45
    E SP           38 45
    E PKKP         41 18
    E SS           44 30
    E PKPPKP       49 21
      LM        19 15        T 20         AE  13,7 AV  12,3
CLL E P         18 25 27     1.7 /  39
    I AP           25 47,1                                                      D=106,4 DEG   AZ=248        CLL
    E              29 46                                                        DISTANCE 107 DEG   DEPTH>N
    E              29 56
    E(PP)          30 06     T 13   AN   0,8 AE   1,4 AV   2,6   MPPH =6,7 MPPV =6,7
    E SKS          36 02
    E SKKS         36 40
    E S            37 24
    E(PS)          38 58
    E PKKP2        41 14  D 2,5 /  150
    E              44
    E PCPPKP       45 10
    E SSS          48
    E PKPPKP       49 17
      LM        19 08        T 24   AN  14   AE  22   AV  18,5   MLH  =6,7 MLV  =6,5 (NO DEPTH CORRECTION)
      L            15
      FINAL     22
BRG E P         18 25 28,5
    E AP           25 49,6                                                      D=106,8 DEG   AZ=249        BRG
    E PP           29 36,2                                                      DISTANCE 107 DEG
    E SKS          36 01,6
    E PS           39 02,4
    E PKKP1        40 57,0
    E PKKP2        41 14
    E SS           45 08,0
    E PKPPKP       49 20,4
      LMV       19 15        T 18                 AV  11,1   MLV  =6,5  (NO DEPTH CORRECTION)
1978 AUG 03     POLAND, UPPER SILESIA
BRG E PG        19 05 28,6
    I SG           06 10,4
CLL E PG        19 05 40
    I              05 54,7
    E              06 02
    E              06 14
    I SG           06 32,0
MOX E SG        19 06 57

1978 AUG 03
CLL E           19 07 19

1978 AUG 03     FIJI ISLANDS REGION                         MB=4,9 ( 9)    19.6S;178.0W 619KM H=19 08 11.7 (NEIS)
CLL I PKP1      19 26 48,1D 1.1 /   45                                          D=147,2 DEG   AZ= 19        CLL
    I PKP2         26 51.9C 1.0 /   28                       MC   =4,6
    E APKP         29 08
BRG I PKP1      19 26 49,1D 1.0 /   25                                          D=147,4 DEG   AZ= 21        BRG
    I PKP2         26 53,2
    E APKP         29 11,6
    E              29 31,5
MOX E PKHKP     19 26 51     1,4 /  23                                          D=148,1 DEG   AZ= 17        MOX
1978 AUG 03     WEST IRIAN REGION                           MB=5,9 (49)
     AUG 04                                                                 0,2S;131,8E  33KM H=23 25 32,1 (NEIS)
                                                                            0,1S;131,7E  50KM    23 25 34,5 (WDCB)
BRG E P         23 39 54,2                                                      D=107,4 DEG   AZ= 68        BRG
    E PP           44 29,0                                                      DISTANCE 107 DEG
    E SKS          50 24,8
    E PS           53 29,6
    E PKKP         55 23,6
      LMV       00 33        T 17                 AV   8,3   MLV  =6,4
CLL E P         23 39 50                                                        D=107,8 DEG   AZ= 67        CLL
    E              43 28                                                        DISTANCE 108 DEG
    E PP           44 19
    E(PPP)         46 30
    E PS           53 34
    E PKKP         55 22
    E              59 17
      LMH       00 25        T 18   AN   9,5 AE   7          MLH  =6,5
      LMV          33        T 16   AN   6   AE   3,5 AV   4,5   MLV  =6,2
MOX E PDIF      23 40 04     1,8 /  20                                          D=108,8 DEG   AZ= 66        MOX
    E PKP          43 50
    E PP           44 28     T 12                 AV   1,5   MPPV =6,6
    E PPP          46 46
    E SKS          50 35
    E SKKS         51 30
    E PS           53 45
    E PPS          54 40
    E SS           59 40
      LMH       00 26        T 18   AN   9,4 AE   7,3        MLH  =6,5
      LMV          34        T 16                 AV   7,7   MLV  =6,4
1978 AUG 04     SAMOA ISLANDS REGION                        /MB=4,4 ( 2)/  15,8S;172,2W  33KM H=23 44 48    (ISC)
CLL E           00 04 36   TRACES                                               D=144,3 DEG   AZ=  9        CLL
BRG E           00 04 30,2                                                      D=144,7 DEG   AZ= 10        BRG
MOX E PKP       00 04 28                                                        D=145,1 DEG   AZ=  6        MOX

1978 AUG 04     LUZON, PHILIPPINE ISLANDS                   MB=5,0 (14)    15,7N;119,8E  33KM H=00 05 29,2 (NEIS)
                                                                           15,8N;119,8E  33KM    00 05 24,7 (WDCB)
BRG E P         00 18 17,8   1,3 /  12                                          D= 87,6 DEG   AZ= 68        BRG
CLL E P         00 18 18                                                        D= 88,0 DEG   AZ= 67        CLL
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1978 AUG 04     TONGA ISLANDS                                   MB=5,3 (13)   15,7S;173,0W  33KM H=01 17 02,0 (NEIS)
                                                                              15,7S;173,6W  33KM   01 16 58,8 (WDCB)
                                                                                    D=144,2 DEG   AZ= 10       CLL
CLL E PKP       01 36 38                                                      D=144,5 DEG   AZ= 12       BRG
BRG E PKP       01 36 38,8                                                    D=144,9 DEG   AZ=  8       MOX
MOX E PKP       01 36 37
     I             36 40,5  1,5 /   45
       LM        02 50       T 18   AN   0,4          AV   0,5   MLH =5,2 MLV =5,3

1978 AUG 04
CLL E P         02 18 52

1978 AUG 04     LUZON, PHILIPPINE ISLANDS                       MB=4,9 (12)   15,6N;119,4E  29KM H=03 03 25,3 (NEIS)
                                                                              16,6N;119,3E  33KM   03 03 32,3 (WDCB)
                                                                                    D= 87,5 DEG   AZ= 68       BRG
BRG E P         03 16 15,8
     E             16 25,3                                                    D= 87,9 DEG   AZ= 68       CLL
CLL   LM        03 54                                                         D= 88,9 DEG   AZ= 67       MOX
MOX   LMH       03 55,5     T 16   AN   0,6 AE   0,5          MLH =5,2
      LMV          56,3     T 16                     AV   0,3   MLV =4,8

1978 AUG 04     PHILIPPINE ISLANDS REGION                       MB=5,4 (66)   19,9N;120,4E  33KM H=08 55 00,9 (NEIS)
                                                                              19,9N;120,6E  33KM   08 54 54,8 (WDCB)
BRG I P         09 07 33,2D 1,2 /   93                                              D= 84,7 DEG   AZ= 65       BRG
     I AP          07 45,8                                                        DISTANCE  81 DEG
     E S           17 54,0
       LMV         50          T 15                 AV   1,0   MLV =5,3
CLL I P         09 07 34,4D 1,7 /  135                                        D= 85,0 DEG   AZ= 64       CLL
     I             07 42,0
     I AP          07 47,6
     E S           18,0
       LM          49          T 14   AN   0,5 AE   1   AV   1     MLH =5,4 MLV =5,4
MOX E P         09 07 41  D 1,6 /   66                                        D= 86,1 DEG   AZ= 63       MOX
     E             07 47                                                          MPV =5,6
     E             07 53
     E S           18 12
       LMH         46,6        T 15,5 AN   0,7 AE   0,5          MLH =5,2
       LMV         50,7        T 16                     AV   1,1   MLV =5,4

1978 AUG 04
CLL E           11 39 28

1978 AUG 04     CHAGOS ARCHIPELAGO REGION                       MB=5,4 (69)    3,5S; 68,7E  33KM H=14 09 09,5 (NEIS)
                                                                               4,0S; 68,6E  33KM   14 09 00,7 (WDCB)
BRG E P         14 20 27,8C 1,8 /   77                                              D= 71,5 DEG   AZ=121       BRG
CLL I P         14 20 32,7C 1,9 /  155                                        D= 72,2 DEG   AZ=120       CLL
     E             20 42
MOX E P         14 20 35,5  2,0 /  120                                        D= 72,6 DEG   AZ=119       MOX
                                                                                MPV =5,6

1978 AUG 05     NEAR EAST COAST OF KAMCHATKA                    /MB=4,6 ( 9)/  54,0N;160,5E  33KM H=00 35 20,4  (ISC)
CLL E P         00 46 39   TRACES                                             D= 71,6 DEG   AZ= 20       CLL

1978 AUG 05     NEW IRELAND REGION                              MB=5,8 (37)    3,6S;151,0E  33KM H=04 12 43,9 (NEIS)
                                                                               2,4S;150,7E  40KM   04 12 50,8 (WDCB)
BRG I PKP       04 31 36,2  1,3 /   19                                              D=120,7 DEG   AZ= 52       BRG
     E PP          32 58,0                                                        DISTANCE 120 DEG
     E PS          42 54,0
     E SS          49 54,0
       LMV       05 29       T 17                     AV   4,9   MLV =6,2
CLL E PKP       04 31 35                                                      D=120,9 DEG   AZ= 51       CLL
     E PP          33 05                                                          DISTANCE 121 DEG
     E             33 24
     E SKP         34 51
     E PS          42,9
     E SKKP        45 41
     E SS          49,7
       LM        05 25       T 19   AN   2,5 AE   3   AV   3,5   MLH =6,1 MLV =6,0
MOX E PKP       04 31 42,5                                                    D=122,0 DEG   AZ= 50       MOX
     E PP          33 15       T  5                 AV   1,0   MPPV =6,7
     E PS          43 05
     E PKKS        45 25
     E SS          49 30
       LMH       05 16,2     T 20,5 AN   3,5 AE   3,3          MLH =6,1
       LMV          28,7     T 18                     AV   3,5   MLV =6,1

1978 AUG 05     SOUTH SHETLAND ISLANDS                          MB=5,8 (15)   60,8S; 56,0W  33KM H=06 43 08,5 (NEIS)
                                                                              60,9S; 56,4W  33KM   06 43 03,9 (WDCB)
MOX E PKP       07 02 03    1,4 /   33                                        D=123,6 DEG   AZ=213       MOX
     E APKP        02 13                                                                                DEPTH  37 KM
     E PP          03 45
     E PS          13 30
     E SS          20 40
       LMV         55,4        T 17                     AV   1,1   MLV =5,6
       LMH         55,6        T 18   AN   0,7 AE   0,7          MLH =5,5
BRG E PKP       07 02 05,2  1,2 /   15
     I APKP        02 14,7                                                    D=124,6 DEG   AZ=214       BRG
     E PP          03 57
CLL E PKP       07 02 04
     I APKP        02 14,6  1,1 /   34                                        D=124,6 DEG   AZ=214       CLL
     E PP          03 56
     E PKS         05 52
       LM          56

1978 AUG 05     SOUTH PACIFIC CORDILLERA                        MB=4,6 ( 2)    55,0S;129,4W  33KM H=08 06 25,2 (NEIS)
CLL E PKP2      08 26 50                                                        D=157,3 DEG   AZ=246       CLL

1978 AUG 05     SOUTH OF HONSHU, JAPAN                          /MB=4,6 ( 2)/  32,3N;141,6E  19KM H=10 54 21,8  (ISC)
CLL E P         11 06 58                                                        D= 85,3 DEG   AZ= 42       CLL
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1978 AUG 05     SOUTH OF HONSHU, JAPAN                          MB=4,6 (39)   30,2N;138,5E 412KM H=11 28 01,5 (NEIS)
                                                                              30,9N;138,4E 500KM   11 28 12,9 (WDCB)
BRG E P         11 39 55,7  1,1 /   11                                              D= 85,6 DEG   AZ= 46       BRG
     E             40 20,3
     E AP          41 38,0
CLL E P         11 39 55                                                      D= 85,8 DEG   AZ= 45       CLL

1978 AUG 05     POLAND, UPPER SILESIA
CLL E           14 28 07

1978 AUG 05     WINDWARD ISLANDS                                MB=4,5 (24)   11,6N; 62,1W 177KM H=15 05 08,2 (NEIS)
BRG E P         15 16 16,6                                                          D= 72,3 DEG   AZ=267       BRG

1978 AUG 05     NEW IRELAND REGION                              MB=5,7 (50)    3,6S;152,3E 255KM H=15 46 36,0 (NEIS)
                                                                               3,6S;152,2E 200KM   15 46 30,3 (WDCB)
BRG I PKP       16 05 00,3  1,0 /   88                                              D=121,4 DEG   AZ= 51       BRG
     E APKP        06 37,0
     E PKKP2       15 03,0
CLL I PKP       16 05 00,8C 1,0 /   82                                        D=121,6 DEG   AZ= 50       CLL
     E APKP        06 06
     E(PP)         06 33
     I PKKP2       15 02,9C 1,3 /   25
     E APKKP2      16 05
     E SKKP        18 55
     E SS          22,9
       LMH         50
MOX E PKP       16 05 03    1,2 /   53                                        D=122,7 DEG   AZ= 49       MOX
     E PP          06 46    1,7 /   61                                             MPPV =5,5
     E SS          23 00
     E SSS         27 32
       LMH         51,6        T 18,5 AN   0,6 AE   0,6
       LMV       17 00,2     T 19                     AV   0,6

1978 AUG 05     CENTRAL ITALY                                   NO MB COMP.   42,6N; 12,6E  33KM H=18 12 47,2 (NEIS)
                                                                              42,7N; 12,5E  10KM   18 12 48,2 (CSEM)
                                                                              42,9N; 12,4E  33KM   18 12 49,8 (WDCB)
MOX E PN        18 14 44,5  0,7 /   21                                        D=  8,1 DEG   AZ=175       MOX
     E SN          16 11                                                          MPV =5,4
       LMH         17,9
BRG E PN        18 14 47,0                                                    D=  8,3 DEG   AZ=187       BRG
     I SN          16 23,6
     E SG          17 19,8
CLL E PN        18 14 52                                                      D=  8,7 DEG   AZ=182       CLL
     E             15 15
     E SN          16 26
     E             16 39
     E             17 10
     E LH          17 50

1978 AUG 05     SOUTHERN SUMATERA                               MB=5,9 (67)    4,0S;102,4E  48KM H=18 52 09,1 (NEIS)
                                                                               3,9S;102,4E  50KM   18 52 09,6 (WDCB)
BRG I P         19 05 15,7C 1,5 /   62                                              D= 92,1 DEG   AZ= 94       BRG
     I AP          05 35,4
     E PP          08 56,4
     E APP         09 15,5
     E S           16 09
       LM          57
CLL I P         19 05 17,9  1,8 /   55                                        D= 92,7 DEG   AZ= 93       CLL
     E AP          05 37
     E PP          09 00
     E             16 44
     E             17 24
MOX I P         19 05 22,0C 1,4 /   37                                        D= 93,6 DEG   AZ= 92       MOX
     E AP          05 41                                                          MPV =5,6                DEPTH  87 KM
     E PP          09 08
     E S           16 30
     E PS          17 35
       LMH         49,3
       LMV       20 01,8

1978 AUG 05     KURILE ISLANDS                                  MB=4,4 (26)   46,0N;149,3E 161KM H=23 13 39,7 (NEIS)
CLL I P         23 25 09,7C 0,6 /   18                                              D= 76,0 DEG   AZ= 30       CLL
BRG E P         23 25 10,4                                                          D= 76,1 DEG   AZ= 30       BRG
MOX E P         23 25 16    TRACES                                                  D= 77,0 DEG   AZ= 29       MOX

1978 AUG 06     SOUTHEASTERN AUSTRIA                                          47,7N; 15,7E  10KM H=00 29 26,1 (CSEM)
MOX E SG        00 31 31,5                                                          D=  4,0 DEG   AZ=136       MOX
CLL E           00 30 58                                                            D=  4,0 DEG   AZ=153       CLL
     E SG          31 33

1978 AUG 06     AFGHANISTAN-USSR BORDER REGION                  MB=4,4 (14)   36,5N; 71,3E 109KM H=02 03 50,9 (NEIS)
BRG E P         02 11 40,2                                                          D= 42,8 DEG   AZ= 87       BRG

1978 AUG 06
CLL E           02 31 37   TRACES

1978 AUG 06     VANUATU ISLANDS                                 MB=4,8 ( 6)   20,8S;169,4E  40KM H=04 19 01,2 (NEIS)
BRG I PKP       04 37 32,1C 0,8 /   18                                              D=144,3 DEG   AZ= 42       BRG
CLL I PKP       04 37 31,9C 0,6 /   14                                              D=144,4 DEG   AZ= 40       CLL
MOX E PKP       04 37 36,5  1,2 /   12                                              D=145,5 DEG   AZ= 39       MOX

1978 AUG 06     SOUTHWESTERN RYUKYU ISLANDS                     /MB=4,5 ( 3)/  24,7N;124,3E  33KM H=06 53 49    (ISC)
CLL E P         07 06 12   TRACES                                               D= 83,3 DEG   AZ= 59       CLL

1978 AUG 06     RYUKYU ISLANDS REGION                           /MB=4,5 ( 2)/  24,7N;127,8E  33KM H=1. 24 10    (ISC)
CLL E P         11 36 43                                                        D= 85,2 DEG   AZ= 56       CLL

1978 AUG 06
BRG E(P)        21 47 14,5
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1978 AUG 07 TAIWAN REGION MB=4,7 (9) 22,2N;121,4E 15KM H=00 56 09,1 (NEIS)
BRG E P 01 08 38,0 D= 83,4 DEG AZ= 63 BRG
CLL E P 01 08 39 MPV =5,1 D= 83,7 DEG AZ= 62 CLL
MOX E P 01 08 45 1,8 / 21 D= 84,8 DEG AZ= 61 MOX

1978 AUG 07
CLL E 02 13 10 TRACES

1978 AUG 07
CLL E 04 09 03

1978 AUG 07
MOX E 08 02 25

1978 AUG 07 KERMADEC ISLANDS NO MB COMP. 30,5S;177,9W 51KM H=09 30 50,8 (NEIS)
CLL E PKP1 09 50 55 D=157,7 DEG AZ= 25 CLL
BRG I 09 50 53,3 D=157,8 DEG AZ= 28 BRG
E PKP2 51 14,0

1978 AUG 07 SEVERNAYA ZEMLYA MB=4,5 (27) 79,7N; 99,1E 33KM H=12 48 22,8 (NEIS)
79,4N; 96,2E 33KM 12 48 27,4 (WDCB)
CLL E P 12 55 49 1,3 / 19 D= 39,3 DEG AZ= 16 CLL
BRG E P 12 55 51,9 D= 39,6 DEG AZ= 16 BRG
MOX E P 12 55 57,5 1,3 / 13 MPV =4,5 D= 40,2 DEG AZ= 16 MOX

1978 AUG 07 AUCKLAND ISLANDS REGION MB=4,6 (1) 49,1S;164,8E 33KM H=13 13 00,1 (NEIS)
BRG E PKP2 13 33 47,3 D=161,2 DEG AZ= 96 BRG
CLL E PKP2 13 33 46 D=161,9 DEG AZ= 94 CLL

1978 AUG 08 AFGHANISTAN-USSR BORDER REGION MB=5,2 (74) 36,6N; 71,1E 220KM H=00 01 46,4 (NEIS)
36,5N; 71,2E 200KM 00 01 44,3 (WDCB)
D= 42,6 DEG AZ= 87 BRG
BRG I P 00 09 22,7C 1,3 / 161
E AP 10 11,7
E XP 10 33,7
E PP 11 06,8
E XPP 12 11,0
E SS 19 00
CLL I P 00 09 26,9C 1,7 / 160 D= 43,2 DEG AZ= 87 CLL
E 09 43
E XP 10 34
E PP 11 11
E 12 18
E SS 19,0
E 22 46
MOX I P 00 09 34,5C 1,8 / 196 MPV =5,3 D= 44,1 DEG AZ= 85 MOX
DEPTH 234 KM
E AP 10 23
E XP 10 40
E PP 11 20
E PPPP 12 26
E SS 19 20

1978 AUG 08
CLL E 02 05 04 TRACES

1978 AUG 08 NORTHERN COLOMBIA MB=5,1 (46) 7,0N; 72,1W 45KM H=02 58 36,6 (NEIS)
MOX E P 03 10 47 D= 80,6 DEG AZ=270 MOX
LMH 44,8
CLL I P 03 10 51,5 1,4 / 23 D= 81,5 DEG AZ=271 CLL
BRG E P 03 10 54,4 1,0 / 12 D= 82,1 DEG AZ=271 BRG

1978 AUG 08 SANTA CRUZ ISLANDS MB=5,7 (39) 12,4S;166,5E 88KM H=07 46 23,0 (NEIS)
11,6S;170,0E 33KM 07 46 14,3 (WDCB)
BRG I PKP 08 05 34,6 D=135,6 DEG AZ= 40 BRG
E APKP 05 52,2 DISTANCE 134 DEG
E PP 08 11,0
E SKP 09 05,0
LMV 09 10 T 19 AV 2,7 MLV =6,0 (NO DEPTH CORRECTION)
CLL I PKP 08 05 36,6 D=135,6 DEG AZ= 39 CLL
E(APKP) 05 53 DISTANCE 134 DEG
E 07 26
E PP 08 16
E 08 31
E SKP 09 07
LMH 09 03 T 22 AN 2,5 AE 2 AV 1,5 MLH =5,9 (NO DEPTH CORRECTION)
LMV 08 T 19 AN 2 AE 1 AV 2 MLV =5,9 (NO DEPTH CORRECTION)
MOX E PKP 08 05 37 T 6 AV 1,1 D=136,7 DEG AZ= 37 MOX
E PP 08 16 T 8 AV 1,4 MPPV =6,2
E PS 18 40
E SS 26 24
LMH 09 07,7 T 21 AN 2,6 AE 1,0
LMV 09,3 T 21 AV 2,5

1978 AUG 08 TIBET MB=5,2 (54) 32,4N; 83,0E 37KM H=10 12 34,4 (NEIS)
32,4N; 83,1E 33KM 10 12 29,5 (WDCB)
BRG I P 10 21 48,8D 0,8 / 41 D= 52,8 DEG AZ= 83 BRG
LMV 46 T 15 AV 2,0
CLL I P 10 21 52,4 1,7 / 42 D= 53,4 DEG AZ= 82 CLL
MOX E P 10 21 59,5 1,1 / 24 MPV =5,1 D= 54,3 DEG AZ= 81 MOX
LMH 44,1 T 20 AN 1,6 AE 0,9 MLH =5,2
LMV 47,7 T 16 AV 1,6 MLV =5,1

1978 AUG 08 RYUKYU ISLANDS /MB=4,6 (3)/ 26,6N;129,0E 45KM H=10 57 03,8 (ISC)
CLL I P 11 09 31,5 D= 84,2 DEG AZ= 54 CLL
E 09 48

1978 AUG 08 ALBANIA MB=4,3 (4) 40,1N; 19,7E 33KM H=12 10 45,9 (NEIS)
40,2N; 19,7E 30KM 12 10 48,0 (CSEM)
BRG E 12 16 33,4 D= 11,5 DEG AZ=157 BRG
MOX E 12 13 32 D= 12,0 DEG AZ=149 MOX
E 16 23
CLL E S 12 16 08 D= 12,1 DEG AZ=155 CLL
E SSSS 16 41
E L 17 44

1978 AUG 08
BRG E(P) 14 31 04,4

1978 AUG 08 JORDAN - SYRIA REGION /NO MB COMP./ 33,5N; 35,4E 8KM H=22 06 09,8 (ISC)
CLL E P 22 11 26 D= 24,1 DEG AZ=129 CLL
MOX E P 22 11 30 D= 24,4 DEG AZ=125 MOX

1978 AUG 09
BRG E(P) 00 03 54,7

1978 AUG 09 FIJI ISLANDS REGION MB=5,2 (34) 14,9S;176,1W 301KM H=00 48 36,7 (NEIS)
14,8S;175,7W 33KM 00 48 00,2 (WDCB)
CLL I PKP 01 07 32,2 1,1 / 32 D=143,0 DEG AZ= 15 CLL
E SKP 10 48
BRG E PKP 01 07 33,1 0,9 / 13 D=143,2 DEG AZ= 16 BRG
I 07 40,3
E SKP 10 47,2
MOX E PKP 01 07 36 D=143,8 DEG AZ= 13 MOX

1978 AUG 09
CLL E 03 20 16
E SG 20 35
MOX E SG 03 20 45

CLL INTERRUPTION OF SOME RECORDS FROM 06H 04M TO 13H 10M

1978 AUG 09 CENTRAL USSR MB=4,8 (10) 52,3N; 96,9E 33KM H=10 17 43,9 (NEIS)
52,2N; 96,8E 33KM 10 17 39,4 (WDCB)
BRG E(P) 10 26 35,1 D= 48,8 DEG AZ= 54 BRG
CLL E 10 26 45 D= 49,1 DEG AZ= 54 CLL
MOX E AP 10 26 46 D= 50,2 DEG AZ= 53 MOX
LMH 46,3 T 17 AN 0,6 AE 0,4 MLH =4,7 DEPTH 37 KM
LMV 50,4 T 12 AV 0,5 MLV =4,7

1978 AUG 09 MID-INDIAN RISE MB=5,1 (30) 20,7S; 68,6E 33KM H=12 18 41,4 (NEIS)
20,6S; 69,1E 33KM 12 18 35,5 (WDCB)
BRG E P 12 31 19,7 D= 85,9 DEG AZ=130 BRG
CLL E P 12 31 22 2,1 / 55 D= 86,6 DEG AZ=129 CLL
MOX E P 12 31 26 1,9 / 46 MPV =5,4 D= 86,9 DEG AZ=128 MOX
E 31 32
E 31 36

1978 AUG 09 MARIANA ISLANDS MB=5,4 (37) 15,8N;146,6E 33KM H=14 31 17,1 (NEIS)
16,2N;146,4E 33KM 14 31 19,4 (WDCB)
BRG E 14 49 22,9 D=101,8 DEG AZ= 46 BRG
CLL E PP 14 49 11 D=101,9 DEG AZ= 45 CLL
LM 15 35 T 16 AN 1 AE 1 AV 1,5 MLV =5,6
MOX LMH 15 31,7 T 17 AN 1,0 AE 0,8 MLH =5,5 D=103,0 DEG AZ= 44 MOX
LMV 36,2 T 16 AV 1,0 MLV =5,4

1978 AUG 09
CLL E P 15 36 34 TRACES
BRG I P 15 36 45,4

1978 AUG 09 VANUATU ISLANDS MB=5,6 (34) 15,4S;166,7E 23KM H=15 35 29,9 (NEIS)
15,3S;166,9E 33KM 15 35 31,3 (WDCB)
BRG E PKP 15 54 49,0 D=138,4 DEG AZ= 42 BRG
I 55 04,7
I 55 19,8
LMV 17 01 T 19 AV 1,2
CLL E PKP 15 54 52 D=138,4 DEG AZ= 40 CLL
I 55 00,3 1,3 / 16
E(PKS) 58 32
LM 16 58 T 19 AN 1 AE 0,5 AV 1,5 MLV =5,7
MOX E PKP 15 54 52 D=139,5 DEG AZ= 39 MOX
LM 16 59 T 20,0 AN 0,9 AE 0,4 AV 0,9 MLH =5,6 MLV =5,5

1978 AUG 09 VANUATU ISLANDS MB=5,3 (11) 15,4S;166,7E 21KM H=15 41 16,4 (NEIS)
CLL E PKP 16 00 43 D=138,4 DEG AZ= 40 CLL

1978 AUG 09 UNDERGROUND EXPLOSION MB=5,6 (70) 63,7N;125,3E 0KM H=17 59 58,2 (NEIS)
CLL I P 18 09 23,8C 1,1 / 100 D= 53,8 DEG AZ= 31 CLL
I 10 08,0
I PCP 10 29,8 0,9 / 40
BRG I P 18 09 24,2C 0,9 / 62 D= 53,8 DEG AZ= 31 BRG
I PCP 10 30,1
I PP 11 26,6
MOX I P 18 09 31,5C 1,0 / 130 MPV =5,9 D= 54,8 DEG AZ= 30 MOX

1978 AUG 09 TAIWAN MB=5,2 (41) 23,5N;121,5E 22KM H=18 35 03,4 (NEIS)
23,7N;121,6E 33KM 18 34 59,8 (WDCB)
BRG E P 18 47 25,1 1,8 / 31 D= 82,5 DEG AZ= 62 BRG
E AP 47 31,8
CLL E P 18 47 27 D= 82,8 DEG AZ= 61 CLL
I AP 47 34,2 1,3 / 32
E PP 50 36
LM 19 29 T 14 AN 2 AE 2 AV 2,5 MLH =5,8 MLV =5,8
(CONT.)

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(CONT.)

MOX E P        19 47 32    1.8 /   27                            MPV  =5.2             D= 83.9 DEG   AZ= 60        MOX
    E AP          47 39.5                                                                             DEPTH  28 KM
    E S           57 55   TRACES
      LMH      19 29.9      T 15   AN   1.5 AE   1.1              MLH  =5.5
      LMV         30.0      T 13.5                    AV   3.0    MLV  =5.9

1978 AUG 09    TAIWAN REGION                                     MB=5.0 (38)   25.1N;120.8E  33KM H=19 36 09.3 (NEIS)
                                                                               26.0N;120.6E  33KM   19 36 13.7 (WDCB)
BRG E P        19 46 22.2  1.6 /   24                                                  D= 80.8 DEG   AZ= 62        BRG
CLL I P        19 48 23.5  1.5 /   38                                                  D= 81.1 DEG   AZ= 61        CLL
    E PP          51 27
      LM       20 26
MOX E P        19 48 30    2.0 /   34                            MPV  =5.0             D= 82.2 DEG   AZ= 60        MOX
      LMH      20 27.6      T 14   AN   0.4 AE   0.5              MLH  =5.2
      LMV         29.5      T 16                      AV   0.7    MLV  =5.2

1978 AUG 09    POLAND, UPPER SILESIA
BRG E PG       20 01 16.2
    E SG          01 59.0
CLL E PG       20 01 29
    E SG          02 20
MOX E SG       20 02 41

1978 AUG 09    VANUATU ISLANDS                                   MB=5.5 (21)   15.5S;166.7E  33KM H=20 39 24.3 (NEIS)
                                                                               15.3S;166.3E  33KM   20 39 20.6 (WDCB)
BRG E PKP      20 58 49.4                                                              D=138.5 DEG   AZ= 42        BRG
CLL E PKP      20 58 50    1.3 /   15                                                  D=138.5 DEG   AZ= 40        CLL
    E SKP      21 02 31
MOX E PKP      20 58 52   TRACES                                                       D=139.6 DEG   AZ= 39        MOX
      LM       22 03        T 20   AN   0.4           AV   0.4    MLH  =5.1 MLV  =5.2

1978 AUG 10    UNDERGROUND EXPLOSION                             MB=5.9 (78)   73.3N; 54.8E   0KM H=07 59 57.7 (NEIS)
                                                                               73.2N; 53.4E  10KM   08 00 04.7 (CSEM)
CLL I P        08 05 53.9C 1.2 /  190                            MPV  =5.8             D= 28.3 DEG   AZ= 24        CLL
    I             06 09.9                                                              DISTANCE  28.5DEG
    I             06 13.2
    I             06 16.9
    I PCP         09 07
    E SN          11 14
    E             16 11
      LM          20.1      T  6   AN   1   AE   1    AV   1      MLH  =5.0 MLV  =5.1
BRG I P        08 05 55.5C 1.6 /  520                                                  D= 28.5 DEG   AZ= 23        BRG
    I             06 14.5
    E             08 43.0
    E SN          11 23
      LMV         20        T 10                      AV   1.6    MLV  =5.1
MOX I P        08 06 02.5C 1.1 /   89                            MPV  =5.5             D= 29.3 DEG   AZ= 24        MOX
      LMV         20.9      T  8                      AV   1.4    MLV  =5.1
      LMH         21.3      T  7   AN   0.9 AE   0.6              MLH  =4.9

1978 AUG 10
CLL I P        14 01 12.1D

1978 AUG 10    BURMA                                             MB=5.1 (56)   26.4N; 96.9E  33KM H=14 52 51.8 (NEIS)
                                                                               26.2N; 97.2E  33KM   14 52 44.3 (WDCB)
BRG I P        15 03 34.8D 0.9 /   17                                                  D= 65.7 DEG   AZ= 78        BRG
    I             03 42.4
CLL I P        15 03 39.1  1.4 /   25                                                  D= 66.2 DEG   AZ= 77        CLL
    E             04 28
MOX E P        15 03 44                                                                D= 67.2 DEG   AZ= 76        MOX
      LMH         32.3      T 16   AN   0.2                       MLH  =4.5
      LMV         34.8      T 16                      AV   0.1    MLV  =4.2

1978 AUG 10    SOUTH ATLANTIC RIDGE                              MB=5.2 (29)   35.9S; 17.6W  10KM H=16 53 37.1 (NEIS)
                                                                               35.8S; 16.2W  33KM   16 53 41.3 (WDCB)
MOX E          17 06 38    2.2 /   33                                                  D= 89.9 DEG   AZ=203        MOX
    E             06 59
    E PP          10 09.5
    E SKKS        17 20
    E PS          18 35
    E SS          23 15
      LM       18 01.8      T 18        AE   0.7 AV   0.9         MLH  =5.1 MLV  =5.3
BRG I P        17 06 45.6  1.4 /   11                                                  D= 90.8 DEG   AZ=205        BRG
    E             07 03.7
    E SKS         17 16
    E SS          23 34
      LMV      18 03        T 18                      AV   1.1    MLV  =5.4
CLL I(P)       17 06 46.3  1.7 /   36                                                  D= 90.9 DEG   AZ=204        CLL
    E             06 55
    E             07 04
    E(PP)         10 36
    E(SKS)        17 26
    E SS          23.6
      L        18 02

1978 AUG 10
CLL E          19 14 56

1978 AUG 10    FIJI ISLANDS REGION                               MB=5.5 (19)   16.7S;175.7E  33KM H=20 07 20.2 (NEIS)
                                                                               16.6S;175.6E  33KM   20 07 15.0 (WDCB)
CLL I PKP      20 26 50.5                                                              D=142.8 DEG   AZ= 28        CLL
    E             29 40
      L        21 34
BRG E PKP      20 26 51.2                                                              D=142.9 DEG   AZ= 30        BRG
MOX E PKP      20 26 53.5  1.6 /   28                                                  D=143.8 DEG   AZ= 26        MOX
    E             28 20
      LM          43.2      T 18.5      AE   0.3 AV   0.5         MLH  =5.1 MLV  =5.3

1978 AUG 10
CLL E          20 38 50
  (CONT.)
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(CONT.)

MOX E          20 39 41

1978 AUG 10
CLL E          21 05 14   TRACES

1978 AUG 10    PRINCE EDWARD ISLANDS REGION                      MB=4.9 (19)   44.6S; 37.9E  33KM H=21 43 48.7 (NEIS)
                                                                               44.3S; 39.2E  33KM   21 43 45.1 (WDCB)
MOX   LM       22 51.4      T 17   AN   0.4           AV   0.4    MLH  =5.0 MLV  =5.0 D= 97.6 DEG   AZ=161        MOX
CLL   LM       22 50                                                                   D= 97.9 DEG   AZ=162        CLL

1978 AUG 11    PHILIPPINE ISLANDS REGION                         MB=5.2 (22)    6.6N;127.0E  62KM H=03 09 40.5 (NEIS)
                                                                                6.6N;126.9E  33KM   03 09 37.4 (WDCB)
BRG E P        03 23 17.0                                                              D= 99.1 DEG   AZ= 68        BRG
CLL E AP       03 23 34                                                                D= 99.5 DEG   AZ= 67        CLL

1978 AUG 11    PHILIPPINE ISLANDS REGION                         MB=5.1 (12)    9.5N;127.3E  33KM H=05 22 21.2 (NEIS)
BRG E P        05 35 52.0                                                              D= 96.9 DEG   AZ= 66        BRG

1978 AUG 11
BRG E P        07 06 29.2

1978 AUG 11    SOUTH OF FIJI ISLANDS                        /NO MB COMP./ (22.7S;179.7W  33KM H=07 35 12.5) (ISC)
CLL I(PKP)     07 54 54.7                                                              D=149.8 DEG   AZ= 24        CLL
    I             55 11.3

1978 AUG 11    KIRGHIZ-SINKIANG BORDER REGION                    MB=4.6 (17)   40.2N; 77.1E  43KM H=20 31 05.4 (NEIS)
                                                                               40.4N; 77.2E  33KM   20 31 02.4 (WDCB)
BRG E P        20 39 18.0                                                              D= 44.2 DEG   AZ= 78        BRG
CLL E(P)       20 39 21                                                                D= 44.7 DEG   AZ= 78        CLL
MOX   LM       20 59.9      T 16        AE   0.2 AV   0.3         MLH  =4.1 MLV  =4.4 D= 45.7 DEG   AZ= 77        MOX

1978 AUG 11
CLL E          23 35 33

1978 AUG 12    CENTRAL YUGOSLAVIA                           /NO MB COMP./  43.4N; 17.8E   0KM H=03 12 59.7  (ISC)
CLL E SG       03 17 38   TRACES                                                       D=  8.6 DEG   AZ=156        CLL

1978 AUG 12
CLL I P        07 33 51.7

1978 AUG 12    FIJI ISLANDS REGION                               MB=4.3 ( 1)   21.8S;179.4W 600KM H=12 27 07.7 (NEIS)
CLL I PKP1     12 45 52.7  1.1 /   18                                                  D=149.0 DEG   AZ= 23        CLL
BRG E PKP1     12 45 52.8  1.0 /   10                                                  D=149.2 DEG   AZ= 25        BRG
MOX E PKHKP    12 45 55                                                                D=149.9 DEG   AZ= 21        MOX

1978 AUG 12
CLL E          16 21 49
    E             22 29

1978 AUG 12    FIJI ISLANDS REGION                               MB=4.9 ( 8)   18.8S;178.1W 531KM H=16 40 30.7 (NEIS)
CLL I PKP1     16 59 12.1  0.9 /   38                                                  D=146.4 DEG   AZ= 19        CLL
BRG I PKP1     16 59 13.8  1.1 /   23                                                  D=146.6 DEG   AZ= 21        BRG
MOX E PKHKP    16 59 15.5                                                              D=147.3 DEG   AZ= 17        MOX

1978 AUG 12
MOX   LMV      23 12.9      T 24                      AV   0.4
      LMH         14.5      T 24   AN   0.2 AE   0.3

1978 AUG 13    TAIWAN REGION                                     MB=5.4 (55)   22.2N;121.5E  19KM H=03 41 31.8 (NEIS)
                                                                               22.6N;121.5E  33KM   03 41 30.3 (WDCB)
BRG I P        03 54 00.4C 1.6 /   59                                                  D= 83.5 DEG   AZ= 63        BRG
    E S        04 04 19.0
      LMV         36        T 13                      AV   0.9    MLV  =5.3
CLL I P        03 54 01.6C 1.6 /   72                                                  D= 83.8 DEG   AZ= 62        CLL
    I             54 14.5
    E PP          57 20
    E S        04 04.5
      LM          36        T 15   AN   0.5 AE   0.5 AV   1
MOX E P        03 54 07    1.7 /   61                            MPV  =5.6             D= 84.9 DEG   AZ= 61        MOX
    E S        04 04 28
      LMH         32.8      T 13   AN   0.7 AE   0.5              MLH  =5.3
      LMV         37.0      T 15                      AV   0.9    MLV  =5.3

1978 AUG 13    SWITZERLAND                                   NO MB COMP.   47.3N;  7.6E  35KM H=04 02 27.0 (NEIS)
                                                                           47.4N;  7.7E  39KM   04 02 27.6 (CSEM)
MOX E PN       04 03 27                                                                D=  4.3 DEG   AZ=220        MOX
    E PG          03 47
    I SN          04 15.0
    I SG          04 42.0
CLL E          04 05 10                                                                D=  5.3 DEG   AZ=223        CLL
    E SG          05 19
BRG E PG       04 04 10                                                                D=  5.5 DEG   AZ=232        BRG
    I SG          05 19

1978 AUG 13
CLL E          07 09 09
    E             10 17

1978 AUG 13    TALAUD ISLANDS                                    MB=5.5 (28)    4.6N;126.6E 113KM H=10 12 50.3 (NEIS)
                                                                                4.8N;126.6E  33KM   10 12 37.9 (WDCB)
BRG I P        10 26 28.0  0.6 /   14                                                  D=100.5 DEG   AZ= 69        BRG
CLL I P        10 26 29.5                                                              D=100.9 DEG   AZ= 68        CLL

1978 AUG 13    NEAR S. COAST OF HONSHU, JAPAN                    MB=5.0 (37)   35.6N;139.9E  81KM H=13 22 49.9 (NEIS)
                                                                               35.8N;139.9E  33KM   13 22 45.7 (WDCB)
BRG I P        13 35 01.4D 0.8 /   14                                                  D= 81.7 DEG   AZ= 42        BRG
CLL I P        13 35 01.3D 1.1 /   23                                                  D= 81.7 DEG   AZ= 41        CLL
MOX E P        13 35 07                                                                D= 82.8 DEG   AZ= 40        MOX
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1978 AUG 13
CLL E 15 51 10
BRG E(P) 15 51 14,6

1978 AUG 13
CLL E 16 36 19

1978 AUG 13 SICILY MB=4,3 (7) 38,7N; 15,8E 127KM H=16 53 47,0 (NEIS)
38,7N; 15,8E 123KM 16 53 48,3 (CSEM)
BRG E(P) 16 56 47,5 D= 12,2 DEG AZ=173 BRG
CLL I(P) 16 56 53,3 1,1 / 16 D= 12,8 DEG AZ=170 CLL

1978 AUG 13 EASTERN TURKEY MB=4,6 (4) 38,7N; 40,7E 33KM H=17 20 11,9 (NEIS)
37,7N; 40,5E 33KM 17 20 06,8 (WDCB)
CLL E P 17 25 17 D= 23,1 DEG AZ=112 CLL

1978 AUG 13 TONGA ISLANDS MB=4,5 (1) 18,2S;173,0W 33KM H=19 28 13,8 (NEIS)
CLL E(PKP) 19 48 01 D=146,6 DEG AZ= 10 CLL
E 48 16
BRG E(PKP) 19 48 02,2 D=146,9 DEG AZ= 12 BRG
E 48 16,6

1978 AUG 13 FIJI ISLANDS REGION MB=5,5 (42) 17,8S;178,4W 599KM H=20 53 53,8 (NEIS)
18,8S;177,8W 33KM 20 52 48,6 (WDCB)
CLL I PKIKP 21 12 25,3D 1,4 / 38 D=145,4 DEG AZ= 19 CLL
I PKP1 12 26,9D 0,9 / 440 MC =5,4 DISTANCE 144 DEG DEPTH 580 KM
E 12 44
E APKP 14 41
E PP 15 56
BRG I PKIKP 21 12 26,4D D=145,6 DEG AZ= 21 BRG
I PKP1 12 28,1
E APKP 14 41,2
MOX E PKHKP 21 12 27,5 1,3 / 149 D=146,3 DEG AZ= 17 MOX
E PKP2 12 29,5

1978 AUG 13 SOUTHERN CALIFORNIA MB=5,5 (62) 34,4N;119,7W 7KM H=22 54 53,5 (NEIS)
34,6N;119,9W 40KM 22 54 56,7 (WDCB)
MOX E P 23 07 29 C 2,0 / 137 MPV =5,8 D= 85,1 DEG AZ=321 MOX
T 10 AV 1,1 MPV =6,0
E PP 10 45
E PPP 12 40
E S 18 10
E PS 19 10
E SS 23 40
LM 48,5 T 15,5 AN 4,3 AE 3,1 AV 7,3 MLH =6,0 MLV =6,2
CLL I P 23 07 29,2C 2,0 / 100 D= 85,1 DEG AZ=322 CLL
E PP 10 46 DISTANCE 85 DEG
E S 18 06
E PS 19 00
LM 42 T 20 AN 2,5 AE 2 AV 1,5 MLH =5,7 MLV =5,4
BRG E P 23 07 33,0C 2,2 / 145 D= 85,8 DEG AZ=323 BRG
E S 18 09,0 DISTANCE 86 DEG
LMV 50 T 14 AV 3,5 MLV =5,9

1978 AUG 13 NORTHERN ITALY FRIULI 46,3N; 13,3E 11KM H=23 24 39,5 (ING)
CLL E SG 23 27 22 D= 5,0 DEG AZ=178 CLL

1978 AUG 14 TONGA ISLANDS MB=4,8 (6) 18,5S;175,7W 196KM H=00 00 00,4 (NEIS)
CLL I PKP1 00 19 19,4 1,1 / 40 D=146,5 DEG AZ= 15 CLL
E APKP 20 19
BRG I PKP1 00 19 20,6 1,0 / 22 D=146,8 DEG AZ= 17 BRG
MOX E PKHKP 00 19 22 D=147,4 DEG AZ= 13 MOX

1978 AUG 14 NORTHERN SUMATERA MB=5,1 (20) 5,5N; 94,7E 55KM H=00 42 44,8 (NEIS)
5,1N; 95,2E 33KM 00 42 33,2 (WDCB)
BRG E P 00 54 50,0 D= 79,9 DEG AZ= 94 BRG
CLL E 00 54 57 TRACES D= 80,5 DEG AZ= 93 CLL
MOX E P 00 54 57 TRACES D= 81,4 DEG AZ= 92 MOX

1978 AUG 14 MID-INDIAN RISE MB=4,9 (22) 13,6S; 65,9E 33KM H=03 23 47,8 (NEIS)
13,6S; 66,4E 33KM 03 23 42,4 (WDCB)
BRG E P 03 35 50,2 D= 78,5 DEG AZ=129 BRG
CLL I(P) 03 35 54,5 1,5 / 17 D= 79,3 DEG AZ=128 CLL
MOX E P 03 35 56 TRACES D= 79,6 DEG AZ=127 MOX

1978 AUG 14
BRG I(P) 06 21 08,3

1978 AUG 14
CLL E 06 41 17

1978 AUG 14 SOUTH SANDWICH ISLANDS REGION MB=5,6 (13) 59,8S; 26,4W 98KM H=06 53 55,9 (NEIS)
BRG I APP 07 13 50,2 D=115,1 DEG AZ=201 BRG
E 14 22,5
CLL E(APP) 07 13 51 D=115,2 DEG AZ=201 CLL
E(PPP) 16 08

1978 AUG 14 MINDORO, PHILIPPINE ISLANDS MB=5,0 (23) 13,3N;120,9E 256KM H=07 01 49,8 (NEIS)
12,9N;121,0E 33KM 07 01 24,2 (WDCB)
CLL E P 07 14 23 D= 90,6 DEG AZ= 68 CLL
MOX LMV 07 56,9 T 20 AV 0,7 D= 91,6 DEG AZ= 67 MOX
LMH 57,0 T 19,5 AN 0,3 AE 0,4

1978 AUG 14 MINDANAO, PHILIPPINE ISLANDS MB=5,0 (15) 6,6N;126,9E 78KM H=08 26 59,7 (NEIS)
8,7N;126,2E 33KM 08 27 05,5 (WDCB)
BRG E 08 40 40,2 D= 99,0 DEG AZ= 68 BRG
CLL E 08 40 45 TRACES D= 99,4 DEG AZ= 67 CLL

1978 AUG 14 STRAITS OF GIBRALTAR MB=5,0 (29) 36,6N; 6,9W 30KM H=14 17 50,4 (NEIS)
36,5N; 7,0W 22KM 14 17 50,3 (CSEM)
36,3N; 6,9W 33KM 14 17 43,9 (WDCB)
MOX E P 14 22 16 D= 19,3 DEG AZ=231 MOX
E PP 22 33
LMH 29,7 T 15 AN 0,9 AE 0,6 MLH =4,3
LMV 31,7 T 16 AV 1,0 MLV =4,4
CLL I P 14 22 28,5C 1,7 / 86 D= 20,4 DEG AZ=232 CLL
E 22 40
E S 26,4
LM 31 T 15 AN 1 AE 0,5 AV 0,5
BRG I P 14 22 30,6C 1,1 / 50 D= 20,6 DEG AZ=234 BRG
E(S) 26 28,0
LMV 32 T 13 AV 0,7

1978 AUG 14
CLL E 18 20 40 TRACES

1978 AUG 14 KURILE ISLANDS MB=5,8(105) 49,9N;156,3E 86KM H=18 46 24,1 (NEIS)
50,1N;155,9E 80KM 18 46 24,9 (WDCB)
CLL I P 18 57 54,1C 1,4 / 230 D= 74,4 DEG AZ= 24 CLL
E S 19 07 24
LM 35 T 16 AN 1 AE 0,5 AV 1
BRG I P 18 57 55,0C 1,3 / 85 D= 74,6 DEG AZ= 24 BRG
E S 19 07 23,0 DISTANCE 74 DEG
LMV 35 T 17 AV 2,3 MLV =5,7 (NO DEPTH CORRECTION)
MOX I P 18 58 00,0C 1,3 / 175 MPV =5,8 D= 75,4 DEG AZ= 23 MOX
E AP 58 20 DEPTH 80 KM
E S 19 07 32
E PS 08 08
E SS 12 55
E SSS 16 00
LMH 34,9 T 20,5 AN 0,8 AE 0,6
LMV 36,0 T 16 AV 0,9

1978 AUG 15 EAST PAPUA NEW GUINEA REGION MB=5,8 (50) 7,9S;146,9E 145KM H=23 45 01,5 (NEIS)
7,9S;146,9E 100KM 23 44 56,1 (WDCB)
BRG I PKP 00 03 40,6 D=122,2 DEG AZ= 59 BRG
E PP 05 17,0
I SKP 07 02,5
E PS 15 00
LMV 58
CLL E PKP 00 03 42 D=122,5 DEG AZ= 58 CLL
E(XPKP) 04 35
I PP 05 20,5
E SDIF 13,0
E(PS) 15,1
E SS 21,9
LMH 49
MOX E PKP 00 03 44 D=123,6 DEG AZ= 57 MOX
E PP 05 29 2,2 / 120 MPPV =5,5
E SKKS 12 08
E 13 16
E PS 15 16
E SS 22 08
LMH 48,3 T 20 AN 0,6 AE 0,7
LMV 01 01,1 T 16 AV 0,3

1978 AUG 15
CLL E 00 46 26

1978 AUG 15
CLL E 06 15 48 TRACES

1978 AUG 15 WESTERN CAUCASUS MB=4,8 (23) 41,3N; 44,0E 15KM H=09 04 23,5 (NEIS)
41,5N; 44,0E 10KM 09 04 26,2 (CSEM)
41,4N; 44,2E 33KM 09 04 21,6 (WDCB)
BRG E P 09 09 29,4C 1,5 / 26 D= 22,8 DEG AZ=103 BRG
E(S) 13 41,0
LMV 22 T 10 AV 0,9
CLL I P 09 09 34,0 1,8 / 85 D= 23,5 DEG AZ=103 CLL
E S 13 54
LM 19
MOX E P 09 09 47 D= 24,2 DEG AZ=100 MOX
E S 14 10
E SSS 15 20
LMH 19,7 T 16 AN 1,0 MLH =4,4
LMV 21,0 T 12 AV 0,8 MLV =4,5

CLL INTERRUPTION OF ONE SHORTPERIODIC RECORD FROM 10H 58M TO 05H 53M (AT AUG 16)

1978 AUG 15 SOUTH ATLANTIC RIDGE MB=5,2 (21) 29,1S; 13,1W 33KM H=11 55 27,5 (NEIS)
29,0S; 12,9W 33KM 11 55 22,8 (WDCB)
MOX E P 12 07 47 2,0 / 43 MPV =5,2 D= 82,4 DEG AZ=202 MOX
E AP 07 53 DEPTH 22 KM
BRG E P 12 07 51,2 1,3 / 18 D= 83,1 DEG AZ=204 BRG
I 07 56,8
E PP 11 06,4
CLL E P 12 07 52 C 2,3 / 80 D= 83,3 DEG AZ=203 CLL
E 08 09
E PP 11 03

1978 AUG 15 KERMADEC ISLANDS MB=6,1 (43) 30,5S;178,2W 33KM H=12 37 12,8 (NEIS)
30,7S;178,6W 33KM 12 37 12,8 (WDCB)
CLL I PKIKP 12 57 05,6C 2,6 / 410 D=157,6 DEG A. = 26 CLL
T 15 AV 3,5 DISTANCE 157 DEG
I 57 22
I PKP2 57 39,2 1,6 / 290 MC =6,1
T 13 AV 3,1

(CONT.)

(CONT.)

E(PP) 13 01 12
E 01 35
E 03 28
E 05 40
E PPPP 07,1
E SKKS 08,0
E 10,1
E 12,0
E PPS 14,5
LM 14 09 T 22 AN 4,5 AE 8,5 AV 9 MLH =6,4 MLV =6,5
BRG I PKIKP 12 57 05,6C 2,8 / 615 D=157.7 DEG AZ= 29 BRG
E PKP2 57 39,0
I PP 13 01 17,0
E SS 21 34,0
LMV 14 09 T 24 AV 9,1 MLV =6,5
MOX E PKIKP 12 57 08 2,3 / 463 D=158.6 DEG AZ= 24 MOX
T 14 AV 3,8
E 57 12
E PKP2 57 43,5
E PP 13 01 23 T 9 AV 3,3 MPPV =6,4
E PPP 05 00
E PPPP 07 20
E SKKKS 09 10
E SKSP 11 12
E PPS 14 40
E SS 21 00
LMH 14 19 T 23 AN 4,0 AE 4,4 MLH =6,3
LMV 31 T 18 AV 4,1 MLV =6,4

1978 AUG 15 OFF EAST COAST OF HONSHU, JAPAN MB=5,5 (39) 34.0N;142.3E 47KM H=12 55 19.2 (NEIS)
34.1N;142.4E 33KM 12 55 13.8 (WDCB)
BRG I P 13 07 47,0 1,2 / 30 D= 84.0 DEG AZ= 41 BRG
CLL I P 13 07 47,1C 1,3 / 72 D= 84.1 DEG AZ= 40 CLL
E PP 11 01
MOX E P 13 07 52,5 1,0 / 35 MPV =5,5 D= 85.2 DEG AZ= 39 MOX
E PP 11 13 1,8 / 47 MPPV =5,6

1978 AUG 15 TIMOR MB=5,6 (28) 8.1S;125.5E 33KM H=17 10 56.7 (NEIS)
7.7S;125.5E 33KM 17 10 58.7 (WDCB)
BRG E PP 17 30 05,5 D=109.8 DEG AZ= 78 BRG
CLL E 17 29 43 D=110.3 DEG AZ= 77 CLL

1978 AUG 15
CLL E 21 27 07 TRACES

1978 AUG 15 MARIANA ISLANDS MB=5,4 (60) 19.7N;144.4E 500KM H=21 47 15.6 (NEIS)
17.2N;145.5E 50KM 21 46 14.4 (WDCB)
BRG I P 21 59 54,6D D= 97.4 DEG AZ= 46 BRG
E PP 22 04 00,4
CLL I P 21 59 54,9D 1,4 / 28 D= 97.5 DEG AZ= 45 CLL
E AP 22 02 04
E PP 04 01
MOX E P 22 00 00 D= 98.6 DEG AZ= 44 MOX
E PP 04 10 2,1 / 77 MPPV =5,6
LMH 45,2
LMV 47,0

1978 AUG 16
CLL I P 04 44 44,4

1978 AUG 16 FIJI ISLANDS REGION MB=5,2 (18) 21.8S;176.4W 210KM H=12 40 35.2 (NEIS)
21.3S;178.2W 33KM 12 40 14,3 (WDCB)
CLL E PKIKP 12 59 56 1,7 / 29 D=149.6 DEG AZ= 12 CLL
I PKP1 13 00 01,3C 1,5 / 115 DISTANCE 149 DEG
I PKP2 00 06,7
E 00 14
E 00 47
E APKP 00 57
E PP 03 31
BRG I PKIKP 12 59 56,7
I PKP1 13 00 02,0 D=149.9 DEG AZ= 19 BRG
I PKP2 00 08,1 DISTANCE 149 DEG
E APKP 00 58,0
MOX E PKIKP 12 59 58
E PKHKP 13 00 04 1,5 / 65 D=150.5 DEG AZ= 15 MOX
E PKP2 00 11 2,0 / 86

1978 AUG 16 FIJI ISLANDS REGION /MB=4,4 (3)/ 21,1S;178,9W 655KM H=14 33 13,7 (ISC)
CLL I PKP1 14 51 51,1 D=148,4 DEG AZ= 22 CLL
BRG E PKP1 14 51 51,7 1,2 / 13 D=148,6 DEG AZ= 23 BRG

1978 AUG 16 GANSU PROVINCE, CHINA MB=5,0 (20) 38.4N;101.4E 33KM H=14 56 47.4 (NEIS)
39.1N;100.6E 33KM 14 56 54.8 (WDCB)
BRG E P 15 06 52,1 1.1 / 16 D= 60.0 DEG AZ= 65 BRG
CLL E P 15 06 57 D= 60.3 DEG AZ= 65 CLL
MOX E P 15 07 05 1,4 / 16 MPV =4.8 D= 61.4 DEG AZ= 64 MOX
LMH 35,0 T 10 AN 0,2 MLH =4.5
LMV 35,1 T 13,5 AV 0,3 MLV =4.7

1978 AUG 16
CLL E 15 57 11 TRACES

1978 AUG 16
CLL LMV 16 26

1978 AUG 16
CLL E 19 52 08

1978 AUG 16 KURILE ISLANDS MB=5,0 (57) 48.5N;153.7E 100KM H=20 39 06.9 (NEIS)
48.4N;153.6E 80KM 20 39 03.8 (WDCB)
CLL I P 20 50 38,6C 1,3 / 50 D= 75.0 DEG AZ= 26 CLL
E 50 44
BRG I P 20 50 39,3C 1,3 / 20 D= 75.2 DEG AZ= 26 BRG
MOX E P 20 50 44 1,5 / 35 MPV =4.9 D= 76.0 DEG AZ= 25 MOX

1978 AUG 17
CLL E 01 07 06 TRACES

1978 AUG 17 SOUTH OF FIJI ISLANDS MB=5,6 (43) 22.2S;179.6W 593KM H=08 32 19.2 (NEIS)
22.1S;179.6W 500KM 08 32 10.6 (WDCB)
CLL I PKIKP 08 50 56,8D 1,4 / 61 D=149,3 DEG AZ= 23 CLL
I PKP1 51 02,7D 0.9 / 550 DISTANCE 149,5DEG DEPTH 610 KM
I PKP2 51 09,5 1,2 / 265 MC =5.8
E APKP 53 20
BRG I PKIKP 08 50 57,3D 1,4 / 68
I PKP1 51 03,1 D=149,5 DEG AZ= 25 BRG
E PKP2 51 10,8 DISTANCE 150,5DEG DEPTH 610 KM
E APKP 53 21,7
MOX E PKIKP 08 50 58 D 1,5 / 50
I PKHKP 51 04,5D 1,2 / 212 D=150,3 DEG AZ= 21 MOX
I PKP2 51 13,0 1,4 / 158 DEPTH 677 KM
E APKP 53 26

1978 AUG 17
CLL E PKIKP 08 55 04 DISTANCE 149,5DEG DEPTH 610 KM
I PKP1 55 11,2D 1,2 / 68
I PKP2 55 18,0C 1,5 / 47 MC =4.9
E 56 24
E APKP 57 32
MOX E PKIKP 08 55 05
E PKHKP 55 13 1,3 / 26
E PKP2 55 22 1,3 / 22
BRG I PKIKP 08 55 06,0 DISTANCE 150,5DEG
I PKP1 55 11,5
E PKP2 55 19,5
E APKP 57 33

1978 AUG 17 TONGA ISLANDS MB=5,7 (37) 21.1S;174.3W 20KM H=08 51 51.3 (NEIS)
20.9S;175.2W 33KM 08 51 55.6 (WDCB)
CLL E PKIKP 09 11 35 C 2,2 / 52 D=149,3 DEG AZ= 13 CLL
I PKP1 11 40,6C 1,8 / 380 MC =5.8 DISTANCE 148 DEG
I PKP2 11 45,8
I APKP1 11 56,3
E PP 15 10
LM 10 27 T 17 AN 0,5 AE 0,5 AV 1
BRG E PKIKP 09 11 36,8 1,6 / 39 D=149,6 DEG AZ= 15 BRG
I PKP1 11 41,5
LMV 10 28 T 17 AV 1,6 MLV =5.9
MOX E PKIKP 09 11 37 2,4 / 90 D=150,1 DEG AZ= 11 MOX
I PKHKP 11 42,5C 2,2 / 425
I PKP2 11 49,5 1,4 / 75
E 13 20
E PP 15 28
E PPP 18 40
LMH 10 28 T 18 AN 1,3 AE 0,7 MLH =5.7
LMV 29 T 18 AV 1,3 MLV =5.7

1978 AUG 17 ASCENSION ISLAND REGION NO MB COMP. 11.1S; 13.0W 33KM H=09 24 41.9 (NEIS)
MOX E P 09 35 22 1,3 / 13 MPV =4.9 D= 65.1 DEG AZ=207 MOX

1978 AUG 17 POLAND, UPPER SILESIA /NO MB COMP./ (50.4N; 18.8E 0KM H=11 54 03) (ISC)
CLL E 11 56 09 D= 3,8 DEG AZ=102 CLL

1978 AUG 17
CLL E 15 32 31

1978 AUG 17 WESTERN POLAND
BRG I PN 20 21 06,4 DISTANCE 1,5DEG
I PG 21 08,2
I SG 21 27,5
CLL E PN 20 21 12 DISTANCE 220 KM
I PG 21 15,9
I 21 19,5
I SG 21 42,4
MOX E PN 20 21 35
E SG 22 13

1978 AUG 18
CLL E 02 21 21 TRACES

1978 AUG 18
CLL E 05 52 16 TRACES

1978 AUG 18 OFF EAST COAST OF HONSHU, JAPAN MB=5,1 (20) 33.0N;141.5E 38KM H=13 03 24.8 (NEIS)
33.5N;141.4E 33KM 13 03 27.5 (WDCB)
BRG I P 13 15 55,8 0,8 / 10 D= 84,6 DEG AZ= 42 BRG
E AP 16 07,4
CLL I P 13 15 56,1C 1,1 / 22 D= 84,6 DEG AZ= 41 CLL
I AP 16 07,5
MOX E P 13 16 02 D= 85,7 DEG AZ= 40 MOX

1978 AUG 18 GUATEMALA MB=5,5 (83) 14.4N; 91.5W 96KM H=15 35 17.8 (NEIS)
16.1N; 91.0W 250KM 15 35 42.7 (WDCB)
MOX E P 15 47 54 1,8 / 101 MPV =5.6 D= 87.1 DEG AZ=289 MOX
E AP 48 15,5 DEPTH 80 KM
E XP 48 24
E PP 51 20
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    E S          15 58 15    T 20,5 AN   1,2 AE   3,4              MSH  =6,1
    E PS            59 20
    E SS         16 04 00
    E SSS           07 44
      LMH           24       T 22              AE   2,3
      LMV           31       T 14                        AV   1,6
CLL E P          15 47 56    1,9 /   80                                    D= 87,7 DEG   AZ=290       CLL
    E AP            48 18                                                  DISTANCE  87 DEG
    E XP            48 27
    E(PP)           51 24
    E SKS           58 16
    E S             58 34
    E PS            59,8
    E XSS        16 04 36
    E PKKP1         05 45
    E PKPPKP        13 50
      LM            24       T 20   AN   1,5 AE   2,5 AV   2,5   MLH  =5,6 MLV  =5,6 (NO DEPTH CORRECTION)
BRG I P          15 48 00,2  1,8 /   35                                    D= 88,4 DEG   AZ=291       BRG
    E AP            48 22,0
    I PP            51 29,5
    E SKS           58 22,0
    E PS         16 00 00,0
    E SS            04 39,0
      LMV           25       T 20                        AV   3,8   MLV  =5,8  (NO DEPTH CORRECTION)

1978 AUG 18      POLAND, UPPER SILESIA                                  /NO MB COMP,/  49,8N; 18,7E   0KM H=18 50 50,1  (ISC)
BRG E PG         18 51 44,4                                                        D=  3,2 DEG   AZ=108       BRG
    E SG            52 26,5
CLL E            18 51 48                                                       D=  3,9 DEG   AZ=110       CLL
    E SG            52 48
MOX E SG         18 53 11                                                       D=  4,6 DEG   AZ= 98       MOX

1978 AUG 18      SOUTHERN ALASKA                                        MB=5,4 (95)   59,9N;153,5W 123KM H=18 52 28,4 (NEIS)
                                                                                      59,9N;153,6W 120KM   18 52 28,1 (WDCB)
                                                                                      D= 68,6 DEG   AZ=353       CLL
CLL E P          19 03 19
    I            03 30,1
    E            03 34
    E AP         03 48
    E            07 14
    E S          12 11
      LMH        30
    E PKPPKP     31 28
BRG I P          19 03 23,0  1,1 /   15                                    D= 69,1 DEG   AZ=353       BRG
    E AP         03 52,4
    E S          12 17,0
    E XS         13 12,0
    E PKPPKP     31 24
      LMV        41
MOX E P          19 03 22    0,8 /   29                          MPV  =5,2 D= 69,2 DEG   AZ=352       MOX
    E AP         03 53                                                                                 DEPTH 136 KM
    E S          12 16       T 11   AN   1,1 AE   1,2            MSH  =5,8
    E SS         16 44
      LMH        31,7        T 16   AN   0,5
      LMV        39,0        T 14                        AV   0,6

1978 AUG 18      ALBANIA                                                MB=5,1 (44)   41,9N; 20,3E   5KM H=20 53 19,8 (NEIS)
                                                                                      41,8N; 20,3E  10KM   20 53 22,8 (CSEM)
                                                                                      41,7N; 20,3E  33KM   20 53 17,1 (WDCB)
BRG E P          20 55 48,0  1,1 /   50                                    D= 10,0 DEG   AZ=152       BRG
      LMH           59       T  9,0                      AV   6,8
MOX E PN         20 55 56,5  1,1 /  129                          MPV  =6,3 D= 10,6 DEG   AZ=142       MOX
    E            56 07
    E PG         56 55
    E SG         59 12
      LMH        59,5        T 12   AN   6,2 AE   8,1            MLH  =4,9
      LMV     21 00,6        T  9                        AV   3,5
CLL E PN         20 55 57    1,5 /   95                                    D= 10,7 DEG   AZ=149       CLL
    E            57 28
    E            58 08
    E            58 55
    E LMH        59 25       T 10   AN   5,5 AE   11             MLH  =5,1
      LMV     21 00,0        T  8                        AV   3,5

1978 AUG 18
CLL E            23 31 23   TRACES

1978 AUG 19      RYUKYU ISLANDS                                         MB=5,0 (22)   25,9N;128,4E  33KM H=01 30 01,6 (NEIS)
                                                                                      26,8N;127,8E  33KM   01 30 07,9 (WDCB)
BRG E P          01 42 31,5  1,2 /    9                                    D= 84,3 DEG   AZ= 55       BRG
CLL E P          01 42 33  C                                               D= 84,5 DEG   AZ= 55       CLL
    I            42 41,1
      LM         02 25
MOX E P          01 42 42    2,0 /   34                          MPV  =5,2
      LMH        02 18,7     T 19   AN   0,7 AE   0,6            MLH  =5,2 D= 85,6 DEG   AZ= 54       MOX
      LMV           26,9     T 13                        AV   0,9   MLV  =5,3

1978 AUG 19      KURILE ISLANDS REGION                                  MB=4,7 ( 9)   44,7N;152,8E  33KM H=02 11 48,4 (NEIS)
                                                                                      45,8N;151,8E  33KM   02 11 56,6 (WDCB)
CLL E AP         02 23 55    1,1 /   13                                    D= 78,2 DEG   AZ= 28       CLL

1978 AUG 19
MOX E PG         17 00 35
    E SG            00 56

1978 AUG 19      TONGA ISLANDS                                          MB=4,9 ( 8)   20,6S;174,2W  95KM H=17 20 01,2 (NEIS)
                                                                                      20,1S;179,5W  33KM   17 19 58,4 (WDCB)
CLL I PKP1       17 39 40,3D 1,4 /   44                                    D=148,8 DEG   AZ= 13       CLL
    I            39 49,7
BRG E PKIKP      17 39 37,5
    I PKP1       39 41,1     1,0 /   16                                    D=149,1 DEG   AZ= 15       BRG
    E            39 52,4
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MOX E PKHKP      17 39 42    1,8 /   54                                                D=149,7 DEG   AZ= 11       MOX
    E APKP          39 52
      LMH        18 52
      LMV           55

1978 AUG 19
CLL E            18 45 41

1978 AUG 20
CLL I            01 13 45,7

1978 AUG 20
CLL E            02 59 19   TRACES

1978 AUG 20      CZECHOSLOVAKIA                                         NO MB COMP,   48,9N; 14,0E  10KM H=06 44 22,8 (CSEM)
                                                                                      48,7N; 14,2E  10KM   06 44 23,7 (NEIS)
BRG I PG         06 45 01,8                                                        D=  2,0 DEG   AZ=179       BRG
    I SG            45 29,2
MOX I PN         06 45 04,5                                                        D=  2,3 DEG   AZ=138       MOX
    I PG            45 08,5
    I SG            45 41,0
CLL E SG         06 45 45                                                       D=  2,5 DEG   AZ=165       CLL

1978 AUG 20      CZECHOSLOVAKIA                                         NO MB COMP,   49,6N; 13,8E  10KM H=15 25 51,7 (NEIS)
                                                                                      (49,8N; 14,1E) 10KM   15 25 50,3 (CSEM)
BRG I PN         15 26 12,3                                                        D=  1,3 DEG   AZ=184       BRG
    I PG            26 13,0
    I SG            26 30,5
MOX E PN         15 26 23                                                       D=  1,8 DEG   AZ=126       MOX
    I PG            26 26,0                                                    DISTANCE   2,0DEG
    I SN            26 46,0
    I SG            26 50,0
CLL I PG         15 26 20,7                                                     D=  1,8 DEG   AZ=163       CLL
    E SG            26 46                                                      DISTANCE 210 KM

1978 AUG 20      AFGHANISTAN-USSR BORDER REGION                         MB=4,5 ( 8)   36,2N; 71,2E 101KM H=16 45 58,0 (NEIS)
BRG E P          16 53 51,2                                                        D= 42,9 DEG   AZ= 87       BRG

1978 AUG 20      POLAND, UPPER SILESIA
CLL E            17 01 22

1978 AUG 20      CENTRAL MID-ATLANTIC RIDGE                             MB=4,8 (15)    7,5N; 34,8W  10KM H=21 21 25,6 (NEIS)
MOX E            21 31 17   TRACES                                                 D= 57,6 DEG   AZ=238       MOX
BRG E P          21 31 27,5                                                        D= 59,0 DEG   AZ=240       BRG

1978 AUG 20      LUZON, PHILIPPINE ISLANDS                              MB=5,2 (39)   16,5N;120,5E  29KM H=21 39 27,0 (NEIS)
                                                                                      16,4N;120,6E  33KM   21 39 21,9 (WDCB)
BRG I P          21 52 12,9C 1,3 /   26                                    D= 87,4 DEG   AZ= 67       BRG
CLL E P          21 52 15  C 1,5 /   22                                    D= 87,8 DEG   AZ= 66       CLL
MOX E P          21 52 20    1,2 /   12                          MPV  =5,1 D= 88,9 DEG   AZ= 65       MOX
      LMH        22 29,8     T 17   AN   0,3 AE   0,3            MLH  =4,9
      LMV           35,4     T 16                        AV   0,4   MLV  =4,9

1978 AUG 21      SAN JUAN PROVINCE, ARGENTINA                           MB=5,6 (36)   31,3S; 67,8W  10KM H=00 28 22,7 (NEIS)
                                                                                      31,6S; 66,9W  33KM   00 28 28,5 (WDCB)
MOX E PKP        00 46 51   TRACES                                                 D=107,4 DEG   AZ=242       MOX
      LMH        01 29,5     T 20   AN   0,4 AE   0,3            MLH  =5,0
      LMV           34,8     T 14                        AV   0,4   MLV  =5,1
CLL E PP         00 47 24                                                       D=108,5 DEG   AZ=243       CLL
    E            47 48
    E            48 27
BRG E PP         00 47 17,3                                                     D=108,8 DEG   AZ=243       BRG

1978 AUG 21      NORWEGIAN SEA                                          NO MB COMP,   72,9N; 14,7E  10KM H=02 05 39,5 (NEIS)
CLL E(P)         02 10 26                                                          D= 21,7 DEG   AZ=  1       CLL
MOX E(P)         02 10 26                                                          D= 22,4 DEG   AZ=  2       MOX

1978 AUG 21      MINDANAO, PHILIPPINE ISLANDS                           MB=5,7 (45)    5,6N;126,2E  44KM H=05 41 43,0 (NEIS)
                                                                                       5,5N;126,0E  50KM   05 41 44,1 (WDCB)
CLL E P          05 55 24    1,1 /   14                                            D= 99,8 DEG   AZ= 68       CLL
MOX E P          05 55 29,5                                                        D=100,9 DEG   AZ= 67       MOX
      LMH        06 40,1     T 17   AN   0,2                MLH  =4,7
      LMV           45,1     T 24                        AV   0,6   MLV  =5,0

1978 AUG 21
CLL E            08 13 43

1978 AUG 21
BRG E(PG)        15 30 03,5
    E SG            30 41,7

1978 AUG 21      OFF EAST COAST OF HONSHU, JAPAN                        MB=5,2 (29)   33,8N;141,6E  33KM H=15 58 17,0 (NEIS)
                                                                                      34,2N;141,5E  33KM   15 58 19,6 (WDCB)
BRG E P          16 10 45,2  0,8 /   10                                            D= 83,9 DEG   AZ= 42       BRG
    E PP            14 02,6
CLL I P          16 10 45,3  1,3 /   26                                            D= 84,0 DEG   AZ= 41       CLL
MOX E P          16 10 51    1,3 /   17                          MPV  =5,1 D= 85,0 DEG   AZ= 40       MOX
    E AP            11 05
    E(PP)           14 09

1978 AUG 21
CLL E            17 39 48

1978 AUG 21      PRINCE EDWARD ISLANDS REGION                           MB=5,8 (25)   47,7S; 32,5E  10KM H=22 0  02,5 (NEIS)
                                                                                      47,9S; 32,4E  33KM   22 05 01,7 (WDCB)
BRG E P          22 18 46,6                                                        D= 99,5 DEG   AZ=167       BRG
    E PP            22 50,0                                                    DISTANCE  99 DEG
    E SKS           29 33,0
    E PS            31 48,0
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     E PKKP2      22 35 34,2
     E SS            37 00,0
       LMV        23 03          T 17                            AV  11.1   MLV  =6,4
 MOX E P          22 18 48       2,4 /   69                                 MPV  =5,8        D= 99,6 DEG   AZ=166        MOX
                                 T 10                            AV   0,7   MPV  =6,1
     I PP            22 51,5     3,5 /  375                                 MPPV =6,2
                                 T 10                            AV   2,0   MPPV =6,5
     E PPP           25 00
     E PPPP          26 45
     E SKS           29 35
     E SKKS          30 05
     E S             30 20
     E PS            31 40
     E PKKP          35 34
     E SS            37 05
     E SSSS          44 05
       LMH        23 00,2        T 18,5 AN   8,0 AE  12,2               MLH  =6,5
       LMV           01,1        T 18                            AV   7,2   MLV  =6,2
 CLL E P          22 18 46       2,5 /  105                                                  D=100,0 DEG   AZ=167        CLL
     E PP            22 55       T  8   AN   1.1                 AV   1,5   MPPV =6,5        DISTANCE 100 DEG
     E(PPP)          24 40
     E PPPP          26 46
     E SKS           29 34
     E PS            31 52
     E               34 36
     E PKKP2         35 32
     E SS            37 12
       LMH        23 05          T 17   AN   9,5 AE   5,5 AV  11,5   MLH  =6,4
       LMV           09          T 15   AN   9               AV   9,5   MLV  =6,4

1978 AUG 22      LOYALTY ISLANDS REGION                   /NO MB COMP,/   22,4S;170,4E  33KM H=00 47 34     (ISC)
BRG E            01 07 19,8                                                         D=146,2 DEG   AZ= 42      BRG
CLL E            01 07 24   TRACES                                                  D=146,2 DEG   AZ= 40      CLL

1978 AUG 22      NORTHERN ITALY                            NO MB COMP.    44.2N; 10,2E  10KM H=07 31 20,2 (NEIS)
MOX E PG         07 33 30                                                           D=  6,5 DEG   AZ=189      MOX
    E               33 46
BRG E PN         07 33 05,0                                                         D=  7,1 DEG   AZ=202      BRG
    E(SN)           34 21,0
    E SG            35 11,2

1978 AUG 22      FRG, CENTRAL REGION                                      50.2N; 8.2E         H=07 33 32    (GRF)
MOX E PN         07 34 07,5                                                         D=  2,2 DEG   AZ=260      MOX
    E PG            34 11,5
    E SN            34 34
    E SG            34 40
CLL E PG         07 34 33                                                           D=  3,2 DEG   AZ=252      CLL
    E SG            35 16
BRG E SG         07 35 28                                                           D=  3,7 DEG   AZ=262      BRG

1978 AUG 22      DODECANESE ISLANDS                        MB=4,0 (10)    36,4N; 27,6E 103KM H=09 29 32,9 (NEIS)
BRG E P          09 33 33,2                                                         D= 17,5 DEG   AZ=141      BRG
MOX E P          09 33 44                                                           D= 18,3 DEG   AZ=135      MOX

1978 AUG 22      FRG, CENTRAL REGION
                 NEAR HAMM
CLL E            13 23 53                                                                                     (GRF)
    E L             24 42

1978 AUG 22      KURILE ISLANDS                            MB=5,0 (20)    44,1N;148,9E  50KM H=14 31 09,2 (NEIS)
                                                                          44,2N;148,9E  33KM   14 31 08,1 (WDCB)
CLL I P          14 43 02,1  1.0 /   19                                             D= 77,6 DEG   AZ= 31      CLL
      LM         15 21
BRG E P          14 43 02,0                                                         D= 77,6 DEG   AZ= 31      BRG

1978 AUG 22      NEW BRITAIN REGION                        MB=5,3 ( 5)     6,0S;152,9E  35KM H=14 29 38,9 (NEIS)
BRG E PKP        14 48 34,5                                                         D=123,8 DEG   AZ= 52      BRG
CLL I PKP        14 48 35,0C 0,8 /   13                                             D=123,9 DEG   AZ= 51      CLL

1978 AUG 22      SOUTHERN ITALY                           /NO MB COMP,/   39,3N; 15,4E 279KM H=18 03 04,7  (ISC)
MOX E P          18 05 46                                                           D= 11,7 DEG   AZ=165      MOX
CLL E P          18 05 53   TRACES                                                  D= 12,1 DEG   AZ=171      CLL

1978 AUG 22      WESTERN AUSTRIA                                          47,4N; 12,1E        H=19 15 23    (GRF)
MOX E(PG)        19 16 25                                                           D=  3,3 DEG   AZ=174      MOX
    E               16 44
    E(SG)           17 07
CLL E SG         19 17 31                                                           D=  4,0 DEG   AZ=189      CLL

1978 AUG 22      WESTERN AUSTRIA                                          47,4N; 12,3E        H=19 17 19    (GRF)
MOX E PN         19 18 09                                                           D=  3,3 DEG   AZ=172      MOX
    E PG            18 20                                                           DISTANCE   2,9DEG
    E SN            18 42
    E SG            18 56
    E L             19 03
CLL E SG         19 19 23                                                           D=  3,9 DEG   AZ=187      CLL

1978 AUG 22      WESTERN CAUCASUS                          MB=4,8 (37)    42,0N; 43,9E  10KM H=22 48 11,2 (NEIS)
                                                                          42.2N; 44,0E  10KM   22 48 14,0 (CSEM)
                                                                          42.0N; 44,0E  33KM   22 48 09,0 (WDCB)
BRG I P          22 53 11,4C 1,3 /   27                                             D= 22,3 DEG   AZ=102      BRG
CLL I P          22 53 18,2C 1,1 /   68                                             D= 23,0 DEG   AZ=102      CLL
      LM         23 03
MOX E P          22 53 25    1,4 /   19                          MPV  =4,5
      LMH        23 03,8     T 13   AN   0,4                     MLH  =4,1          D= 23,8 DEG   AZ= 99      MOX
      LMV           04,2     T 12                    AV   0,3    MLV  =4,1
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1978 AUG 22
BRG I P          23 01 45,2C 1,3 /   22

1978 AUG 23      COSTA RICA                                            MB=5,7 (88)    10,2N; 85,2W  56KM H=00 33 32,2 (NEIS)
                                                                                       9,9N; 85.3W  33KM   00 33 29,4 (WDCB)
MOX E P          00 51 10      2.1 /  192                              MPV  =6.1               D= 86,5 DEG   AZ=282      MOX
                               T 16   AN    5,9                        MPV  =6.9
    E PP            54 32
    E SKS        01 01 45
    E PS            03 00
    E SS            07 35
      LMV           32,7       T 17,5                       AV  62,7   MLV  =7,1  (NO DEPTH CORRECTION)
      LMH           34,0       T 16,5 AN  23,2 AE  50,0                MLH  =7,0  (NO DEPTH CORRECTION)
CLL I P          00 51 13,8C 2,2 /  250                                                        D= 87,2 DEG   AZ=283      CLL
                               T 20   AN   1,2 AE   3,0 AV   6,5                               DISTANCE  87 DEG
    E               51 24
    I               51 58,4
    E PP            54 43
    E S          01 01,8
    E(PS)           03,1
    E SS            08,0
    E(SSS)          11,6
    E PKPPKP        17 18
    E               17 41
    E(SKPPKP)       21 08
      L             24
      L             29
      LM            34         T 17,5 AN  38,5 AE  42,5 AV( 63)    MLH  =7,0 MLV  =7,1 (NO DEPTH CORRECTION)
BRG I P          00 51 16,9C 2,2 /  190                                                        D= 87,9 DEG   AZ=283      BRG
    E AP            51 34,2                                                                    DISTANCE  92 DEG
    E PP            55 00,0
    E SKS        01 01 50,0
    E S             02 13
    E PKKP          08 13,8
    E SS            08 20,0
    E PKPPKP        17 09,2
      LMV           34         T 17                          AV  65,0   MLV  =7,2  (NO DEPTH CORRECTION)

1978 AUG 23      COSTA RICA                                            MB=5,4 (65)    10.3N; 85,1W  71KM H=00 50 29,1 (NEIS)
                                                                                      10,2N; 85,0W  33KM   00 50 19,5 (WDCB)
MOX E P          01 03 04      1,7 /   61                              MPV  =5,4               D= 86,3 DEG   AZ=282      MOX
    E AP            03 20,5                                                                                 DEPTH  63 KM
CLL E P          01 03 08   C  1,8 /   80                                                      D= 87,1 DEG   AZ=283      CLL
    E               03 23
    E PP            06 41
      LM            47         T 16   AN  11.5 AE  11,5 AV  15,5   MLH  =6.5 MLV  =6,5 (NO DEPTH CORRECTION)
BRG E P          01 03 11,0C 1,8 /   70                                                        D= 87,7 DEG   AZ=283      BRG
    I AP            03 27,9
    E PP            06 48,0

1978 AUG 23      TAIWAN                                                MB=4,8 (12)    23.6N;121.6E  48KM H=01 15 39,2 (NEIS)
BRG E P          01 27 57,5  1.0 /    8                                                        D= 82,4 DEG   AZ= 62      BRG
CLL I P          01 27 59,7                                                                    D= 82,7 DEG   AZ= 61      CLL
MOX E P          01 28 05,5                                                                    D= 83,8 DEG   AZ= 60      MOX

1978 AUG 23      COSTA RICA                                            MB=4,7 (40)    10.3N; 85,3W  72KM H=02 24 15,3 (NEIS)
CLL E P          02 36 58                                                                      D= 87,2 DEG   AZ=283      CLL
    E XP            37 28
BRG E P          02 36 58,5                                                                    D= 87,9 DEG   AZ=284      BRG

1978 AUG 23      COSTA RICA                                            MB=4,7 (19)    10.3N; 85,3W  66KM H=02 26 13,5 (NEIS)
CLL E(P)         02 39 00                                                                      D= 87,2 DEG   AZ=283      CLL
    E XP            39 28

1978 AUG 23      RYUKYU ISLANDS                                        MB=4,7 ( 5)    25,9N;128,6E  24KM H=05 20 16,7 (NEIS)
CLL E AP         05 32 58                                                                      D= 84,6 DEG   AZ= 55      CLL
MOX   LM         06 16,4       T 16   AN   0,3             AV   0.3   MLH  =4,8 MLV  =4,8 D= 85,7 DEG   AZ= 54      MOX

1978 AUG 23      RYUKYU ISLANDS                                        MB=5,1 (26)    26,0N;128,5E  29KM H=07 09 31,9 (NEIS)
                                                                                      26,6N;128,1E  33KM   07 09 31,1 (WDCB)
BRG E P          07 22 02,9C 1,4 /   18                                                        D= 84,2 DEG   AZ= 55      BRG
    E AP            22 11,9
CLL I P          07 22 04,0C 1,4 /   27                                                        D= 84,5 DEG   AZ= 55      CLL
    I AP            22 13
      LMH           57         T 19   AN   1,5 AE   1
      L          08 04
MOX E P          07 22 13      2,0 /   34                              MPV  =5,2               D= 85,6 DEG   AZ= 54      MOX
    E AP            22 20                                                                                   DEPTH  26 KM
      LMH           58,5       T 18,5 AN   1,0 AE   0,9                MLH  =5,4
      LMV        08 05,6       T 13,5                        AV   1,2   MLV  =5,5

1978 AUG 23      CENTRAL ITALY                                         NO MB COMP.    43,5N; 13,0E  10KM H=15 48 07,8 (NEIS)
BRG E PN         15 49 57,0                                                                    D=  7,4 DEG   AZ=185      BRG
    E               51 57,4
CLL E SN         15 51 17                                                                      D=  7,8 DEG   AZ=180      CLL
    E(SG)           52 40
    E               52 56
```

1978 AUG 23 TALAUD ISLANDS MB=5,5 (45) 4,0N;126,6E 71KM H=19 34 02,4 (NEIS)
4,2N;126,4E 33KM 19 33 59,2 (WDCB)
BRG I P 19 47 46,2C 1,2 / 21 D=100,9 DEG AZ= 70 BRG
CLL E P 19 47 48 1,4 / 17 D=101,3 DEG AZ= 69 CLL
MOX E P 19 47 52,5 1,2 / 16 D=102,4 DEG AZ= 68 MOX

1978 AUG 23 RAT ISLANDS, ALEUTIAN ISLANDS MB=5,4 (87) 51,7N;176,4E 54KM H=20 59 05,7 (NEIS)
52,4N;175,7E 33KM 20 59 07,7 (WDCB)
CLL I P 21 10 49,7C 1,3 / 27 D= 76,4 DEG AZ= 11 CLL
E 10 56
LM 46
BRG I P 21 10 51,5C 1,3 / 32 D= 76,7 DEG AZ= 11 BRG
E 11 07,5
MOX I P 21 10 55,0C 1,3 / 35 MPV =5,2 D= 77,2 DEG AZ= 10 MOX
E AP 11 10 DEPTH 60 KM
LMH 47.7 T 25 AN 0.4 MLH =4,6
LMV 48.2 T 25 AV 0.4 MLV =4,6

1978 AUG 23 SOUTHERN GREECE MB=3,8 (7) 37,1N; 21,5E 31KM H=23 45 49,1 (NEIS)
37,3N; 21,7E 10KM 23 45 50,9 (CSEM)
BRG E P 23 49 17,3 D= 14,8 DEG AZ=156 BRG
MOX E(P) 23 49 24 TRACES D= 15,3 DEG AZ=149 MOX
LMH 56.2 T 25 AN 0.8 MLH =3,7
LMV 56.3 T 16 AV 0.4 MLV =3,9
CLL E PP 23 49 39 D= 15,4 DEG AZ=154 CLL
E 50 16

1978 AUG 24 GREECE MB=4,2 (2) 40,6N; 23,3E 10KM H=01 23 47,5 (NEIS)
MOX LM 01 32.3 T 16 AN 0.3 AE 0,3 AV 0.4 MLH =3,6 D= 12,9 DEG AZ=136 MOX

1978 AUG 24 FIJI ISLANDS REGION MB=4,4 (3) 17,9S;178,4W 642KM H=02 53 16,1 (NEIS)
CLL I PKP1 03 11 46,2 0,8 / 12 D=145,5 DEG AZ= 19 CLL
BRG E PKP1 03 11 47,2 D=145,7 DEG AZ= 21 BRG

1978 AUG 24 POLAND, UPPER SILESIA
BRG I(PG) 07 09 31,2
E SG 10 02,5
CLL E SG 07 10 23
MOX E(SG) 07 10 47

1978 AUG 24 NEW BRITAIN REGION MB=5,2 (15) 5,7S;151,4E 62KM H=09 26 43,3 (NEIS)
5,1S;151,5E 33KM 09 26 42,1 (WDCB)
BRG I PKP 09 45 34,0D 1,0 / 16 D=122,7 DEG AZ= 53 BRG
I SKP 49 05,8
CLL I PKP 09 45 34,4D D=122,9 DEG AZ= 52 CLL
MOX E PKP 09 45 36,5 1,4 / 19 D=124,0 DEG AZ= 51 MOX
E APKP 45 53 DEPTH 78 KM

1978 AUG 24
BRG E 11 05 42,8

1978 AUG 24 VIRGIN ISLANDS MB=4,7 (15) 19,9N; 64,9W 47KM H=13 13 35,3 (NEIS)
CLL E P 13 24 26 1,6 / 18 D= 67,2 DEG AZ=274 CLL
BRG E P 13 24 31,8 D= 67,8 DEG AZ=275 BRG

1978 AUG 24 VANUATU ISLANDS MB=5,3 (23) 15,6S;167,7E 139KM H=15 06 55,7 (NEIS)
15,8S;166,7E 33KM 15 06 44,8 (WDCB)
BRG E PKP 15 26 07,6 0,9 / 14 D=139,0 DEG AZ= 40 BRG
I SKP 29 31,0
CLL I PKP 15 26 07,8D 1,1 / 26 D=139,0 DEG AZ= 39 CLL
E(PP) 28 58
MOX E PKP 15 26 09,5 1,6 / 22 D=140,1 DEG AZ= 37 MOX
LMH 30.0 T 16 AE 0,4
LMV 30.1 T 16 AV 0.4

1978 AUG 24
CLL I P 16 09 50,7C

1978 AUG 24 UNDERGROUND EXPLOSION MB=5,1 (51) 65,9N;112,5E 0KM H=17 59 57,0 (NEIS)
CLL I P 18 08 40,4C 0,9 / 40 D= 48,1 DEG AZ= 33 CLL
I PCP 10 07,7D
BRG I P 18 08 40,8C 0,7 / 32 D= 48,2 DEG AZ= 33 BRG
I PCP 10 07,7
E PP 10 32,8
MOX I P 18 08 49,0C 0,9 / 43 MPV =5,4 D= 49,2 DEG AZ= 32 MOX

1978 AUG 25 UNIMAK ISLAND REGION MB=4,8 (59) 54,1N;164,8W 64KM H=05 56 50,5 (NEIS)
54,5N;161,2W 33KM 05 56 48,4 (WDCB)
CLL E P 06 08 36 D= 74,9 DEG AZ=359 CLL
E AP 08 42
BRG E P 06 08 37,5 D= 75,4 DEG AZ=359 BRG
MOX E P 06 08 39,5 1,4 / 21 MPV =4,9 D= 75,6 DEG AZ=358 MOX
E AP 08 46 DEPTH 64 KM

1978 AUG 25 TONGA ISLANDS NO MB COMP, 17,1S;173,5W 33KM H=07 40 53,2 (NEIS)
CLL I PKP 08 00 29,3D 1,4 / 13 D=145,5 DEG AZ= 11 CLL
BRG I PKP 08 00 30,2C 1,0 / 14 D=145,8 DEG AZ= 13 BRG
MOX E PKHKP 08 00 31,5 1,1 / 20 D=146,3 DEG AZ= 9 MOX

1978 AUG 25 KERMADEC ISLANDS REGION /MB=5,2 (16)/ 32,0S;178,0W 33KM H=10 00 49,3 (ISC)
31,6S;179,8E 33KM 10 00 54,2 (WDCB)
CLL E PKP1 10 20 59 D=159,1 DEG AZ= 27 CLL
I PKP2 21 21,0D 1,3 / 43
BRG E PKIKP 10 20 43 D=159,2 DEG AZ= 30 BRG
I PKP2 21 21,8D 1,4 / 33
MOX E PKP2 10 21 26 1,4 / 23 D=160,1 DEG AZ= 25 MOX

1978 AUG 25 CRETE MB=4,3 (31) 34,2N; 25,2E 22KM H=12 02 10,6 (NEIS)
34,1N; 25,2E 10KM 12 02 11,3 (CSEM)
33,7N; 25,1E 33KM 12 02 04,7 (WDCB)
BRG E P 12 06 27,2 D= 18,6 DEG AZ=149 BRG
MOX E P 12 06 33 D= 19,2 DEG AZ=144 MOX
LMH 13.4 T 16 AE 0,3 MLH =3,7
LMV 15.5 T 10 AV 0.4 MLV =4,2
CLL E P 12 06 36 0,9 / 15 D= 19,3 DEG AZ=148 CLL
E 06 47

1978 AUG 25 KERMADEC ISLANDS REGION MB=5,4 (3) 31,8S;178,0W 33KM H=18 18 44,1 (NEIS)
32,2S;177,8W 33KM 18 18 39,9 (WDCB)
CLL I PKP2 18 39 14,6D 1,6 / 22 D=158,9 DEG AZ= 27 CLL
BRG E PKIKP 18 38 41,2 D=159,0 DEG AZ= 29 BRG
I PKP2 39 15,3

1978 AUG 25
CLL E 19 16 25

1978 AUG 25 KERMADEC ISLANDS MB=4,9 (2) 30,0S;177,1W 33KM H=18 59 43,3 (NEIS)
CLL E APKP2 19 20 17 1,8 / 39 D=157,4 DEG AZ= 23 CLL
BRG E 19 19 43,2 D=157,6 DEG AZ= 26 BRG
E PKP2 20 03,7
I APKP2 20 21,4
MOX E APKP2 19 20 34 1,6 / 16 D=158,4 DEG AZ= 21 MOX

1978 AUG 25
CLL E 19 56 08

1978 AUG 25
CLL E 20 46 33

1978 AUG 26
CLL E 01 00 32

1978 AUG 26 BISMARCK SEA MB=4,7 (2) 3,2S;147,5E 33KM H=03 49 11,1 (NEIS)
MOX LMH 05 00.7 T 20 AN 0.2 MLH =4,7 D=119,9 DEG AZ= 53 MOX
LMV 01.3 T 20 AV 0.3 MLV =4,9

1978 AUG 26 TAIWAN REGION MB=4,8 (19) (22,0N;121,5E 10KM H=04 53 08,2)(NEIS)
22,9N;121,8E 33KM 04 53 13,0 (WDCB)
BRG E P 05 05 44,3 1,4 / 18 D= 83,6 DEG AZ= 63 BRG
CLL E P 05 05 43 1,1 / 16 D= 84,0 DEG AZ= 62 CLL
MOX E P 05 05 52 D= 85,1 DEG AZ= 61 MOX
LMH 48.7 T 15 AN 0.3 AE 0,6 MLH =5,1
LMV 48.8 T 15 AV 0.6 MLV =5,2

1978 AUG 26 POLAND, UPPER SILESIA
BRG E PG 06 02 03,0
E SG 02 49,3
CLL E 06 03 03

1978 AUG 26 ADMIRALTY ISLANDS REGION MB=5,2 (13) 2,9S;147,4E 33KM H=05 42 07,7 (NEIS)
2,9S;147,8E 33KM 05 42 06,8 (WDCB)
CLL L 06 54 D=118,5 DEG AZ= 54 CLL
MOX LMH 06 54.3 T 20 AN 0.5 AE 0,4 MLH =5,2 D=119,6 DEG AZ= 53 MOX
LMV 54.8 T 20 AV 0.5 MLV =5,1

1978 AUG 26 PUERTO RICO REGION MB=4,8 (8) 19,9N; 65,0W 41KM H=07 55 01,2 (NEIS)
CLL E P 08 05 55 D= 67,3 DEG AZ=274 CLL
BRG I P 08 05 57,6 D= 67,9 DEG AZ=275 BRG

1978 AUG 26
CLL L 09 03

1978 AUG 26 KURILE ISLANDS MB=4,7 (16) 44,3N;149,7E 28KM H=09 46 23,0 (NEIS)
44,3N;149,7E 33KM 09 46 18,7 (WDCB)
CLL I P 09 58 19,3 1,1 / 19 D= 77,7 DEG AZ= 30 CLL
E AP 58 30

1978 AUG 26 PRINCE EDWARD ISLANDS REGION MB=4,7 (5) 47,1S; 32,5E 33KM H=11 42 23,1 (NEIS)
MOX LMH 12 36.9 T 20 AN 0.4 AE 1.1 MLH =5,5 D= 99,0 DEG AZ=166 MOX
LMV 44.6 T 16 AV 0.5 MLV =5,2
CLL LM 12 43 D= 99,5 DEG AZ=167 CLL

1978 AUG 26
CLL E 14 42 11

1978 AUG 26 SICILY MB=4,4 (2) 38,0N; 14,1E 35KM H=18 43 41,7 (NEIS)
MOX E P 18 46 43 2,1 / 29 MPV =5,0 D= 12,8 DEG AZ=171 MOX
LMH 52.8 T 12 AE 0.2 MLH =3,3
LMV 53.0 T 12 AV 0.2
BRG E P 18 46 46 D= 12,9 DEG AZ=179 BRG

1978 AUG 26
CLL E 20 06 15

1978 AUG 26 WESTERN POLAND NO MB COMP, (51,1N; 14,9E 10KM H=21 03 25,4)(NEIS)
BRG I PN 21 03 41,1 D= ,6 DEG AZ= 69 BRG
I PG 03 43,0
I SG 04 03,!
CLL E PN 21 03 47 D= 1,2 DEG AZ= 99 CLL
I PG 03 32,3 DISTANCE 220 KM
I 03 35,0
I SG 04 16,1
MOX E PN 21 04 11 D= 2,1 DEG AZ= 76 MOX
E PG 04 20 DISTANCE 2,5DEG
E SN 04 35
E SG 04 42

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1978 AUG 27     SAMOA ISLANDS REGION                          /MB=4,4 ( 2)/  16,9S;172,3W  33KM H=01 27 01    (ISC)
CLL E PKP       01 46 37                                                     D=145,4 DEG   AZ=  9       CLL
BRG E PKP       01 46 39,0                                                   D=145,7 DEG   AZ= 11       BRG
MOX E PKP       01 46 41    1.2 /   16                                       D=146,2 DEG   AZ=  7       MOX
    E           01 46 50
    E           01 47 07

1978 AUG 27     SOUTHERN IRAN                                 MB=4,4 (15)   27,2N; 56,0E  33KM H=20 18 06,7 (NEIS)
BRG E           20 25 34                                                     D= 39,6 DEG   AZ=111       BRG

1978 AUG 27     NEAR EAST COAST OF HONSHU, JAPAN              MB=4,6 ( 5)   38,8N;142,3E  47KM H=23 30 02,3 (NEIS)
BRG E P         23 42 05,5                                                   D= 79,9 DEG   AZ= 38       BRG
CLL E P         23 42 07                                                     D= 79,9 DEG   AZ= 38       CLL

1978 AUG 28     WESTERN IRAN                                  MB=5,2 (61)   32,6N; 49,8E  49KM H=00 07 04,1 (NEIS)
                                                                            32,7N; 49,8E  54KM   00 07 06,5 (CSEM)
                                                                            32,2N; 49,8E  33KM   00 06 59,7 (WDCB)
                                                                             D= 32,0 DEG   AZ=111       BRG
BRG I P         00 13 26,6C 1.1 /   54
    E           00 15 31,8
    E PCP       00 16 16,5
CLL I P         00 13 32,7C 1.2 /  100                                       D= 32,7 DEG   AZ=111       CLL
    E           00 14 09
    E PP        00 14 50
MOX E P         00 13 33,5  1.4 /   33                          MPV  =5,0    D= 33,3 DEG   AZ=108       MOX
    LMH         00 29,7
    LMV         00 30,2     T 12                    AV  0.3   MLV  =4,3

1978 AUG 28     POLAND, UPPER SILESIA
BRG E(PG)       08 25 03,8
    E SG        08 25 49,8
CLL E SG        08 26 16

1978 AUG 28     CENTRAL MID-ATLANTIC RIDGE                    MB=4,8 (26)    1,0S; 23,6W  10KM H=09 37 39,7 (NEIS)
MOX E P         09 47 46    1.1 /   14                          MPV  =5,0    D= 59,6 DEG   AZ=222       MOX
CLL E P         09 47 53                                                     D= 60,6 DEG   AZ=223       CLL
BRG E P         09 47 53,4                                                   D= 60,7 DEG   AZ=224       BRG
    E PP        09 50 07,0

1978 AUG 28     AUCKLAND ISLANDS REGION                       MB=5,6 ( 2)   50,1S;163,5E  33KM H=08 04 13,4 (NEIS)
MOX    LMH      09 48,0     T 20            AE  0.3           MLH  =5,0    D=162,1 DEG   AZ= 99       MOX
       LMV      09 48,4     T 20                    AV  0.5   MLV  =5,3

1978 AUG 28
CLL E           11 06 53

1978 AUG 28     SWITZERLAND                                   NO MB COMP.   47,4N;  8,8E  40KM H=14 44 41,2 (NEIS)
MOX E PN        14 45 33                                                     D=  3,7 DEG   AZ=211       MOX
    E PG        14 45 47,5                                                   DISTANCE   3,5DEG
    E SN        14 46 17
    I SG        14 46 32,0
CLL E SG        14 47 13                                                     D=  4,8 DEG   AZ=217       CLL
BRG E(PG)       14 46 10,7                                                   D=  4,8 DEG   AZ=226       BRG
    E SG        14 47 17,8

1978 AUG 29     UNDERGROUND EXPLOSION                         MB=5,0 (46)   49,8N; 78,0E   0KM H=02 36 58,2 (NEIS)
BRG I P         02 44 34,1C 0,9 /   23                                       D= 39,7 DEG   AZ= 66       BRG
CLL I P         02 44 37,2C 0,7 /   41                                       D= 40,1 DEG   AZ= 66       CLL
MOX I P         02 44 47,0C 0,7 /   38                          MPV  =5,2    D= 41,2 DEG   AZ= 64       MOX

1978 AUG 29     UNDERGROUND EXPLOSION                         MB=5,9 (61)   50,0N; 79,0E   0KM H=02 37 06,5 (NEIS)
BRG I P         02 44 46,1C 1.1 /  150                                       D= 40,2 DEG   AZ= 65       BRG
    I PN        46 15,7                                                      DISTANCE  38 DEG
CLL I P         02 44 49,0C 1.4 /  330  0.7 /   95  0.7 /  120              D= 40,6 DEG   AZ= 65       CLL
    E PN        46 13
    E L         58 30
      LM        03 02.0
MOX I P         02 44 59,0C 0.9 /  253                          MPV  =5,9    D= 41,7 DEG   AZ= 64       MOX
    E PN        46 30
    E           59 15
    E           59 30
      LMH       03 02.3
      LMV       02.4      T 11                    AV  0.4   MLV  =4,7

1978 AUG 29     KURILE ISLANDS                                MB=4,7 (27)   46,4N;152,7E  62KM H=03 41 43,6 (NEIS)
                                                                            46,9N;152,4E  33KM   03 41 45,0 (WDCB)
                                                                             D= 76,7 DEG   AZ= 27       CLL
CLL I P         03 53 29,0C 0.9 /   24                                       D= 76,8 DEG   AZ= 28       BRG
BRG E P         03 53 29,4                                                   D= 77,7 DEG   AZ= 26       MOX
MOX E P         03 53 34,5  1.1 /   16                          MPV  =4,9

1978 AUG 29     SOUTHWESTERN RYUKYU ISLANDS                   MB=5,3 (58)   24,9N;125,3E  48KM H=07 35 03,3 (NEIS)
                                                                            25,1N;125,4E  33KM   07 34 57,3 (WDCB)
BRG I P         07 47 23,0C 1.0 /   26                                       D= 83,4 DEG   AZ= 58       BRG
CLL I P         07 47 29,7C 1.2 /   47                                       D= 83,7 DEG   AZ= 58       CLL
      LM        08 29
MOX I P         07 47 34,0C 1.4 /   79                          MPV  =5,6
      LM        08 30,7     T 16  AN  0.4 AE  0.2 AV  0.5   MLH  =4,9 MLV  =5,1    D= 84,8 DEG   AZ= 57       MOX

1978 AUG 29     KURILE ISLANDS                                MB=4,7 (31)   44,0N;149,0E  33KM H=11 19 58,2 (NEIS)
                                                                            45,0N;148,1E  70KM   11 20 10,1 (WDCB)
CLL I P         11 31 52,5  1.2 /   22                                       D= 77,7 DEG   AZ= 31       CLL
    E AP        11 32 03
BRG E P         11 31 53,2                                                   D= 77,8 DEG   AZ= 31       BRG
    E           11 32 12,7
MOX E P         11 32 00                                                     D= 78,7 DEG   AZ= 30       MOX
    E AP        11 32 15                                                                   DEPTH  60 KM
      LMH       12 05
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1978 AUG 29     FRG, CENTRAL REGION                                                    51,0N;  6,6E       H=13 16 05    (GRF)
CLL E           13 18 27                                                                 D=  4,0 DEG   AZ=268       CLL
BRG E           13 18 45,2                                                               D=  4,6 DEG   AZ=274       BRG

1978 AUG 29     SOUTHERN IRAN                                                 MB=4,9 (47)   29,6N; 51,6E  34KM H=14 11 04,3 (NEIS)
                                                                                            29,5N; 51,7E  39KM   14 11 06,2 (CSEM)
                                                                                            29,6N; 51,5E  33KM   14 10 59,5 (WDCB)
BRG I P         14 17 57,2D 1.2 /   20                                                   D= 35,2 DEG   AZ=113       BRG
CLL I P         14 18 03,7D 1.4 /   48                                                   D= 35,9 DEG   AZ=112       CLL
MOX E P         14 18 08,5  1.7 /   39                                      MPV  =5,1    D= 36,5 DEG   AZ=110       MOX

1978 AUG 30
BRG E           01 06 31,4
CLL E           01 06 54

1978 AUG 30
CLL E           04 16 56

CLL  INTERRUPTION OF SOME RECORDS FROM 07H 02M TO 07H 36M

1978 AUG 30     TALAUD ISLANDS                                                MB=5,4 (22)    3,6N;126,8E  33KM H=08 24 54,9 (NEIS)
BRG E P         08 38 59,0                                                               D=101,4 DEG   AZ= 70       BRG

1978 AUG 30
BRG E           10 47 53,6
CLL E           10 48 14
      L         11 20

1978 AUG 30     VANUATU ISLANDS                                               MB=5,2 (20)   15,5S;167,5E 129KM H=13 26 44,4 (NEIS)
                                                                                            15,5S;167,5E  33KM   13 26 33,1 (WDCB)
BRG E PKP       13 45 56,4  1,0 /   20                                                   D=138,8 DEG   AZ= 41       BRG
    E SKP       13 49 21,2  1,0 /   12
CLL I PKP       13 45 56,4D 1,0 /   21                                                   D=138,8 DEG   AZ= 39       CLL
    E SKP       13 49 21
MOX E PKP       13 45 58,5                                                               D=139,9 DEG   AZ= 38       MOX

1978 AUG 30     POLAND, UPPER SILESIA
CLL E SG        15 13 32

1978 AUG 30     MARIANA ISLANDS REGION                                        MB=5,3 (24)   17,7N;147,8E  22KM H=15 51 24,3 (NEIS)
                                                                                            18,1N;147,6E  33KM   15 51 23,2 (WDCB)
BRG E PP        16 09 19,1                                                               D=100,6 DEG   AZ= 44       BRG
CLL E           16 09 14                                                                 D=100,7 DEG   AZ= 44       CLL
MOX E PP        16 09 24                                                                 D=101,8 DEG   AZ= 42       MOX

1978 AUG 30     MARIANA ISLANDS REGION                                        MB=5,4 (25)   17,7N;147,8E  33KM H=17 02 54,9 (NEIS)
BRG E PP        17 20 54,2                                                               D=100,6 DEG   AZ= 44       BRG

1978 AUG 30     POLAND, UPPER SILESIA
BRG E(PG)       19 10 07,1
    E SG        19 10 51,7
CLL E SG        19 11 03

1978 AUG 30     EAST PAPUA NEW GUINEA REGION                                  MB=5,4 (29)    5,9S;147,1E  76KM H=20 28 56,1 (NEIS)
                                                                                             6,4S;147,1E  33KM   20 28 42,8 (WDCB)
BRG E PKP       20 47 40,8                                                               D=120,7 DEG   AZ= 58       BRG
CLL E PKP       20 47 41                                                                 D=120,9 DEG   AZ= 56       CLL
MOX    LMV      21 31.3     T 32                    AV  0.5                              D=122,0 DEG   AZ= 55       MOX
       LMH      35.3        T 32    AN  1.0

1978 AUG 31     SICHUAN PROVINCE, CHINA                                       MB=5,1 (58)   27,6N;101,2E  42KM H=03 26 50,7 (NEIS)
                                                                                            27,4N;101,3E  33KM   03 26 48,5 (WDCB)
BRG I P         03 37 44,0D                                                              D= 67,4 DEG   AZ= 74       BRG
    I           03 54,3                                                                  DISTANCE  67 DEG
    E S         46 33,0
      LMV       04 09       T 17                    AV  1.5   MLV  =5,4
CLL I P         03 37 46,1D 1.2 /   24                                                   D= 67,9 DEG   AZ= 73       CLL
      LM        04 08       T 18    AN  1   AE  0,5 AV  1
      L         12
MOX E P         03 37 53,5                                                               D= 68,9 DEG   AZ= 72       MOX
      LMH       04 08.7     T 18    AN  1.0                 MLH  =5,1
      LMV       10.2        T 18                    AV  1.0   MLV  =5,2

1978 AUG 31
BRG E(P)        07 28 35,6

1978 AUG 31     ANDAMAN ISLANDS REGION                                        MB=4,9 (30)   10,7N; 93,1E  55KM H=08 40 22,2 (NEIS)
                                                                                            10,3N; 93,2E  33KM   08 40 17,4 (WDCB)
BRG E P         08 51 59,1  0,9 /   12                                                   D= 74,9 DEG   AZ= 92       BRG
    I           08 52 00,0
CLL E P         08 52 02                                                                 D= 75,5 DEG   AZ= 91       CLL
MOX E P         08 52 08    1,6 /   22                          MPV  =4,9    D= 76,4 DEG   AZ= 90       MOX

1978 AUG 31
CLL E P         09 51 47

1978 AUG 31     NEW BRITAIN REGION                                            MB=5,4 (14)    5,0S;151,8E 114KM H=18 01 14,5 (NEIS)
BRG I PKP       10 19 57,5D 1,0 /   16                                                   D=122,3 DEG   AZ= 52       BRG
CLL I PKP       10 19 57,7D 0,9 /   19                                                   D=122,5 DEG   AZ= 51       CLL
MOX E PKP       10 20 00,5                                                               D=123,6 DEG   AZ= 50       MOX

1978 AUG 31     MINDANAO, PHILIPPINE ISLANDS                                  MB=5,7 (61)    6,6N;126,9E  61KM H=10 08 09,8 (NEIS)
                                                                                             6,6N;126,8E  33KM   10 08 01,7 (WDCB)
BRG E P         10 21 43,4  1.1 /   23                                                   D= 99,0 DEG   AZ= 68       BRG
    I AP        10 22 03,4
      LMV       11 10       T 19                    AV  0.9   MLV  =5,3  (NO DEPTH CORRECTION)
CLL E P         10 21 47                                                                 D= 99,4 DEG   AZ= 67       CLL
    E AP        10 22 06
      LM        11 11
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                                                                                    D=100,5 DEG   AZ= 66        MOX

MOX E P          10 21 52
    E AP            22 10
      LMH        11 10,3      T 20   AN   0,3 AE   0,4
      LMV           11,0      T 20                  AV   0,5

                                                                  MB=5,6 (71)   37,3N;116,4W   0KM H=14 00 00,2 (NEIS)
1978 AUG 31      UNDERGROUND EXPLOSION                                                D= 81,2 DEG   AZ=321        MOX
                 >PANIR<                                            MPV  =5,5     D= 81,3 DEG   AZ=321        CLL
MOX I P          14 12 18,0   1,3 /   61
CLL I P          14 12 18,0C  1,5 /   61                                           D= 82,0 DEG   AZ=322        BRG
    E               12 39
BRG I P          14 12 21,8C
    E               12 43,0

                                                                  MB=4,8 (29)   34,9N;135,6E 368KM H=16 21 45,9 (NEIS)
1978 AUG 31      NEAR S. COAST OF SOUTHERN HONSHU                               34,9N;135,8E 300KM   16 21 39,9 (WDCB)
                                                                                     D= 80,5 DEG   AZ= 45        CLL
CLL E P          16 33 19

                                                                  MB=4,7 (10)   19,8N; 64,9W  45KM H=17 03 12,5 (NEIS)
1978 AUG 31      VIRGIN ISLANDS                                                       D= 67,3 DEG   AZ=274        CLL
CLL E AP         17 14 13   TRACES                                                 D= 67,9 DEG   AZ=274        BRG
BRG E AP         17 14 13,9

                                                                  MB=4,4 (15)   29,4N; 51,5E  16KM H=20 24 02,3 (NEIS)
1978 AUG 31      SOUTHERN IRAN                                                  29,4N; 51,8E  46KM   20 24 06,4 (CSEM)
                                                                                28,5N; 51,6E  33KM   20 23 59,7 (WDCB)
                                                                                     D= 35,3 DEG   AZ=113        BRG
BRG E P          20 30 57,2   1,0 /    6                                              D= 36,0 DEG   AZ=113        CLL
CLL E P          20 31 04     1,3 /   21
MOX E P          20 31 09     2,0 /   26                                  MPV  =4,7   D= 36,6 DEG   AZ=110        MOX
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1978 SEP 01      VANUATU ISLANDS                                                                  MB=5,6 (32)   17,4S;168,0E  32KM H=04 16 42,1 (NEIS)
                                                                                                                17,4S;168,1E  33KM   04 16 35,6 (WDCB)
BRG E PKP        04 36 05,5                                                                                           D=140,7 DEG   AZ= 41        BRG
    E PP            39 22
      LMV        05 48        T 18
CLL E(PKP)       04 36 07                                                  AV   3,0   MLV  =6,1
    E               38 52
    E PP            39 21                                                                                            D=140,8 DEG   AZ= 40        CLL
    E PKS           39 49
    E               40 09
      LM         05 38        T 21   AN   2,5 AE   2    AV   3     MLH  =5,9 MLV  =6,0
      FINAL      07
MOX E PKP        04 36 09
    E PP            39 18     T 11
    E SS            57 48                                             AV   1,0                                     D=141,8 DEG   AZ= 38        MOX
    E SSS        05 03 05
      LMH           47,3      T 19   AN   1,5 AE   1,3
      LMV           47,3      T 18                                    AV   1,3   MLH  =5,8
                                                                                  MLV  =5,7
1978 SEP 01      SOUTHEAST ASIA

                                                                                                 MB=4,9 (10)   20,4N;100,5E  48KM H=04 55 17,1 (NEIS)
BRG E P          05 06 40,4   1,4 /   10                                                                      20,0N;100,5E  33KM   04 55 12,9 (WDCB)
CLL E P          05 06 42                                                                                             D= 72,3 DEG   AZ= 79        BRG
                                                                                                                      D= 72,8 DEG   AZ= 79        CLL
1978 SEP 01      VANUATU ISLANDS
BRG E PKP        06 18 36,0                                                                      MB=5,0 ( 4)   17,5S;167,9E  29KM H=05 59 07,5 (NEIS)
CLL E APKP       06 18 54                                                                                             D=140,8 DEG   AZ= 41        BRG
                                                                                                                      D=140,8 DEG   AZ= 40        CLL
1978 SEP 01      KERMADEC ISLANDS
                                                                                                 MB=5,6 (16)   30,7S;178,0W  17KM H=07 14 48,6 (NEIS)
CLL E PKIKP      07 34 44     2,0 /   41                                                                      30,7S;179,0W  33KM   07 14 47,0 (WDCB)
    E PKP1          34 55                                                                                            D=157,8 DEG   AZ= 26        CLL
    I               35 16,8                                                                                          DISTANCE 158 DEG
    I PKP2          35 19,9   1,0 /   54
    E               39 16                                                    MC   =5,4
BRG I PKIKP      07 34 44,8D  1,8 /   35
    I PKP2          35 20,8                                                                                          D=158,0 DEG   AZ= 28        BRG
MOX E PKIKP      07 34 46
    E PKHKP         34 57,5                                                                                          D=158,8 DEG   AZ= 23        MOX
    E PKP2          35 21

1978 SEP 01
BRG E(P)         08 33 31,9

1978 SEP 01
CLL E            10 04 53

1978 SEP 01      SOLOMON ISLANDS                                                                 MB=6,0 (48)    7,5S;156,6E  33KM H=09 56 00,6 (NEIS)
                                                                                                                 5,9S;155,1E  33KM   09 56 13,0 (WDCB)
BRG E PKP        10 15 05,7                                                                                           D=126,9 DEG   AZ= 49        BRG
    E PP            17 09,4
    E PS            27 10
    E SS            34 22
      LMV        11 11        T 19                                      AV   7,2   MLV  =6,3
CLL E PKP        10 15 05
    I               15 25,1                                                                                          D=127,0 DEG   AZ= 47        CLL
    E PP            17 10                                                                                            DISTANCE 128 DEG
    E PPS           28,8
    E SS            34,4
      LMH        11 11        T 18   AN   3    AE   3,5 AV   5     MLH  =6,2
      LMV           16        T 18   AN   3    AE   3    AV   5,5   MLV  =6,2
      FINAL      12 30
MOX E PKP        10 15 11                                                                                         D=128,1 DEG   AZ= 46        MOX
    E PP            17 16
    E PPP           20 00
    E PKKS          28 35
    E SS            34 35
    E SSS           39 00
      LMH        11 02,5      T 21   AN   3,4 AE   4,1                  MLH  =6,2
      LMV           12,1      T 17                                    AV   3,8   MLV  =6,1

1978 SEP 01      SOLOMON ISLANDS                                                                 MB=5,5 (15)    7,5S;156,5E  16KM H=10 07 50,7 (NEIS)
BRG E PKP        10 26 54,0                                                                                           D=126,8 DEG   AZ= 49        BRG
CLL E(PKP)       10 27 02                                                                                             D=127,0 DEG   AZ= 48        CLL
MOX E PKP        10 27 03   TRACES                                                                                    D=128,1 DEG   AZ= 46        MOX

1978 SEP 01      SOUTH OF AUSTRALIA                                                                 /NO MB COMP./  51,5S;139,0E   0KM H=10 53 01,6 (ISC)
CLL E PKP1       11 12 48                                                                                             D=147,0 DEG   AZ=112        CLL

1978 SEP 01
MOX   LMH        18 52,1      T 20              AE   0,3
      LMV           53,7      T 18                   AV   0,5

1978 SEP 01      SICHUAN PROVINCE, CHINA                                                         MB=4,7 (28)   27,6N;101,2E  33KM H=18 45 45,3 (NEIS)
                                                                                                               27,2N;101,4E  33KM   18 45 37,3 (WDCB)
BRG E P          18 56 39,8   1,2 /   11                                                                             D= 67,4 DEG   AZ= 74        BRG
CLL E P          18 56 42     1,4 /   14                                                                             D= 67,9 DEG   AZ= 73        CLL
MOX E P          18 56 49                                                                                            D= 68,9 DEG   AZ= 72        MOX
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1978 SEP 01     GREECE                                          MB=4,8 (10)   39,1N; 21,5E  37KM H=22 46 16,6 (NEIS)
                                                                              39,2N; 21,6E  35KM   22 46 20,1 (CSEM)
                                                                              39,0N; 21,2E  33KM   22 46 14,3 (WDCB)
BRG E P         22 49 19,2                                                    D= 12,9 DEG   AZ=153       BRG
    E(S)           51 44,0                                                    DISTANCE  13 DEG
      LMV          55        T 10                    AV   2,2
MOX E P         22 49 32                                                      D= 13,5 DEG   AZ=145       MOX
    E(S)           51 44
      LMH          54,2      T 14   AN   0,6 AE   0,7          MLH  =4,0
      LMV          55,3      T 11                  AV   1,1
CLL I PP        22 49 37,7  1,3 /   25                                       D= 13,6 DEG   AZ=151       CLL
    E(S)           51 46
    E              53 23
    E              53,9
      LM           55,1      T 11   AN   1,5 AE   0,5 AV   1,5  MLH  =4,3

1978 SEP 01
CLL E           23 42 51    TRACES

1978 SEP 01     NEAR EAST COAST OF HONSHU, JAPAN                MB=4,8 ( 3)   35,8N;141,0E  33KM H=23 37 18,4 (NEIS)
CLL E P         23 49 37                                                      D= 82,0 DEG   AZ= 40       CLL
    E AP           49 50

1978 SEP 02     TAIWAN REGION                                   MB=6,1 (93)   24,9N;122,0E 109KM H=01 57 33,4 (NEIS)
                                                                              25,0N;122,2E 100KM   01 57 32,4 (WDCB)
BRG I P         02 09 40,3C 2,0 /  346                                        D= 81,6 DEG   AZ= 61       BRG
    I PCP          09 48,0                                                    DISTANCE  81 DEG.
    I AP           10 06,7
    I PP           12 46,8
    I S            19 43,0
    E XS           20 28,0
    E PKKP1        28 12,3
      LMV          55        T 16                  AV   6,0
CLL I P         02 09 42,0C 1,9 /  380                  MPV  =5,9             D= 81,9 DEG   AZ= 60       CLL
    I PCP          09 48,2                                                    DISTANCE  82 DEG  DEPTH 100 KM
    E AP           10 09
    E S            19 45     T 11   AN   3,4 AE   4,0          MSH  =6,7
    E XS           20 25
    E SS           25,0
    E PKKP1        28 12
    E SSS          28,8
    E SSSS         31,1
    E PKPPKP       36 18
      LH           40        T 10   AN   4   AE   2,5
      LM           51        T 15   AN   3   AE   2,5 AV   3    MLH  =5,9 MLV  =5,9 (NO DEPTH CORRECTION)
MOX I P         02 09 47,5C 1,9 /  311                  MPV  =5,9             D= 83,0 DEG   AZ= 59       MOX
                               T  9                  AV   2,2  MPV  =6,0
    I S            19 56     T 13,5 AN   3,0 AE   2,8          MSH  =6,5
    I PS           20 42
    E SS           25 08
    E PKKP         28 11   1,2 /   20
      LMH          52,3      T 16   AN   2,0 AE   3,5
      LMV          55,1      T 15                  AV   3,0

1978 SEP 02     FIJI ISLANDS REGION                            /MB=4,5 ( 1)/  20,7S;178,0W 543KM H=02 43 18,7  (ISC)
CLL I PKP1      03 02 05,4  0,8 /   17                                        D=148,3 DEG   AZ= 20       CLL
BRG E PKP1      03 02 05,8                                                    D=148,5 DEG   AZ= 22       BRG
    I PKP2         02 10,2

1978 SEP 02     SOLOMON ISLANDS                                 MB=5,5 (29)    7,2S;156,6E  33KM H=03 24 08,4 (NEIS)
                                                                               7,1S;156,8E  33KM   03 24 02,9 (WDCB)
BRG E PKP       03 43 10,4                                                    D=126,6 DEG   AZ= 49       BRG
CLL E APKP      03 43 21    TRACES                                            D=126,7 DEG   AZ= 47       CLL
MOX   LMH       04 41,3     T 20           AE   2,1          MLH  =5,9        D=127,8 DEG   AZ= 46       MOX
      LMV          46,0     T 17                  AV   0,6  MLV  =5,4

1978 SEP 02     FIJI ISLANDS REGION                             MB=5,2 ( 2)   17,0S;177,2W  33KM H=03 43 19,0 (NEIS)
BRG E PKP       04 03 00,8                                                    D=145,0 DEG   AZ= 19       BRG
MOX E PKP       04 02 58                                                      D=145,7 DEG   AZ= 15       MOX

1978 SEP 02     SOLOMON ISLANDS                                 MB=5,2 (17)    7,5S;156,6E  33KM H=05 47 28,3 (NEIS)
                                                                               7,5S;156,5E  33KM   05 47 28,3 (WDCB)
BRG E PKP       06 06 29,1                                                    D=126,9 DEG   AZ= 49       BRG
MOX   LMH       07 08,5     T 17   AN   0,5 AE   0,3          MLH  =5,3        D=128,1 DEG   AZ= 46       MOX
      LMV          08,5     T 20                  AV   0,4  MLV  =5,1

1978 SEP 02     POLAND, UPPER SILESIA
BRG E(PG)       07 11 36,0
    E SG           12 18
CLL E           07 12 43

1978 SEP 02
BRG E(PG)       08 58 05,8
    E SG           58 34,5

1978 SEP 02     POLAND, UPPER SILESIA
BRG E(PG)       12 04 45,5
    E(SG)          05 27,5
CLL E SG        12 05 54

1978 SEP 02     SAMOA ISLANDS REGION                            MB=4,6 ( 3)   16,0S;172,9W  39KM H=15 39 27,1 (NEIS)
BRG E PKP       15 59 01,6                                                    D=144,8 DEG   AZ= 11       BRG
MOX E PKP       15 59 03                                                      D=145,2 DEG   AZ=  8       MOX

1978 SEP 02     NORTHERN ITALY                                  NO MB COMP.   46,7N; 11,6E  10KM H=16 08 13,2 (NEIS)
                                                                              46,6N; 11,6E  10KM   16 08 14,7 (CSEM)
MOX E           16 09 21                                                      D=  3,9 DEG   AZ=180       MOX
    E PG           09 31
    E SN           09 58
    E SG           10 20
  (CONT.)
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  (CONT.)

BRG E SN        16 10 12,9                                                    D=  4,5 DEG   AZ=201       BRG
    E SG           10 39,6
CLL E SG        16 10 42                                                      D=  4,7 DEG   AZ=192       CLL

1978 SEP 02     CHIAPAS, MEXICO
MOX E P         16 16 15                                        MB=4,8 (39)   16,9N; 93,7W 125KM H=16 03 44,2 (NEIS)
    E AP           16 50                                                      D= 86,5 DEG   AZ=292       MOX
CLL E P         16 16 16                                                                    DEPTH 144 KM
    E AP           16 53                                                      D= 87,0 DEG   AZ=293       CLL
BRG I P         16 16 20,8  0,9 /   17                                        D= 87,7 DEG   AZ=294       BRG

1978 SEP 02
CLL E           20 23 07

1978 SEP 02
BRG E P         21 41 43,2  1,4 /    7
CLL E           21 41 50

1978 SEP 02     SOUTH OF FIJI ISLANDS                          /MB=4,6 ( 1)/  25  S;178,1W 313KM H=23 07 30    (ISC)
CLL I PKP1      23 26 55,9D                                                   D=152   DEG   AZ= 22       CLL
    E              29 01
BRG I PKP1      23 26 56,3  0,7 /    9                                        D=153   DEG   AZ= 24       BRG

1978 SEP 03     WESTERN CAUCASUS                                MB=5,7 (80)   44,4N; 38,1E  33KM H=00 21 15,6 (NEIS)
                                                                              44,5N; 38,0E  10KM   00 21 15,5 (CSEM)
BRG I P         00 25 14,1  3,0 /  442                                        44,6N; 38,0E  33KM   00 21 15,2 (WDCB)
    I              25 19,4  1,5 /  379          MPV  =5,3        D= 17,5 DEG   AZ=102       BRG
    I PP           25 28,4                                                    DISTANCE  17 DEG
      LMV          33        T 15                  AV   7,3  MLV  =5,2
CLL I P(1)      00 25 22,0C 1,8 /  220
    I P(2)         25 27,4D 1,6 /  840  1,6 /  170  1,6 /  500               D= 18,1 DEG   AZ=103       CLL
    I PP           25 38                                                      DISTANCE ( 19)DEG DEPTH > N
    E S            28 50     T  8,5 AN   3,2 AE   1,2 AV   1,1
    I SSS          29 26,2D 1,7 /  200
    E LG2          31 31
    I              31 38,5
      LMH          32        T 23   AN  16,5 AE   4            MLH  =5,2
      LMV          33        T 14   AN   8   AE   4,5 AV   5,5  MLV  =5,1
      FINAL     01 30
MOX E P         00 25 33    1,5 /  292          MPV  =5,2        D= 18,9 DEG   AZ= 99       MOX
    E S            29 05
      LMH          32,9      T 20   AN  11,9     MLH  =5,2
      LMV          38,1      T 11                  AV   5,3  MLV  =5,3

1978 SEP 03     EL SALVADOR                                     MB=4,8 (10)   13,4N; 89,7W  58KM H=01 03 22,7 (NEIS)
CLL E P         01 16 06    TRACES                                            D= 87,4 DEG   AZ=288       CLL

1978 SEP 03     FRG, SOUTHWESTERN REGION                       (MB=4,9 (17))
                SWABIAN JURA                                                  48,3N;  9,0E   6KM H=05 08 31,7 (CSEM)
                                                                              48,3N;  9,0E   8KM   05 08 30,2 (NEIS)
MOX I PN        05 09 16,0C                                                   48,6N;  9,4E  33KM   05 08 32,4 (WDCB)
    I PG           09 24,0                                                    D=  2,9 DEG   AZ=217       MOX
    I SN           09 52,0
    I SG           10 00,0
      LMH          10,2      T  5   AN 138,4 AE 252,4          MLH  =5,8
      LMV          10,3      T  6                  AV 129,0
CLL I PN        05 09 30,2C                                                   D=  4,0 DEG   AZ=222       CLL
    E PG           09 46                                                      DISTANCE   3,9DEG
    E              10 21
    E              10 24
    E              10 27
    E SG           10 38
      LM           10,9      T  7   AN( 90)  AE( 60)  AV( 75)   MLH  =5,6
BRG I PN        05 09 32,3C 1,2 /  260                                        D=  4,1 DEG   AZ=233       BRG
    I PG           09 48,8                                                    DISTANCE   4,1DEG
    I SG           10 42,4
      LMV          11        T  5                  AV  52,0

1978 SEP 03     FRG, SOUTHWESTERN REGION                       NO MB COMP.
                SWABIAN JURA                                                  48,3N;  9,0E   6KM H=05 23 35   (CSEM)
                                                                              48,3N;  9,0E  10KM   05 23 32,1 (NEIS)
MOX E PN        05 24 18                                                      D=  2,9 DEG   AZ=217       MOX
    I PG           24 26,0
    I SN           24 52,0
    I SG           25 03,0
CLL E PN        05 24 34                                                      D=  4,0 DEG   AZ=222       CLL
    I PG           24 48,8                                                    DISTANCE   3,9DEG
    I SG           25 39,5
BRG E PN        05 24 36,9                                                    D=  4,1 DEG   AZ=233       BRG
    I PG           24 50,7
    I SG           25 45,4

1978 SEP 03     FRG, SOUTHWESTERN REGION
                SWABIAN JURA                                                  48,3N;  9,0E   6KM H=05 27 34   (CSEM)
MOX E PN        05 28 15                                                      D=  2,9 DEG   AZ=217       MOX
    E PG           28 25
    E SG           29 02
CLL E PG        05 28 47                                                      D=  4,0 DEG   AZ=222       CLL
    E SG           29 39                                                      DISTANCE   3,9DEG
BRG I PG        05 28 49,5                                                    D=  4,1 DEG   AZ=233       BRG
    I SG           29 41,8

1978 SEP 03     FRG, SOUTHWESTERN REGION                       NO MB COMP.
                SWABIAN JURA                                                  48,3N;  9,0E   6KM H=05 34 21   (CSEM)
                                                                              48,3N;  8,9E  10KM   05 34 18,5 (NEIS)
MOX E PN        05 35 04                                                      D=  2,9 DEG   AZ=217       MOX
    I PG           35 12,0
    I SN           35 39,0
    I SG           35 50,0
CLL E PN        05 35 18                                                      D=  4,0 DEG   AZ=222       CLL
    I PG           35 35,1                                                    DISTANCE   3,9DEG
    I SG           36 26
      LM           36,5
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BRC E PN        05 35 11.8
    I PG        35 17.1
    I SG        36 12.5
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E           05 41 13
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        06 24 47.5
    I PG        24 19
    I SN        25 05.0
    I SG        25 16.5
CLL E SG        06 26 12
ERC I PG        06 29 13.2
    I SG        26 19.6
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        06 55 12.0
    I SG        55 15.5
    E SN        55 44.5
BRC E SG        06 56 16.5
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E SG        07 10 13
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        07 15 49.0
    I PG        15 16.0
    I SN        16 02.0
    I SG        16 13.0
CLL E SG        07 17 09
ERC E PG        07 16 02.3
    E SG        17 23.6
1978 SEP 03  KUPILE ISLANDS
CLL I P         07 42 43.8  1.7 / 120
    I PCP       43 33.3
    E           43 33
ERC I P         07 42 53.9  1.4 / 46
    I PCP       42 55.6
MOX E P         07 43 07    1.1 / 62
    E           43 12
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E PC        08 10 43
    E SN        07 36
    E SG        07 46
CLL E SG        08 02 02
ERC E(PC)       08 07 13.4
    E SG        08 07 17.1
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E PC        08 10 43
    E SN        07 36
    E SG        07 46
CLL E SG        08 02 02
ERC E(PC)       08 07 13.4
    E SG        08 07 17.1
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        08 21 41
    E SG        22 18
ERC E SG        06 23 13
CLL E SG        06 23 13
DRC E SG        06 23 33.9
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E PN        06 24 06
    E PG        24 19
    I SG        25 16.5
ERC I PG        06 25 13.2
    I SG        26 19.6
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        06 24 47.5
    I PG        24 19
    I SN        25 05.0
    I SG        25 16.5
CLL E SG        06 26 12
ERC I PG        06 25 13.2
    I SG        26 19.6
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        06 55 12.0
    E SN        55 44.5
    I SG        55 15.5
BRC E SG        06 56 16.5
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E SG        07 10 13
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        07 15 49.0
    I PG        15 16.0
    I SN        16 02.0
    I SG        16 13.0
CLL E SG        07 17 09
ERC E PG        07 16 02.3
    E SG        17 23.6
1978 SEP 03  KUPILE ISLANDS
CLL I P         07 42 43.8  1.7 / 120
    I PCP       43 33.3
    E           43 33
ERC I P         07 42 53.9  1.4 / 46
    I PCP       42 55.6
MOX E P         07 43 07    1.1 / 62
    E           43 12
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E PC        08 10 43
    E SN        07 36
    E SG        07 46
CLL E SG        08 02 02
ERC E(PC)       08 07 13.4
    E SG        08 07 17.1
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        08 21 41
    E SG        22 18
ERC E SG        06 23 13
CLL E SG        06 23 13
DRC E SG        06 23 33.9
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX E PN        06 24 06
    E PG        24 19
    I SG        25 16.5
ERC I PG        06 25 13.2
    I SG        26 19.6
1978 SEP 03  FRG, SOUTHWESTERN REGION
             SHABIAT JUPA
MOX I PN        06 55 12.0
    I SG        55 15.5
    E SN        55 44
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BRG E SG 21 36 15,8 D= 3,8 DEG AZ=203 BRG
CLL E SG 21 36 25 D= 4,0 DEG AZ=192 CLL

1978 SEP 03 SOUTHERN SUMATERA MB=4,9 (6) 2,3S; 99,8E 33KM H=21 43 20,0 (NEIS)
1,7S; 99,8E 33KM 21 43 23,2 (WDCB)
D= 89,1 DEG AZ= 95 BRG
BRG E P 21 56 15,8
E AP 56 25,1

1978 SEP 03
CLL E 23 12 11

1978 SEP 04 POLAND, UPPER SILESIA 50,3N; 19,0E 10KM H=00 27 09,8 (CSEM)
BRG E(PG) 00 28 07,6 D= 3,3 DEG AZ= 98 BRG
I SG 28 53,9 DISTANCE 3,6DEG
CLL E PG 00 28 23 D= 3,9 DEG AZ=103 CLL
E SG 29 17 DISTANCE 4,0DEG
MOX E SG 00 29 38 D= 4,7 DEG AZ= 91 MOX

1978 SEP 04 FRG, SOUTHWESTERN REGION NO MB COMP. 48,2N; 9,0E 10KM H=00 30 48,0 (NEIS)
SWABIAN JURA D= 3,0 DEG AZ=216 MOX
MOX E SG 00 32 19 D= 4,2 DEG AZ=232 BRG
BRG E SG 00 33 03,2

1978 SEP 04 FRG, SOUTHWESTERN REGION NO MB COMP. 48,3N; 9,0E 6KM H=06 41 06 (CSEM)
SWABIAN JURA 48,2N; 8,9E 10KM 06 41 04,9 (NEIS)
D= 2,9 DEG AZ=217 MOX
MOX I PG 06 41 57,0
I SG 42 35,0 D= 4,0 DEG AZ=222 CLL
CLL E PG 06 42 19 DISTANCE 3,9DEG
E SG 43(16) D= 4,1 DEG AZ=233 BRG
BRG E PG 06 42 22,1 DISTANCE 4,2DEG
E SG 43 16,4

1978 SEP 04 VANUATU ISLANDS MB=5,4 (9) 20,7S;169,4E 33KM H=13 03 46,3 (NEIS)
20,1S;170,2E 33KM 13 03 41,2 (WDCB)
BRG I PKP 13 23 17,8C 1,0 / 77 D=144,2 DEG AZ= 42 BRG
CLL I PKP 13 23 17,9C 1,5 / 84 D=144,3 DEG AZ= 40 CLL
E 23 31
E 23 35
MOX E PKP 13 23 21,5 1,4 / 93 D=145,4 DEG AZ= 39 MOX
E 23 35

1978 SEP 04
BRG E(PG) 15 11 52,8
E SG 12 28,9

1978 SEP 04 POLAND, UPPER SILESIA /NO MB COMP./ 50,4N; 19,1E 0KM H=15 31 39 (ISC)
BRG E(PG) 15 32 42 D= 3,3 DEG AZ= 96 BRG
E SG 33 25,3
CLL E PG 15 32 57 D= 4,0 DEG AZ=101 CLL
E SG 33 48 DISTANCE 4,0DEG
MOX E SG 15 34 11 D= 4,8 DEG AZ= 90 MOX

1978 SEP 04
CLL E 17 16 15

1978 SEP 04 FRG, SOUTHWESTERN REGION NO MB COMP.
SWABIAN JURA 48,2N; 8,8E 10KM H=22 26 13,8 (NEIS)
MOX E SG 22 27 44,5 D= 3,1 DEG AZ=218 MOX
BRG E SG 22 28 23,4 D= 4,3 DEG AZ=233 BRG

1978 SEP 04
CLL E 22 40 19

1978 SEP 04
MOX LMH 22 41,1 T 19 AN 0,3 AE 0,4
LMV 45,8 T 14 AV 0,3

1978 SEP 05 EASTERN KAZAKH SSR /MB=4,6 (5)/ 48,6N; 78,7E 0KM H=00 23 06,6 (ISC)
CLL I P 00 30 54,4D D= 41,1 DEG AZ= 67 CLL

1978 SEP 05 FRG, SOUTHWESTERN REGION NO MB COMP.
SWABIAN JURA 48,3N; 9,0E 6KM H=00 49 45 (CSEM)
48,3N; 9,1E 10KM 00 49 42,8 (NEIS)
MOX E PN 00 50 29 MOX
I PG 50 39,0 D= 2,9 DEG AZ=217
I SN 51 04,0
I SG 51 14,5
CLL E SG 00 51 51 D= 4,0 DEG AZ=222 CLL
BRG E PG 00 51 04,5 D= 4,1 DEG AZ=233 BRG
E SG 51 58,7

1978 SEP 05 KERMADEC ISLANDS REGION MB=5,2 (6) 29,3S;176,8W 33KM H=01 47 09,3 (NEIS)
29,1S;176,9W 33KM 01 47 03,9 (WDCB)
CLL E PKP2 02 07 30 2,1 / 51 CLL
E APKP2 07 42 D=156,8 DEG AZ= 22
BRG E(PKIKP) 02 06 58,6 BRG
E PKP2 07 32,5 D=157,0 DEG AZ= 25
MOX LMH 03 20,0 MOX
LMV 23 D=157,8 DEG AZ= 20

1978 SEP 05 KERMADEC ISLANDS REGION MB=5,2 (1) 29,1S;176,9W 72KM H=03 20 26,3 (NEIS)
CLL E(PKP) 03 40 37 D=156,6 DEG AZ= 22 CLL
BRG E PKP2 03 40 45,2 D=156,8 DEG AZ= 25 BRG

1978 SEP 05 OFF W. COAST OF NORTH, SUMATERA MB=4,8 (13) 4,1N; 90,3E 33KM H=03 39 40,1 (NEIS)
BRG E P 03 51 38,8 D= 78,2 DEG AZ= 98 BRG
CLL I P 03 51 41,9 1,4 / 16 D= 78,9 DEG AZ= 97 CLL
MOX E P 03 51 47 1,2 / 12 MPV =4,8 D= 79,7 DEG AZ= 96 MOX

1978 SEP 05 TAIWAN MB=5,2 (26) 24,0N;121,7E 17KM H=03 42 32,2 (NEIS)
24,7N;121,1E 33KM 03 42 35,2 (WDCB)
BRG E P 03 54 53,3 2,0 / 31 D= 82,2 DEG AZ= 62 BRG
(CONT.)

(CONT.)

CLL E 03 55 14 1,6 / 33 D= 82,5 DEG AZ= 61 CLL
E PP 57 58
E S 04 05 11
LM 35 T 15 AN 1,5 AE 2 AV 3,5 MLH =5,7 MLV =5,9
MOX E 03 55 16 D= 83,6 DEG AZ= 60 MOX
E S 04 05 20
LMH 37,2 T 14 AN 2,3 AE 2,3 MLH =5,9
LMV 37,3 T 12 AV 3,1 MLV =5,9

1978 SEP 05 KURILE ISLANDS MB=4,6 (32) 49,8N;155,1E 111KM H=07 55 47,2 (NEIS)
50,0N;155,0E 100KM 07 55 48,1 (WDCB)
CLL E P 08 07 14 D= 74,2 DEG AZ= 24 CLL

1978 SEP 05 LOYALTY ISLANDS MB=4,2 (1) 20,3S;168,8E 33KM H=08 58 18,4 (NEIS)
BRG E PKP 09 17 49,4 D=143,6 DEG AZ= 42 BRG
CLL E PKP 09 17 49 D=143,7 DEG AZ= 41 CLL
MOX E PKP 09 17 53,5 1,4 / 23 D=144,8 DEG AZ= 39 MOX
E 18 03,5

1978 SEP 05 LOYALTY ISLANDS NO MB COMP. 20,3S;168,7E 33KM H=09 20 47,2 (NEIS)
MOX E PKP 09 40 21 TRACES D=144,7 DEG AZ= 39 MOX

1978 SEP 05
CLL E 10 48 38

1978 SEP 05
CLL E PG 12 23 57 DISTANCE 175 KM
I SG 24 18,0
E L 24 40
BRG E 12 24 04,4
E SG 24 37

1978 SEP 05 ROMANIA MB=4,4 (7) 45,7N; 26,5E 152KM H=13 36 10,9 (NEIS)
45,7N; 26,6E 146KM 13 36 12,0 (CSEM)
45,7N; 26,4E 150KM 13 36 11,4 (WDCB)
BRG E(P) 13 38 37,2 D= 9,8 DEG AZ=117 BRG
CLL E(P) 13 38 46 D= 10,6 DEG AZ=117 CLL
MOX E P 13 38 46 TRACES D= 11,1 DEG AZ=111 MOX

1978 SEP 05
CLL E 16 31 42

1978 SEP 05 FRG, SOUTHWESTERN REGION NO MB COMP. 48,3N; 9,0E 6KM H=18 25 08 (CSEM)
SWABIAN JURA 48,3N; 9,0E 10KM 18 25 05,8 (NEIS)
D= 2,9 DEG AZ=217 MOX
MOX E PN 18 25 51,5
I PG 26 00,0
I SN 26 25,5
I SG 26 36,5
CLL E PG 18 26 22 D= 4,0 DEG AZ=222 CLL
E SG 27 13 DISTANCE 3,9DEG
BRG E PG 18 26 26,8 D= 4,1 DEG AZ=233 BRG
E SG 27 17,8

1978 SEP 05
CLL E 18 37 06

1978 SEP 05 SOLOMON ISLANDS MB=5,4 (23) 6,6S;155,0E 52KM H=19 40 28,2 (NEIS)
6,3S;154,8E 33KM 19 40 22,0 (WDCB)
BRG E PKP 19 59 24,6 0,9 / 11 D=125,3 DEG AZ= 50 BRG
CLL I PKP 19 59 24,8D 0,8 / 12 D=125,5 DEG AZ= 49 CLL

1978 SEP 06 NEAR COAST OF CHIAPAS, MEXICO MB=5,0 (11) 14,4N; 93,0W 33KM H=01 01 09,1 (NEIS)
MOX E P 01 14 00 D= 88,0 DEG AZ=290 MOX
E SKS 24 30
E PS 25 50
LMH 55,5 T 17 AN 0,4 AE 0,6 MLH =5,2
LMV 55,9 T 18,5 AV 0,6 MLV =5,1
CLL E(P) 01 14 04 D= 88,6 DEG AZ=291 CLL
E 15 06
E S 24 39
LM 56
BRG E P 01 14 05,0 D= 89,3 DEG AZ=292 BRG
E SKS 24 36,0
LMV 58 T 17 AV 1,0 MLV =5,3

1978 SEP 06
CLL E 01 58 31

1978 SEP 06 COSTA RICA MB=4,7 (12) 10,4N; 85,2W 8KM H=02 01 33,5 (NEIS)
CLL E P 02 14 20 D= 87,0 DEG AZ=283 CLL
BRG E P 02 14 24,6 D= 87,7 DEG AZ=284 BRG

1978 SEP 06 LOYALTY ISLANDS MB=5,5 (24) 20,1S;168,7E 36KM H=04 01 53,5 (NEIS)
20,2S;168,7E 33KM 04 01 48,3 (WDCB)
D=143,4 DEG AZ= 42 BRG
BRG I PKP 04 21 23,0 2,1 / 151
I APKP 21 35,8
E PP 24 40
E SKP 25 29,6
LMV 05 32 T 18 AV 4,7 MLV =6,3
CLL I PKP 04 21 23,2C 2,4 / 280 D=143,5 DEG AZ= 41 CLL
E APKP 21 33
E PP 24 44
LM 05 32 T 18 AN 3,5 AE 1 AV 4,5 MLH =6,1 MLV =6,3
FINAL 07
MOX E PKP 04 21 27 2,4 / 414 D=144,5 DEG AZ= 39 MOX
T 8 AV 4,4
E APKP 21 38
E SKP 25 33,5 1,8 / 88
E 25 43
E SS 43 40
LM 05 34 T 19 AN 3,1 AE 1,7 AV 3,6 MLH =6,1 MLV =6,2

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1978 SEP 06     POLAND, UPPER SILESIA
CLL E           05 00 07

1978 SEP 06     KERMADEC ISLANDS REGION                    MB=5,4 ( 4)   29,4S;176,7W  47KM H=08 22 08,5 (NEIS)
                                                                         29,2S;176,6W  33KM   08 22 03,1 (WDCB)
                                                                                 D=156,9 DEG   AZ= 22       CLL
CLL E PKIKP     08 42 01
    E PKP2        42 33
    E(PP)         46 21
      LM        09 57
BRG E           08 42 15,8                                                     D=157,1 DEG   AZ= 24       BRG
    E PKP2        42 32,0
MOX E PKP2      08 42 35                                                       D=157,9 DEG   AZ= 20       MOX
      LMV       10 03       T 18                  AV   0,6   MLV  =5,4
      LMH         04        T 18   AN   0,6              MLH  =5,4

1978 SEP 06
CLL E           11 21 19

1978 SEP 06     VANUATU ISLANDS                            MB=6,0 (58)   13,3S;160,1E 198KM H=11 07 43,1 (NEIS)
                                                                         13,1S;166,7E 180KM   11 07 42,9 (WDCB)
                                                                                 D=133,6 DEG   AZ= 48       BRG
BRG I(PKHKP)    11 26 31,3  1,2 /   30
    I PKIKP       26 44,3  1,4 /  305
    E APKP        27 33,0
    E PP          29 29
    I SKP         29 59,1
    E PKS         30 22,0
    E PCPPKP      38 50,2
      LMV       12 29       T 19                  AV   5,1
CLL E           11 26 24                                                       D=133,7 DEG   AZ= 47       CLL
    E             26 30                                                      DISTANCE 137,5DEG DEPTH 200 KM
    I(PKHKP)      26 32,4
    I PKIKP       26 43,1C 1,5 /  380
    E             27 07
    E APKP        27 33
    I PP          29 29,0   T 12                  AV   2,6   MPPV =6,0
    I SKP         29 59,3
    E             31 06
    E SKKS        36,0
    E(SPP)        41 12
      FINAL     13 30
MOX E PKHKP     11 26 35                                                       D=134,8 DEG   AZ= 46       MOX
    E PKIKP       26 45,5  1,6 /  253
    E APKP        27 20
    E PP          29 35     T 11                  AV   3,8   MPPV =6,3
    E SKP         30 02
    E PKS         30 11
    E             36 10
    E             42 25
    E SS          47 30
    E SSS         52 30
      LMH       12 26       T 24   AN   4,4
      LMV         26        T 20                  AV   5,4

1978 SEP 06     SOUTHERN IRAN                              MB=4,6 (19)   28,2N; 57,2E  33KM H=13 00 53,4 (NEIS)
                                                                         28,7N; 57,4E  10KM   13 00 54,7 (CSEM)
                                                                         27,6N; 57,3E  33KM   13 00 49,6 (WDCB)
BRG E P         13 08 23,6                                                      D= 39,6 DEG   AZ=108       BRG
CLL I P         13 08 29,4D 1,2 /   17                                          D= 40,3 DEG   AZ=108       CLL

1978 SEP 06     PANAY, PHILIPPINE ISLANDS                  MB=5,2 (24)   10,4N;122,5E  52KM H=14 46 38,5 (NEIS)
                                                                         10,3N;122,6E  33KM   14 46 35,9 (WDCB)
BRG I P         14 59 50,3C 1,1 /   10                                          D= 93,4 DEG   AZ= 69       BRG
CLL E P         14 59 51                                                        D= 93,8 DEG   AZ= 68       CLL

1978 SEP 06
BRG E(P)        18 38 07,0

1978 SEP 06     ICELAND                                    MB=4,1 (11)   64,5N; 18,0W  10KM H=19 23 08,6 (NEIS)
                                                                         63,2N; 18,2W  10KM   19 23 20,6 (CSEM)
                                                                                 D= 20,8 DEG   AZ=321       CLL
CLL E(P)        19 27 57    TRACES                                               D= 21,5 DEG   AZ=321       BRG
BRG E P         19 28 01,4

1978 SEP 06     TONGA ISLANDS                              MB=5,4 ( 6)   15,4S;173,3W  33KM H=23 26 23,6 (NEIS)
                                                                         14,3S;173,0W  33KM   23 26 27,7 (WDCB)
CLL E(PKP)      23 46 04                                                        D=143,8 DEG   AZ= 10       CLL
BRG I(PKP)      23 45 58,7                                                      D=144,1 DEG   AZ= 12       BRG
MOX E PKP       23 45 58,5 TRACES                                               D=144,6 DEG   AZ=  8       MOX

1978 SEP 07
CLL E           01 53 42

1978 SEP 07     IONIAN SEA                                 MB=4,5 (17)   37,8N; 20,9E  43KM H=04 53 54,7 (NEIS)
                                                                         37,9N; 21,0E  43KM   04 53 57,8 (CSEM)
                                                                         37,5N; 20,8E  33KM   04 53 51,0 (WDCB)
BRG E P         04 57 12,4                                                      D= 14,0 DEG   AZ=157       BRG
    I             57 22,0
    E             57 47,5
MOX E P         04 57 18,5  0,7 /   13                MPV  =4,7
      LM        05 03,9                                                         D= 14,4 DEG   AZ=149       MOX
CLL E P         04 57 22
    I             57 28,0                                                     D= 14,6 DEG   AZ=154       CLL
    E LI        05 01 17
    E L           03 42

1978 SEP 07     UNIMAK ISLAND REGION                       MB=5,1 (58)   54,0N;164,0W  40KM H=05 54 35,0 (NEIS)
                                                                         53,3N;163,8W  33KM   05 54 24,8 (WDCB)
CLL E P         06 06 13                                                        D= 75,0 DEG   AZ=358       CLL
BRG E P         06 06 16,0                                                      D= 75,5 DEG   AZ=359       BRG
MOX E P         06 06 17,5                                                      D= 75,7 DEG   AZ=357       MOX

1978 SEP 07
CLL E           09 25 22
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1978 SEP 07
CLL E           11 48 46

1978 SEP 07
CLL E           16 26 06
BRG E           16 26 07,4

1978 SEP 07     VIRGIN ISLANDS
CLL E AP        20 07 28                                   MB=4,8 ( 4)   19,8N; 64,9W  41KM H=19 56 24,9 (NEIS)
BRG I P         20 07 21,0  1,0 /    9                                          D= 67,3 DEG   AZ=274       CLL
                                                                                D= 67,9 DEG   AZ=274       BRG

1978 SEP 07     VIRGIN ISLANDS
CLL E AP        20 47 45                                   MB=5,0 ( 5)   19,9N; 64,9W  37KM H=20 36 42,6 (NEIS)
BRG E P         20 47 40,2                                                      D= 67,2 DEG   AZ=274       CLL
    E AP          47 50,8                                                     D= 67,8 DEG   AZ=275       BRG

1978 SEP 08
BRG E P         02 58 27,2

1978 SEP 08     VANUATU ISLANDS                            MB=5,3 (16)   16,0S;167,6E  39KM H=06 02 48,6 (NEIS)
                                                                         15,9S;167,6E  33KM   06 02 48,6 (WDCB)
BRG E PKP       06 22 12,7                                                      D=139,3 DEG   AZ= 41       BRG
    I             22 28,7
CLL I PKP       06 22 15,1D                                                     D=139,3 DEG   AZ= 39       CLL
    E APKP        22 24

1978 SEP 08     NORTHERN ITALY              FRIULI         NO MB COMP.   46,3N; 13,4E  10KM H=08 03 03,5 (CSEM)
                                                                         46,3N; 13,2E  10KM   08 03 02,2 (NEIS)
MOX E PN        08 04 11,5                                                      D=  4,5 DEG   AZ=164       MOX
    E SG          05 22
BRG E PG        08 04 32,2                                                      D=  4,6 DEG   AZ=185       BRG
    E SN          05 05,9                                                     DISTANCE   4,7DEG
    I SG          05 31,5
CLL E SG        08 05 42                                                        D=  5,0 DEG   AZ=177       CLL

1978 SEP 08     TAIWAN                                     MB=5,0 (13)   24,1N;121,9E  19KM H=12 19 04,9 (NEIS)
                                                                         24,2N;122,1E  33KM   12 19 06,3 (WDCB)
CLL E P         12 31 27   TRACES                                               D= 82,5 DEG   AZ= 61       CLL

1978 SEP 08     TALAUD ISLANDS                             MB=5,4 (45)   4,0N;126,4E  46KM H=12 28 39,7 (NEIS)
                                                                         4,3N;126,2E  33KM   12 28 40,5 (WDCB)
BRG E P         12 42 26,4  1,0 /   14                                          D=100,8 DEG   AZ= 70       BRG
      LMV       13 31       T 18              AV   1,0   MLV  =5,4
CLL E P         12 42 28                                                        D=101,2 DEG   AZ= 69       CLL
MOX   LMH       13 28,6     T 26   AN   1,5             MLH  =5,4
      LMV         31,5      T 24                  AV   0,5   MLV  =5,0       D=102,3 DEG   AZ= 68       MOX

1978 SEP 08     SOUTH INDIAN OCEAN                         MB=4,4 ( 2)   37,2S; 52,2E  33KM H=13 34 02,6 (NEIS)
BRG E P         13 47 18,9                                                      D= 93,9 DEG   AZ=150       BRG
CLL E P         13 47 21                                                        D= 94,6 DEG   AZ=150       CLL

1978 SEP 08     POLAND, UPPER SILESIA
CLL E           17 34 24

1978 SEP 08     KERMADEC ISLANDS REGION                    MB=4,8 ( 2)   30,9S;179,6W  33KM H=20 56 35,6 (NEIS)
CLL E(PKP2)     21 17 07    2,0 /   33                                          D=157,6 DEG   AZ= 29       CLL
    E             21 10
    E             21 55
      LM        22 54
BRG E(PKIKP)    21 16 32,0                                                      D=157,6 DEG   AZ= 32       BRG
    E PKP2        17 03,6
MOX E PKP2      21 17 09                                                        D=158,6 DEG   AZ= 27       MOX
      LMV       22 47       T 16                  AV   0,6   MLV  =5,5
      LMH         50        T 20        AE   1,2             MLH  =5,6

1978 SEP 08     KERMADEC ISLANDS                           MB=5,6 ( 2)   30,9S;178,9W  33KM H=21 04 26,6 (NEIS)
CLL E(PKP2)     21 24 58    1,7 /   24                                          D=157,8 DEG   AZ= 28       CLL
    E PP          28 47
BRG E(PKIKP)    21 24 28,3                                                      D=157,9 DEG   AZ= 30       BRG
    E(PKP2)       25 02,0
MOX E PKP2      21 25 05,5                                                      D=158,8 DEG   AZ= 26       MOX

1978 SEP 08 /   KERMADEC ISLANDS                          MB=5,9 (17)
     SEP 09                                                             30,4S;178,2W  33KM H=22 56 56,6 (NEIS)
                                                                        30,4S;178,6W  33KM   22 56 56,4 (WDCB)
CLL I PKIKP     23 16 48,5C 1,8 /   40                                          D=157,5 DEG   AZ= 26       CLL
    I PKP1        17 01,0   1,5 /   35                                        DISTANCE 158 DEG
    E             17 07
    I PKP2        17 21,3   1,6 /   67          MC   =5,4
    E PP          21 03
BRG I PKIKP     23 16 49,1C 1,8 /   52                                          D=157,6 DEG   AZ= 29       BRG
    E PKP1        17 01,7   1,3 /   24                                        DISTANCE 157 DEG
    I PKP2        17 22,3   1,7 /   47
    I             17 42,6
MOX E PKIKP     23 16 50    1,9 /   46                                          D=158,5 DEG   AZ= 24       MOX
    E PKHKP       17 02
    E PKP2        17 25
      LM        00 36

1978 SEP 09
CLL E           00 14 21

1978 SEP 09     NEAR EAST COAST OF HONSHU, JAPAN           MB=4,5 (13)   40,5N;142,4E  58KM H=02 07 40,2 (NEIS)
CLL E P         02 19 36   TRACES                                               D= 78,5 DEG   AZ= 37       CLL

1978 SEP 09     MARIANA ISLANDS                            MB=5,2 (48)   18,6N;145,5E 188KM H=05 41 32,8 (NEIS)
                                                                         18,5N;145,5E 150KM   05 41 28,2 (WDCB)
CLL I P         05 54 51,5D                                                     D= 98,9 DEG   AZ= 45       CLL
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1978 SEP 09      SOUTH SANDWICH ISLANDS REGION          MB=5,4 ( 7)   56,3S; 27,7W  33KM H=06 01 06,9 (NEIS)
                                                                                D=111,4 DEG   AZ=202       MOX
MOX   LMV        06 58,0
      LMH           58,7

1978 SEP 09      AFGHANISTAN-USSR BORDER REGION         MB=4,8 (13)   36,5N; 71,4E 116KM H=09 26 28,7 (NEIS)
BRG I P          09 34 18,3  0,7 /   11                                         D= 42,9 DEG   AZ= 87       BRG

1978 SEP 09      FIJI ISLANDS REGION                    MB=4,5 ( 1)   20,8S;178,8W 625KM H=09 37 05,8 (NEIS)
CLL I PKP1       09 55 44,0 TRACES                                              D=148,2 DEG   AZ= 21       CLL
BRG I PKP1       09 55 44,4                                                     D=148,4 DEG   AZ= 23       BRG

1978 SEP 09      VANUATU ISLANDS                        MB=5,2 ( 6)   17,5S;167,9E  27KM H=12 23 33,7 (NEIS)
BRG I PKP        12 43 03,6                                                     D=140,8 DEG   AZ= 41       BRG
CLL I PKP        12 43 06,1D                                                    D=140,8 DEG   AZ= 40       CLL

1978 SEP 09      SOUTH INDIAN OCEAN                     MB=5,4 (52)   26,5S; 67,8E  33KM H=12 46 59,0 (NEIS)
                                                                      26,5S; 67,9E  33KM   12 46 54,0 (WDCB)
BRG I P          12 59 59,2C 1,5 /   29                                         D= 90,5 DEG   AZ=134       BRG
    E            13 00 07,5
    E PP            03 40
CLL I P          13 00 02,6C 2,1 /   72                                         D= 91,2 DEG   AZ=133       CLL
MOX E P          13 00 04    1,5 /   25                       MPV  =5,4         D= 91,4 DEG   AZ=132       MOX
    E S             11 00
    E SS            17 05
      LMH           43,5
      LMV           44,5

1978 SEP 09      SOUTH INDIAN OCEAN                     MB=5,2 (18)   26,5S; 67,8E  33KM H=13 08 07,0 (NEIS)
                                                                      26,5S; 67,9E  33KM   13 08 01,7 (WDCB)
BRG E P          13 21 07,2  1,8 /   21                                         D= 90,5 DEG   AZ=134       BRG
    E               21 15,7
CLL E            13 21 17                                                       D= 91,2 DEG   AZ=133       CLL
MOX E P          13 21 12                                                       D= 91,4 DEG   AZ=132       MOX

1978 SEP 09      POLAND, UPPER SILESIA
CLL E            15 54 58

1978 SEP 09      GREECE                                 MB=4,2 (29)   38,5N; 23,2E  21KM H=16 31 59,8 (NEIS)
                                                                      38,5N; 23,3E  10KM   16 32 01,5 (CSEM)
                                                                      38,3N; 23,0E  33KM   16 31 55,8 (WDCB)
BRG E            16 35 27,9                                                     D= 14,0 DEG   AZ=149       BRG
MOX E P          16 35 29                                                       D= 14,7 DEG   AZ=141       MOX
      LMH           42,8      T 12          AE   0,8          MLH  =4,1
      LMV           42,8      T 13                   AV   0,9 MLV  =4,3
CLL E P          16 35 34    1,3 /   23                                         D= 14,7 DEG   AZ=147       CLL
    E LG2           40 17
    E               40 46
      LM            42,2      T 12   AN   1   AE   1   AV   1

1978 SEP 09
CLL I PKP        21 31 51,4C 1,1 /   12
BRG I PKP        21 31 51,9

1978 SEP 09      YUNAN PROVINCE, CHINA                  MB=5,1 (67)   23,0N;101,1E  33KM H=23 11 13,2 (NEIS)
                                                                      22,8N;101,2E  33KM   23 11 11,3 (WDCB)
BRG I P          23 22 29,4D 0,9 /   14                                         D= 70,8 DEG   AZ= 77       BRG
    E               23 18,0
      LMV           56        T 14                   AV   1,4 MLV  =5,4
CLL E P          23 22 30    1,6 /   18                                         D= 71,2 DEG   AZ= 77       CLL
    E               23 05
      LM            53        T 21   AN   3   AE   0,5 AV   0,5 MLH  =5,6
MOX E P          23 22 38,5                                                     D= 72,2 DEG   AZ= 75       MOX
      LMH           54,1      T 20   AN   2,3 AE   0,9        MLH  =5,5
      LMV           57,4      T 16                   AV   0,7 MLV  =5,1

1978 SEP 10
CLL I PKP        02 47 50,3  1,0 /   15
BRG I PKP        02 47 50,4  0,9 /   17

1978 SEP 10      NORWEGIAN SEA                          MB=4,7 (33)   74,4N; 10,6E  10KM H=02 48 32,2 (NEIS)
                                                                      74,3N; 11,4E  10KM   02 48 35,7 (CSEM)
                                                                      74,3N; 11,1E  33KM   02 48 32,2 (WDCB)
CLL I P          02 53 40,5D 1,8 /   61                                         D= 23,2 DEG   AZ=358       CLL
BRG E P          02 53 43,8  1,4 /   31                                         D= 23,7 DEG   AZ=358       BRG
MOX E P          02 53 47    1,8 /   81                       MPV  =5,0         D= 23,8 DEG   AZ=359       MOX

1978 SEP 10      EASTERN SEA OF JAPAN                   MB=4,9 (55)   42,4N;137,0E 294KM H=12 45 40,9 (NEIS)
                                                                      42,6N;136,9E 270KM   12 45 39,8 (WDCB)
BRG I P          12 56 49,7D 0,5 /   21                                         D= 74,7 DEG   AZ= 40       BRG
CLL I P          12 56 49,8D 0,9 /   43                                         D= 74,7 DEG   AZ= 40       CLL
    E PP            59 38
MOX E P          12 56 56                                                       D= 75,8 DEG   AZ= 39       MOX

1978 SEP 10
BRG E(SG)        15 52 29,5

1978 SEP 10      TAIWAN                                 MB=5,1 (51)   24,2N;121,8E  21KM H=15 50 34,7 (NEIS)
                                                                      24,4N;122,0E  33KM   15 50 31,0 (WDCB)
BRG I P          16 02 55,2D 1,8 /   24                                         D= 82,1 DEG   AZ= 61       BRG
    I               03 03,0
CLL E P          16 02 56                                                       D= 82,4 DEG   AZ= 61       CLL
    E PP            06 01
      LM            44
MOX E P          16 03 02    1,6 /   19                       MPV  =5,0         D= 83,5 DEG   AZ= 60       MOX
      LMV           44,8      T 13,5                 AV   0,8 MLV  =5,3
      LMH           45,2      T 15   AN   0,9 AE   0,5        MLH  =5,3
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1978 SEP 10      TAIWAN                                 MB=5,0 (23)   24,1N;121,9E  17KM H=16 10 52,8 (NEIS)
                                                                      24,8N;121,9E  33KM   16 10 58,0 (WDCB)
BRG E P          16 23 14,1                                                     D= 82,2 DEG   AZ= 61       BRG
CLL E(P)         16 23 20                                                       D= 82,5 DEG   AZ= 61       CLL

1978 SEP 10      TAIWAN                                 MB=5,0 ( 4)   24,1N;121,7E  21KM H=16 13 48,0 (NEIS)
BRG E P          16 26 10,2                                                     D= 82,1 DEG   AZ= 61       BRG
CLL E(P)         16 26 08                                                       D= 82,4 DEG   AZ= 61       CLL

1978 SEP 10      TAIWAN                                 MB=5,4 (55)   24,1N;121,7E  15KM H=16 34 02,2 (NEIS)
                                                                      24,3N;121,8E  33KM   16 33 59,4 (WDCB)
BRG I P          16 46 23,3D                                                    D= 82,1 DEG   AZ= 61       BRG
      LMV        17 26        T 12
CLL E P          16 46 24     2,0 /   45                AV   2,4  MLV  =5,8
    E(PP)           49 41                                                       D= 82,4 DEG   AZ= 61       CLL
      LM         17 27        T 16   AN   1,5 AE   1    AV   2,5  MLH  =5,6 MLV  =5,7
MOX E P          16 46 30     2,2 /   33                          MPV  =5,1     D= 83,5 DEG   AZ= 60       MOX
    E PP            49 44
      LMV        17 28,5      T 16                      AV   2,2  MLV  =5,7
      LMH           28,7      T 16   AN   2,0 AE   1,6            MLH  =5,7

1978 SEP 10      KERMADEC ISLANDS                 /NO MB COMP./       30,3S;177,1W  71KM H=21 35 27    (ISC)
CLL E(PKP)       21 55 43                                                       D=157,7 DEG   AZ= 24       CLL
    E               55 58
BRG E PKP2       21 55 49,8                                                     D=157,8 DEG   AZ= 26       BRG

1978 SEP 10 /    GUATEMALA                              MB=5,6 (85)
     SEP 11                                                           14,3N; 91,5W  94KM H=23 24 15,6 (NEIS)
                                                                      15,0N; 91,6W  33KM   23 24 12,3 (WDCB)
MOX E P          23 36 52     1,3 /   52                          MPV  =5,4     D= 87,2 DEG   AZ=289       MOX
    E AP            37 10     1,4 /   70                                                      DEPTH  65 KM
    E S             47 20     T 20             AE   2,0           MSH  =5,8
    E SS            53 00
      LMV        00 17,8      T 20,5                    AV   1,5
      LMH           18,4      T 18   AN   1,1 AE   1,7
CLL I P          23 36 55,7   1,4 /   37                                        D= 87,8 DEG   AZ=290       CLL
    I AP            37 13,0                                                     DISTANCE  90 DEG
    E S             47 28
    E               48 08
    E SS            53,6
      LM         00 09        T 25   AN   3   AE   4    AV   4    MLH  =5,8 MLV  =5,7 (NO DEPTH CORRECTION)
      L             16
BRG I P          23 37 00,7   1,3 /   22                                        D= 88,5 DEG   AZ=291       BRG
    E AP            37 17,1
    E PP            40 30
    E SKS           47 27,0
    E SS            53 40
      LMV        00 13        T 22                      AV   4,6

1978 SEP 11      GREECE-ALBANIA BORDER REGION           MB=4,4 ( 1)   39,0N; 20,2E  60KM H=07 11 51,8 (NEIS)
                                                                      39,0N; 20,3E  48KM   07 11 54,1 (CSEM)
CLL E LG2        07 18 51                                                       D= 13,3 DEG   AZ=155       CLL

1978 SEP 11      SOUTHWESTERN RYUKYU ISLANDS            MB=5,7 (84)   24,9N;124,8E  21KM H=07 40 52,5 (NEIS)
                                                                      25,4N;124,9E  33KM   07 40 55,1 (WDCB)
BRG E P          07 53 18,0   1,5 /   79                                        D= 83,2 DEG   AZ= 59       BRG
    I AP            53 25,4
      LMV        08 35        T 15                      AV   8,5
CLL E P          07 53 19     1,8 /  165                                        D= 83,4 DEG   AZ= 58       CLL
    I AP            53 26,0                                                     DISTANCE  85 DEG
    E               58 56
    E(S)         08 03 44
    E SS            09,3
    E               14,2
      LH            29        T 16   AN   9   AE   5
      LM            36        T 13   AN   8   AE   8,3  AV  10    MLH  =6,4 MLV  =6,5
      FINAL      09 30
MOX I P          07 53 26,0C  1,8 /  223                          MPV  =6,1     D= 84,5 DEG   AZ= 57       MOX
                              T 10                      AV   1,8  MPV  =7,8
    I AP            53 32,5   2,0 /  256
    E S          08 03 50
      LMV           36,5      T 14                      AV   9,8  MLV  =6,4
      LMH           37        T 13   AN  10,6                     MLH  =6,4

1978 SEP 11      KURILE ISLANDS                         MB=5,2 (48)   46,4N;153,6E  33KM H=08 41 11,3 (NEIS)
                                                                      47,3N;152,8E  33KM   08 41 17,0 (WDCB)
CLL I P          08 53 01,1C  1,5 /   46                                        D= 76,9 DEG   AZ= 27       CLL
    I AP            53 14,7
BRG I P          08 53 03,8D                                                    D= 77,0 DEG   AZ= 27       BRG
    E AP            53 16,0
MOX E P          08 53 07     1,5 /   50                          MPV  =5,3     D= 77,9 DEG   AZ= 26       MOX

1978 SEP 11
CLL E            11 12 07

1978 SEP 11      NORTHEAST OF TAIWAN                    MB=4,9 (15)   25,0N;124,8E  58KM H=11 14 44,3 (NEIS)
                                                                      24,8N;125,0E  33KM   11 14 40,2 (WDCB)
BRG E P          11 27 07,1   1,1 /   14                                        D= 83,1 DEG   AZ= 59       BRG
CLL I P          11 27 08,4   1,0 /   23                                        D= 83,4 DEG   AZ= 58       CLL
MOX E P          11 27 14     1,2 /   18                          MPV  =5,0     D= 84,5 DEG   AZ= 57       MOX

1978 SEP 11
CLL E            12 50 34

1978 SEP 11
BRG E(P)         13 00 54,7
CLL E            13 00 56

1978 SEP 11
CLL   LH         15 06
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1978 SEP 11 SOUTH OF KERMADEC ISLANDS MB=5,1 (4) 32,9S;178,5W 33KM H=17 47 44,8 (NEIS)
33,0S;178,9W 33KM 17 47 40,7 (WDCB)
CLL I PKP2 18 08 18,7D 1,7 / 42 D=159,8 DEG AZ= 29 CLL
BRG E 18 07 47,2 D=159,8 DEG AZ= 32 BRG
I PKP2 08 18,6 0,8 / 17
MOX E PKP2 18 08 23 D=160,8 DEG AZ= 27 MOX

1978 SEP 11 NORTH ATLANTIC RIDGE MB=4,9 (24) 10,8N; 43,4W 33KM H=18 18 22,0 (NEIS)
10,1N; 40,5W 33KM 18 18 24,1 (WDCB)
D= 59,9 DEG AZ=249 MOX
MOX E P 18 28 25,5
LMV 50,9 T 20 AV 0,9 MLV =5,0
LMH 51,2 T 20 AE 0,8 MLH =4,9
CLL E P 18 28 33 D= 60,9 DEG AZ=249 CLL
BRG E P 18 28 38,5 D= 61,3 DEG AZ=251 BRG

1978 SEP 11 TAIWAN MB=5,2 (34) 24,1N;121,8E 19KM H=22 25 36,6 (NEIS)
24,5N;121,7E 33KM 22 25 35,1 (WDCB)
BRG E P 22 37 57,9D D= 82,1 DEG AZ= 61 BRG
CLL E P 22 37 58 D= 82,5 DEG AZ= 61 CLL
LM 23 19
MOX LMH 23 20,2 T 14,5 AN 1,0 AE 0,7 MLH =5,4 D= 83,5 DEG AZ= 60 MOX
LMV 20,3 T 14 AV 1,5 MLV =5,6

1978 SEP 11
BRG E 23 49 10,0
CLL E 23 49 30

1978 SEP 12 RYUKYU ISLANDS MB=5,3 (68) 29,9N;129,5E 144KM H=00 41 52,0 (NEIS)
30,2N;129,6E 70KM 00 41 45,0 (WDCB)
BRG I P 00 53 55,4C 1.6 / 79 D= 81,6 DEG AZ= 52 BRG
CLL I P 00 53 56,2C 1.1 / 140 D= 81,8 DEG AZ= 52 CLL
MOX I P 00 54 02,0C 1.4 / 112 MPV =5,4 D= 82,9 DEG AZ= 51 MOX

1978 SEP 12 NORTHERN EASTER I. CORDILLERA MB=5,2 (24) 4,6S;106,2W 33KM H=06 00 38,1 (NEIS)
MOX LMH 07 05,7 T 20 AE 1,6 MLH =5,6 D=111,0 DEG AZ=289 MOX
LMV 08,9 T 20 AV 1,7 MLV =5,6
CLL LM 07 01 D=111,5 DEG AZ=291 CLL
BRG E PKP 06 19 13,0 D=112,3 DEG AZ=291 BRG
LM 07 01 T 21 AV 1,7 MLV =5,6

CLL INTERRUPTION OF ONE SHORTPERIODIC RECORD FROM 10H 11M TO 10H 43M

1978 SEP 12
BRG E 11 17 19,6

1978 SEP 12 POLAND, UPPER SILESIA
CLL E 19 06 07

1978 SEP 13 POLAND, UPPER SILESIA
CLL E 00 56 00
MOX E SG 00 56 24

1978 SEP 13 BONIN ISLANDS REGION MB=5,2 (41) 26,4N;142,0E 22KM H=04 27 57,4 (NEIS)
26,3N;141,6E 33KM 04 27 59,7 (WDCB)
BRG E P 04 40 58,0 D= 90,5 DEG AZ= 45 BRG
I AP 41 05,8
CLL E P 04 40 59 D= 90,6 DEG AZ= 44 CLL
I AP 41 05,5
MOX E P 04 41 04 D= 91,7 DEG AZ= 43 MOX
E AP 41 11 DEPTH 25 KM

1978 SEP 13 NEW BRITAIN REGION MB=5,3 (14) 5,2S;152,6E 57KM H=05 46 13,5 (NEIS)
4,3S;152,8E 33KM 05 46 13,8 (WDCB)
BRG E PKP 06 05 06,0 1,0 / 12 D=122,9 DEG AZ= 52 BRG
CLL I PKP 06 05 06,4D D=123,1 DEG AZ= 50 CLL
MOX E PKP 06 05 07,5 TRACES D=124,2 DEG AZ= 49 MOX

1978 SEP 13 GREECE MB=3,6 (1) 38,2N; 23,0E 40KM H=12 34 57,9 (NEIS)
CLL E(P) 12 38 24 D= 14,9 DEG AZ=148 CLL

1978 SEP 13 KERMADEC ISLANDS REGION MB=5,3 (26) 28,0S;176,5W 32KM H=17 58 19,7 (NEIS)
27,8S;177,3W 33KM 17 58 15,8 (WDCB)
CLL E PKIKP 18 18 11 D=155,6 DEG AZ= 21 CLL
E PKP1 18 19 DISTANCE 156 DEG
E PKP2 18 37
E PP 22 27
LM 19 37
BRG E PKIKP 18 18 11,8 1,3 / 19 D=155,8 DEG AZ= 23 BRG
E PKP1 18 20,4
E PKP2 18 38,3
MOX E PKP2 18 18 40 D=156,6 DEG AZ= 18 MOX
LMH 19 36 T 17,5 AN 0,9 AE 0,8 MLH =5,7
LMV 37 T 18 AV 1,2 MLV =5,7

1978 SEP 13 POLAND, UPPER SILESIA
CLL E 19 22 33

1978 SEP 14 GREECE-ALBANIA BORDER REGION MB=4,7 (11) 39,1N; 20,5E 56KM H=00 05 10,7 (NEIS)
39,0N; 20,5E 39KM 00 05 12,6 (CSEM)
38,7N; 20,3E 33KM 00 05 02,3 (WDCB)
BRG E P 00 08 10,8 D= 12,6 DEG AZ=156 BRG
LMV 13 T 10 AV 2,5
MOX E P 00 08 16 0,8 / 15 MPV =4,9 D= 13,1 DEG AZ=148 MOX
LMH 13,1 T 14,5 AN 3,0 AE 3,1 MLH =4,6 (NO DEPTH CORRECTION)
LMV 14,5 T 12 AV 2,5
CLL E PP 00 08 32 1.4 / 27 D= 13,3 DEG AZ=154 CLL
LMH 13,0 T 12 AN 3 AE 5 MLH =4,8 (NO DEPTH CORRECTION)
L 14,6

1978 SEP 14 GREECE-ALBANIA BORDER REGION MB=4,4 (4) 39,0N; 20,5E 46KM H=00 09 51,4 (NEIS)
39,1N; 20,6E 45KM 00 09 54,4 (CSEM)
BRG LMV 00 18 T 10 AV 3,0 D= 12,7 DEG AZ=156 BRG
CLL LMH 00 17,7 T 12 AN 2,5 AE 4,5 MLH =4,8 D= 13,4 DEG AZ=154 CLL
L 19,3

1978 SEP 14 KERMADEC ISLANDS REGION MB=5,2 (5) 28,0S;176,4W 12KM H=00 25 34,7 (NEIS)
28,0S;178,4W 33KM 00 25 36,4 (WDCB)
CLL E PKP1 00 45 38 D=155,7 DEG AZ= 21 CLL
E PKP2 45 55
BRG E PKIKP 00 45 30,0
E PKP1 45 40,4 D=155,8 DEG AZ= 23 BRG
I PKP2 45 56,2
E 46 14,8
MOX LMV 02 03,6
LMH 03,8 D=156,6 DEG AZ= 18 MOX

1978 SEP 14
CLL E 01 11 45

1978 SEP 14 GREECE-ALBANIA BORDER REGION MB=4,2 (4) 39,2N; 20,5E 57KM H=02 11 44,2 (NEIS)
39,2N; 20,5E 47KM 02 11 46,1 (CSEM)
BRG E PP 02 14 53,0 D= 12,6 DEG AZ=156 BRG
MOX E P 02 14 48,5 D= 13,0 DEG AZ=148 MOX
CLL E PP 02 15 01 D= 13,2 DEG AZ=154 CLL
E 16 27
E L 19 42

1978 SEP 14 EASTERN GULF OF ADEN MB=4,7 (17) 12,1N; 47,2E 33KM H=05 01 41,3 (NEIS)
BRG E P 05 10 14,8 D= 47,2 DEG AZ=133 BRG
CLL E P 05 10 20 1.3 / 19 D= 47,9 DEG AZ=132 CLL
MOX E P 05 10 22 D= 48,2 DEG AZ=130 MOX

1978 SEP 14 TONGA ISLANDS MB=4,8 (7) 17,3S;174,2W 113KM H=05 08 41,8 (NEIS)
CLL E PKP 05 28 09 D=145,6 DEG AZ= 12 CLL
BRG E PKP 05 28 09,8 D=145,9 DEG AZ= 14 BRG

CLL INTERRUPTION OF ONE SHORTPERIODIC RECORD FROM 05H 48M TO 11H 59M

1978 SEP 14 EASTERN GULF OF ADEN MB=4,8 (17) 12,5N; 47,8E 33KM H=07 14 17,0 (NEIS)
12,3N; 48,0E 33KM 07 14 11,3 (WDCB)
BRG E P 07 22 48,2 D= 47,1 DEG AZ=132 BRG
CLL E P 07 22 56 D= 47,9 DEG AZ=131 CLL
MOX E P 07 22 55 D= 48,1 DEG AZ=129 MOX

1978 SEP 14 TONGA ISLANDS /MB=4,4 (2)/ 20,9S;173,7W 33KM H=07 39 50,6 (ISC)
CLL I PKP1 07 59 38,4 1,6 / 30 D=149,2 DEG AZ= 12 CLL
BRG E PKP1 07 59 39,6 1,4 / 19 D=149,5 DEG AZ= 14 BRG
MOX E PKHKP 07 59 41,5 1,6 / 28 D=150,0 DEG AZ= 10 MOX

1978 SEP 14 KERMADEC ISLANDS REGION MB=4,6 (4) 27,9S;176,2W 33KM H=08 48 26,0 (NEIS)
BRG E 09 08 54 D=155,8 DEG AZ= 22 BRG
E 09 05

1978 SEP 14 SOUTH OF TONGA ISLANDS MB=4,6 (2) 26,2S;175,7W 33KM H=14 54 28,5 (NEIS)
BRG E PKP1 15 14 26 D=154,3 DEG AZ= 20 BRG

1978 SEP 14
BRG E(P) 16 34 28,0

1978 SEP 14 POLAND, UPPER SILESIA
CLL E 18 20 40

1978 SEP 14 EASTERN GULF OF ADEN MB=4,7 (10) 12,8N; 47,8E 33KM H=19 03 45,1 (NEIS)
11,4N; 47,3E 33KM 19 03 32,4 (WDCB)
CLL E P 19 12 20 D= 47,6 DEG AZ=131 CLL

1978 SEP 14 PHILIPPINE ISLANDS REGION MB=5,5 (36) 10,8N;126,1E 68KM H=19 55 42,7 (NEIS)
10,7N;125,9E 33KM 19 55 38,8 (WDCB)
BRG E P 20 09 01,2 D= 95,2 DEG AZ= 66 BRG
CLL E P 20 09 02 D= 95,6 DEG AZ= 65 CLL
MOX E P 20 09 08 TRACES D= 96,6 DEG AZ= 64 MOX

1978 SEP 15 KERMADEC ISLANDS REGION MB=5,1 (8) 27,8S;177,0W 36KM H=02 01 51,8 (NEIS)
CLL E PKP1 02 21 50 1,2 / 16 D=155,3 DEG AZ= 22 CLL
I PKP2 22 06,8 1,2 / 28 MC =5.1
BRG E PKIKP 02 21 41,4 1,3 / 13 D=155,5 DEG AZ= 24 BRG
E PKP1 21 51,5
I PKP2 22 08,0 1,2 / 25
MOX E PKP2 02 22 10,5 D=156,3 DEG AZ= 19 MOX

1978 SEP 15 UNDERGROUND EXPLOSION MB=6,0 (75) 49,9N; 78,9E 0KM H=02 36 57,3 (NEIS)
BRG I P 02 44 37,4C 0,7 / 106 D= 40,2 DEG AZ= 65 BRG
I PN 46 07,0
CLL I P 02 44 40,1 0,7 / 230 D= 40,6 DEG AZ= 65 CLL
I PN 46 10,8
MOX I P 02 44 49,0C 0,6 / 203 MPV =6,0 D= 41,7 DEG AZ= 64 MOX
I PN 46 27,5

1978 SEP 15 POLAND, UPPER SILESIA NO MB COMP. 50,4N; 18,7E 10KM H=08 01 00,9 (CSEM)
50,0N; 19,4E 7KM 08 01 05,2 (NEIS)
BRG E PG 08 01 58,2 D= 3,1 DEG AZ= 97 BRG
E SG 02 44,2
CLL E PG 08 02 12 D= 3,7 DEG AZ=102 CLL
E SG 03 05 DISTANCE 4,0DEG
MOX E PN 08 02 24 D= 4,5 DEG AZ= 90 MOX
E SN 03 29

1978 SEP 15 SOUTHERN GREECE (36,9N; 21,6E 33KM H=09 05 09) (ATH)
CLL E P 09 08 25 D= 15,7 DEG AZ=154 CLL

1978 SEP 15 SOUTHWESTERN RYUKYU ISLANDS MB=4,9 (13) 24,8N;124,9E 15KM H=11 27 11,7 (NEIS)
BRG E P 11 39 43,4 1,2 / 19 D= 83,3 DEG AZ= 59 BRG
CLL E P 11 39 43 D D= 83,6 DEG AZ= 58 CLL
MOX E P 11 39 50 1,6 / 44 MPV =5,4 D= 84,7 DEG AZ= 57 MOX

1978 SEP 15 KURILE ISLANDS MB=6,0 (85) 48,3N;154,3E 44KM H=11 39 25,1 (NEIS)
MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE 48,4N;154,2E 50KM 11 39 26,1 (WDCB)
CLL I P(1) 11 51 04,8C D= 75,4 DEG AZ= 26 CLL
I P(2) 51 06,3D 1,3 / 530
E 51 12
E S 12 00 36
LM 26 T 21 AN 4 AE 3,5 AV 5 MLH =5,8 MLV =5,9
BRG E P(1) 11 51 05,5 D= 75,5 DEG AZ= 26 BRG
I P(2) 51 07,0 1,4 / 250 DISTANCE 75 DEG
I 51 13,9
E S 12 00 40,0
LMV 27 T 20 AV 5,0 MLV =5,8
MOX I P 11 51 11,0C 1,3 / 358 MPV =6,2 D= 76,4 DEG AZ= 25 MOX
T 5 AV 2,0 MPV =6,4
E S 12 00 50
E SS 06 00
LMH 23,8 T 20 AN 2,4 AE 3,3 MLH =5,7
LMV 30,6 T 16 AV 3,8 MLV =5,8

1978 SEP 15 EASTERN GULF OF ADEN MB=5,0 (21) 12,4N; 47,9E 33KM H=12 17 50,9 (NEIS)
12,4N; 48,2E 33KM 12 17 45,6 (WDCB)
BRG E P 12 26 23,4 2,1 / 35 D= 47,3 DEG AZ=132 BRG
CLL E P 12 26 28 2,7 / 120 D= 48,0 DEG AZ=131 CLL

1978 SEP 15 FRG, SOUTHWESTERN REGION NO MB COMP.
SWABIAN JURA 48,3N; 9,0E 6KM H=13 15 26 (CSEM)
48,3N; 8,8E 10KM 13 15 27,7 (NEIS)
MOX E PN 13 16 17,5 D= 2,9 DEG AZ=217 MOX
E SG 16 56,5
CLL E SG 13 17 37 D= 4,0 DEG AZ=222 CLL
BRG I(PG) 13 16 43,4 D= 4,1 DEG AZ=233 BRG
E SG 17 40,6

1978 SEP 15 POLAND, UPPER SILESIA
CLL E 20 04 12 TRACES

1978 SEP 16
CLL E 01 57 15
E 57 27

1978 SEP 16 KURILE ISLANDS MB=4,8 (6) 46,0N;152,5E 33KM H=14 23 03,5 (NEIS)
46,5N;151,3E 100KM 14 23 15,8 (WDCB)
CLL I P 14 34 53,3C 1,2 / 33 D= 77,0 DEG AZ= 28 CLL
BRG E P 14 34 54,3 1,2 / 14 D= 77,1 DEG AZ= 28 BRG
MOX E P 14 35 00 1,2 / 20 MPV =5,0 D= 78,0 DEG AZ= 27 MOX

1978 SEP 16 IRAN MB=6,5 (40) 33,4N; 57,4E 33KM H=15 35 56,6 (NEIS)
33,3N; 57,4E 22KM 15 35 57,1 (CSEM)
33,2N; 57,5E 33KM 15 35 50,5 (WDCB)
BRG I P 15 42 57,0 1,9 / 2276 MPV =6,7 D= 36,0 DEG AZ=102 BRG
I 43 11,1 DISTANCE 37 DEG
E S 48 48,0
LMV 16 02 T 23 AV 530,0 MLV =7,4
CLL I P 15 43 03,1D 1,4 / 660 D= 36,7 DEG AZ=102 CLL
T 7 AN 6,0 AE 17,8 AV 27,0 MPH =7,1 MPV =7,1 DISTANCE 37 DEG
E PM 43 12 (1,8 / 2000) MPMV =6,6
I PP 44 31,2 2,2 / 2900
T 16 AN 9,0 AE 44,5 AV 38,0 MPPH =7,3 MPPV =7,1
E S 48 51 T(22) AN(100) AE 127 MSH =7,5
E 50,9
E(SSS) 51 32
E 52 26
E 53 58
LMH 58 T 21 AN(780) AE(440) MLH =7,5
LH 16 03
FINAL 20
MOX I P 15 43 09,5C 1,8 / 777 MPV =6,3 D= 37,4 DEG AZ=100 MOX
T 8 AV 24,7 MPV =7,1
E PP 44 25
E S 48 40 T 16 AN 70,2 AE 122,4 MSH =7,5
LMV 16 01,3 T 16 AV 313,6 MLV =7,3
LMH 04,3 T 17 AN 636,4 MLH =7,4

1978 SEP 16 IRAN /MB=4,5 (2)/ 34,2N; 57,6E 33KM H=16 18 33,3 (ISC)
BRG E P 16 25 31,3 D= 35,6 DEG AZ=101 BRG
CLL E P 16 25 33 D= 36,3 DEG AZ=101 CLL

1978 SEP 16 IRAN /MB=4,4 (4)/ 33,9N; 57,7E 33KM H=16 53 24 (ISC)
CLL I P 17 00 29,1D D= 36,6 DEG AZ=101 CLL
E 02 58

1978 SEP 16
CLL E 18 07 13

1978 SEP 16 IRAN MB=4,8 (11) 33,9N; 57,1E 16KM H=18 45 14,0 (NEIS)
33,9N; 57,4E 10KM 18 45 13,5 (CSEM)
BRG E 18 52 22,0 33,7N; 57,0E 33KM 18 45 09,8 (WDCB)
CLL E P 18 52 17 D= 35,5 DEG AZ=102 BRG
D= 36,2 DEG AZ=101 CLL

1978 SEP 16 LOYALTY ISLANDS NO MB COMP. 20,5S;168,7E 19KM H=22 44 51,4 (NEIS)
BRG E PKP 23 04 24,7 D=143,8 DEG AZ= 43 BRG
CLL E PKP 23 04 26 TRACES D=143,8 DEG AZ= 41 CLL
MOX E PKP 23 04 28,5 D=144,9 DEG AZ= 39 MOX

1978 SEP 16 / KERMADEC ISLANDS REGION MB=5,2 (6)
SEP 17 30,5S;179,3W 286KM H=23 13 23,1 (NEIS)
30,5S;179,2W 33KM 23 12 47,1 (WDCB)
CLL I PKP1 23 32 56,0C 1,2 / 21 D=157,3 DEG AZ= 28 CLL
I PKP2 33 17,0C 1,1 / 80 DISTANCE 158 DEG
E APKP2 34 31
E PP 37 00
BRG I PKIKP 23 32 44,8 1,3 / 20 D=157,4 DEG AZ= 31 BRG
I PKP1 32 56,6
I PKP2 33 18,0 1,1 / 65
MOX E PKP2 23 33 22 1,2 / 45 D=158,3 DEG AZ= 26 MOX
LMV 00 44
LMH 45

1978 SEP 16 / SOUTH OF FIJI ISLANDS MB=5,7 (24)
SEP 17 25,7S;177,9W 221KM H=23 38 08,9 (NEIS)
25,0S;178,6E 150KM 23 38 09,3 (WDCB)
CLL I PKP1 23 57 41,7C 0,9 / 44 D=153,1 DEG AZ= 22 CLL
I PKP2 57 53,4
I(APKP2) 58 45,1
BRG I PKIKP 23 57 34,6 D=153,3 DEG AZ= 24 BRG
I PKP1 57 41,7 0,9 / 34
I PKP2 57 53,8 1,5 / 80
E APKP 58 46,1
E XPKP 59 15,0
E PP 00 01 26,6
MOX E PKIKP 23 57 37 D=154,0 DEG AZ= 20 MOX
E PKHKP 57 46
I PKP2 57 58,0 1,6 / 71

1978 SEP 17 FIJI ISLANDS REGION MB=4,8 (3) 17,6S;179,0W 613KM H=00 29 56,6 (NEIS)
CLL I PKP 00 48 23,9D 1,1 / 24 D=145,0 DEG AZ= 20 CLL
BRG I PKP 00 48 24,8 0,6 / 12 D=145,2 DEG AZ= 22 BRG

1978 SEP 17 IRAN MB=4,7 (23) 33,1N; 56,9E 33KM H=07 35 49,9 (NEIS)
33,3N; 57,1E 10KM 07 35 49,1 (CSEM)
33,7N; 57,3E 33KM 07 35 55,9 (WDCB)
CLL I(P) 07 42 58,1D 1,3 / 15 D= 36,6 DEG AZ=103 CLL

1978 SEP 17 IRAN MB=5,0 (40) 33,7N; 57,0E 33KM H=08 17 24,6 (NEIS)
33,7N; 57,0E 38KM 08 17 27,6 (CSEM)
33,6N; 57,0E 33KM 08 17 19,4 (WDCB)
BRG E P 08 24 23,7 D= 35,6 DEG AZ=102 BRG
CLL E P 08 24 28 1,5 / 45 D= 36,3 DEG AZ=102 CLL
MOX E P 08 24 32,5 TRACES D= 37,0 DEG AZ=100 MOX

1978 SEP 17 KERMADEC ISLANDS REGION MB=4,5 (3) 28,1S;176,0W 33KM H=10 12 17,7 (NEIS)
CLL E PKP2 10 32 40 TRACES D=155,8 DEG AZ= 20 CLL
BRG I PKP1 10 32 22,5 D=156,0 DEG AZ= 22 BRG
E PKP2 32 43,5

1978 SEP 17 IRAN MB=4,7 (20) 34,1N; 57,6E 33KM H=12 43 25,5 (NEIS)
34,3N; 57,3E 10KM 12 43 26,0 (CSEM)
34,1N; 57,6E 33KM 12 43 20,8 (WDCB)
BRG I P 12 50 22,1D 1,2 / 17 D= 35,7 DEG AZ=101 BRG
CLL I P 12 50 28,4C 1,2 / 40 D= 36,4 DEG AZ=101 CLL
MOX E P 12 50 33,5 1,2 / 12 MPV =4,7 D= 37,1 DEG AZ= 99 MOX

1978 SEP 17
BRG E(PG) 17 08 16,0
E L 09 02,0

1978 SEP 17 SOUTHEASTERN AUSTRIA 47,7N; 15,8E 10KM H=20 03 03,4 (CSEM)
BRG E SG 20 04 50 D= 3,4 DEG AZ=158 BRG
MOX E SG 20 05 10 D= 4,0 DEG AZ=135 MOX
CLL E SG 20 05 12 D= 4,0 DEG AZ=152 CLL

1978 SEP 17 FIJI ISLANDS REGION MB=5,2 (15) 19,7S;176,0W 258KM H=21 16 21,3 (NEIS)
19,5S;177,1W 33KM 21 15 59,4 (WDCB)
CLL I PKP1 21 35 36,9D 1,4 / 105 D=147,7 DEG AZ= 16 CLL
BRG E PKIKP 21 35 35,3 D=147,9 DEG AZ= 18 BRG
I PKP1 35 38,5 1,3 / 59
I APKP 36 38,9
MOX E PKHKP 21 35 39,5 1,7 / 67 D=148,5 DEG AZ= 14 MOX
E APKP 36 40

1978 SEP 18 KERMADEC ISLANDS REGION MB=4,8 (3) 27,9S;176,5W 96KM H=01 40 10,6 (NEIS)
BRG E(PKP) 02 00 05,4 D=155,7 DEG AZ= 23 BRG
E 00 28,9

1978 SEP 18 IRAN MB=4,7 (9) 33,5N; 57,3E 23KM H=04 50 02,0 (NEIS)
34,0N; 57,7E 33KM 04 50 08,8 (WDCB)
BRG E(P) 04 57 06,4 D= 35,9 DEG AZ=102 BRG
CLL E P 04 57 10 D= 36,6 DEG AZ=102 CLL

1978 SEP 18 FIJI ISLANDS REGION MB=4,8 (8) 15,5S;177,6W 418KM H=06 47 59,1 (NEIS)
BRG E PKP 07 06 44,5 D=143,5 DEG AZ= 19 BRG

1978 SEP 18 NEAR COAST OF CENTRAL CHILE MB=5,0 (6) 32,7S; 71,9W 33KM H=07 12 07,0 (NEIS)
MOX LMV 08 16,0 T 20 AV 0,3 MLV =4,9 D=110,7 DEG AZ=244 MOX

1978 SEP 18 EAST PAPUA NEW GUINEA REGION MB=5,4 (26) 5,6S;146,0E 47KM H=08 17 05,1 (NEIS)
MOX LMV 09 28,5 T 25 AV 0,5 MLV =5,1 D=121,2 DEG AZ= 56 MOX

1978 SEP 18 CENTRAL YUGOSLAVIA NO MB COMP. 43,9N; 17,0E 10KM H=12 30 48,1 (NEIS)
43,9N; 17,0E 10KM 12 30 50,2 (CSEM)
45,1N; 17,3E 33KM 12 31 01,9 (WDCB)
BRG E PN 12 32 36,8 D= 7,3 DEG AZ=162 BRG
E SG 34 46,6
MOX E PN 12 32 43 D= 7,7 DEG AZ=149 MOX
E 32 48
E SG 34 40
(CONT.)

(CONT.)

CLL E SN 12 34 06 D= 7,9 DEG AZ=158 CLL
E 34 42
E SG 35 06

1978 SEP 18 WESTERN TURKEY MB=3,9 (11) 36,9N; 29,2E 10KM H=17 34 55,2 (NEIS)
37,0N; 29,3E 10KM 17 34 57,5 (CSEM)
BRG E P 17 39 06,2 D= 17,7 DEG AZ=136 BRG
CLL E P 17 39 15 D= 18,5 DEG AZ=135 CLL
MOX E P 17 39 17 D= 18,6 DEG AZ=131 MOX

1978 SEP 18 IRAN MB=4,9 (11) 33,7N; 56,9E 33KM H=17 35 08,2 (NEIS)
33,7N; 57,2E 33KM 17 35 04,7 (WDCB)
BRG E P 17 42 06,0 D= 35,5 DEG AZ=102 BRG
CLL E P 17 42 08 D= 36,2 DEG AZ=102 CLL

1978 SEP 18 PYRENEES NO MB COMP. 43,5N; 0,5W 10KM H=18 14 32,0 (NEIS)
43,6N; 0,5W 0KM 18 14 33,1 (CSEM)
MOX E SG 18 20 25 D= 10,9 DEG AZ=234 MOX
CLL E LG2 18 21 07 D= 12,0 DEG AZ=235 CLL
BRG E 18 21 15,8 D= 12,3 DEG AZ=239 BRG

1978 SEP 18 NEAR EAST COAST OF HONSHU, JAPAN MB=5,2 (18) 34,1N;140,0E 93KM H=20 44 28,2 (NEIS)
34,2N;140,0E 33KM 20 44 16,7 (WDCB)
BRG E P 20 56 45,6 D= 83,0 DEG AZ= 43 BRG
E AP 57 14,8
CLL I P 20 56 44,6D 1,5 / 19 D= 83,0 DEG AZ= 42 CLL
MOX E P 20 56 51 TRACES D= 84,1 DEG AZ= 41 MOX

1978 SEP 19 SOUTH PACIFIC CORDILLERA MB=5,5 (4) 63,0S;157,7W 33KM H=23 58 29,0 (NEIS)
BRG E PKIKP 00 18 32,4 D=167,0 DEG AZ=197 BRG

1978 SEP 19 SOUTHWEST OF AFRICA MB=5,2 (5) 52,7S; 18,9E 10KM H=01 47 19,2 (NEIS)
BRG E PP 02 05 35,2 D=103,3 DEG AZ=177 BRG
CLL E 02 01 30 D=103,8 DEG AZ=176 CLL
E PP 05 39

1978 SEP 19 FRG, SOUTHWESTERN REGION NO MB COMP.
SWABIAN JURA 48,3N; 9,0E 6KM H=03 46 49 (CSEM)
48,2N; 8,7E 10KM 03 46 49,9 (NEIS)
MOX E PN 03 47 33 D= 2,9 DEG AZ=217 MOX
E PG 47 43 DISTANCE 2,9DEG
E SG 48 19
CLL E PG 03 48 05 D= 4,0 DEG AZ=222 CLL
E SG 48 53 DISTANCE 3,9DEG
BRG E PG 03 48 05,1 D= 4,1 DEG AZ=233 BRG
E SG 48 58

1978 SEP 19 EASTERN MEDITERRANEAN SEA MB=3,8 (6) 33,9N; 25,3E 10KM H=07 02 33,9 (NEIS)
34,1N; 25,1E 10KM 07 02 39,4 (CSEM)
CLL E PP 07 07 21 D= 19,6 DEG AZ=148 CLL

1978 SEP 19
BRG E 09 52 22,3

1978 SEP 19 VANUATU ISLANDS MB=5,3 (13) 19,3S;169,0E 119KM H=12 45 00,2 (NEIS)
BRG I PKP 13 04 17,4 D=142,8 DEG AZ= 41 BRG
CLL E PKP 13 04 18 D=142,9 DEG AZ= 40 CLL
MOX E PKP 13 04 20,5 1,3 / 48 D=143,9 DEG AZ= 38 MOX

1978 SEP 19 NORWEGIAN SEA NO MB COMP. 62,3N; 1,9E 10KM H=14 52 34,1 (NEIS)
62,3N; 1,7E 10KM 14 52 36,4 (CSEM)
CLL E(P) 14 55 42 D= 12,6 DEG AZ=336 CLL
E 57 45
E S 57 51
MOX E(P) 14 55 46 D= 12,8 DEG AZ=339 MOX
BRG E P 14 55 44,2 D= 13,2 DEG AZ=335 BRG
E 58 02,1

1978 SEP 19
CLL I P 21 03 06,7C

1978 SEP 19
CLL E 21 43 54

1978 SEP 19 FRG, SOUTHWESTERN REGION NO MB COMP.
SWABIAN JURA
48,3N; 9,0E 10KM H=23 53 48,5 (CSEM)
48,3N; 9,0E 10KM 23 53 47,4 (NEIS)
47,1N; 4,9E 33KM 23 53 09,6 (WDCB)
MOX E PN 23 54 32,5 D= 2,9 DEG AZ=217 MOX
I PG 54 43,0
I SG 55 19,0
LMH 55,6 T 6 AN 1,1 AE 1,4 MLH =4,6
LMV 55,8 T 4 AV 0,9
CLL I PN 23 54 47,6 D= 4,0 DEG AZ=222 CLL
I 54 53,5 DISTANCE 3,9DEG
E PG 55 04
E SG 55 57
LM 56,2 T 7 AN 1 AE 1 AV 0,5 MLH =3,6
BRG E 23 54 56,5 D= 4,1 DEG AZ=233 BRG
I PG 55 05,9
I 55 10,4
E SG 56 02,1

1978 SEP 20
CLL E 03 05 32 TRACES

1978 SEP 20 TAJIK-SINKIANG BORDER REGION MB=4,7 (28) 39,2N; 73,0E 33KM H=16 09 57,7 (NEIS)
39,4N; 72,8E 33KM 16 09 53,6 (WDCB)
BRG I P 16 17 50,6C 0,8 / 16 D= 42,3 DEG AZ= 82 BRG
CLL I P 16 17 54,4C 0,8 / 15 D= 42,8 DEG AZ= 82 CLL
E PPP 20 11
(CONT.)

(CONT.)

MOX E P 16 18 02,5 D= 43,8 DEG AZ= 81 MOX
LM 38,3

1978 SEP 20
CLL E 20 30 22

1978 SEP 21 FIJI ISLANDS REGION MB=4,6 (4) 20,8S;178,7W 582KM H=06 24 56,6 (NEIS)
CLL I PKP1 06 43 38,9D 0,8 / 18 D=148,2 DEG AZ= 21 CLL
E(APKP) 45 46
BRG E PKP1 06 43 39,7 D=148,4 DEG AZ= 23 BRG

1978 SEP 21 FIJI ISLANDS REGION MB=5,1 (20) 20,9S;178,8W 588KM H=07 45 05,0 (NEIS)
20,9S;176,8W 33KM 07 43 59,9 (WDCB)
CLL I PKP1 08 03 46,4D 1,1 / 55 D=148,3 DEG AZ= 21 CLL
I PKP2 03 52,0
E APKP 06 09
BRG E PKIKP 08 03 42,5 D=148,4 DEG AZ= 23 BRG
I PKP1 03 46,8 1,2 / 36
I PKP2 03 52,8
E APKP 06 09,5
MOX E PKIKP 08 03 43 D=149,2 DEG AZ= 19 MOX
E PKHKP 03 48,5 1,5 / 40
E PKP2 03 55,5

1978 SEP 21 EASTERN TURKEY MB=4,7 (29) 38,1N; 38,7E 10KM H=11 08 46,3 (NEIS)
38,2N; 38,6E 10KM 11 08 49,4 (CSEM)
38,4N; 38,7E 33KM 11 08 51,4 (WDCB)
BRG E P 11 13 39,0 1,8 / 62 D= 21,7 DEG AZ=117 BRG
CLL E P 11 13 46 1,4 / 41 D= 22,4 DEG AZ=116 CLL
LM 24
MOX E P 11 13 54 1,6 / 50 MPV =4,8 D= 22,9 DEG AZ=113 MOX
LMH 25,5 T 15 AE 0,9 MLH =4,5
LMV 26,4 T 12 AV 1,0 MLV =4,6

1978 SEP 21
BRG E(P) 11 41 51,0

1978 SEP 21 UNDERGROUND EXPLOSION MB=5,2 (55) 66,5N; 86,3E 0KM H=14 59 57,5 (NEIS)
BRG I P 15 07 20,0C 0,9 / 37 D= 38,2 DEG AZ= 38 BRG
E PP 08 54,5
CLL I P 15 07 19,7C 0,9 / 46 D= 38,2 DEG AZ= 38 CLL
E PN 08 42
E PCP 09 33
MOX E P 15 07 29,5 1,9 / 68 MPV =5,0 D= 39,3 DEG AZ= 38 MOX

1978 SEP 21
CLL E 16 03 12

1978 SEP 21 EASTERN TURKEY MB=4,6 (34) 37,9N; 38,6E 10KM H=19 37 46,1 (NEIS)
38,1N; 38,6E 10KM 19 37 48,8 (CSEM)
38,3N; 38,6E 33KM 19 37 46,1 (WDCB)
BRG I P 19 42 39,7C 1,7 / 47 D= 21,8 DEG AZ=117 BRG
I 42 43,9
CLL I P 19 42 46,1D 1,3 / 39 D= 22,5 DEG AZ=117 CLL
LM 53
MOX E P 19 42 53 1,6 / 33 MPV =4,7 D= 23,0 DEG AZ=113 MOX
E S 47 08
LMH 54,4
LMV 54,6

1978 SEP 21 EASTERN TURKEY MB=4,2 (16) 38,0N; 38,5E 10KM H=23 29 16,1 (NEIS)
37,9N; 38,4E 10KM 23 29 18,5 (CSEM)
36,6N; 38,0E 33KM 23 29 12,6 (WDCB)
BRG E P 23 34 08,8 1,7 / 19 D= 21,6 DEG AZ=117 BRG
CLL E P 23 34 15 1,4 / 23 D= 22,4 DEG AZ=117 CLL
E 34 54
MOX E P 23 34 23,5 D= 22,9 DEG AZ=113 MOX
E S 38 38
LMH 45,9 T 15 AE 0,4 MLH =4,0
LMV 47,1 T 14 AV 0,7 MLV =4,4

1978 SEP 22 NORTHERN ITALY FRIULI NO MB COMP. 46,5N; 13,3E 10KM H=00 55 57,3 (CSEM)
46,4N; 13,1E 10KM 00 55 55,4 (NEIS)
MOX I PN 00 57 02,0 D= 4,3 DEG AZ=164 MOX
E SG 58 18
BRG E SN. 00 57 57,0 D= 4,4 DEG AZ=186 BRG
E SG 58 20
CLL E SG 00 58 32 D= 4,8 DEG AZ=178 CLL

1978 SEP 22 OFF EAST COAST OF HONSHU, JAPAN MB=4,9 (22) 38,4N;143,0E 33KM H=03 57 47,0 (NEIS)
38,3N;143,0E 33KM 03 57 40,8 (WDCB)
BRG I P 04 09 57,1 0,9 / 8 D= 80,5 DEG AZ= 38 BRG
CLL I P 04 09 57,3D 1,1 / 18 D= 80,5 DEG AZ= 38 CLL

1978 SEP 22 KERMADEC ISLANDS MB=5,3 (11) 30,6S;178,0W 63KM H=06 59 20,2 (NEIS)
30,6S;177,6W 33KM 06 59 10,9 (WDCB)
CLL I PKP2 07 19 43,9 0,8 / 20 D=157,8 DEG AZ= 26 CLL
E APKP2 20 07
BRG E PKIKP 07 19 10,4 D=157,9 DEG AZ= 28 BRG
I PKP2 19 45,0 0,9 / 16
MOX E PKP2 07 19 47 D=158,7 DEG AZ= 23 MOX

1978 SEP 22 FIJI ISLANDS REGION /NO MB COMP./ 17,3S;176,4W 0KM H=07 =9 05 (ISC)
CLL E 08 18 59 D=145,3 DEG A_= 16 CLL
BRG E 08 18 58,4 D=145,5 DEG AZ= 18 BRG
MOX E(PKP) 08 18 51 D=146,1 DEG AZ= 14 MOX

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1978 SEP 22     SOUTH OF TONGA ISLANDS          MB=5,1 ( 2)  24,9S;175,5W  33KM H=09 49 54,1 (NEIS)
CLL I PKP1      10 09 48,1D 0,8 /   17                               D=152,8 DEG   AZ= 17       CLL
BRG E PKIKP     10 09 41,0                                          D=153,1 DEG   AZ= 19       BRG
    I PKP1         09 48,9  0,9 /   13
    E PKP2         10 01,0

1978 SEP 22     IRAN                            MB=4,4 (20)  33,3N; 56,9E  37KM H=18 53 07,0 (NEIS)
                                                             33,4N; 56,9E  33KM   18 53 02,8 (WDCB)
CLL E P         19 00 10                                            D= 36,5 DEG   AZ=102       CLL

1978 SEP 22     AEGEAN SEA                      /NO MB COMP./  40,3N; 25,2E   0KM H=22 46 40    (ISC)
CLL E           22 50 28                                            D= 13,9 DEG   AZ=138       CLL
    E              50 35

1978 SEP 22     TONGA ISLANDS                   MB=5,2 ( 6)  19,8S;175,9W 205KM H=23 16 25,6 (NEIS)
CLL I PKP1      23 35 47,3D 0,7 /   13                               D=147,8 DEG   AZ= 16       CLL
    E APKP         36 48
BRG E PKP1      23 35 47,7                                          D=148,0 DEG   AZ= 18       BRG

1978 SEP 23     NEAR EAST COAST OF KAMCHATKA    MB=5,1 (64)  54,6N;161,5E  59KM H=05 13 02,3 (NEIS)
                                                             54,5N;162,4E  33KM   05 12 51,5 (WDCB)
CLL I P         05 24 16,2C 1,2 /   85                               D= 71,2 DEG   AZ= 19       CLL
BRG I P         05 24 17,7C 1,0 /   32                               D= 71,5 DEG   AZ= 19       BRG
MOX I P         05 24 22,0C 1,0 /   55          MPV =5,4             D= 72,1 DEG   AZ= 18       MOX

1978 SEP 23
BRG E P         10 15 30,5  0,9 /    8

1978 SEP 23     SOUTH OF FIJI ISLANDS           MB=5,1 ( 6)  23,4S;179,9E 547KM H=16 11 32,8 (NEIS)
CLL I PKP1      16 30 23,2D 0,9 /   25                               D=150,4 DEG   AZ= 25       CLL
    I PKP2         30 31,7C 0,9 /   15          MC  =4,5
    E APKP         32 53
BRG E PKP1      16 30 23,8D 0,7 /   15                               D=150,5 DEG   AZ= 27       BRG
MOX E PKHKP     16 30 25,5                                          D=151,3 DEG   AZ= 23       MOX
    E PKP2         30 36,5

1978 SEP 23     VANUATU ISLANDS                 MB=6,3 (53)  13,9S;167,2E 201KM H=16 32 11,1 (NEIS)
                                                             13,9S;168,2E 350KM   16 32 23,6 (WDCB)
BRG E(PKHKP)    16 51 00,7                                          D=137,2 DEG   AZ= 40       BRG
    I PKIKP        51 12,4                                          DISTANCE 136 DEG  DEPTH 190 KM
    I              51 37,0
    I PP           53 58,0
    E SKP          54 27,0
    E PKS          54 47,0
    E PKKS      17 03 48
    E SS           11 44
    E SSP          12 11
    E SSS          17 10
CLL E           16 50 20                                            D=137,3 DEG   AZ= 39       CLL
    E(PKHKP)       51 01                                            DISTANCE 136 DEG  DEPTH 190 KM
    I PKIKP        51 14,0  1,5 /  770
                   T  7   AN   1,0 AE   0,5 AV   4,1
    I              51 18,4
    I              51 24
    E APKP         52 03
    I PP           54 01,6  T 12   AN   1,6 AE   1,3 AV   3,7   MPPH =6,2 MPPV =6,2
    E SKP          54 28
    E              54 39
    E PKS          54 46
    E              55 34
    E              55 49
    E PPP          57 06
    E           17 02 16
    E SCPPKP       02 25
    E SKKP         03 15
    E SKKS         07,4
    E XSS          13,4
    E              18,2
    FINAL       19
MOX E PKHKP     16 51 05    0,9 /   51                              D=138,3 DEG   AZ= 37       MOX
    E PKIKP        51 13    1,4 /  437
                            T  6                  AV   4,7
    E PP           53 55
    E APP          54 32
    E SS        17 11 50
      LMH          43       T 20   AN   3,1
      LMV          54,5     T 20                  AV   3,6

1978 SEP 23     HOKKAIDO, JAPAN, REGION                 MB=4,5 (31)  43,0N;142,9E 123KM H=18 06 18,1 (NEIS)
                                                                     41,8N;143,8E  33KM   18 05 53,7 (WDCB)
CLL I P         18 17 55,7  0,9 /   18                               D= 76,5 DEG   AZ= 35       CLL
BRG E P         18 17 55,9                                           D= 76,5 DEG   AZ= 36       BRG

1978 SEP 23
CLL E           19 18 33

1978 SEP 23     SOUTH OF FIJI ISLANDS                   MB=4,4 ( 5)  22,3S;179,4W 532KM H=19 34 27,1 (NEIS)
CLL I PKP1      19 53 16,3D 0,9 /   21                               D=149,5 DEG   AZ= 23       CLL
BRG E PKIKP     19 53 12,2                                           D=149,6 DEG   AZ= 25       BRG
    I PKP1         53 16,5  0,8 /   14

1978 SEP 23     OFF EAST COAST OF HONSHU, JAPAN         MB=5,4 (71)  38,4N;143,1E  31KM H=22 43 10,6 (NEIS)
                                                                     38,6N;143,0E  33KM   22 43 06,6 (WDCB)
BRG I P         22 55 21,3C 1,3 /   35                               D= 80,5 DEG   AZ= 38       BRG
    I AP           55 30,7
  (CONT.)
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  (CONT.)
CLL I P         22 55 21,1C 1,4 /   63                              D= 80,6 DEG   AZ= 38       CLL
    I AP           55 30,4
      LM        23 33       T 15   AN   1   AE   1   AV   1
MOX E P         22 55 27    1,4 /   47
      LMH       23 31,3     T 16   AN   1,2 AE   1,0                MPV =5,3     D= 81,6 DEG   AZ= 37       MOX
      LMV          37,2     T 16                  AV   1,6          MLH =5,5
                                                                    MLV =5,5
1978 SEP 23     NORTH OF SVALBARD               MB=4,3 ( 3)  86,3N; 23,9E  10KM H=23 38 39,1 (NEIS)
CLL E P         23 45 35                                            D= 35,2 DEG   AZ=  1       CLL
BRG E P         23 45 39,0  1,2 /   13                              D= 35,7 DEG   AZ=  1       BRG
MOX E P         23 45 42    1,5 /   20          MPV =4,7            D= 35,9 DEG   AZ=  1       MOX

1978 SEP 24     TONGA ISLANDS                   MB=4,5 ( 5)  20,1S;174,0W 115KM H=01 59 06,3 (NEIS)
CLL E PKP1      02 18 41                                            D=148,4 DEG   AZ= 13       CLL
BRG E PKP1      02 18 43,0                                          D=148,7 DEG   AZ= 14       BRG
MOX E PKHKP     02 18 45                                            D=149,2 DEG   AZ= 10       MOX

1978 SEP 24     MID-INDIAN RISE                 MB=5,1 (11)  23,0S; 69,3E  33KM H=03 44 44,3 (NEIS)
                                                             22,9S; 69,7E  33KM   03 44 40,7 (WDCB)
BRG E P         03 57 38,9                                          D= 88,2 DEG   AZ=131       BRG
CLL E(P)        03 57 41                                            D= 88,9 DEG   AZ=130       CLL
MOX E           03 57 44                                            D= 89,2 DEG   AZ=129       MOX

1978 SEP 24     SOUTH OF FIJI ISLANDS           MB=5,0 ( 4)  23,6S;179,9W 519KM H=07 32 26,8 (NEIS)
CLL I PKP1      07 51 20,7D 1,0 /   37                               D=150,6 DEG   AZ= 25       CLL
    I PKP2         51 29,9C 1,0 /   21          MC  =4,7
BRG I PKP1      07 51 21,1D 0,6 /   26                              D=150,7 DEG   AZ= 27       BRG
    I PKP2         51 30,6
MOX E PKHKP     07 51 23                                            D=151,6 DEG   AZ= 23       MOX
    E PKP2         51 34

1978 SEP 24     LOYALTY ISLANDS REGION          MB=5,0 ( 8)  22,0S;170,0E  43KM H=07 43 26,4 (NEIS)
                                                             22,0S;168,4E  33KM   07 43 22,3 (WDCB)
BRG I PKP       08 03 01,6C 1,0 /  138                              D=145,6 DEG   AZ= 42       BRG
CLL I PKP       08 03 01,5C 1,1 /  130                              D=145,7 DEG   AZ= 40       CLL
    I APKP         03 09,6
    I              03 27,1
MOX E PKP       08 03 05    1,2 /   37                              D=146,8 DEG   AZ= 39       MOX
      LMH       09 22       T 18   AN   0,6          MLH =5,4
      LMV          26       T 16                  AV   0,4  MLV =5,3

1978 SEP 24     SOUTHERN ITALY                  MB=4,2 ( 3)  40,8N; 16,1E  28KM H=08 07 44,8 (NEIS)
                                                             40,8N; 16,1E  10KM   08 07 45,4 (CSEM)
                                                             39,9N; 15,3E  33KM   08 07 30,5 (WDCB)
BRG E PN        08 10 13,0                                          D= 10,2 DEG   AZ=171       BRG
    E SN           12 12,7
MOX E PN        08 10 14                                            D= 10,3 DEG   AZ=161       MOX
    E SG           13 37
    E              14 40
CLL E(PN)       08 10 30                                            D= 10,7 DEG   AZ=167       CLL
    E              11 54
    E              12 34
    E              12 58
    E SG           13 45

1978 SEP 24
CLL I P         10 28 56,6D
BRG E P         10 28 56,5  0,9 /    9

1978 SEP 24     LOYALTY ISLANDS REGION          /NO MB COMP./  21,6S;169,8E  60KM H=11 40 07    (ISC)
BRG I PKP       11 59 37,8C 0,9 /   16                              D=145,2 DEG   AZ= 42       BRG
CLL I PKP       11 59 37,2  1,0 /   17                              D=145,3 DEG   AZ= 40       CLL

1978 SEP 24     CENTRAL MID-ATLANTIC RIDGE      MB=4,7 ( 5)   0,9N; 26,4W  10KM H=13 46 20,0 (NEIS)
CLL E P         13 56 31   TRACES                                   D= 60,2 DEG   AZ=227       CLL

1978 SEP 24
CLL E           17 54 29
    E              54 40

1978 SEP 24     IRAN                            MB=4,5 ( 7)  33,6N; 57,2E  33KM H=18 16 04,6 (NEIS)
                                                             33,6N; 57,5E  33KM   18 16 04,9 (WDCB)
BRG E           18 23 11,4                                          D= 35,8 DEG   AZ=102       BRG
CLL E P         18 23 10                                            D= 36,4 DEG   AZ=102       CLL

1978 SEP 24     LOYALTY ISLANDS REGION          MB=5,0 ( 7)  21,9S;170,0E  42KM H=18 20 10,7 (NEIS)
                                                             22,6S;167,2E  33KM   18 20 13,0 (WDCB)
BRG I PKP       18 39 45,8C 1,3 /   96                              D=145,6 DEG   AZ= 42       BRG
CLL I PKP       18 39 45,6C 1,9 /  150                              D=145,6 DEG   AZ= 40       CLL
MOX E PKP       18 39 49,5  1,3 /   35                              D=146,7 DEG   AZ= 39       MOX
      LMV       20 03

1978 SEP 25     KURILE ISLANDS REGION           MB=4,8 (26)  44,8N;150,1E  33KM H=01 50 46,1 (NEIS)
CLL I P         02 02 38,6D 0,9 /   19                              D= 77,3 DEG   AZ= 30       CLL
BRG E P         02 02 39,6  1,2 /    9                              D= 77,4 DEG   AZ= 30       BRG

1978 SEP 25     OFF COAST OF NORTHERN CALIFORNIA MB=4,6 (10)  41,2N;125,3W   2KM H=02 10 50,0 (NEIS)
CLL E P         02 23 09                                            D= 81,0 DEG   AZ=329       CLL
MOX   LMH       03 00,2                                             D= 81,1 DEG   AZ=329       MOX
      LMV          01,4
BRG E P         02 23 14,2                                          D= 81,6 DEG   AZ=330       BRG

1978 SEP 25     VANUATU ISLANDS                 MB=5,3 (18)  15,0S;166,9E  25KM H=04 34 46,0 (NEIS)
BRG E PKP       05 14 12,5                                          D=138,1 DEG   AZ= 41       BRG
CLL E(PKP)      05 14 13   TRACES                                   D=138,2 DEG   AZ= 40       CLL
MOX   LM        06 18,0                                             D=139,2 DEG   AZ= 38       MOX
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1978 SEP 25     FRG, SOUTHWESTERN REGION                    NO MB COMP,
                SWABIAN JURA                                              48,3N; 9,0E   6KM H=08 24 58   (CSEM)
                                                                          48,2N; 8,8E  10KM   08 24 57,2 (NEIS)
                                                                                D=  2,9 DEG   AZ=217       MOX
MOX E PN        08 25 41
    I PG           25 50,0
    I SN           26 16,0
    E SG           26 27
CLL E PG        08 26 14                                                  D=  4,0 DEG   AZ=222       CLL
    E              26 49                                                 DISTANCE   3,9DEG
    I SG           27 03,2
BRG E PG        08 26 13,6                                                D=  4,1 DEG   AZ=233       BRG
    E SG           27 08,5

1978 SEP 25     FIJI ISLANDS REGION                         MB=4,8 ( 1)   21,1S;179,2W 626KM H=10 56 13,6 (NEIS)
BRG E PKP1      11 14 53,6                                                D=148,5 DEG   AZ= 24       BRG

1978 SEP 25     TONGA ISLANDS                              /MB=4,6 ( 2)/  21,4S;174,0W  33KM H=13 22 33    (ISC)
CLL E           13 42 31    1,5 /   27                                   D=149,6 DEG   AZ= 13       CLL
BRG E PKP1      13 42 21,4                                                D=149,9 DEG   AZ= 15       BRG

1978 SEP 25     SOUTH INDIAN OCEAN                          MB=4,8 ( 3)    1,5S; 81,1E  33KM H=18 44 02,7 (NEIS)
BRG E P         18 55 54,7  1,1 /    7                                    D= 77,0 DEG   AZ=109       BRG
CLL I P         18 55 58,7                                                D= 77,7 DEG   AZ=108       CLL

1978 SEP 25     UZBEK SSR                                   MB=4,5 (16)   40,4N; 63,7E  33KM H=21 23 52,4 (NEIS)
                                                                          40,5N; 63,7E  33KM   21 23 47,4 (WDCB)
BRG E P         21 30 49,8  0,9 /   13                                    D= 35,7 DEG   AZ= 87       BRG
CLL E P         21 30 54                                                  D= 36,3 DEG   AZ= 87       CLL

1978 SEP 25     SICHUAN PROVINCE, CHINA                     MB=4,7 (21)   29,7N; 99,6E  33KM H=21 49 39,7 (NEIS)
                                                                          29,5N; 99,7E  33KM   21 49 38,3 (WDCB)
CLL E P         22 00 21                                                  D= 65,4 DEG   AZ= 73       CLL
MOX E P         22 00 28   TRACES                                         D= 66,4 DEG   AZ= 72       MOX

1978 SEP 25     VANUATU ISLANDS                             MB=5,4 (28)   15,0S;166,8E  35KM H=22 48 44,7 (NEIS)
                                                                          15,0S;166,5E  33KM   22 48 45,1 (WDCB)
BRG E PKP       23 08 09,0                                                D=138,1 DEG   AZ= 41       BRG
CLL E PKP       23 08 08                                                  D=138,1 DEG   AZ= 40       CLL

1978 SEP 26     VANUATU ISLANDS                             MB=5,6 ( 7)   13,3S;167,1E 202KM H=00 41 10,8 (NEIS)
BRG E PKP       01 00 10,2                                                D=136,7 DEG   AZ= 40       BRG
    E SKP          03 27,3
CLL E PKP       01 00 09                                                  D=136,7 DEG   AZ= 38       CLL
    E              04 03

1978 SEP 26     FRG, SOUTHWESTERN REGION                    NO MB COMP,
                SWABIAN JURA                                              48,2N;  8,7E  10KM H=02 54 27,6 (NEIS)
MOX E SG        02 55 55,5                                                D=  3,1 DEG   AZ=219       MOX

1978 SEP 26     CENTRAL YUGOSLAVIA                          NO MB COMP,   43,3N; 19,2E  10KM H=04 59 10,3 (NEIS)
                                                                          43,1N; 19,1E  10KM   04 59 11,0 (CSEM)
BRG E           05 04 25,7                                                D=  8,4 DEG   AZ=153       BRG
CLL E           05 03 51                                                  D=  9,0 DEG   AZ=150       CLL

1978 SEP 26     MINAHASSA PENINSULA                         MB=5,7 (41)    1,2N;120,3E  33KM H=06 07 44,1 (NEIS)
                                                                           1,1N;120,3E  40KM   06 07 44,8 (WDCB)
BRG I P         06 21 24,7  1,1 /   12                                    D= 99,3 DEG   AZ= 76       BRG
    I              21 38,0
    E PP           25 31,5
CLL E P         06 21 26                                                  D= 99,8 DEG   AZ= 76       CLL
    E PP           25 34
MOX E P         06 21 32                                                  D=100,8 DEG   AZ= 75       MOX
    E PP           25 40,5
      LMH       07 07,3     T 27   AN   2,4 AE   1,4          MLH =5,6
      LMV          16,5     T 20                      AV   0,8  MLV =5,2

BRG  INTERRUPTION OF SHORTPERIODIC RECORDS FROM 10H 14M TO 11H 23M

1978 SEP 26     KERMADEC ISLANDS REGION                     MB=4,8 ( 4)   31,3S;179,7W 261KM H=10 36 59,7 (NEIS)
CLL I PKP2      10 56 59,6  1,0 /   17                                    D=157,9 DEG   AZ= 30       CLL
MOX E PKP2      10 57 04                                                  D=158,9 DEG   AZ= 28       MOX

1978 SEP 26     FIJI ISLANDS REGION                         MB=5,2 ( 7)   20,4S;178,1W 574KM H=12 16 33,6 (NEIS)
CLL I PKP1      12 35 15,9D 0,9 /   18                                    D=147,9 DEG   AZ= 20       CLL
BRG I PKP1      12 35 16,2                                                D=148,1 DEG   AZ= 22       BRG
MOX E PKHKP     12 35 17   TRACES                                         D=148,9 DEG   AZ= 18       MOX

1978 SEP 26     SOUTHEAST INDIAN RISE                       MB=5,1 ( 6)   44,8S; 96,8E  33KM H=14 03 06,0 (NEIS)
CLL E PKP       14 21 52                                                  D=119,9 DEG   AZ=125       CLL

1978 SEP 26     SOUTH OF MARIANA ISLANDS                    MB=5,8 (74)   12,6N;143,3E  91KM H=14 24 44,3 (NEIS)
                                                                          12,4N;143,6E 100KM   14 24 43,8 (WDCB)
BRG I P         14 38 33,2                                                D=103,0 DEG   AZ= 51       BRG
    E              41 21,6
    E APP          43 10,8
CLL I P         14 38 34,0                                                D=103,2 DEG   AZ= 50       CLL
    E              41 38
    E              42 09
    E APP          43 13
MOX E P         14 38 39,5                                                D=104,3 DEG   AZ= 49       MOX
    E PP           42 59
    E APP          43 23,5
      LMH       15 21,5
      LMV          23,8
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1978 SEP 26     HUNGARY                                     NO MB COMP,   47,2N; 19,0E  10KM H=16 47 33,1 (NEIS)
                                                                          47,3N; 19,1E  10KM   16 47 34,9 (CSEM)
                                                                          47,1N; 18,7E  33KM   16 47 36,2 (WDCB)
BRG E PN        16 48 48,2                                                D=  5,0 DEG   AZ=136       BRG
    E SN           49 46,3
CLL I PN        16 48 58,7                                                D=  5,7 DEG   AZ=134       CLL
    E PG           49 25                                                 DISTANCE   5,9DEG
    E SN           50 01
    E              50 15
    E(SG)          50 46
MOX E PN        16 49 04                                                  D=  6,0 DEG   AZ=122       MOX
    E              49 10
    E SN           50 12
    E SG           50 48

1978 SEP 26     TAJIK SSR                                   MB=4,9 (33)   39,0N; 70,8E  15KM H=19 21 47,4 (NEIS)
                                                                          39,0N; 70,7E  33KM   19 21 45,9 (WDCB)
BRG E P         19 29 31,6                                                D= 41,0 DEG   AZ= 84       BRG
    E PP           31 08,2
CLL E(P)        19 29 40                                                  D= 41,5 DEG   AZ= 84       CLL
    E PP           31 15

1978 SEP 26
CLL E           22 53 01

1978 SEP 27     SWITZERLAND                                 NO MB COMP,   46,9N;  9,5E  10KM H=00 23 50,4 (NEIS)
                                                                          46,9N;  9,5E  10KM   00 23 52,3 (CSEM)
MOX E PN        00 24 49                                                  D=  4,0 DEG   AZ=201       MOX
    E PG           25 06
    E SN           25 37
    E SG           25 57
BRG E SG        00 26 29,5                                                D=  4,9 DEG   AZ=218       BRG
CLL E SG        00 26 29                                                  D=  5,0 DEG   AZ=209       CLL

1978 SEP 27     UNDERGROUND EXPLOSION                       MB=5,6 (76)   73,4N; 54,7E   0KM H=02 04 58,2 (NEIS)
                                                                          73,6N; 54,9E   0KM   02 04 59,3 (CSEM)
CLL I P         02 10 54,1C 1,2 /   88          MPV =5,5                  D= 28,3 DEG   AZ= 24       CLL
    E              11 17                                                 DISTANCE 28,3DEG
    I PCP          14 08,0
    E SN           16 14
    E LMH          20 15
      LM           25
BRG I P         02 10 56,1C 0,8 /  118                                    D= 28,5 DEG   AZ= 23       BRG
    I              11 14,6
    E PCP          14 08,2
    E SN           16 15,8
MOX E P         02 11 03    0,7 /   50          MPV =5,5                  D= 29,3 DEG   AZ= 24       MOX
    E              11 21
      LMH          22,9     T 12          AE   0,8          MLH =4,6
      LMV          25,5

1978 SEP 27     HOKKAIDO, JAPAN, REGION                     MB=4,9 (45)   41,4N;142,1E  68KM H=03 55 12,8 (NEIS)
                                                                          41,0N;142,2E  33KM   03 55 06,3 (WDCB)
BRG E P         04 07 02,5  1,3 /   11                                    D= 77,6 DEG   AZ= 37       BRG
CLL I P         04 07 02,1C 1,2 /   27                                    D= 77,6 DEG   AZ= 37       CLL
    I AP           07 21,8
MOX E P         04 07 08    1,4 /   23          MPV =4,9                  D= 78,6 DEG   AZ= 36       MOX

CLL  INTERRUPTION OF ALL RECORDS FROM 10H 08M TO 10H 44M

1978 SEP 27     SOUTH OF HONSHU, JAPAN                      MB=5,1 (62)   33,5N;138,1E 293KM H=17 00 17,5 (NEIS)
                                                                          33,5N;137,9E 250KM   17 00 13,8 (WDCB)
BRG I P         17 12 09,6D 0,9 /   69                                    D= 82,7 DEG   AZ= 44       BRG
    I PP           15 24,3
CLL I P         17 12 09,9D 1,1 /  160                                    D= 82,8 DEG   AZ= 44       CLL
    E AP           12 56
    E XP           13 19
    E PP           15 24
MOX I P         17 12 15,5D 1,4 /   74          MPV =5,3                  D= 83,8 DEG   AZ= 43       MOX
    E PP           15 34    1,7 /   42          MPPV =5,3

1978 SEP 27     UNDERGROUND EXPLOSION                       MB=5,0 (34)
                >DRAUGHTS<                                                37,1N;116,1W   0KM H=17 00 00,0 (NEIS)
CLL I P         17 12 18,2  1,1 /   48  SUPERPOSED BY PRECEDING QUAKE      D= 81,3 DEG   AZ=321       CLL

1978 SEP 27     UNDERGROUND EXPLOSION                       MB=5,7 (72)
                >RUMMY<                                                   37,1N;116,0W   0KM H=17 20 00,0 (NEIS)
MOX I P         17 32 18,0C 1,2 /   85          MPV =5,7                  D= 81,2 DEG   AZ=320       MOX
    E PP           35 23
      LMH          50
      LMV          53,5
CLL I P         17 32 18,3C 1,3 /  105                                    D= 81,3 DEG   AZ=321       CLL
    E              32 38                                                 D= 82,0 DEG   AZ=322       BRG
BRG I P         17 32 22,6C 1,0 /   66

1978 SEP 27     LOYALTY ISLANDS REGION                     /MB=4,3 ( 1)/  22,2S;169,9E  33KM H=18 59 15    (ISC)
BRG E PKP1      19 18 52,4  0,9 /    7                                    D=145,8 DEG   AZ= 42       BRG
CLL E PKP1      19 18 53                                                  D=145,8 DEG   AZ= 40       CLL

1978 SEP 28     POLAND, UPPER SILESIA
BRG E PG        02 10 08,2
    E SG           10 48
  (CONT.)
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(CONT.)

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CLL E           02 11 14

1978 SEP 28     KASHMIR-INDIA BORDER REGION                    MB=4,7 ( 7)   33,5N; 76,2E  35KM H=05 32 16,3 (NEIS)
BRG E P         05 40 52,0                                                         D= 47,8 DEG   AZ= 86       BRG

1978 SEP 28     OFF EAST COAST OF KAMCHATKA                    MB=4,8 (26)   51,3N;159,8E  33KM H=09 38 33,2 (NEIS)
                                                                             52,9N;158,7E 100KM   09 38 51,0 (WDCB)
                                                                                   D= 74,0 DEG   AZ= 21       CLL

CLL E P         09 50 07
    E AP        09 19
      LH        10 24      T 16   AN   1   AE   1,5
      LM           28      T 15   AN   2   AE   1   AV   1,5   MLH =5,6 MLV =5,4
                                                                       D= 74,9 DEG   AZ= 20       MOX
MOX E P         09 50 15
    E S         10 00 05                                                MLH =5,5
      LMH          25,2     T 16   AN   1,4 AE   1,3
      LMV          29,4     T 14                          AV   2,3   MLV =5,7

1978 SEP 28     OFF EAST COAST OF KAMCHATKA                    MB=4,7 (18)   51,4N;159,7E  33KM H=09 55 38,2 (NEIS)
                                                                             50,7N;160,4E  33KM   09 55 32,8 (WDCB)
                                                                                   D= 73,8 DEG   AZ= 21       CLL

CLL E P         10 07 11

1978 SEP 28     VANUATU ISLANDS                                MB=5,6 (37)   19,1S;169,0E 145KM H=10 31 28,9 (NEIS)
                                                                             19,2S;169,2E  33KM   10 31 14,6 (WDCB)
                                                                                   D=142,6 DEG   AZ= 41       BRG
BRG E PKP       10 50 42,8
    I SKP       54 10,5                                                        D=142,7 DEG   AZ= 39       CLL
CLL E PKP       10 50 43
    E           51 46
    I SKP       54 10,8D 1,4 /   39                                            D=143,8 DEG   AZ= 38       MOX
MOX E PKP       10 50 46    1,2 /   41                                                                   DEPTH 142 KM
    E APKP      51 24

BRG  INTERRUPTION OF ALL RECORDS FROM 11H 00M TO 18H 02M

1978 SEP 28     HINDU KUSH REGION                              MB=4,5 ( 8)   36,4N; 70,9E 202KM H=11 16 56,9 (NEIS)
CLL E(P)        11 24 33                                                           D= 43,2 DEG   AZ= 87       CLL
    E           24 48

1978 SEP 28     SOUTH OF FIJI ISLANDS                          MB=4,9 ( 8)   22,0S;179,7W 584KM H=14 48 42,9 (NEIS)
CLL I PKP1      15 07 26,4  0,9 /   28                                         D=149,1 DEG   AZ= 23       CLL
    E PKP2      07 34
MOX E PKHKP     15 07 29                                                       D=150,1 DEG   AZ= 21       MOX

1978 SEP 29     FRG, SOUTHWESTERN REGION                       NO MB COMP.
                SWABIAN JURA                                                 48,3N;  9,0E   6KM H=01 42 28   (CSEM)
                                                                             48,3N;  9,0E  10KM   01 42 26,1 (NEIS)
MOX E PN        01 43 11                                                           D=  2,9 DEG   AZ=217       MOX
    E PG        43 19
    E SN        43 46
    E SG        43 59                                                          D=  4,0 DEG   AZ=222       CLL
CLL E PG        01 43 43
    E           44 20
    E SG        44 36
BRG E PG        01 43 44,2                                                     D=  4,1 DEG   AZ=233       BRG
    E SG        44 39,5

1978 SEP 29
BRG I PG        02 10 03,7
    I SG        10 23,8
CLL E           02 10 13
    E SG        10 38
MOX E PG        02 10 33                                                                  DISTANCE   2,9DEG
    E SG        11 11,5

1978 SEP 29     POLAND, UPPER SILESIA                                        50,3N; 19,2E       H=06 44 32,0   (WAR)
CLL E SG        06 46 42                                                           D=  4,1 DEG   AZ=102       CLL

1978 SEP 29     BURMA                                          MB=4,5 (11)   21,4N; 94,7E  96KM H=08 59 28,2 (NEIS)
BRG E P         09 10 18,9                                                         D= 67,9 DEG   AZ= 83       BRG
    I AP        10 45,6

1978 SEP 29     KURILE ISLANDS                                 MB=5,1 (45)   44,0N;149,2E  33KM H=11 07 43,3 (NEIS)
                                                                             44,7N;148,7E  70KM   11 07 51,4 (WDCB)
CLL I P         11 19 38,5C 1,1 /   33                                             D= 77,8 DEG   AZ= 31       CLL
    I AP        19 54,1
      LMH       51
BRG E P         11 19 39,0  1,0 /   18                                         D= 77,8 DEG   AZ= 31       BRG
MOX E P         11 19 45    1,2 /   20                   MPV =5,0          D= 78,8 DEG   AZ= 30       MOX
      LMH          52,9     T 20   AN   1,0 AE   1,1    MLH =5,3

1978 SEP 29     DODECANESE ISLANDS                             MB=4,0 ( 5)   35,0N; 27,1E  10KM H=12 03 49,3 (NEIS)
BRG E P         12 08 07,3                                                         D= 18,5 DEG   AZ=144       BRG
CLL E P         12 08 14                                                           D= 19,2 DEG   AZ=143       CLL

1978 SEP 29     FRG, SOUTHWESTERN REGION                       NO MB COMP.
                SWABIAN JURA                                                 48,3N;  9,0E   6KM H=15 53 04   (CSEM)
                                                                             48,3N;  9,1E  10KM   15 53 00,9 (NEIS)
MOX E PN        15 53 46,5                                                         D=  2,9 DEG   AZ=217       MOX
    E PG        53 54
    E SN        54 21
    E SG        54 32                                                          D=  4,0 DEG   AZ=222       CLL
CLL E           15 54 34
    E SG        55 10
BRG E PG        15 54 21,3                                                     D=  4,1 DEG   AZ=233       BRG
    E SG        55 14,0

1978 SEP 29     MICHOACAN, MEXICO                              MB=5,5 (72)   18,6N;102,3W  96KM H=16 21 41,0 (NEIS)
                                                                             19,2N;102,1W  40KM   16 21 37,0 (WDCB)
MOX E P         16 34 32    2,0 /   60                   MPV =5,4          D= 90,0 DEG   AZ=300       MOX
CLL I P         16 34 33,8  1,9 /   62                                     D= 90,4 DEG   AZ=301       CLL
BRG E P         16 34 36,9D 1,6 /   44                                     D= 91,2 DEG   AZ=302       BRG

1978 SEP 29
CLL E           18 56 16
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1978 SEP 29     KURILE ISLANDS                                 MB=4,5 ( 5)   44,3N;148,8E  33KM H=22 05 09,1 (NEIS)
CLL E P         22 17 03                                                           D= 77,4 DEG   AZ= 31       CLL
    E AP        17 17
BRG E P         22 17 03,5                                                     D= 77,4 DEG   AZ= 31       BRG

1978 SEP 30     POLAND, UPPER SILESIA
CLL E           00 41 17   TRACES

1978 SEP 30
CLL E           00 44 13

1978 SEP 30     IONIAN SEA                                     MB=4,8 (18)   37,3N; 20,3E  33KM H=01 05 12,4 (NEIS)
                                                                             37,5N; 20,4E  46KM   01 05 17,2 (CSEM)
                                                                             37,3N; 20,4E  33KM   01 05 12,0 (WDCB)
BRG E P         01 08 34,4                                                         D= 14,3 DEG   AZ=159       BRG
MOX E P         01 08 47    1,3 /   17                   MPV =4,9          D= 14,7 DEG   AZ=152       MOX
      LMH          13,9     T 17   AN   1,0 AE   1,2    MLH =4,2
      LMV          15,1     T 15                    AV   0,6
CLL E P         01 08 43                                                       D= 14,9 DEG   AZ=157       CLL
    E PP        08 50
    E           09 42
    E           10 52
    E           12 43
      LMH       14

CLL  INTERRUPTION OF SHORTPERIODIC RECORDS FROM 05H 47M TO 05H 50M (AT OCT 02)

1978 SEP 30
CLL I P         08 26 30,7 TRACES

1978 SEP 30     SOUTH BURMA                                    MB=5,5 (70)   16,6N; 95,9E  10KM H=09 04 31,2 (NEIS)
                                                                             17,1N; 95,7E  33KM   09 04 32,4 (WDCB)
BRG E P         09 15 58,1  2,1 /   69                                         D= 72,3 DEG   AZ= 85       BRG
    I AP        16 02,6
    E S         25 26,0
      LM        53       T 17   AN   3,5 AE   5,8 AV   6,0   MLH =6,0 MLV =6,0
CLL E P         09 16 02                                                       D= 72,8 DEG   AZ= 85       CLL
    E S         25 24
    E L         34 20
      LMH       49       T 20   AN   6,5 AE   2,5                MLH =5,9
      LMV       53       T 16   AN   3,5 AE   2,5 AV   3,5   MLV =5,8
MOX E P         09 16 06    1,7 / 109                          MPV =5,6       D= 73,8 DEG   AZ= 84       MOX
    E S         25 40
    E SSS       34 20
      LMH       50,4     T 20   AN   6,3                      MLH =5,9
      LMV       53,9     T 16                    AV   5,5   MLV =6,0

1978 SEP 30     WESTERN POLAND
BRG I PG        10 24 13,5
    I SG        24 31,3
CLL I PN        10 24 22,7                                                     DISTANCE 220 KM
    I PG        24 25,4
    I SG        24 51,5
MOX E PG        10 24 41                                                       DISTANCE   2,9DEG
    E SG        25 18

1978 SEP 30     SOUTH OF FIJI ISLANDS                          MB=5,4 (13)   23,0S;178,9W 435KM H=16 51 13,5 (NEIS)
                                                                             21,5S;179,3W  33KM   16 50 30,1 (WDCB)
CLL I PKP1      17 10 14,9                                                         D=150,3 DEG   AZ= 23       CLL
    I PKP2      10 23,2
    E APKP      12 07
BRG I PKP1      17 10 15,3  0,9 /   33                                         D=150,4 DEG   AZ= 25       BRG
    I PKP2      10 23,8
    E APKP      12 10,0
MOX E PKHKP     17 10 17                                                       D=151,2 DEG   AZ= 20       MOX
    E PKP2      10 28

1978 SEP 30     NORTHERN ITALY                                 NO MB COMP.   44,5N;  9,7E  17KM H=18 55 49,7 (NEIS)
                                                                             44,4N;  9,8E  10KM   18 55 49,5 (CSEM)
MOX E           18 58 18                                                           D=  6,3 DEG   AZ=193       MOX
    E SN        58 33
BRG E           18 58 35,9                                                     D=  7,0 DEG   AZ=206       BRG
    E           59 32
CLL E SG        18 59 41                                                       D=  7,2 DEG   AZ=199       CLL

1978 SEP 30
CLL E           19 14 22   TRACES
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1978 OCT 01
MOX E          01 22 41

1978 OCT 01
CLL I P        04 36 22,5 TRACES

1978 OCT 01    MINDANAO, PHILIPPINE ISLANDS                    MB=5,6 (48)    6,7N;124,0E  46KM H=13 23 50,1 (NEIS)
                                                                              6,7N;124,1E  33KM   13 23 48,3 (WDCB)
BRG E P        13 37 20,0                                                          D= 97,2 DEG   AZ= 70        BRG
CLL E P        13 37 21                                                            D= 97,7 DEG   AZ= 69        CLL
    E(PP)         41 28
      LM       14 27
MOX E P        13 37 26                                                            D= 98,7 DEG   AZ= 68        MOX
    E PP          41 30,5
      LMH      14 19,3     T 23   AN   1,3 AE   0,9          MLH  =5,5
      LMV         27,8     T 16                   AV   1,1   MLV  =5,5

1978 OCT 01
CLL I P        19 01 36,5
BRG E P        19 01 36,6

1978 OCT 01
CLL E P        20 24 16   TRACES

1978 OCT 01
CLL E          23 00 50

1978 OCT 02
CLL E P        03 29 11

1978 OCT 02
CLL E P        03 43 11

1978 OCT 02
CLL E P        03 59 19   TRACES

1978 OCT 02    KERMADEC ISLANDS REGION                         MB=5,0 ( 6)   27,7S;178,3W 259KM H=06 47 07,7 (NEIS)
CLL E PKP1     07 06 39                                                            D=154,9 DEG   AZ= 24        CLL
    E PKP2        06 55
    E APKP2       07 50
BRG I PKIKP    07 06 30,0                                                          D=155,1 DEG   AZ= 26        BRG
    I PKP2        06 55,9  1,0 /   18

1978 OCT 02
CLL I P        10 33 41,8D

1978 OCT 02    POLAND, UPPER SILESIA                                         49,8N; 18,8E  10KM H=11 39 41,4 (CSEM)
BRG E PG       11 40 43,0                                                          D=  3,3 DEG   AZ=107        BRG
    E SG          41 27,0
CLL E PG       11 40 56                                                            D=  4,0 DEG   AZ=110        CLL
    E SG          41 48                                                            DISTANCE   3,9DEG
MOX E PG       11 41 12                                                            D=  4,7 DEG   AZ= 98        MOX

1978 OCT 02    KURILE ISLANDS REGION                           MB=4,8 ( 6)   43,9N;149,3E  26KM H=13 11 31,4 (NEIS)
                                                                              44,1N;149,6E  33KM   13 11 32,3 (WDCB)
CLL E P        13 23 28                                                            D= 77,9 DEG   AZ= 31        CLL
    E             23 43
BRG E(P)       13 23 35,0                                                          D= 78,0 DEG   AZ= 31        BRG
MOX E P        13 23 34                                                            D= 78,9 DEG   AZ= 30        MOX

1978 OCT 02
CLL I P        15 07 06,2D

1978 OCT 02
CLL E          15 28 29

1978 OCT 02    KURILE ISLANDS REGION                          /MB=3,9 ( 1)/  43,9N;148,6E  30KM H=19 23 34    (ISC)
CLL E P        19 35 28                                                            D= 77,7 DEG   AZ= 31        CLL

1978 OCT 02    SOUTH OF FIJI ISLANDS                           MB=5,2 (11)   23,9S;179,6W 511KM H=19 33 30,8 (NEIS)
CLL E PKP1     19 52 26                                                            D=151,0 DEG   AZ= 24        CLL
BRG I PKP1     19 52 27,1                                                          D=151,1 DEG   AZ= 26        BRG

1978 OCT 02    ROMANIA                                         MB=5,0 (54)   45,7N; 26,5E 164KM H=20 28 52,6 (NEIS)
                                                                              45,7N; 26,7E 164KM   20 28 53,5 (CSEM)
                                                                              45,8N; 26,6E 150KM   20 28 52,4 (WDCB)
BRG E P        20 31 09,8  1,6 /   16                                              D=  9,8 DEG   AZ=117        BRG
    E             33 52,2
CLL E(P)       20 31 28                                                            D= 10,6 DEG   AZ=117        CLL
    E AP          31 59
    I             32 20,3
    E             33 02
    E             34 02
    E             34 32
      LMH         34,8
    E L           35 15
MOX E P        20 31 27    2,1 /   48                  MPV  =4,6                 D= 11,1 DEG   AZ=111        MOX
    E             34 38

1978 OCT 02
CLL E          21 04 26

1978 OCT 02
CLL E          22 15 38

1978 OCT 04
CLL E          00 27 53
```

1978 OCT 04 KURILE ISLANDS — MB=5,7 (76) — 46,3N;151,7E 115KM H=03 54 18,4 (NEIS); 47,0N;151,3E 100KM 03 54 21,0 (WDCB)

CLL I P	04 05 56,9C 1,2 / 400		D= 76,5 DEG AZ= 28 CLL
BRG I P	04 05 57,3C 1,1 / 144		D= 76,6 DEG AZ= 29 BRG
E PP	08 48,1		
MOX I P	04 06 02,5C 1,2 / 211	MPV =5,8	D= 77,5 DEG AZ= 27 MOX
LMH	37,5		

1978 OCT 04 POLAND, UPPER SILESIA

BRG E	10 40 52	
E SG	41 40	
CLL E	10 41 33	
E SG	42 03	

1978 OCT 04 NEPAL — MB=5,2 (44) — 27,8N; 86,0E 33KM H=13 53 52,0 (NEIS); 28,3N; 85,9E 33KM 13 53 50,6 (WDCB)

BRG E P	14 03 42,8 1,2 / 36		D= 57,9 DEG AZ= 84 BRG
CLL E P	14 03 48 1,3 / 22		D= 58,4 DEG AZ= 84 CLL
MOX E P	14 03 57,5 1,2 / 24	MPV =5,2	D= 59,4 DEG AZ= 83 MOX

1978 OCT 04 CALIFORNIA-NEVADA BORDER REGION — MB=5,4 (50) — 37,5N;118,6W 9KM H=16 42 48,6 (NEIS); 37,4N;119,0W 33KM 16 42 51,7 (WDCB)

MOX E P	16 55 11	1,6 / 39				MPV =5,2		MOX
LMH	17 29,6	T 18	AN	1,6	AE 3,4	MLH =5,8		
LMV	33,5	T 16			AV 2,2	MLV =5,6		
CLL I P	16 55 11,1C	1,6 / 40					D= 81,9 DEG AZ=323	CLL
LMH	17 28	T 20	AN	2,5	AE 3	MLH =5,8		
BRG I P	16 55 13,7C	0,8 / 23					D= 82,6 DEG AZ=324	BRG
LMH	17 28	T 20	AN	3,0	AE 3,8			
LMV	33	T 16			AV 2,4			

1978 OCT 04 CENTRAL YUGOSLAVIA — 43,8N; 18,4E 0KM H=17 41 40,0 (ING)

CLL E SG	17 46 13	D= 8,3 DEG AZ=152 CLL

1978 OCT 04 CALIFORNIA-NEVADA BORDER REGION — MB=5,0 (1) — 37,6N;118,6W 10KM H=17 39 02,9 (NEIS)

CLL E(P)	17 51 30	D= 81,8 DEG AZ=323 CLL
BRG E P	17 51 27,0	D= 82,5 DEG AZ=324 BRG
E	51 33,0	

1978 OCT 04 ALEUTIAN ISLAND REGION — MB=5,3 (66) — 50,9N;173,5E 33KM H=19 55 17,5 (NEIS); 51,3N;173,0E 33KM 19 55 15,0 (WDCB)

CLL I P	20 07 06,8D	2,0 / 110					D= 76,8 DEG AZ= 13	CLL
BRG I P	20 07 08,6D	1,5 / 44					D= 77,1 DEG AZ= 13	BRG
MOX E P	20 07 12 D	2,0 / 68				MPV =5,3	D= 77,7 DEG AZ= 12	MOX
LMV	38,3	T 28			AV 0,7	MLV =4,9		
LMH	38,8	T 28	AN	1,4		MLH =5,1		

1978 OCT 05
CLL E 03 27 01

1978 OCT 05
CLL E 03 37 42

1978 OCT 05 SOLOMON ISLANDS — /MB=5,4 (1)/ — 7,6S;156,7E 50KM H=03 45 59 (ISC)

BRG E PKP	04 04 57,8 1,3 / 14	D=127,0 DEG AZ= 49 BRG

1978 OCT 05
CLL E 05 02 14

1978 OCT 05
CLL E 10 57 36 TRACES

1978 OCT 05
CLL I(P) 12 17 37,5 1,1 / 24

1978 OCT 05 OFF EAST COAST OF KAMCHATKA — MB=4,8 (16) — 54,9N;163,3E 42KM H=13 16 51,1 (NEIS); 54,9N;163,7E 33KM 13 16 44,9 (WDCB)

CLL E	13 28 17	D= 71,3 DEG AZ= 18 CLL
E AP	28 27	
E	28 48	
BRG E P	13 28 06,0	D= 71,5 DEG AZ= 18 BRG

1978 OCT 05
CLL I P 13 58 28,0C

1978 OCT 05
CLL I P 14 40 58,9C

1978 OCT 05
CLL E 15 51 44

1978 OCT 05
CLL E 16 35 58

1978 OCT 05 CENTRAL ITALY — NO MB COMP, — 43,8N; 13,2E 10KM H=17 51 42,1 (NEIS); 43,8N; 13,2E 10KM 17 51 44,2 (CSEM)

MOX E(PN)	17 53 32	D= 6,9 DEG AZ=170 MOX
E SN	54 38	DISTANCE 6,8DEG
E SG	55 24	
LM	55,7	
BRG E PN	17 53 25,7	D= 7,1 DEG AZ=184 BRG
E PG	53 59,0	
I SN	54 43,2	
E SG	55 30,6	
CLL E	17 55 05	D= 7,5 DEG AZ=179 CLL
E	55 53	
E	56 01	

1978 OCT 06 LAKE TANGANYIKA REGION — MB=4,9 (15) — 2,0S; 29,0E 33KM H=04 12 02,4 (NEIS)

BRG E P	04 21 26,4 1,4 / 17	D= 54,2 DEG AZ=161 BRG
CLL E P	04 21 31	D= 54,8 DEG AZ=160 CLL

1978 OCT 06 KAMCHATKA — MB=5,0 (15) — 55,9N;160,2E 57KM H=09 38 30,4 (NEIS); 56,2N;160,9E 50KM 09 38 29,2 (WDCB)

CLL I P	09 49 35,6 1,8 / 49	D= 69,8 DEG AZ= 19 CLL
E AP	49 52	
BRG E P	09 49 36,9	D= 70,0 DEG AZ= 19 BRG
MOX E P	09 49 40	D= 70,7 DEG AZ= 18 MOX

1978 OCT 06 FRG, SOUTHWESTERN REGION — NO MB COMP, — 48,2N; 9,1E 10KM H=14 34 09,7 (NEIS)
SWABIAN JURA

MOX E PN	14 34 54,5	D= 2,9 DEG AZ=215 MOX
I PQ	35 03,0	
E SG	35 41	
CLL E PQ	14 35 26	D= 4,0 DEG AZ=221 CLL
E SQ	36 17	DISTANCE 3,9DEG
BRG E PQ	14 35 31,0	D= 4,1 DEG AZ=232 BRG
I SQ	36 27,7	

1978 OCT 06 LUZON, PHILIPPINE ISLANDS — MB=5,1 (11) — 16,5N;122,1E 16KM H=16 08 39,9 (NEIS)

BRG E P	16 21 32,3						D= 88,3 DEG	AZ= 66 BRG
CLL E P	16 21 34						D= 88,7 DEG	AZ= 65 CLL
E	21 46							
E	22 30							
LM	17 07							
MOX E P	16 21 44						D= 89,8 DEG	AZ= 64 MOX
E AP	21 54,5							DEPTH 36 KM
LMH	17 06,0							
LMV	07,8	T 15			AV 0,8	MLV =5,3		

1978 OCT 06
CLL E 18 04 02

1978 OCT 06 HONSHU, JAPAN — MB=5,2 (24) — 35,8N;137,5E 27KM H=20 44 44,3 (NEIS); 36,1N;137,5E 50KM 20 44 48,1 (WDCB)

BRG E P	20 56 55,8	1,6 / 16					D= 80,5 DEG	AZ= 43 BRG
CLL I P	20 56 55,1	1,5 / 27					D= 80,5 DEG	AZ= 43 CLL
LMH	21 31							
MOX E P	20 57 02						D= 81,6 DEG	AZ= 42 MOX
LMH	21 31,5	T 18			AE 0,6	MLH =5,0		
LMV	39,5							

1978 OCT 06 NEAR COAST OF NORTHERN CALIF. — MB=4,8 (8) — 40,5N;124,6W 32KM H=21 26 31,8 (NEIS)

CLL E(P)	21 38 56	D= 81,4 DEG AZ=329 CLL
BRG E P	21 38 52,4	D= 82,0 DEG AZ=329 BRG
E AP	39 04,1	

1978 OCT 07 NORTHEAST OF TAIWAN — MB=5,0 (24) — 25,5N;124,5E 136KM H=00 20 46,9 (NEIS); 25,5N;125,0E 33KM 00 20 32,9 (WDCB)

BRG I P	00 32 55,7	D= 82,5 DEG AZ= 59 BRG
CLL I P	00 32 56,8	D= 82,8 DEG AZ= 58 CLL

1978 OCT 07 FIJI ISLANDS REGION — MB=4,6 (7) — 17,9S;178,6W 619KM H=01 08 59,5 (NEIS)

CLL I PKP1	01 27 30,7C 1,2 / 48	D=145,4 DEG AZ= 20 CLL
BRG I PKP1	01 27 31,1C 1,1 / 27	D=145,6 DEG AZ= 21 BRG
MOX E PKP	01 27 32 1,4 / 21	D=146,3 DEG AZ= 18 MOX

1978 OCT 07
CLL E 04 31 44

1978 OCT 07 FIJI ISLANDS REGION — MB=5,1 (27) — 20,2S;177,7W 501KM H=08 17 22,3 (NEIS); 19,1S;178,7W 33KM 08 16 25,5 (WDCB)

CLL I PKIKP	08 36 07,6C	1,8 / 52	D=147,8 DEG AZ= 19 CLL
I PKP1	36 11,0D	1,6 / 280	DISTANCE 147 DEG DEPTH 480 KM
I PKP2	36 14,8	1,4 / 130	MC =5,3
E APKP	38 09		
BRG I PKIKP	08 36 08,1	1,2 / 32	D=148,0 DEG AZ= 21 BRG
I PKP1	36 11,8	1,4 / 155	DISTANCE 148 DEG
I PKP2	36 16,2	1,6 / 78	
I APKP	38 10,4		
MOX E PKIKP	08 36 08	1,8 / 51	D=148,7 DEG AZ= 17 MOX
I PKHKP	36 13,0D	1,8 / 250	
E PKP2	36 18	1,8 / 74	

1978 OCT 07 FRG, SOUTHWESTERN REGION — NO MB COMP, — 48,3N; 8,6E 10KM H=09 27 27,4 (NEIS)
SWABIAN JURA

MOX E PG	09 28 18	D= 3,1 DEG AZ=221 MOX
E SG	28 55	
CLL E SG	09 29 32	D= 4,1 DEG AZ=225 CLL
BRG E SG	09 29 38,2	D= 4,3 DEG AZ=236 BRG

1978 OCT 07 FRG, SOUTHWESTERN REGION — NO MB COMP, — 48,3N; 9,0E 10KM H=09 36 52,8 (NEIS); 48,4N; 9,0E 15KM 09 36 53,6 (CSEM)
SWABIAN JURA

MOX E PN	09 37 36	D= 2,9 DEG AZ=217 MOX
I PQ	37 46,0	DISTANCE 2,9DEG
I SN	38 10,0	
I SQ	38 24,0	
CLL E PQ	09 38 06	D= 4,0 DEG AZ=222 CLL
E SG	38 59	DISTANCE 3,9DEG
BRG E PQ	09 38 12,2	D= 4,1 DEG AZ=233 BRG
I SQ	39 05,1	DISTANCE 4,2DEG

1978 OCT 07
CLL E 11 06 06
E 06 21
E SQ 06 29

1978 OCT 07 TONGA ISLANDS REGION — MB=4,3 (1) — 17,9S;172,4W 23KM H=12 46 31,3 (NEIS)

CLL E PKP1	13 06 13	D=146,4 DEG AZ= 9 CLL
(CONT.)		

(CONT.)
BRG E PKP1   13 36 14,6   D=146,7 DEG   AZ= 11   BRG

1978 OCT 07
BRG I(P)   20 44 35,2

1978 OCT 08   UNDERGROUND EXPLOSION (FOA)   MB=5,2 (49)   61,5N;112,9E   0KM H=23 59 56,8 (NEIS)
BRG I P   00 09 01,1C 0,9 /   83   D= 50,8 DEG   AZ= 38   BRG
CLL I P   00 09 00,7C 0,7 /   49   D= 50,9 DEG   AZ= 38   CLL
MOX I P   00 09 09,0C 0,9 /   90   MPV =5,7   D= 51,9 DEG   AZ= 37   MOX

1978 OCT 08   NORTH ATLANTIC OCEAN   MB=4,8 (29)   37,3N; 14,1W   10KM H=11 26 31,8 (NEIS)
37,2N; 14,1W   10KM   11 26 34,5 (CSEM)
36,8N; 14,9W   33KM   11 26 24,1 (WDCB)
D= 22,7 DEG   AZ=244   MOX
MOX E P   11 31 36
E   31 45   1,5 /   55
E LH   36 00
LMH   39,2   T 16,5 AN   2,2   MLH =4,7
LMV   41,9   T 14   AV   0,7   MLV =4,4
CLL E P   11 31 46   D= 23,8 DEG   AZ=244   CLL
E   31 57
LH   39
L   42
BRG E P   11 31 51,1   D= 24,1 DEG   AZ=247   BRG
LMH   40

1978 OCT 08   NEAR EAST COAST OF HONSHU, JAPAN   MB=4,2 (2)   40,9N;141,9E   76KM H=13 32 53,1 (NEIS)
CLL E P   13 44 44   TRACES   D= 77,9 DEG   AZ= 37   CLL

1978 OCT 08   SOUTHERN SINKIANG PROV., CHINA   MB=5,8 (80)   39,4N; 74,7E   62KM H=14 20 05,6 (NEIS)
39,6N; 74,7E   50KM   14 20 05,1 (WDCB)
BRG I P   14 28 02,4C 1,1 /   280   D= 43,2 DEG   AZ= 81   BRG
I   28 07,6   DISTANCE   42,5DEG
E PCP   29 56,0
I S   34 30,0
E SS   37 35,0
LMH   46   T 16   AN   21,0 AE   4,0   MLH =6,3   (NO DEPTH CORRECTION)
LMV   48   T 15   AV   31,2   MLV =6,2   (NO DEPTH CORRECTION)
CLL I P   14 28 05,9C 1,4 /   230   D= 43,7 DEG   AZ= 81   CLL
I   28 11,1   DISTANCE   43,5DEG
E PP   29 55
E S   34 36
E   37 36
E SS   38,0
LMH   46   T 18   AN   45,5 AE   10   MLH =6,4   (NO DEPTH CORRECTION)
LMV   48   T 14   AN   25   AE   18   AV   31   MLV =6,5   (NO DEPTH CORRECTION)
FINAL   16
MOX I P   14 28 14,0C 1,5 /   201   MPV =5,7   D= 44,7 DEG   AZ= 79   MOX
E PP   30 00
E PPPP   31 10
E S   34 50
E SS   38 05
E SSS   39 10
LMH   39,2   T 16   AN   33,7   MLH =6,4   (NO DEPTH CORRECTION)
LMV   41,9   T 16   AV   30,0   MLV =6,4   (NO DEPTH CORRECTION)

1978 OCT 08   HONSHU, JAPAN   MB=5,3 (69)   36,0N;137,1E 250KM H=19 09 21,8 (NEIS)
36,7N;137,0E 270KM   19 09 27,2 (WDCB)
BRG E P   19 21 05,3   1,3 /   13   D= 80,1 DEG   AZ= 44   BRG
E AP   22 08,0
CLL I P   19 21 05,8D 0,9 /   35   D= 80,2 DEG   AZ= 43   CLL
I AP   22 07,7C
E S   30 48
MOX I P   19 21 12,0
E   21 18   D= 81,3 DEG   AZ= 42   MOX

1978 OCT 09   SOUTHERN SINKIANG PROV., CHINA   MB=4,7 (9)   39,5N; 74,8E   70KM H=03 09 20,7 (NEIS)
40,0N; 74,6E   33KM   03 09 18,8 (WDCB)
BRG I P   03 17 17,0   D= 43,2 DEG   AZ= 81   BRG
CLL I P   03 17 20,9D   D= 43,7 DEG   AZ= 81   CLL
MOX E P   03 17 28,5 TRACES   D= 44,7 DEG   AZ= 79   MOX

1978 OCT 09   LOYALTY ISLANDS REGION   NO MB COMP.   22,4S;170,4E   33KM H=11 39 40,5 (NEIS)
BRG I PKP1   11 59 17,1D 1,4 /   41   D=146,2 DEG   AZ= 42   BRG
E APKP   59 30,4
CLL I PKP1   11 59 17,1D 1,1 /   35   D=146,2 DEG   AZ= 40   CLL
E APKP   59 29
MOX E PKHKP   11 59 22,5   D=147,3 DEG   AZ= 38   MOX

1978 OCT 09   IRAN   MB=4,5 (6)   33,4N; 57,3E   33KM H=16 04 42,3 (NEIS)
33,3N; 57,3E   33KM   16 04 37,1 (WDCB)
BRG E(P)   16 11 49,0   D= 36,0 DEG   AZ=102   BRG
CLL E P   16 11 47   D= 36,6 DEG   AZ=102   CLL

1978 OCT 09   WESTERN IRAN   MB=4,7 (18)   32,6N; 49,9E   33KM H=16 25 03,1 (NEIS)
32,6N; 49,9E   10KM   16 25 02,3 (CSEM)
BRG E P   16 31 27,7   32,7N; 50,0E   33KM   16 25 04,1 (WDCB)
CLL E P   16 31 34   D= 32,0 DEG   AZ=111   BRG
D= 32,7 DEG   AZ=110   CLL

1978 OCT 09   SOUTHWESTERN RYUKYU ISLANDS   MB=5,1 (29)   24,3N;125,1E   44KM H=19 22 51,6 (NEIS)
25,3N;125,0E   33KM   19 22 55,1 (WDCB)
BRG I P   19 35 19,1   1,2 /   14   D= 83,8 DEG   AZ= 59   BRG
CLL E P   19 35 19   1,6 /   26   D= 84,1 DEG   AZ= 58   CLL
E   35 29
LM   20 17
MOX E P   19 35 25
E AP   35 36
LMH   20 18,1   T 16   AN   0,4 AE   0,4   D= 85,2 DEG   AZ= 57   MOX
LMV   18,5   T 16   AV   0,4   MLH =5,1   MLV =5,0   DEPTH   41 KM

1978 OCT 09   NEW IRELAND REGION   MB=4,9 (2)   3,9S;152,5E 179KM H=21 49 37,4 (NEIS)
BRG I PKP   22 08 11,3   0,6 /   10   D=121,7 DEG   AZ= 51   BRG
CLL E PKP   22 08 11   D=121,9 DEG   AZ= 50   CLL

1978 OCT 10   NICOBAR ISLANDS REGION   MB=4,8 (7)   8,8N; 94,4E   33KM H=02 42 58,6 (NEIS)
BRG E P   02 54 50,4   D= 77,2 DEG   AZ= 92   BRG

1978 OCT 10   FRG, SOUTHWESTERN REGION   MB=4,7 (1)
SWABIAN JURA   48,3N;   9,0E   10KM H=13 03 46,2 (NEIS)
MOX E PN   13 04 31,5   D=   2,9 DEG   AZ=217   MOX
E PG   04 42
E SG   05 18
CLL E PG   13 05 02   D=   4,0 DEG   AZ=222   CLL
E   05 25   DISTANCE   3,9DEG
E SG   05 52
BRG E PG   13 05 09,0   D=   4,1 DEG   AZ=233   BRG
I SG   05 59,5   DISTANCE   4,3DEG

1978 OCT 10   MEDITERRANEAN SEA   MB=3,9 (2)   35,9N; 22,8E   10KM H=16 26 07,4 (NEIS)
35,1N; 22,3E   10KM   16 26 00,4 (CSEM)
BRG E(P)   16 30 03,0   D= 16,3 DEG   AZ=154   BRG
CLL E P   16 30 09   TRACES   D= 16,9 DEG   AZ=152   CLL

1978 OCT 10   MARIANA ISLANDS REGION   MB=5,1 (20)   21,6N;145,9E   33KM H=17 22 25,5 (NEIS)
21,6N;146,0E   33KM   17 22 25,4 (WDCB)
BRG E(P)   17 35 57,3   D= 96,4 DEG   AZ= 44   BRG
E PP   39 47,5
CLL E PP   17 39 45   D= 96,5 DEG   AZ= 43   CLL
LM   18 33
MOX   LMH   18 24,0   T 16   AN   0,7   MLH =5,2   D= 97,6 DEG   AZ= 42   MOX
LMV   24,2   T 16   AV   0,5   MLV =5,1

1978 OCT 10
CLL E   17 53 32

1978 OCT 10   BURMA-INDIA BORDER REGION   MB=4,7 (4)   24,3N; 93,7E   33KM H=18 14 43,1 (NEIS)
BRG E   18 25 38,9   D= 65,2 DEG   AZ= 82   BRG

1978 OCT 11   EAST PAPUA NEW GUINEA REGION   MB=5,5 (32)   6,5S;147,5E   98KM H=23 47 58,5 (NEIS)
6,3S;147,5E   33KM   23 47 50,8 (WDCB)
BRG E PKP   00 06 42,5   1,0 /   12   D=121,4 DEG   AZ= 58   BRG
E APKP   07 15,3
I SKP   10 09,6   D=121,6 DEG   AZ= 56   CLL
CLL E PKP   00 06 42   D=122,7 DEG   AZ= 55   MOX
MOX E PKP   00 06 44

1978 OCT 11
CLL E   00 22 04

1978 OCT 11   SOUTH OF HONSHU, JAPAN   MB=5,9(122)   33,4N;140,8E   57KM H=01 49 01,1 (NEIS)
33,9N;140,6E   50KM   01 49 03,4 (WDCB)
BRG I P   02 01 26,0C 1,8 /   167   D= 83,9 DEG   AZ= 42   BRG
I   01 35,4   DISTANCE   83 DEG
E XP   01 44,8
I PP   04 39,4
E APP   04 53,5
E S   11 46,0
E PKKP1   19 41,8
LMH   41   T 19   AN   0,9 AE   1,7   MLH =5,5   (NO DEPTH CORRECTION)
LMV   47   T 17   AV   1,6   MLV =5,5   (NO DEPTH CORRECTION)
CLL I P   02 01 26,1C 1,8 /   200   D= 84,0 DEG   AZ= 42   CLL
E AP   01 41   DISTANCE   83 DEG
E PP   04 39
E APP   04 53
E PPP   06 41
E SKS   11 41
E PKKP1   19 41
LM   46   T 16   AN   1   AE   0,5 AV   1,5   MLH =5,4 MLV =5,5 (NO DEPTH CORRECTION)
MOX I P   02 01 31,5C 1,8 /   182   MPV =5,9   D= 85,1 DEG   AZ= 41   MOX
E AP   01 47,5   DEPTH   58 KM
E PP   05 00   1,9 /   121   MPPV =6,0
E S   11 55
E SKS   12 05
E SS   17 45
E PKKP   19 38   1,5 /   22
E SSS   21 05
LMH   41,4   T 16   AN   1,0 AE   0,9
LMV   47   T 24   AV   0,8

1978 OCT 11   KURILE ISLANDS   MB=5,3 (63)   44,2N;149,0E   49KM H=10 26 14,6 (NEIS)
44,9N;148,8E   70KM   10 26 19,9 (WDCB)
CLL I P   10 38 06,2C 1,2 /   62   D= 77,5 DEG   AZ= 31   CLL
E AP   38 19
E   38 51
LH   11 10
LM   16
BRG I P   10 38 06,5C 1,4 /   31   D= 77,6 DEG   AZ= 31   BRG
E AP   38 21,0
LM   11 16   T 18   AN   1,7 AE   1,7 AV   2,3   MLH =5,6 MLV =5,6
MOX E P   10 38 12   2,0 /   77   MPV =5,3   D= 78,5 DEG   AZ= 30   MOX
LMH   11 14,2   T 16   AN   0,9 AE   1,0   MLH =5,4
LMV   17,4   T 16   AV   1,1   MLV =5,3

1978 OCT 11	SOUTH OF FIJI ISLANDS	
CLL I PKP1	11 33 31,2D 1.2 / 33	MB=5,2 (6) 22.3S;179.2E 616KM H=11 14 50.2 (NEIS)
I PKP2	33 33,5	D=149,1 DEG AZ= 25 CLL
BRG I PKP1	11 33 31,8 0.3 / 27	D=149,2 DEG AZ= 27 BRG
MOX E PKHKP	11 33 34	D=150,1 DEG AZ= 24 MOX
1978 OCT 11	MID-INDIAN RISE	MB=4,9 (24) 14.8S; 66,9E 33KM H=18 42 49.0 (NEIS)
		14.1S; 66.8E 33KM 18 42 53.0 (WDCB)
BRG E P	18 54 57,0 1.6 / 17	D= 80,0 DEG AZ=128 BRG
CLL I P	18 55 01,5 1.7 / 27	D= 80,8 DEG AZ=128 CLL
MOX E P	18 55 03	D= 81,1 DEG AZ=126 MOX
1978 OCT 11		
CLL E P	19 35 35	MB=5,0 (3) 26.7S;176.4W 52KM H=19 23 07.1 (NEIS)
1978 OCT 11	SOUTH OF FIJI ISLANDS	D=154,4 DEG AZ= 20 CLL
CLL E PKP1	19 43 04	D=154,6 DEG AZ= 22 BRG
BRG E PKP1	19 43 04,2	
1978 OCT 11		
CLL E	20 44 46	MB=4,2 (4) 27.3N; 52.8E 33KM H=03 05 44.4 (NEIS)
1978 OCT 12	SOUTHERN IRAN	D= 38,3 DEG AZ=113 CLL
CLL E	03 14 16 TRACES	
1978 OCT 12		
CLL E	05 13 50	MB=4,1 (1) 27.9S;176.3W 33KM H=09 41 00.8 (NEIS)
1978 OCT 12	KERMADEC ISLANDS REGION	D=155,8 DEG AZ= 23 BRG
BRG I PKP2	06 01 34,0	
1978 OCT 12	WESTERN TURKEY	MB=4,1 (11) 41.0N; 33.3E 21KM H=06 11 14.7 (NEIS)
		40.9N; 33.4E 10KM 06 11 14.9 (CSEM)
CLL E(P)	06 15 22	D= 17,4 DEG AZ=118 CLL
MOX E P	06 15 25	D= 17,9 DEG AZ=114 MOX
1978 OCT 12	SOUTHERN IRAN	MB=4,7 (33) 27.8N; 54.9E 33KM H=06 54 33.4 (NEIS)
		27.8N; 55.1E 10KM 06 54 31.3 (CSEM)
BRG E P	07 01 52,7 1.0 / 12	27.7N; 54.9E 33KM 06 54 32.6 (WDCB)
CLL I P	07 02 00,3 1.6 / 30	D= 38,5 DEG AZ=111 BRG
E PP	03 40	D= 39,2 DEG AZ=111 CLL
1978 OCT 12	NORTHWEST OF KURILE ISLANDS	/MB=4,2 (5)/ 46.2N;146.3E 304KM H=10 54 07.9 (ISC)
CLL I P	11 05 17,5	D= 74,9 DEG AZ= 32 CLL
1978 OCT 12	LOYALTY ISLANDS	MB=4,2 (1) 21.3S;168.9E 33KM H=12 25 37.3 (NEIS)
BRG I PKP	12 45 10,8	D=144,6 DEG AZ= 43 BRG
CLL E PKP	12 45 13	D=144,6 DEG AZ= 41 CLL
MOX E	12 45 37	D=145,7 DEG AZ= 40 MOX
1978 OCT 12	IRAN	MB=4,9 (21) 33.4N; 57.5E 15KM H=19 01 41.1 (NEIS)
		33.5N; 57.6E 10KM 19 01 42.3 (CSEM)
BRG E P	15 08 44,8	33.6N; 57.6E 33KM 19 01 45.3 (WDCB)
CLL E P	15 08 49 1.2 / 17	D= 36,1 DEG AZ=102 BRG
		D= 36,8 DEG AZ=102 CLL
1978 OCT 12	MID-INDIAN RISE	MB=4,8 (36) 15.1S; 66.8E 33KM H=17 08 24.9 (NEIS)
		15.3S; 67.1E 33KM 17 08 18.2 (WDCB)
BRG E P	17 20 34,6C 2.4 / 42	D= 80,3 DEG AZ=129 BRG
E	20 45,0	
CLL E P	17 20 38 1.7 / 44	D= 81,0 DEG AZ=128 CLL
MOX E P	17 20 40 2.1 / 44	MPV =5.1 D= 81,3 DEG AZ=127 MOX
E AP	20 50	DEPTH 37 KM
1978 OCT 12	MID-INDIAN RISE	MB=4,9 (49) 8.9S; 67.7E 33KM H=20 03 15.7 (NEIS)
		8.9S; 68.4E 33KM 20 03 14.4 (WDCB)
BRG E P	20 14 58,2	D= 75,4 DEG AZ=125 BRG
CLL I P	20 15 06,4C 2.0 / 50	D= 76,2 DEG AZ=124 CLL
LM	54	
MOX E P	20 15 08,5 1.4 / 23	MPV =5.0 D= 76,6 DEG AZ=123 MOX
E AP	15 18	DEPTH 35 KM
E S	24 30	
E SS	29 40	
LMH	40.0 T 34 AN 0.9 AE 0.5	MLH =4.9
LMV	41.0 T 44 AV 0.5	MLV =4.5
1978 OCT 12		
CLL E	22 39 14	
1978 OCT 13	ROMANIA	NO MB COMP. 46.6N; 26.6E 104KM H=01 02 04.6 (NEIS)
BRG E	01 04 26,0	D= 9,4 DEG AZ=112 BRG
E	06 54,6	
1978 OCT 13		
CLL E	01 15 49	
1978 OCT 13	SOUTH OF FIJI ISLANDS	MB=5,0 (13) 22.3S;179.5W 582KM H=00 59 02.2 (NEIS)
CLL I PKP1	01 17 46,9C 1.2 / 39	D=149,5 DEG AZ= 23 CLL
I PKP2	17 54,1 1.0 / 18	MC =4.6
BRG I PKP1	01 17 47,1C 0.9 / 24	D=149,6 DEG AZ= 25 BRG
MOX E PKHKP	01 17 49	D=150,4 DEG AZ= 21 MOX
1978 OCT 13	SOUTH OF FIJI ISLANDS	MB=4,5 (3) 25.0S;179.0W 360KM H=01 41 36.9 (NEIS)
BRG E PKP1	02 00 52,2	D=152,3 DEG AZ= 26 BRG
1978 OCT 13		
CLL E	04 58 12	
1978 OCT 13		
MOX E SG	10 36 07	

1978 OCT 13	WESTERN POLAND	
BRG E PG	23 03 59,1	
I SG	04 19,2	
CLL E SG	23 04 36	
MOX E SG	23 05 07	
1978 OCT 13		
CLL E	23 05 40	
1978 OCT 14	SOUTHERN SINKIANG PROV., CHINA	MB=4,9 (34) 41.5N; 88.6E 33KM H=01 00 02.7 (NEIS)
	QUESTIONABLE EVENT	D= 50,5 DEG AZ= 70 BRG
BRG E P	01 09 00,0	D= 50,9 DEG AZ= 70 CLL
CLL I P	01 09 02,6 0.8 / 17	D= 51,9 DEG AZ= 68 MOX
MOX E P	01 09 10	
1978 OCT 14	BONIN ISLANDS REGION	MB=4,7 (35) 27.5N;140.0E 465KM H=11 31 20.8 (NEIS)
		26.1N;140.9E 250KM 11 30 51.0 (WDCB)
BRG E P	11 43 23,5	D= 88,6 DEG AZ= 46 BRG
CLL E P	11 43 24	D= 88,7 DEG AZ= 45 CLL
MOX E P	11 43 29,5	D= 89,8 DEG AZ= 44 MOX
E PP	47 09	
1978 OCT 14	WESTERN POLAND	
BRG I PG	12 23 12,5	
I SG	23 31,8	
CLL E SG	12 23 45	
MOX E SG	12 24 20	
1978 OCT 14	KERMADEC ISLANDS REGION	MB=5,3 (6) 31.2S;178.5W 53KM H=13 44 17.7 (NEIS)
CLL E PKIKP	14 04 08	D=158,2 DEG AZ= 27 CLL
E(PKP2)	04 46	
BRG E PKIKP	14 04 08,2 1.4 / 14	D=158,3 DEG AZ= 30 BRG
E PKP2	04 43,0	
MOX E PKP2	14 04 47	D=159,2 DEG AZ= 25 MOX
1978 OCT 14	POLAND, UPPER SILESIA	/NO MB COMP./ 50.4N; 18.9E H=16 03 08 (WAR)
		50.5N; 18.9E 0KM 16 03 05.5 (ISC)
BRG E(PG)	16 04 09,8	D= 3,2 DEG AZ= 97 BRG
E SG	04 52,8	
CLL E	16 04 40	D= 3,8 DEG AZ=101 CLL
E SG	05 15	
MOX E(SG)	16 05 37	D= 4,7 DEG AZ= 90 MOX
1978 OCT 14		
CLL E	17 56 22 TRACES	
1978 OCT 14	JAVA	MB=5,6 (48) 7.5S;112.2E 184KM H=15 41 13.7 (NEIS)
		7.2S;112.1E 200KM 15 41 16.4 (WDCB)
BRG E(P)	18 54 52,0	D=101,0 DEG AZ= 88 BRG
I PP	58 52,6	
CLL E	18 57 24	D=101,6 DEG AZ= 88 CLL
E(PP)	58 48	
MOX E PP	18 59 04	D=102,5 DEG AZ= 87 MOX
1978 OCT 14		
CLL E	19 06 56	
MOX E(SG)	19 07 04	
1978 OCT 14		
CLL E	19 23 51	
1978 OCT 14 / OCT 15	NEW BRITAIN REGION	MB=5,4 (27) 4.5S;152.9E 47KM H=22 56 01.4 (NEIS)
		4.3S;152.9E 33KM 22 56 00.2 (WDCB)
BRG I PKP	23 14 53,3C 1.1 / 29	D=122,5 DEG AZ= 51 BRG
E APKP	15 09,3	
CLL I PKP	23 14 53,9 1.0 / 27	D=122,6 DEG AZ= 50 CLL
LM	00 11	D=123,7 DEG AZ= 49 MOX
MOX E PKP	23 14 57	
LMH	00 10.2 T 21 AN 0.4 AE 0.3	MLH =5.2
LMV	13.7 T 18 AV 0.5	MLV =5.2
1978 OCT 15	UNDERGROUND EXPLOSION (FOA)	MB=5,1 (51) 49.7N; 78.3E 0KM H=05 36 57.0 (NEIS)
BRG I P	05 44 34,8C 0.9 / 18	D= 40,0 DEG AZ= 66 BRG
E PP	46 01,5	
CLL I P	05 44 37,5C 0.8 / 41	D= 40,3 DEG AZ= 66 CLL
E PN	46 09	
MOX I P	05 44 47,5 0.7 / 42	MPV =5.3 D= 41,4 DEG AZ= 64 MOX
E PN	46 20	
1978 OCT 15	NEW BRITAIN REGION	MB=5,8 (54) 5.6S;148.1E 154KM H=05 36 13.1 (NEIS)
		5.6S;147.9E 150KM 05 36 12.6 (WDCB)
BRG I PKP	05 54 47,6C 1.0 / 36	D=120,9 DEG AZ= 56 BRG
E APKP	55 30,5	
E PP	56 25,2	
E PKKP	06 04 52,1	D=121,2 DEG AZ= 55 CLL
CLL E PDIF	05 51 16	
E PKP	54 48 C 1.1 / 34	
E PP	56 19	
E PKKP	06 04 51	D=122,3 DEG AZ= 54 MOX
MOX E PKP	05 54 50 1.2 / 20	
E PP	56 26	
LMH	06 39.0 T 28 AN 0.5	MLH =5.0 (NO DEPTH CORRECTION)
LMV	39.8 T 32 AV 0.4	MLV =4.8 (NO DEPTH CORRECTION)

1978 OCT 15   WEST CHILE RISE   MB=5,4 (7)   41,8S; 83,6W 33KM H=07 43 52,1 (NEIS)
38,1S; 83,9W 33KM 07 43 52,4 (WDCB)
D=123,7 DEG AZ=244 MOX
MOX E PKP 08 02 43 TRACES
LMH 54,3 T 18 AE 0',3 MLH =5,0
LMV 55,7 T 18 AV 0.2 MLV =4,8
CLL E PKP 08 02 49   D=124,8 DEG AZ=245 CLL
BRG E PKP 08 02 50,2   D=125,2 DEG AZ=245 BRG

1978 OCT 15   OFF COAST OF NORTHERN CALIFORNIA   MB=4,8 (28)   40,6N;127,1W 15KM H=15 36 33,5 (NEIS)
CLL E P 15 48 55 1,6 / 22   D= 82,1 DEG AZ=330 CLL
MOX E P 15 48 55 1,8 / 31   MPV =5,1   D= 82,2 DEG AZ=330 MOX
BRG I P 15 48 58,2C 1,1 / 16   D= 82,7 DEG AZ=331 BRG

1978 OCT 15
MOX E 17 23 22
CLL E 17 23 35

1978 OCT 15   OFF COAST OF NORTHERN CALIFORNIA   MB=4,8 (26)   40,6N;127,0W 15KM H=19 54 53,1 (NEIS)
CLL E P 20 07 13   D= 82,0 DEG AZ=330 CLL
I AP 07 19,5 2,1 / 28
MOX E P 20 07 15 2,0 / 34   MPV =5,2   D= 82,2 DEG AZ=329 MOX
E AP 07 20 2,0 / 51
LMV 44,5
LMH 44,6
BRG E P 20 07 16,8 1,6 / 21   D= 82,7 DEG AZ=331 BRG
I AP 07 22,8

1978 OCT 15
CLL E 21 57 21

1978 OCT 16
CLL E 02 46 31

1978 OCT 16   OFF COAST OF NORTHERN CALIFORNIA   MB=4,5 (15)   40,5N;127,3W 15KM H=04 22 44,7 (NEIS)
BRG E P 04 35 11,2   D= 82,9 DEG AZ=331 BRG

1978 OCT 16
BRG E(P) 12 24 27,8

1978 OCT 16   MONGOLIA   MB=5,0 (40)   45,2N; 93,7E 33KM H=16 30 26,0 (NEIS)
45,0N; 93,8E 33KM 16 30 20,3 (WDCB)
BRG E P 16 39 28,2   D= 51,2 DEG AZ= 63 BRG
CLL I P 16 39 30,3C 1,3 / 45   D= 51,5 DEG AZ= 63 CLL
E 42 32
LMH 17 02
LMV 04
MOX E P 16 39 39 1,2 / 33   D= 52,6 DEG AZ= 62 MOX
LMH 17 02,3 T 12,5 AN 0.4 AE 0',5 MPV =5,2 MLH =4,9
LMV 06,5 T 9 AV 0.5 MLV =5,0

1978 OCT 16
CLL E 19 24 36

1978 OCT 16
CLL E 23 38 35

1978 OCT 17   FIJI ISLANDS REGION   MB=5,4 (37)   17,8S;178,8W 565KM H=23 55 15,9 (NEIS)
18,6S;178,6W 33KM 23 54 14,8 (WDCB)
CLL I PKP 00 13 50,2C 1,7 / 580   D=145,3 DEG AZ= 20 CLL
I 14 03,9
E PPP 20 51
BRG I PKP 00 13 50,8C 1,6 / 276   D=145,5 DEG AZ= 22 BRG
MOX I PKIKP 00 13 52,5C   D=146,2 DEG AZ= 18 MOX
I PKHKP 13 55,0 1,8 / 304

1978 OCT 17   WESTERN POLAND
BRG I PG 00 47 05,8
I SG 47 26,0
CLL E 00 47 14   DISTANCE 1,6DEG
E SG 47 40
MOX E PG 00 47 35,5   DISTANCE 215 KM
E SG 48 14

1978 OCT 17   UNDERGROUND EXPLOSION   MB=5,8 (84)   47,8N; 48,1E 0KM H=04 59 56,5 (NEIS)
47,9N; 48,1E 0KM 04 59 59,0 (CSEM)
BRG I P 05 04 57,2C 1,1 / 360   D= 22,3 DEG AZ= 85 BRG
E 09 13,2
LM 15
CLL I P 05 05 02,8C 1,1 / 420   D= 22,9 DEG AZ= 85 CLL
I 05 21,7   DISTANCE 23 DEG
I(S) 09 25,5
E 12 34
LM 15 T 12 AN 0.5 AE 1 AV 1.5 MLH =4,5 MLV =4,7
MOX E P 05 05 13 1,2 / 281   D= 23,8 DEG AZ= 83 MOX
LMH 16,2 T 12 AN 0,9 MPV =5,8 MLH =4,5
LMV 17,4 T 8 AV 1,1 MLV =4,9

1978 OCT 17   NORTH ATLANTIC OCEAN   MB=4,8 (6)   14,6N; 48,0W 33KM H=08 14 02,1 (NEIS)
CLL E P 08 24 13   D= 60,7 DEG AZ=256 CLL

1978 OCT 17   UNDERGROUND EXPLOSION   MB=5,5 (68)   63,1N; 63,4E 0KM H=13 59 57,8 (NEIS)
63,4N; 62,4E 0KM 14 00 03,6 (CSEM)
BRG I P 14 05 58,4C 1,2 / 60   D= 28,8 DEG AZ= 36 BRG
I 06 20,3
I 06 33,0
I 06 39,0
I SN 11 24,2
CLL I P 14 05 59,6C 1,4 / 130   D= 28,9 DEG AZ= 36 CLL
I 06 23,8 1,1 / 260   DISTANCE 29 DEG
E PN 06 33
E PP 06 51
E SN 11 25
MOX E P 14 06 09,5 1,2 / 41   MPV =5,1   D= 30,0 DEG AZ= 36 MOX
E PN 06 34
E PP 06 46

1978 OCT 17
BRG I(P) 14 44 14,7

1978 OCT 17   FIJI ISLANDS REGION   MB=4,3 (1)   19,6S;177,7W 570KM H=16 03 51,6 (NEIS)
CLL E PKP1 16 22 34   D=147,3 DEG AZ= 19 CLL

1978 OCT 17   EASTERN TURKEY   /NO MB COMP./   39,7N; 41,7E 33KM H=16 45 14 (ISC)
BRG E(P) 16 50 15,2   D= 22,4 DEG AZ=109 BRG
CLL E(P) 16 50 15   D= 23,1 DEG AZ=109 CLL

1978 OCT 17
CLL E 19 11 39

1978 OCT 17   EL SALVADOR   MB=5,1 (20)   13,8N; 89,7W 116KM H=20 16 49,5 (NEIS)
MOX E P 20 29 20   D= 86,5 DEG AZ=287 MOX
CLL I P 20 29 23,5   D= 87,1 DEG AZ=288 CLL
BRG E P 20 29 26,6 1,3 / 11   D= 87,8 DEG AZ=289 BRG

1978 OCT 17   FIJI ISLANDS REGION   MB=5,4 (31)   20,6S;178,2W 550KM H=22 56 32,1 (NEIS)
20,8S;177,6W 33KM 22 55 34,6 (WDCB)
CLL I PKIKP 23 15 12,9 1,1 / 20   D=148,1 DEG AZ= 20 CLL
I PKP1 15 17,2D 1,0 / 170   DISTANCE 147,5DEG DEPTH 580 KM
I PKP2 15 21,6D 1,2 / 70   MC =5,2
E APKP 17 31
E SKP 18 04
E PP 18 53
BRG I PKIKP 23 15 13,4 1,0 / 22   D=148,3 DEG AZ= 22 BRG
I PKP1 15 18,0 1,0 / 92
I PKP2 15 23,0 1,3 / 73
E APKP 17 31,3
MOX E PKIKP 23 15 14,5
I PKHKP 15 19,5D 1,1 / 81   D=149,0 DEG AZ= 18 MOX
E PKP2 15 25,5 1,4 / 47   DEPTH 631 KM
E APKP 17 36

1978 OCT 18
CLL I PKP 02 20 42,9 1,1 / 23
BRG I PKP 02 20 43,6 0,7 / 15

1978 OCT 18
CLL E 11 51 53

1978 OCT 18   NEAR N. COAST OF WEST IRIAN   MB=5,3 (18)   2,7S;139,1E 53KM H=17 14 16,2 (NEIS)
BRG E PKP 17 32 52,6   D=113,6 DEG AZ= 63 BRG
MOX LMH 18 26,9 T 16 AE 0',2 MLH =4,9   D=115,0 DEG AZ= 61 MOX
LMV 27,2 T 20 AV 0.3 MLV =4,9

1978 OCT 18   FRG, SOUTHWESTERN REGION   NO MB COMP.
SWABIAN JURA   48,1N; 8,6E 10KM H=18 53 34,6 (NEIS)
MOX E(SG) 18 55 02   D= 3,2 DEG AZ=219 MOX
CLL E SG 18 55 40   D= 4,3 DEG AZ=223 CLL
BRG I(PG) 18 54 49,6   D= 4,5 DEG AZ=234 BRG
E SG 55 41,7

1978 OCT 18   CRETE   MB=4,4 (21)   35,1N; 25,8E 10KM H=23 37 05,7 (NEIS)
35,0N; 25,9E 10KM 23 37 07,5 (CSEM)
BRG E P 23 41 18,4   D= 18,0 DEG AZ=147 BRG
MOX E P 23 41 28   D= 18,6 DEG AZ=141 MOX
LMH 47,5 T 20 AN 0.7 AE 0',8 MLH =4,1
LMV 50,2 T 16 AV 0.3 MLV =4,0
CLL E P 23 41 26   D= 18,6 DEG AZ=145 CLL
E 41 56
E LH 49 24
E L 50 21

1978 OCT 18 /   HOKKAIDO, JAPAN, REGION   MB=5,5 (56)
OCT 19   41,2N;143,9E 33KM H=23 30 20,2 (NEIS)
41,6N;143,8E 33KM 23 30 22,0 (WDCB)
CLL I P 23 42 19,6 1,7 / 76   D= 78,4 DEG AZ= 36 CLL
LM 00 20 T 16 AN 1,5 AE 1 AV 2 MLH =5,5 MLV =5,6
BRG E P 23 42 19,7   D= 78,4 DEG AZ= 36 BRG
LMH 00 17 T 17 AN 1,3 AE 2',4
LMV 21 T 16 AV 2.0
MOX E P 23 42 25 1,7 / 48   MPV =5,2   D= 79,5 DEG AZ= 35 MOX
LMH 00 18,3 T 16 AN 1.0 AE 1',2 MLH =5,5
LMV 22,0 T 16 AV 1.6 MLV =5,5

1978 OCT 19
CLL E 01 40 40

1978 OCT 19   VANUATU ISLANDS   MB=5,2 (28)   13,5S;167,1E 210KM H=01 39 13,2 (NEIS)
13,6S;167,1E 33KM 01 38 47,3 (WDCB)
BRG E PKP 01 58 03,4   D=136,8 DEG AZ= 40 BRG
E SKP 02 01 32,5
CLL E PKP 01 58 12   D=136,9 DEG AZ= 38 CLL
MOX E PKP 01 58 14   D=137,9 DEG AZ= 37 MOX

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1978 OCT 19
CLL E          08 02 45   TRACES

1978 OCT 19    KURILE ISLANDS                                  MB=5.0 (38)  44.4N;149.3E  23KM H=10 57 51.9 (NEIS)
                                                                            44.5N;149.3E  33KM   10 57 53.7 (WDCB)
                                                                                  D= 77.4 DEG   AZ= 30       CLL
CLL I P        11 09 46.3D 1.3 /  41                                        D= 77.5 DEG   AZ= 31       BRG
BRG E P        11 09 46.9  1.4 /  17                          MPV  =5.2     D= 78.4 DEG   AZ= 30       MOX
MOX E P        11 09 52    1.5 /  35

1978 OCT 19    FIJI ISLANDS REGION                             MB=5.3 (34)  21.2S;177.8W 395KM H=13 08 37.7 (NEIS)
                                                                            21.0S;178.3W  33KM   13 08 00.1 (WDCB)
                                                                                  D=148.8 DEG   AZ= 20       CLL
CLL I PKP1     13 27 32.8D 1.2 / /110
    E PKP2        27 43                                                     D=149.0 DEG   AZ= 22       BRG
BRG I PKIKP    13 27 36.2  0.9 /  16
    I PKP1        27 40.4  1.0 /  64
    I PKP2        27 46.5  1.0 /  58
    E APKP        29 00.3                                                   D=149.7 DEG   AZ= 18       MOX
MOX E PKIKP    13 27 37
    E PKHKP       27 43    1.3 /  66
    E PKP2        27 51    1.6 /  39

1978 OCT 19    SOUTHERN SINKIANG PROV., CHINA                  MB=4.9 (43)  39.8N; 77.0E  51KM H=16 08 34.7 (NEIS)
                                                                            39.7N; 77.2E  33KM   16 08 31.8 (WDCB)
                                                                                  D= 44.4 DEG   AZ= 79       BRG
BRG I P        16 16 42.3  1.2 /  15
    E          16 26.0
      LM          36       T 13          AE  2.2 AV  2.0   MLH  =5.2 MLV  =5.3
                                                                            D= 44.9 DEG   AZ= 79       CLL
CLL I P        16 16 45.6  1.0 /  17
    E PP          16 33
    E             19 33
      LM          36                                                        D= 45.9 DEG   AZ= 77       MOX
MOX E P        16 16 54
    E             17 04
      LM          37.6       T 13          AE  1.4 AV  2.0   MLH  =5.1 MLV  =5.2

1978 OCT 19    NEAR EAST COAST OF HONSHU, JAPAN          /MB=4.8 ( 5)/  38.8N;142.5E  26KM H=18 03 00     (ISC)
CLL E          18 15 16                                                   D= 80.0 DEG   AZ= 38       CLL

1978 OCT 19    CRETE                                           MB=4.0 (13)  34.0N; 25.2E  10KM H=19 52 04.7 (NEIS)
                                                                            34.0N; 25.2E  10KM   19 52 06.5 (CSEM)
BRG E(P)       19 56 23.6                                                 D= 18.8 DEG   AZ=150       BRG
MOX E P        19 56 34                                                   D= 19.4 DEG   AZ=144       MOX
    E PP          56 43
CLL I PP       19 56 50.5                                                 D= 19.4 DEG   AZ=148       CLL

1978 OCT 20
CLL E          03 29 31   TRACES

1978 OCT 20    VANUATU ISLANDS                                 MB=5.0 ( 2)  15.4S;167.6E 116KM H=11 16 19.5 (NEIS)
CLL E PKP      11 36 04   TRACES                                          D=138.8 DEG   AZ= 39       CLL

1978 OCT 20
BRG I PG       11 42 55.6
    I SG          43 15.3

1978 OCT 20
CLL E          15 11 33
    E             11 45

1978 OCT 20    BURMA-INDIA BORDER REGION                       MB=4.8 (22)  24.2N; 94.8E  90KM H=17 21 46.2 (NEIS)
BRG E P        17 32 26.5                                                 D= 66.0 DEG   AZ= 81       BRG
    E AP          32 43.0

1978 OCT 20    NEW IRELAND REGION                              MB=5.6 (35)  3.3S;150.8E  33KM H=18 04 02.0 (NEIS)
BRG E PKP      18 22 51.7                                                 D=120.4 DEG   AZ= 52       BRG
MOX   LMH      19 12.5    T 24   AM   0.7      MLH  =5.2                  D=121.7 DEG   AZ= 50       MOX
      LMV         16.5    T 20          AV  0.9 MLV  =5.4

1978 OCT 20    NEW IRELAND REGION                              MB=5.3 (14)  3.3S;150.8E  33KM H=18 26 47.4 (NEIS)
                                                                            3.4S;151.5E  33KM   18 26 40.1 (WDCB)
BRG E PKP      18 45 37.1                                                 D=120.4 DEG   AZ= 52       BRG
CLL E(PKP)     18 45 41                                                   D=120.6 DEG   AZ= 51       CLL

1978 OCT 20    NEW BRITAIN REGION                              MB=5.3 (29)  4.4S;152.0E 153KM H=23 08 53.3 (NEIS)
                                                                            4.4S;152.4E  33KM   23 08 37.8 (WDCB)
BRG I PKP      23 27 30.8  1.2 /  15                                      D=121.9 DEG   AZ= 52       BRG
CLL I PKP      23 27 31.0                                                 D=122.1 DEG   AZ= 51       CLL

1978 OCT 20    KURILE ISLANDS                                  MB=4.6 (24)  45.9N;147.4E  80KM H=23 36 33.1 (NEIS)
CLL I P        23 48 09.4C                                                D= 75.5 DEG   AZ= 31       CLL
BRG E P        23 48 11.0                                                 D= 75.6 DEG   AZ= 32       BRG

1978 OCT 21    SEA OF JAPAN                                    MB=5.1 (77)  41.2N;135.5E 359KM H=02 36 09.6 (NEIS)
                                                                            41.3N;135.4E 350KM   02 36 09.7 (WDCB)
BRG E P        02 47 13.8  1.4 /  43                                      D= 75.1 DEG   AZ= 42       BRG
    E AP          48 37.3
    E PP          50 01.2
    E S           56 49
CLL I P        02 47 14.3C 1.2 /  50                                      D= 75.1 DEG   AZ= 41       CLL
    I AP          48 37.3
    E PP          50 05
MOX E P        02 47 20.5  1.3 /  35          MPV  =4.9
    E AP          48 47.5  1.3 /  11                                      D= 76.2 DEG   AZ= 40       MOX
    E PP          50 02                                                                 DEPTH 395 KM
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1978 OCT 21    OFF E. COAST OF N. ISLAND, N.Z.                 MB=5.0 ( 1)  37.3S;178.2E  54KM H=11 49 22.4 (NEIS)
BRG I PKP2     12 10 18.6                                                 D=162.4 DEG   AZ= 46       BRG
CLL E PKP2     12 10 17                                                   D=162.5 DEG   AZ= 43       CLL

1978 OCT 21    SOUTH OF FIJI ISLANDS                           MB=5.2 ( 6)
               SUPERPOSED BY FOLLOWING QUAKE                              23.7S;179.9E 531KM H=17 37 11.7 (NEIS)
CLL I PKP1     17 56 04.9C 1.0 /  19                                      D=150.6 DEG   AZ= 25       CLL
    E APKP        58 20
BRG E PKP1     17 56 04.9  1.0 /  13                                      D=150.8 DEG   AZ= 27       BRG
    E APKP        58 22

1978 OCT 21    SOUTH OF FIJI ISLANDS                           MB=5.1 (17)
               SUPERPOSED BY PRECEDING QUAKE                              23.5S;179.9W 404KM H=17 37 13.0 (NEIS)
CLL I PKP1     17 56 16.2                                                 D=150.5 DEG   AZ= 25       CLL
    E PKP2        56 25
BRG I PKP1     17 56 16.7                                                 D=150.6 DEG   AZ= 27       BRG
    I PKP2        56 26.3

1978 OCT 22    SANTA CRUZ ISLANDS                              MB=5.1 (11)  12.0S;166.0E  32KM H=04 27 41.5 (NEIS)
                                                                            12.1S;164.8E  33KM   04 27 38.9 (WDCB)
BRG E PKP      04 47 00.4  1.1 /  13                                      D=135.0 DEG   AZ= 40       BRG
    E SKP         50 41.2
CLL E PKP      04 47 01    1.1 /  20                                      D=135.1 DEG   AZ= 39       CLL
MOX   LMH      05 53.6     T 18   AM   0.6      MLH  =5.4                 D=136.1 DEG   AZ= 38       MOX
      LMV         53.9     T 20          AV  0.9 MLV  =5.5

1978 OCT 22    CENTRAL ITALY                                   MB=4.9 ( 2)  43.6N; 13.4E  33KM H=08 40 00.0 (NEIS)
                                                                            43.5N; 13.7E  10KM   08 39 57.3 (CSEM)
MOX E PN       08 41 43                                                   D=  7.2 DEG   AZ=170       MOX
    E SN          43 02
BRG E PN       08 41 43.3                                                 D=  7.3 DEG   AZ=183       BRG
    E SN          43 07.4
    E SG          43 56.0
CLL E          08 43 14                                                   D=  7.7 DEG   AZ=178       CLL
    E             44 11

1978 OCT 22    TONGA ISLANDS                                   MB=5.0 (16)  18.5S;173.7W  87KM H=11 00 22.3 (NEIS)
CLL I PKP1     11 19 54.7  1.1 /  38                                      D=146.8 DEG   AZ= 12       CLL
    E APKP        20 16
BRG E PKP1     11 19 55.8  0.8 /  18                                      D=147.1 DEG   AZ= 13       BRG
    I             20 03.2
    E APKP        20 19.6
MOX E PKHKP    11 19 57                                                   D=147.6 DEG   AZ=  9       MOX
    E APKP        20 19                                                                 DEPTH  80 KM

1978 OCT 22    OFF COAST OF MICHOACAN, MEXICO                  MB=5.2 (23)  15.2N;104.4W  33KM H=14 07 00.2 (NEIS)
MOX E PS       14 32 45                                                   D= 93.9 DEG   AZ=300       MOX
    E SS          38 00
      LM       15 07.2     T 18.5 AN   0.6 AE  1.1 AV  0.6   MLH  =5.4
CLL I P        14 20 17.9  0.9 /  15                                      D= 94.4 DEG   AZ=301       CLL
BRG I P        14 20 18.3                                                 D= 95.1 DEG   AZ=301       BRG

1978 OCT 22    KERMADEC ISLANDS REGION                         MB=5.0 ( 2)  27.8S;176.4W 124KM H=19 42 48.7 (NEIS)
CLL E PKP2     20 02 56                                                   D=155.5 DEG   AZ= 20       CLL
BRG E PKIKP    20 02 30.2                                                 D=155.7 DEG   AZ= 23       BRG
    E PKP1        02 40.6
    E PKP2        02 56.8

1978 OCT 22    KERMADEC ISLANDS REGION                         MB=4.6 ( 3)  27.8S;176.7W 154KM H=21 07 19.0 (NEIS)
CLL E PKP1     21 27 05                                                   D=155.4 DEG   AZ= 21       CLL
BRG E PKIKP    21 26 56.3                                                 D=155.6 DEG   AZ= 23       BRG
    E PKP1        27 06.1
    E PKP2        27 22.0

1978 OCT 23
BRG E          03 19 42.9

1978 OCT 23    SOUTHEASTERN AUSTRIA                            NO MB COMP.  47.7N; 16.2E  10KM H=05 00 34.2 (NEIS)
                                                                            47.7N; 16.2E  10KM   05 00 35.0 (CSEM)
BRG I PN       05 01 29.4                                                 D=  3.5 DEG   AZ=154       BRG
    E             01 39.2                                                 DISTANCE   3.6DEG
    I PG          01 45.0
    E SN          02 11.0
    E SG          02 26.4
CLL E PN       05 01 40                                                   D=  4.2 DEG   AZ=149       CLL
    I(PG)         01 53.1                                                 DISTANCE   3.8DEG
    I SN          02 29.3
    I             02 32.0
    E             02 43
    E SG          02 49
MOX E PN       05 01 41                                                   D=  4.2 DEG   AZ=133       MOX
    I PG          01 54.0
    I SN          02 37.5
    I SG          02 45.5

1978 OCT 23    AFGHANISTAN-USSR BORDER REGION                  MB=5.6 (97)  36.5N; 71.0E 185KM H=08 07 31.6 (NEIS)
                                                                            36.4N; 71.1E 170KM   08 07 30.1 (WDCB)
BRG I P        08 15 11.7D 0.8 / 242                                      D= 42.6 DEG   AZ= 87       BRG
    I AP          15 51.6                                                 DISTANCE  43 DEG  DEPTH 190 KM
    E XP          16 12.0
    I PP          16 55.6
    I SCP         20 31.2
    E S           21 23.0
    E SCS         24 35.5
CLL I P        08 15 15.7D 1.2 / 165                                      D= 43.2 DEG   AZ= 87       CLL
    I AP          15 55.8                                                 DISTANCE  43 DEG  DEPTH 180 KM
    I XP          16 14.7
  (CONT.)
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(CONT.)

I PP 08 16 39,6
E(APP) 17 31
E SCP 20 39
E S 21 29
LH 26.0 MPV =5.4 D= 44,1 DEG AZ= 85 MOX
MOX I P 08 15 23,5C 1.2 / 130 DEPTH 190 KM
E AP 16 04
E XP 16 22
E S 21 48
E SS 25 12
LMH 36.2
LMV 36.9

1978 OCT 23
BRG E(P) 08 32 37,4

1978 OCT 23
MOX E 10 19 33

1978 OCT 23
CLL I(P) 10 24 55,1 0.9 / 13

1978 OCT 23 KERMADEC ISLANDS REGION MB=5.1 (5) 27.4S;176.8W 88KM H=11 23 47.5 (NEIS)
CLL E PKP1 11 43 40 D=155.0 DEG AZ= 21 CLL
I PKP2 43 55,7
E PP 47 42
BRG E PKIKP 11 43 32,0 1.2 / 9 D=155,2 DEG AZ= 23 BRG
I PKP2 43 57,2
MOX E PKP2 11 44 00 D=155,9 DEG AZ= 19 MOX

1978 OCT 23 VOLCANO ISLANDS REGION MB=5.1 (16) 25,6N;141,3E 37KM H=13 48 14.6 (NEIS)
26,4N;140,8E 33KM 13 48 20.1 (WDCB)
CLL LM 14 45 T 14 AN 1 AE 1,5 AV 1 MLH =5.7 D= 91,0 DEG AZ= 45 CLL
MOX LMH 14 43.9 T 16 AN 1.0 AE 0,7 MLH =5.4 D= 92,0 DEG AZ= 44 MOX
LMV 46.5 T 13,5 AV 1.4 MLV =5.6

1978 OCT 23 VANUATU ISLANDS MB=4.9 (3) 20.4S;169.6E 89KM H=16 03 31.7 (NEIS)
BRG I PKP 16 22 55,8 0.6 / 9 D=144,1 DEG AZ= 41 BRG
CLL E PKP 16 22 53 D=144,1 DEG AZ= 39 CLL
MOX E PKP 16 23 00 D=145,2 DEG AZ= 38 MOX

1978 OCT 23 TONGA ISLANDS REGION MB=5.1 (8) 23.9S;175.9W 33KM H=22 52 35.7 (NEIS)
21,2S;174,0W 33KM 22 52 38.0 (WDCB)
CLL E PKIKP 22 12 22 D=151,8 DEG AZ= 17 CLL
I PKP1 12 28,1C 1.3 / 70
I PKP2 12 36,2D 1.2 / 44 MC =5.3
E 15 55
BRG I PKIKP 22 12 22,0 D=152,0 DEG AZ= 19 BRG
I PKP1 12 28,7 1.0 / 50
I PKP2 12 42,0 1.0 / 28
MOX E PKIKP 22 12 24 D=152,7 DEG AZ= 15 MOX
E PKHKP 12 30 1.2 / 24
E PKP2 12 43

1978 OCT 24 NORTHERN ITALY NO MB COMP. 44.0N; 10,9E 10KM H=03 30 24.0 (NEIS)
BRG E SG 03 34 19,2 D= 7,2 DEG AZ=198 BRG

1978 OCT 24 MARIANA ISLANDS MB=5.4 (34) 17,9N;146,5E 71KM H=10 34 59.7 (NEIS)
BRG E PP 10 52 58 D= 99,9 DEG AZ= 45 BRG
E PKKP 11 05 00,8

1978 OCT 24 ANDAMAN ISLANDS REGION MB=5.0 (42) 14,6N; 96,5E 33KM H=13 38 48.3 (NEIS)
14,0N; 96,7E 33KM 13 38 38.6 (WDCB)
BRG E P 13 50 23,6 D= 74,1 DEG AZ= 86 BRG
CLL E P 13 50 27 1.6 / 29 D= 74,7 DEG AZ= 86 CLL
LM 14 28
MOX E P 13 50 33 D= 75,6 DEG AZ= 84 MOX
LMH 14 24.9 T 24 AN 1,5 MLH =5.2
LMV 29.3 T 18 AV 1.4 MLV =5.3

1978 OCT 24
CLL I P 14 17 40,2C

1978 OCT 24
CLL I P 16 11 02,5

1978 OCT 24
CLL I P 16 39 41,2

1978 OCT 24 POLAND, UPPER SILESIA
CLL E 22 01 04
E SG 02 04
MOX E SG 22 02 32

1978 OCT 25 WESTERN POLAND
BRG I PG 04 52 32,3
I SG 52 51,4 DISTANCE 1,5DEG
CLL E 04 53 05

1978 OCT 25
CLL E 10 54 56

1978 OCT 25
CLL E 12 05 31

1978 OCT 25
CLL E 15 21 13
E 21 30
E 22 46

1978 OCT 25
CLL I P 20 54 11,8D 1.1 / 18

1978 OCT 25 GULF OF ALASKA MB=4.9 (29) 59,2N;147,8W 19KM H=22 02 18.1 (NEIS)
59,1N;148,0W 33KM 22 02 14.8 (WDCB)
CLL E(P) 22 13 25 D= 68,7 DEG AZ=350 CLL
MOX E 22 13 35 D= 69,2 DEG AZ=349 MOX
BRG E(P) 22 13 24,6 D= 69,3 DEG AZ=350 BRG

1978 OCT 25
CLL E 23 01 57

1978 OCT 26 SWITZERLAND NO MB COMP. 47,3N; 7,7E 10KM H=02 49 03.4 (NEIS)
MOX E PG 02 50 24 D= 4,2 DEG AZ=219 MOX
E SN 50 50 DISTANCE 3,9DEG
E SG 51 14
CLL E SG 02 51 54 D= 5,3 DEG AZ=223 CLL
BRG E PG 02 50 50,0 D= 5,4 DEG AZ=231 BRG
E SG 51 59,9

1978 OCT 26 MINDANAO, PHILIPPINE ISLANDS MB=5.3 (24) 8,2N;125,8E 42KM H=09 14 51.0 (NEIS)
8,7N;125,2E 33KM 09 14 54.3 (WDCB)
BRG E P 09 28 20,4 1.4 / 14 D= 97,1 DEG AZ= 68 BRG
E AP 28 27,3
CLL E(P) 09 28 28 D= 97,5 DEG AZ= 67 CLL
MOX E(P) 09 28 33 D= 98,6 DEG AZ= 66 MOX
LMH 10 08.7 T 28.5 AN 0,7 AE 0,5 MLH =5.2
LMV 12.7 T 24 AV 0,5 MLV =4.9

1978 OCT 26
CLL I P 10 08 10,0

1978 OCT 26
MOX E(P) 11 05 03

1978 OCT 26 OFF COAST OF JALISCO, MEXICO MB=5,2 (7) 19,0N;106,3W 33KM H=11 35 27.1 (NEIS)
MOX LMH 12 32.7 T 19 AN 0,7 AE 0,5 MLH =5.2 D= 91,9 DEG AZ=303 MOX
LMV 34.0 T 16 AV 1.2 MLV =5.4
CLL LM 12 33 D= 92,2 DEG AZ=304 CLL

1978 OCT 26 OFF COAST OF JALISCO, MEXICO MB=4,9 (5) 18,6N;106,5W 33KM H=13 02 44.0 (NEIS)
MOX LMV 14 01.1 T 16 AV 0.5 MLV =5.1 D= 92,3 DEG AZ=303 MOX
LMH 01.3 T 15 AN 0,5 AE 0,3 MLH =5.1

1978 OCT 26
CLL E 23 47 47

1978 OCT 27
CLL E 02 06 46 TRACES

1978 OCT 27
CLL E 02 52 26

1978 OCT 27
BRG E(P) 03 28 29,5

1978 OCT 27 SOUTH OF FIJI ISLANDS MB=5.0 (22) 22,1S;179,6E 569KM H=05 51 38.9 (NEIS)
CLL E PKIKP 06 10 18 D=149,0 DEG AZ= 25 CLL
I PKP1 10 23,4D 0,8 / 45
I PKP2 10 29,8 0,9 / 23 MC =4,9 D=149,2 DEG AZ= 27 BRG
BRG I PKP1 06 10 24,0D 0,9 / 45
I PKP2 10 31,0 1,0 / 28 D=150,0 DEG AZ= 23 MOX
MOX I PKHKP 06 10 26,0 1,4 / 28
I PKP2 10 34,0 1,4 / 23

1978 OCT 27 FIJI ISLANDS REGION MB=5.3 (21) 20,9S;178,7W 602KM H=06 24 57.4 (NEIS)
20,7S;177,5W 33KM 06 23 55,7 (WDCB)
CLL E PKIKP 06 43 32 D=148,3 DEG AZ= 21 CLL
DISTANCE 149 DEG DEPTH 540 KM
I PKP1 43 37,2D 1,2 / 120
I PKP2 43 42,4C 1,3 / 85 MC =5.1
E 45 39
E APKP 45 59
BRG I PKIKP 06 43 33,7 1,1 / 20 D=148,5 DEG AZ= 23 BRG
I PKP1 43 38,3 1,3 / 91
I PKP2 43 44,0 1,2 / 57
E APKP 46 00,5
MOX E PKIKP 06 43 34,5 D=149,2 DEG AZ= 19 MOX
I PKHKP 43 40,0C 1,6 / 104
E PKP2 43 46 1,4 / 42

1978 OCT 27 SOUTHERN BOLIVIA MB=5.6 (74) 21.9S; 65.8W 280KM H=10 06 46.1 (NEIS)
22,0S; 65,8W 33KM 10 06 17.4 (WDCB)
MOX E AP 10 21 03,5 D= 99,0 DEG AZ=247 MOX
LM 11 00.5 DEPTH 294 KM
CLL I P 10 20 02,0D 1.6 / 48 D=100,1 DEG AZ=248 CLL
E AP 21 08
E S 31,3
E PKKP2 36 44
BRG I P 10 20 03,6 1.1 / 25 D=100,5 DEG AZ=248 BRG
E AP 21 10,3
I PKKP1 36 17,6
E PKKP2 36 43,0

1978 OCT 27 CENTRAL YUGOSLAVIA NO MB COMP. 43.7N; 17.5E 10KM H=14 04 42.6 (NEIS)
43,4N; 17,0E 10KM 14 04 43.9 (CSEM)
BRG E 14 07 32,8 D= 7,6 DEG AZ=160 BRG
E 08 23,8
CLL E 14 08 41 D= 8,2 DEG AZ=157 CLL

1978 OCT 27
CLL E 17 52 57

1978 OCT 27 VANUATU ISLANDS
BRG E SKP 17 59 07,0
CLL E SKP 17 59 05

1978 OCT 28
BRG E 03 08 51,0 1,2 / 12
CLL E 03 09 15

1978 OCT 28 MID-INDIAN RISE
BRG E P 05 13 46,8
CLL E P 05 13 50
MOX E P 05 13 52

1978 OCT 28 MID-INDIAN RISE
BRG E P 05 30 35,8 2,0 / 39
CLL E P 05 30 39 2,0 / 42
MOX E P 05 30 41 1,8 / 27

1978 OCT 28 EASTERN SIBERIA
CLL I P 09 31 15,9D 1,2 / 19
MOX E P 09 31 22,5 1,0 / 10

1978 OCT 28 KURILE ISLANDS
CLL I P 16 41 33,8 0,9 / 28
E XP 42 28
BRG E P 16 41 40,0
MOX E P 16 41 45 1,4 / 37

1978 OCT 28
CLL E 19 26 15

1978 OCT 28 HOKKAIDO, JAPAN, REGION
CLL I P 22 58 22,0C 1,0 / 22
E 58 59
BRG E P 22 58 22,2 1,2 / 13
E AP 58 51,9
MOX E P 22 58 23

1978 OCT 29 DODECANESE ISLANDS
MOX E(P) 02 19 00

1978 OCT 29
CLL E 03 27 55

1978 OCT 29 NEW BRITAIN REGION
BRG I PKP 04 24 55,0 1,2 / 17
E APKP 25 07,0
CLL I PKP 04 24 55,6 1,1 / 16
MOX E PKP 04 24 57,5 1,6 / 22
E PP 26 47 1,8 / 31

1978 OCT 29 MOLUCCA SEA
BRG E P 19 15 00,5
MOX E P 19 15 07

1978 OCT 29
CLL E 21 49 04 TRACES

1978 OCT 30
CLL E 07 24 04

1978 OCT 30 TONGA ISLANDS
CLL I PKP 07 38 14,4D 1,3 / 34
BRG I PKP 07 38 15,3 1,0 / 20
MOX E PKP 07 38 18
E APKP 39 25

1978 OCT 30 MINDANAO, PHILIPPINE ISLANDS
BRG I P 13 53 54,7
CLL E P 13 53 56

1978 OCT 30 MINDANAO, PHILIPPINE ISLANDS
BRG E P 13 55 36,0
E PP 59 29,6
CLL E P 13 55 38
E 56 15
E(PP) 59 44
E PS 14 08,2
LM 40
MOX E P 13 55 44
E PP 59 43
E PS 14 08 30
E SS 13 50
LMH 41,2 T 18 AN 1,0 AE 1,7 MLH =5,6
LMV 42,0 T 17 AV 1,9 MLV =5,6

MB=5,1 (5) 16,1S 168,0E 180KM H=17 36 40,3 (NEIS)
D=139,5 DEG AZ= 40 BRG
D=139,6 DEG AZ= 39 CLL

MB=4,6 (1) 14,8S 66,6E 10KM H=09 01 35,3 (NEIS)
D= 79,9 DEG AZ=129 BRG
D= 80,6 DEG AZ=128 CLL
D= 80,9 DEG AZ=127 MOX

MB=4,7 (17) 14,9S 66,5E 10KM H=09 18 24,6 (NEIS)
D= 79,9 DEG AZ=129 BRG
D= 80,7 DEG AZ=128 CLL
MPV =5,0 D= 81,0 DEG AZ=127 MOX

MB=4,6 (24) 64,7N 145,2E 33KM H=09 21 20,6 (NEIS)
64,7N 145,2E 33KM 09 21 16,2 (WDCB)
D= 58,5 DEG AZ= 22 CLL
MPV =4,9 D= 59,5 DEG AZ= 21 MOX

MB=5,5 (71) 50,2N 155,7E 135KM H=16 30 18,3 (NEIS)
50,6N 155,4E 125KM 16 30 19,3 (WDCB)
D= 74,0 DEG AZ= 24 CLL

D= 74,2 DEG AZ= 24 BRG
MPV =4,9 D= 75,0 DEG AZ= 23 MOX

MB=5,1 (72) 42,7N 144,2E 82KM H=22 46 35,0 (NEIS)
43,0N 144,4E 90KM 22 46 35,9 (WDCB)
D= 77,2 DEG AZ= 35 CLL

D= 77,2 DEG AZ= 35 BRG

D= 78,3 DEG AZ= 34 MOX

MB=3,8 (7) 36,0N 27,1E 10KM H=02 14 38,4 (NEIS)
36,0N 27,1E 10KM 02 14 40,4 (CSEM)
D= 18,4 DEG AZ=137 MOX

MB=5,9 (43) 5,4S 152,0E 60KM H=04 06 04,2 (NEIS)
5,3S 151,8E 33KM 04 06 01,5 (WDCB)
D=122,8 DEG AZ= 92 BRG

D=123,0 DEG AZ= 91 CLL
D=124,1 DEG AZ= 90 MOX
MPPV =5,2

MB=5,5 (31) 0,1S 124,9E 71KM H=19 01 07,1 (NEIS)
D=103,2 DEG AZ= 74 BRG
D=104,7 DEG AZ= 72 MOX

MB=4,9 (6) 17,3S 175,0W 272KM H=07 19 06,7 (NEIS)
D=145,5 DEG AZ= 14 CLL
D=145,7 DEG AZ= 15 BRG
D=146,3 DEG AZ= 11 MOX
DEPTH 270 KM

MB=5,4 (9) 8,0N 122,2E 41KM H=13 40 33,5 (NEIS)
D= 95,1 DEG AZ= 71 BRG
D= 95,6 DEG AZ= 70 CLL

MB=5,7 (12) 8,1N 122,3E 33KM H=13 42 14,6 (NEIS)
D= 95,1 DEG AZ= 71 BRG

D= 95,5 DEG AZ= 70 CLL

D= 96,6 DEG AZ= 69 MOX

1978 OCT 30
CLL E 16 00 57

1978 OCT 30 NEAR COAST OF GUATEMALA MB=5,3 (44) 13,9N 91,1W 73KM H=18 23 36,0 (NEIS)
14,0N 91,4W 33KM 18 23 31,9 (WDCB)
MOX E P 18 36 16 1,0 / 16 MPV =5,1 D= 87,2 DEG AZ=288 MOX
T 14 AV 1,9 DEPTH 124 KM
E AP 36 35
E 36 46
E PP 39 45
E SKS 46 00
E S 47 00
E PS 48 00
E SS 52 50
E SSS 56 50
LMV 19 15 T 17,5 AV 7,4
LMH 17 T 17,5 AN 2,6 AE 5,4
CLL E P 18 36 18 C T 14 AV 1,6 D= 87,9 DEG AZ=290 CLL
E AP 36 38 DISTANCE 90 DEG
E PP 39 51
E(S) 47 10
E PPS 48 25
E SS 53,0
E 53 51
E SSS 57,1
LM 19 15 T 20 AN 2,5 AE 5,3 AV 5,5 MLH =6,0 MLV =6,0 (NO DEPTH CORRECTION)
BRG I P 18 36 22,0 D= 88,6 DEG AZ=290 BRG
E AP 36 41,7 DISTANCE 90 DEG
E 37 19,8
E(S) 47 20
I PPS 48 38,0
E(SS) 53 31,0
LM 19 16 T 20 AN 4,1 AE 5,8 AV 7,8 MLH =6,1 MLV =6,2 (NO DEPTH CORRECTION)

1978 OCT 30 NEAR COAST OF GUATEMALA MB=5,0 (16) 13,8N 91,2W 59KM H=19 09 40,1 (NEIS)
CLL E P 19 22 26 D= 88,0 DEG AZ=290 CLL
BRG E P 19 22 30,4 D= 88,7 DEG AZ=290 BRG

1978 OCT 30 NORTH ATLANTIC RIDGE MB=4,8 (42) 25,2N 45,5W 10KM H=19 23 24,3 (NEIS)
26,6N 45,1W 33KM 19 23 36,3 (WDCB)
MOX E P 19 32 23 1,4 / 19 MPV =4,9 D= 50,2 DEG AZ=262 MOX
CLL E P 19 32 29 D= 51,2 DEG AZ=262 CLL
E AP 32 36
BRG E P 19 32 33,8 1,3 / 18 D= 51,7 DEG AZ=264 BRG

1978 OCT 31
CLL E 02 41 23 TRACES

1978 OCT 31
CLL E 02 55 49

1978 OCT 31
CLL E 03 23 45

1978 OCT 31 CRETE MB=3,7 (14) 35,6N 26,2E 10KM H=04 01 20,2 (NEIS)
MOX E P 04 05 37 D= 18,4 DEG AZ=139 MOX

1978 OCT 31 UNDERGROUND EXPLOSION MB=5,2 (62) 49,8N 78,1E 0KM H=04 16 57,5 (NEIS)
BRG I P 04 24 34,5C 0,9 / 29 D= 39,8 DEG AZ= 66 BRG
I PN 26 03,0
CLL I P 04 24 37,6C 0,7 / 60 D= 40,2 DEG AZ= 66 CLL
E PN 26 06
MOX I P 04 24 46,7C 0,8 / 58 MPV =5,4 D= 41,2 DEG AZ= 64 MOX
E PN 26 20

1978 OCT 31 NEAR COAST OF GUATEMALA MB=5,0 (16) 13,8N 91,1W 60KM H=06 30 33,6 (NEIS)
MOX E P 06 43 16 D= 87,3 DEG AZ=288 MOX
LMH 07 25,0 T 16,5 AN 0,8 AE 1,1
LMV 25,1 T 16 AV 1,4
CLL E 06 43 27 D= 87,9 DEG AZ=289 CLL
LM 07 21 T 20 AN 0,5 AE 1 AV 1
BRG E P 06 43 23,6 D= 88,6 DEG AZ=290 BRG

1978 OCT 31 MINDANAO, PHILIPPINE ISLANDS MB=5,4 (43) 6,8N 123,9E 554KM H=11 21 01,1 (NEIS)
5,4N 124,4E 300KM 11 20 29,3 (WDCB)
BRG E P 11 33 35,4 1,0 / 18 D= 97,1 DEG AZ= 70 BRG
CLL E P 11 33 36 1,7 / 27 D= 97,5 DEG AZ= 69 CLL
MOX E P 11 33 42 D= 98,6 DEG AZ= 68 MOX

1978 OCT 31 POLAND, UPPER SILESIA /NO MB COMP./ 50,4N 18,9E H=11 33 13,0 (WAR)
50,2N 19,3E 0KM 11 33 16 (ISC)
BRG E PG 11 34 15,0 D= 3,2 DEG AZ= 97 BRG
E SG 35 00,0
CLL E PG 11 34 27 D= 3,8 DEG AZ=101 CLL
E SG 35 19
MOX E(SG) 11 35 40 D= 4,7 DEG AZ= 90 MOX

1978 OCT 31 KERMADEC ISLANDS REGION MB=5,3 (14) 27,5S 176,5W 33KM H=16 54 44,7 (NEIS)
27,8S 177,0W 33KM 16 54 40,2 (WDCB)
CLL E PKIKP 17 14 36 D=155,2 DEG AZ= 20 CLL
E PKP2 15 00 2,2 / 78
E PP 18 32
LM 18 33 T 18 AN 1 AE 1 AV 2 MLH =5,6 MLV =5,9
(CONT.)

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                                                                                                                    D=155,3 DEG   AZ= 23        BRG
BRG E PKIKP     17 14 36,0
    E PKP1         14 47,8
    E PKP2         15 00,7                                                                                          D=156,1 DEG   AZ= 18        MOX
MOX E PKP2      17 15 07
    E SS           38 36                                                                  MLH =5,9
      LMH       18 36,3     T 17,5 AN   1,5 AE   1,0                                     MLV =5,9
      LMV          39,1     T 16                    AV   1,6

1978 OCT 31
BRG E(P)        17 55 47,2

1978 OCT 31
CLL E           19 05 35

1978 OCT 31
CLL E           21 35 54

1978 OCT 31     KURILE ISLANDS                                                  MB=5,0 (62)   44,1N;148,2E  57KM H=21 44 02,5 (NEIS)
                                                                                              44,5N;148,1E  70KM   21 44 05,6 (WDCB)
                                                                                                    D= 77,3 DEG   AZ= 31        CLL
CLL I P         21 55 52,1C 1,2 /   77
    I AP           56 08,8                                                                          D= 77,4 DEG   AZ= 32        BRG
BRG I P         21 55 52,5C 1,0 /   24                                                              D= 78,4 DEG   AZ= 30        MOX
MOX E P         21 55 58

1978 OCT 31     POLAND, UPPER SILESIA
CLL E           22 30 45
MOX E           22 31 25
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1978 NOV 01
CLL E           03 45 41

1978 NOV 01
CLL E           12 40 18

1978 NOV 01
CLL E           16 51 41

1978 NOV 01     KIRGHIZ SSR                                                     MB=6,2 (70)   39,3N; 72,6E  40KM H=19 48 28,0 (NEIS)
                MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE                                     39,5N; 72,6E  33KM   19 48 28,1 (WDCB)
BRG I P         19 56 16,8D 1,7 /  840                                                  MPV =6,2          D= 41,9 DEG   AZ= 82        BRG
    I              56 27,4                                                                                DISTANCE  42 DEG
    I PP           57 56,0
    E S         20 02 42,0
    I SS           05 51,0
      LM           13       T 19                          AV 218,0   MLV =7,1
CLL I P(1)      19 56 20,5D 1,4 /  200                                                                    D= 42,5 DEG   AZ= 82        CLL
    I P(2)         56 29,8  1,6 /  690                                                                    DISTANCE  42 DEG
                             T  9   AN   0,9 AE   2,6 AV   5,0   MPH =6,2 MPV =6,2
    E PP(1)        57 54
    I PP(2)        58 04     T 10   AN   2,7 AE  16,6 AV  18,3   MPPH =6,9 MPPV =6,8
    E              59 20
    E SCP       20 02 02
    I S            02 41     T 12   AN  15,8 AE   9,6            MSH =6,7
    E SS           05 52
      LM           15        T 14   AN 295   AE  94   AV(130)    MLH =7,3 MLV =7,1
MOX I P         19 56 29,0D                                                                               D= 43,4 DEG   AZ= 81        MOX
    I              56 40  C  T  9                          AV   5,8
    E PP           58 20     T 10                          AV  14,0   MPPV =6,7
    I S         20 03 04     T 11   AN  13,0 AE  10,5            MSH =6,7
    I SS           06 11
      LMH          14        T 20   AN 326,2                     MLH =7,2
      LMV          17,9      T 14,5                 AV 171,4    MLV =7,2

1978 NOV 01     KURILE ISLANDS REGION                                   /NO MB COMP./  43,7N;148,6E  40KM H=22 29 20     (ISC)
CLL I P         22 41 15,6D 1,0 /   11                                                                D= 77,8 DEG   AZ= 31        CLL

1978 NOV 01     KIRGHIZ SSR                                                     MB=4,7 (10)   39,4N; 72,3E  67KM H=22 55 36,0 (NEIS)
BRG E P         23 03 22,6                                                                            D= 41,7 DEG   AZ= 83        BRG

1978 NOV 01
CLL E           23 15 21

1978 NOV 01
BRG E           23 33 07,0
CLL E           23 33 13

1978 NOV 01     KIRGHIZ SSR                                                     MB=4,7 ( 4)   39,6N; 72,7E  33KM H=23 41 03,8 (NEIS)
BRG E P         23 48 52,2                                                                            D= 41,8 DEG   AZ= 82        BRG
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1978 NOV 02
CLL E           00 32 35

1978 NOV 02
CLL E           01 38 27

1978 NOV 02     NORTHERN YUGOSLAVIA                                             NO MB COMP.   46,0N; 14,2E  10KM H=01 56 39,3 (NEIS)
                                                                                              46,0N; 14,2E  10KM   01 56 39,0 (CSEM)
BRG E(PN)       01 57 43,5                                                                            D=  4,9 DEG   AZ=178        BRG
    E              58 15,6
    E SQ           59 14,2
MOX E SQ        01 59 18                                                                              D=  5,0 DEG   AZ=159        MOX
CLL E           01 59 19                                                                              D=  5,4 DEG   AZ=171        CLL
    E SQ           59 33

1978 NOV 02
CLL E           02 01 35

1978 NOV 02     LOYALTY ISLANDS REGION                                          NO MB COMP.   22,4S;170,2E  44KM H=01 48 24,7 (NEIS)
BRG E PKP       02 07 59,6  1,0 /   11                                                                D=146,1 DEG   AZ= 42        BRG
CLL E PKP       02 07 59                                                                              D=146,1 DEG   AZ= 40        CLL

1978 NOV 02     GREENLAND SEA                                                   MB=4,8 (41)   74,2N;  8,5E  10KM H=05 21 35,1 (NEIS)
                                                                                              74,4N;  9,1E  10KM   05 21 36,4 (CSEM)
                                                                                              74,3N;  9,5E  33KM   05 21 35,0 (WDCB)
                                                                                                    D= 23,1 DEG   AZ=357        CLL
CLL E P         05 26 43    2,0 /   75
    I              26 49,0  2,0 /  190
BRG E P         05 26 46,6  1,8 /   76                                                              D= 23,5 DEG   AZ=356        BRG
MOX E P         05 26 48,5                                                                          D= 23,7 DEG   AZ=358        MOX

1978 NOV 02     KIRGHIZ SSR                                                     MB=5,3 (82)   39,3N; 72,7E  27KM H=06 24 13,0 (NEIS)
                                                                                              39,4N; 72,6E  33KM   06 24 09,6 (WDCB)
BRG I P         06 32 03,3C 1,2 /   49                                                                D= 42,0 DEG   AZ= 82        BRG
    E PP           33 44,6                                                                            DISTANCE  42 DEG
    E SS           41 46
      LMH          48        T 18   AN   7,3 AE   2,3            MLH =5,6
      LMV          51        T 18                   AV   5,2    MLV =5,5
CLL E P         06 32 07    1,4 /   51                                                               D= 42,5 DEG   AZ= 82        CLL
    E PP           33 48                                                                              DISTANCE  42 DEG
    E S            38 36
      LM           51        T 15   AN   5   AE   5   AV   6,5   MLH =5,7 MLV =5,7
MOX E P         06 32 16                                                                              D= 43,5 DEG   AZ= 81        MOX
    E PP           33 59,5
    E S            38 50
    E SS           41 55
      LMH          52,4      T 14,5 AN   5,2 AE   3,9            MLH =5,7
      LMV          53,7      T 12                   AV   4,8    MLV =5,7
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1978 NOV 02 KIRGHIZ SSR MB=4,6 (12) 39,3N; 72,2E 51KM H=07 34 17.7 (NEIS)
BRG E(P) 07 42 10,8 D= 41,7 DEG AZ= 83 BRG

1978 NOV 02 KIRGHIZ SSR MB=5,4 (77) 39,4N; 72,6E 46KM H=11 15 40.5 (NEIS)
39,4N; 72,6E 33KM 11 15 34.5 (WDCB)
D= 41,9 DEG AZ= 82 BRG
BRG I P 11 23 28,1C 1,0 / 62
E PP 25 08,0
LM 44 T 16 AV 2,7 MLV =5,3 D= 42,4 DEG AZ= 82 CLL
CLL I P 11 23 32,1 1,2 / 55
E 25 28
E SS 33 20
LM 42 T 15 AN 3 AE 2,5 AV 3 MLH =5,4 MLV =5,5
MPV =5,2 D= 43,4 DEG AZ= 81 MOX
MOX E P 11 23 41 1,4 / 65
E PP 25 26
LM 43,8 T 10 AN 2,1 AE 1,9 AV 2,6 MLH =5,5 MLV =5,5

1978 NOV 02
CLL E 20 16 16

1978 NOV 03
CLL E 01 01 45

1978 NOV 03
CLL E 02 52 58

1978 NOV 03 SOUTH SANDWICH ISLANDS REGION MB=5,6 (12) 57,9S; 25,5W 90KM H=03 21 26.0 (NEIS)
MOX LMV 04 20,4 T 24 AV 1,1 D=112,4 DEG AZ=200 MOX
LMH 21,6 T 23 AN 0,9

1978 NOV 03 PYRENEES 43,0N; 2,9E 10KM H=06 38 00.8 (CSEM)
MOX E 06 43 34,5 D= 9,7 DEG AZ=221 MOX
BRG E 06 43 12,0 D= 10,9 DEG AZ=228 BRG
E 44 14,8

1978 NOV 03 GREENLAND SEA MB=4,6 (11) 74,2N; 9,0E 10KM H=06 45 49.9 (NEIS)
CLL E P(2) 06 51 04 1,8 / 52 D= 23,0 DEG AZ=357 CLL
BRG E P 06 51 04,0 D= 23,5 DEG AZ=357 BRG
MOX E P(1) 06 51 03 D= 23,7 DEG AZ=358 MOX
E P(2) 51 10 1,8 / 68 MPV =4,9

1978 NOV 03
CLL E 07 30 18

1978 NOV 03
CLL E 09 33 03

1978 NOV 03 VOLCANO ISLANDS REGION MB=5,3 (35) 25,8N;142,3E 33KM H=12 13 30.8 (NEIS)
26,0N;141,8E 33KM 12 13 26.8 (WDCB)
BRG I P 12 26 33,2C 0,9 / 20 D= 91,1 DEG AZ= 45 BRG
I 28 39,6
E PP 30 11,4
CLL I P 12 26 33,4C 1.2 / 38 D= 91,2 DEG AZ= 44 CLL
E PP 30 17
MOX E P 12 26 39 1,2 / 16 MPV =5,3 D= 92,3 DEG AZ= 43 MOX

1978 NOV 03 MARIANA ISLANDS REGION MB=5,3 (42) 20,6N;146,3E 51KM H=13 05 56.7 (NEIS)
20,7N;146,3E 33KM 13 05 50.3 (WDCB)
BRG E P 13 19 26,6 D= 97,4 DEG AZ= 44 BRG
CLL E P 13 19 27 D= 97,5 DEG AZ= 43 CLL
E AP 19 42
MOX LMH 14 03,6 T 20 AN 0,5 MLH =5,0 D= 98,6 DEG AZ= 42 MOX
LMV 08,3 T 20 AV 0,5 MLV =5,0

1978 NOV 03 SOUTHERN GREECE MB=4,4 (1) 36,9N; 21,3E 51KM H=16 48 25.9 (NEIS)
37,2N; 21,4E 62KM 16 48 31.9 (CSEM)
BRG E(P) 16 52 02,5 D= 14,9 DEG AZ=157 BRG
MOX E P 16 52 09 TRACES D= 15,4 DEG AZ=149 MOX
CLL E(P) 16 52 08 D= 15,6 DEG AZ=154 CLL

1978 NOV 03 KURILE ISLANDS REGION MB=4,8 (10) 43,7N;149,5E 33KM H=17 06 46.3 (NEIS)
CLL I P 17 18 44,9C 1,1 / 24 D= 78,1 DEG AZ= 31 CLL
E AP 18 56
E 19 11
BRG E P 17 18 44,0 D= 78,2 DEG AZ= 31 BRG
MOX E P 17 18 50,5 TRACES D= 79,1 DEG AZ= 30 MOX

1978 NOV 03 RAT ISLANDS, ALEUTIAN ISLANDS MB=4,9 (29) 51,9N;175,0E 33KM H=17 36 14.4 (NEIS)
51,9N;174,5E 33KM 17 36 15.6 (WDCB)
CLL E 17 48 09 D= 76,0 DEG AZ= 11 CLL
BRG E P 17 48 01,4 D= 76,4 DEG AZ= 12 BRG

1978 NOV 03 EASTERN CAUCASUS MB=4,5 (6) 42,5N; 45,2E 30KM H=18 54 06.2 (NEIS)
42,4N; 45,3E 33KM 18 54 02.9 (WDCB)
BRG E P 18 59 09,4 D= 22,9 DEG AZ= 99 BRG
CLL E(P) 18 59 19 D= 23,5 DEG AZ= 99 CLL
E 59 23 1,7 / 39

1978 NOV 03
CLL E 23 08 17

1978 NOV 04 OFF COAST OF ECUADOR MB=4,7 (6) 1,2N; 85,3W 33KM H=03 04 16.6 (NEIS)
MOX LMV 03 51,4 T 24 AV 0,7 MLV =5,1 D= 93,5 DEG AZ=276 MOX
LMH 52,5 T 23 AN 0,5 AE 0,7 MLH =5,2

1978 NOV 04 UNDERGROUND EXPLOSION MB=5,6 (89) 50,0N; 79,0E 0KM H=05 05 57.5 (NEIS)
BRG I P 05 13 37,0C 1,0 / 58 D= 40,2 DEG AZ= 65 BRG
I PN 15 07,2
CLL I P 05 13 39,5C 0,9 / 95 D= 40,6 DEG AZ= 65 CLL
I PN 15 13,2
E 17 08
E 24 19
MOX I P 05 13 48,5C 0,9 / 105 MPV =5,6 D= 41,7 DEG AZ= 64 MOX
E PN 15 20

1978 NOV 04 KIRGHIZ SSR MB=4,5 (6) 39,4N; 72,5E 51KM H=06 26 53.6 (NEIS)
BRG E(P) 06 34 37,0 D= 41,8 DEG AZ= 82 BRG

1978 NOV 04 JAN MAYEN ISLAND REGION /MB=4,0 (4)/ 71,6N; 3,8W 0KM H=08 01 46.1 (ISC)
BRG E P 08 06 46,2 D= 22,3 DEG AZ=345 BRG

1978 NOV 04
CLL E 10 02 34 TRACES

1978 NOV 04 NORTHWESTERN IRAN MB=6,1 (94) 37,7N; 48,9E 34KM H=15 22 19.3 (NEIS)
37,7N; 49,0E 64KM 15 22 23.7 (CSEM)
37,8N; 49,1E 33KM 15 22 19.2 (WDCB)
D= 28,0 DEG AZ=104 BRG
DISTANCE 29 DEG
BRG I P 15 28 08,6C 2,0 / 630
E S 32 55
E SCP 35 02,2
LM 43 T 14 AN 3,0 AE 18,5 AV 17,0 MLH =5,9 MLV =5,9
CLL I P 15 28 14,8C 1,6 / 1400 D= 28,7 DEG AZ=104 CLL
DISTANCE 29 DEG
I 28 29
I 28 57,0
E PP 29 08
I 29 15
E 29 57
E 31 44
E S 33 00 T 8 AN 4,0 AE 3,3 MSH =6,1
E 33 13
E 33 34
E 34,0
E SS 34 30
E PCS 35 07
LM 43 T 14 AN 15 AE 14 AV 16,5 MLH =5,9 MLV =5,9
MOX I P 15 28 20,5C 1,2 / 179 MPV =5,7 D= 29,4 DEG AZ=102 MOX
E S 33 16 T 17 AN 4,1 AE 7,1 MSH =5,9
LMH 46,0 T 15,5 AN 13,8 AE 8,3 MLH =5,8
LMV 46,1 T 16 AV 19,2 MLV =5,9

1978 NOV 04
CLL I P 15 44 10,0

1978 NOV 04 KIRGHIZ SSR MB=4,5 (6) 39,3N; 72,5E 36KM H=16 10 36.1 (NEIS)
BRG E P 16 18 26,8 D= 41,9 DEG AZ= 83 BRG

1978 NOV 04 IRAN MB=4,5 (4) 33,6N; 57,2E 36KM H=17 12 26.8 (NEIS)
33,4N; 57,2E 33KM 17 12 25.9 (WDCB)
CLL E P 17 19 30 D= 36,4 DEG AZ=102 CLL

1978 NOV 04 POLAND, UPPER SILESIA /NO MB COMP./ 50,4N; 18,9E 0KM H=19 52 03.0 (ISC)
BRG E PG 19 53 06,4 D= 3,2 DEG AZ= 97 BRG
E SG 53 49,4
CLL E PG 19 53 19 D= 3,8 DEG AZ=101 CLL
E SG 54 12
MOX E SG 19 54 35 D= 4,7 DEG AZ= 90 MOX

1978 NOV 04 / SOLOMON ISLANDS MB=5,8 (19)
NOV 05 11,2S;162,2E 33KM H=22 29 22.1 (NEIS)
15,9S;164,0E 150KM 22 29 09.5 (WDCB)
MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE
BRG E PKP 22 48 37,0 D=132,7 DEG AZ= 45 BRG
E 48 49,2 DISTANCE 131 DEG
E PP 51 22,0
E SKP 52 16,0
E PS 23 01 30,0
E SS 08 50,0
LM 51 T 18 AN 25,5 AE 25,4 AV 47,0 MLH =7,1 MLV =7,2
CLL E PKP(1) 22 48 37 D=132,8 DEG AZ= 43 CLL
E PKP(2) 48 48 DISTANCE 132 DEG
I 48 55,5
E 50 57
E PP(2) 51 20
E SKP(1) 52 14
E SKP(2) 52 23
E 23 04 50
E SS 08,9
E SSS 13,7
LM 50 T 20 AN 29 AE 29,5 AV 52 MLH =7,1 MLV =7,3
FINAL 02
MOX I PKP 22 48 50,5 2,0 / 68 D=133,9 DEG AZ= 42 MOX
T 8 AV 1,4
E PP 51 44
E SS 23 09 00
E SSS 14 00
LMH 50,7 T 20,5 AN 32,6 AE 20,0 MLH =7,1
LMV 50,8 T 20 AV 41,5 MLV =7,1

1978 NOV 04 SOLOMON ISLANDS NO MB COMP. 11,2S;161,8E 33KM H=22 46 19.9 (NEIS)
BRG E SKP 23 08 59,2 D=132,5 DEG AZ= 45 BRG

1978 NOV 04 SOLOMON ISLANDS MB=5,9 (34) 11,2S;162,1E 33KM H=22 51 54.6 (NEIS)
11,1S;161,3E 33KM 22 51 50.9 (WDCB)
BRG E PKP 23 11 08,3 1,4 / 29 D=132,6 DEG AZ= 45 BRG
E 11 26,2
E PP 13 32,5
I SKP 14 36,6
CLL E PKP 23 11 07 1,8 / 90 D=132,7 DEG AZ= 43 CLL
E 11 26
E SKP 14 36
MOX E PKP 23 11 10 2,0 / 86 D=133,8 DEG AZ= 42 MOX

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                                                              MB=5,6 ( 1)    11.0S;162.2E  33KM H=23 01 31.0 (NEIS)
1978 NOV 04     SOLOMON ISLANDS                                                       D=132,5 DEG   AZ= 44        BRG
BRG E PKP       23 20 43,8
    E SKP          24 11,4                                                            D=132,6 DEG   AZ= 43        CLL
CLL E SKP       23 24 11     1,4 /    27
                                                              NO MB COMP.    11,1S;162,3E  33KM H=23 17 02,7 (NEIS)
1978 NOV 04     SOLOMON ISLANDS                                                       D=132,6 DEG   AZ= 44        BRG
BRG E PKP       23 36 13,6                                                            D=132,7 DEG   AZ= 43        CLL
CLL E PKP       23 36 15
                                                              MB=5,5 (31)    11,2S;162,3E  33KM H=03 57 04.0 (NEIS)
1978 NOV 05     SOLOMON ISLANDS                                              11,0S;161,5E  33KM   03 57 00.0 (WDCB)
                                                                                      D=132,7 DEG   AZ= 44        BRG
BRG E PKP       04 16 17,8
    E PP           18 43,4
    E SKP          19 44,7
      LM        05 23         T 17   AN   2,4 AE   1,6 AV   4,0   MLH  =6,0 MLV  =6,2
CLL E PKP       04 16 18                                                              D=132,8 DEG   AZ= 43        CLL
    E PP           18 45                                                              DISTANCE 132 DEG
    E SKP          19 45
      LM        05 17         T 20   AN   2,5 AE   2    AV   3    MLH  =5,9 MLV  =6,1
MOX E PP        04 18 45                                                              D=133,9 DEG   AZ= 42        MOX
    E SKP          19 52
    E SS           36 38
      LMH       05 12,5       T 20,5 AN   1,3 AE   2,0              MLH  =5,9
      LMV          23,9       T 18                 AV   2,3         MLV  =5,9

1978 NOV 05     FIJI ISLANDS REGION                           MB=5,1 ( 2)    17,6S;177,0W  89KM H=04 57 34.1 (NEIS)
CLL E           05 17 02                                                              D=145,4 DEG   AZ= 17        CLL
    I PKP          17 05,5   1,4 /    38
BRG E PKIKP     05 17 03,2                                                            D=145,7 DEG   AZ= 19        BRG
    I PKP1         17 06,7   1,1 /    33
MOX E PKIKP     05 17 05                                                              D=146,3 DEG   AZ= 15        MOX
    E PKHKP        17 09     1,3 /    44

1978 NOV 05     KURILE ISLANDS                                MB=5,1 (63)    48,9N;153,9E 138KM H=05 25 04,9 (NEIS)
                                                                             49,0N;153,8E 120KM   05 25 03,6 (WDCB)
CLL I P         05 36 30,3C 0,9 /    32                                               D= 74,7 DEG   AZ= 26        CLL
    I              36 35,5
BRG I P         05 36 31,6                                                            D= 74,9 DEG   AZ= 26        BRG
MOX E P         05 36 37     1,2 /    20                      MPV  =4,7               D= 75,7 DEG   AZ= 25        MOX

1978 NOV 05     CENTRAL MID-ATLANTIC RIDGE                    MB=5,2 (42)     8,1N; 38,6W  10KM H=06 39 35,7 (NEIS)
                                                                              7,9N; 37,7W  33KM   06 39 41,1 (WDCB)
MOX E P         06 49 39     1,3 /    22                      MPV  =5,1               D= 59,2 DEG   AZ=242        MOX
    E              49 49     1,8 /    61
      LMH       07 13,3      T 20                AE   1,3       MLH  =5,0
      LMV          13,8      T 20                       AV   1,5   MLV  =5,2
CLL E P         06 49 47                                                              D= 60,3 DEG   AZ=243        CLL
    E AP           49 54     2,0 /    41
BRG E P         06 49 48,8   1,5 /    16                                              D= 60,7 DEG   AZ=244        BRG

1978 NOV 05
CLL I P         09 47 37,9   0,9 /    13

1978 NOV 05
CLL E           10 12 22

1978 NOV 05     NEAR EAST COAST OF HONSHU, JAPAN              MB=5,1 (24)    36,6N;141,0E  55KM H=16 17 27,0 (NEIS)
                                                                             37,2N;140,9E 170KM   16 17 42,0 (WDCB)
BRG E P         16 29 38,8   1,0 /    10                                              D= 81,3 DEG   AZ= 41        BRG
    E AP           29 51,0
CLL I P         16 29 38,8D  1,4 /    29                                              D= 81,3 DEG   AZ= 40        CLL
    E              29 52
MOX E P         16 29 45   TRACES                                                     D= 82,4 DEG   AZ= 39        MOX

1978 NOV 05     MEXICO-GUATEMALA BORDER REGION                MB=4,8 ( 6)    15,8N; 92,2W 213KM H=16 21 01,2 (NEIS)
MOX E AP        16 34 10,5                                                            D= 86,4 DEG   AZ=291        MOX
CLL E AP        16 34 09                                                              D= 87,0 DEG   AZ=292        CLL
BRG E AP        16 34 15,4                                                            D= 87,7 DEG   AZ=292        BRG

1978 NOV 05
CLL I P         19 20 33

1978 NOV 05     LOYALTY ISLANDS REGION                        /NO MB COMP./  22,1S;170,2E  33KM H=21 21 27,9  (ISC)
BRG E PKP       21 41 05,4   1,2 /    22                                              D=145,8 DEG   AZ= 42        BRG
CLL I PKP       21 41 05,3D  1,7 /    36                                              D=145,9 DEG   AZ= 40        CLL

1978 NOV 05     SOLOMON ISLANDS                               MB=6,3 (39)    11,1S;162,1E  33KM H=22 02 07,1 (NEIS)
                                                                             10,8S;161,5E  33KM   22 02 09,4 (WDCB)
BRG E PKP       22 21 15,8                                                            D=132,6 DEG   AZ= 45        BRG
    I              21 26,8                                                            DISTANCE 131 DEG
    E PP           23 53,5
    I SKP          24 48,4
    E PCPPKP       33 53,7
    E SS           41 19,0
      LM        23 22         T 19   AN  27,2 AE  48,6 AV  64,0   MLH  =7.2 MLV  =7,3
CLL E PKP       22 21 20                                                              D=132,7 DEG   AZ= 43        CLL
    E              21 35                                                              DISTANCE 132 DEG
    E PP           23 44
    E SKP          24 48
    E              25 42
    E SKS          28 25
    E SKKP         34 07
    E              37 24
    E SS           41,4
    E SSS          46,2
      LM        23 22         T 20   AN  36,5 AE  33   AV( 65)   MLH  =7.2 MLV  =7,4
      LM           27         T 18   AN  37   AE  24   AV( 44)
MOX E PKP       22 21 23     1,5 /    65
    E              21 26     2,5 /   123                                              D=133,7 DEG   AZ= 42        MOX
    E PP           23 54
  (CONT.)
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  (CONT.)
    E SS        22 41 40
    E SSS          46 45
      LMV       23 24,9       T 20                     AV  42,2   MLV  =7,1
      LMH          25,4       T 18,5 AN  36,6                     MLH  =7,1

1978 NOV 06     NEW IRELAND REGION                            NO MB COMP.     5,5S;153,3E  55KM H=00 22 06,6 (NEIS)
BRG I PKP       00 41 00,1                                                            D=123,5 DEG   AZ= 51        BRG

1978 NOV 06
CLL E           01 23 14

1978 NOV 06
CLL E           02 34 18

1978 NOV 06     WESTERN POLAND
MOX E SG        04 07 05,5
BRG I PG        04 05 57,2
    I SG           06 17,2
CLL E PG        04 06 07                                                              DISTANCE 220 KM
    E SG           06 31

1978 NOV 06     WESTERN POLAND
BRG E PN        04 07 21,0
    I PG           07 22,4
    I SG           07 42,0
CLL E PG        04 07 32                                                              DISTANCE 220 KM
    E SG           07 56
MOX I SG        04 08 30,0

1978 NOV 06
CLL E           05 30 15   TRACES

1978 NOV 06     MONA PASSAGE                                  MB=4,7 (35)    18,0N; 68,4W  95KM H=08 18 29.5 (NEIS)
BRG I P         08 29 41,8C 0.8 /    12                                               D= 71,5 DEG   AZ=276        BRG

1978 NOV 06     RYUKYU ISLANDS REGION                         MB=5,1 (34)    29,5N;131,6E  22KM H=08 21 27,9 (NEIS)
                                                                             29,8N;131,7E  33KM   08 21 30,6 (WDCB)
BRG I P         08 33 52,9D 1,2 /    24                                               D= 83,0 DEG   AZ= 51        BRG
CLL I P         08 33 53,8D 1,3 /    70                                               D= 83,1 DEG   AZ= 50        CLL
MOX E P         08 34 00    (1,5)/   25                       MPV  =5,2               D= 84,2 DEG   AZ= 49        MOX

1978 NOV 06     FRANCE                                        NO MB COMP.    45,8N;  1,0E  16KM H=10 48 24,6 (CSEM)
                                                                             45,8N;  1,0E  10KM   10 48 22,8 (NEIS)
MOX E           10 52 10                                                              D=  8,6 DEG   AZ=240        MOX
    E SG           53 01
CLL E SG        10 53 35                                                              D=  9,7 DEG   AZ=240        CLL
BRG E           10 51 15,3                                                            D= 10,0 DEG   AZ=245        BRG
    E SG           53 47,8

1978 NOV 06     HOKKAIDO, JAPAN, REGION                       MB=5,3 (79)    42,2N;143,0E  63KM H=15 08 57,3 (NEIS)
                                                                             42,8N;142,8E  33KM   15 08 56,4 (WDCB)
CLL I P         15 20 45,5C 0,9 /    64                                               D= 77,2 DEG   AZ= 36        CLL
    E XP           21 07
    E              23 53
BRG I P         15 20 45,5C 1.0 /    20                                               D= 77,2 DEG   AZ= 36        BRG
    E XP           21 07,9
MOX E P         15 20 51    (1,5)/   45                       MPV  =5,2               D= 78,3 DEG   AZ= 35        MOX
    E XP           21 13,5  1,5 /    45                                                             DEPTH  89 KM
      LMH          53,5       T 30   AN   0,4
      LMV          54         T 30                     AV   0,5

1978 NOV 06     SOUTH OF HONSHU, JAPAN                        MB=4,9 (23)    32,4N;141,3E  33KM H=15 52 25,3 (NEIS)
                                                                             32,9N;141,3E  33KM   15 52 27,6 (WDCB)
BRG I P         16 04 58,8C 0,7 /    14                                               D= 85,0 DEG   AZ= 42        BRG
CLL I P         16 04 59,2C 1,0 /    28                                               D= 85,1 DEG   AZ= 42        CLL
MOX E P         16 05 04,5                                                            D= 86,1 DEG   AZ= 41        MOX

1978 NOV 06     IRAN                                          MB=4,6 (23)    33,4N; 57,5E  11KM H=16 49 54,5 (NEIS)
                                                                             33,3N; 57,7E  33KM   16 49 56,1 (WDCB)
CLL E P         16 57 04     1,1 /    12                                              D= 36,8 DEG   AZ=102        CLL

1978 NOV 06
CLL E           18 27 55   TRACES

1978 NOV 06     SOUTHWESTERN RYUKYU ISLANDS                   MB=4,7 (17)    24,7N;123,4E  97KM H=18 38 05,7 (NEIS)
CLL E P         18 50 21   TRACES                                                     D= 92,8 DEG   AZ= 59        CLL

1978 NOV 06
CLL E           19 51 15

1978 NOV 06
CLL E           22 46 03

1978 NOV 06     IRAN                                          MB=4,7 (30)    33,2N; 54,9E  33KM H=23 46 41,7 (NEIS)
                                                                             33,2N; 54,9E  10KM   23 46 40,9 (CSEM)
                                                                             33,4N; 55,0E  33KM   23 46 44,8 (WDCB)
CLL E P         23 53 35                                                              D= 35,3 DEG   AZ=104        CLL
    I AP           53 40,2   1,3 /    27

1978 NOV 07
CLL E P         01 28 10

1978 NOV 07     AFGHANISTAN-USSR BORDER REGION                MB=5,0 (61)    37,2N; 71,8E 125KM H=03 04 53,9 (NEIS)
                                                                             37,4N; 71,8E 130KM   03 04 56,2 (WDCB)
BRG I P         03 12 40,3D 0,8 /    68                                               D= 42,7 DEG   AZ= 86        BRG
    I AP           13 10,3
    I XP           13 27,8
CLL I P         03 12 44,1D 0,9 /    45                                               D= 43,3 DEG   AZ= 85        CLL
    I AP           13 15,5
    E              15 14
MOX I P         03 12 52,0D 0,8 /    35                       MPV  =5,1               D= 44,2 DEG   AZ= 84        MOX
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                                                                    MB=4,6 (11)   47,3N;153,1E  54KM H=05 04 49,0 (NEIS)
1978 NOV 07     KURILE ISLANDS                                                                  D= 76,0 DEG   AZ= 27       CLL
CLL E P         05 16 31     1,0 /  13                                                          D= 76,1 DEG   AZ= 27       BRG
BRG E P         05 16 31,2                                                                      D= 76,9 DEG   AZ= 26       MOX
MOX E AP        05 16 56     1,2 /  12                                                                        DEPTH  73 KM

1978 NOV 07
BRG I(P)        05 58 46,6

                                                                    MB=4,6 ( 1)   11,7N; 42,6E  33KM H=06 44 18,5 (NEIS)
1978 NOV 07     ETHIOPIA                                                                        D= 45,5 DEG   AZ=139       BRG
BRG E P         06 52 37,6                                                                      D= 46,3 DEG   AZ=138       CLL
CLL E P         06 52 42

                                                                    MB=5,3 (67)   11,5N; 42,6E  33KM H=17 05 55,2 (NEIS)
1978 NOV 07     ETHIOPIA                                                        11,7N; 42,6E  33KM   17 05 50,7 (WDCB)
                                                                                D= 45,7 DEG   AZ=139       BRG
                                                                                DISTANCE  46 DEG
BRG I P         17 14 14,2D 1,4 /  68
    E S            21 04,0
    E SS           24 27
      LM           37       T 14   AN   3,1 AE   3,9 AV   4,3   MLH  =5,6 MLV  =5,6
CLL I P         17 14 19,4D 1,5 /  110                                                          D= 46,4 DEG   AZ=138       CLL
    E S            21 10                                                                       DISTANCE  48 DEG
    E SS           24 25
      LM           37       T 15   AN   5    AE   3    AV   4     MLH  =5,7 MLV  =5,7
MOX E P         17 14 20   D 1,2 /  69                                                         D= 46,5 DEG   AZ=136       MOX
    E S            21 10                                                                       MPV  =5,5
    E SS           24 40
      LMH          36,6     T 18,5 AN   4,1 AE   3,4           MLH  =5,5
      LMV          37,4     T 15                         AV   4,7   MLV  =5,6

1978 NOV 07     SOLOMON ISLANDS                                                 MB=5,7 (52)   11,0S;162,2E  33KM H(17 33 59,5)(NEIS)
                                                                                 9,1S;160,7E  33KM   17 34 06,8 (WDCB)
                                                                                D=132,5 DEG   AZ= 44       BRG
                                                                                DISTANCE 130 DEG
BRG E PKP       17 53 15,8
    E PP           55 41,7
    E SKP          56 40,5
      LM           18 56       T 19   AN   3,4 AE   2,4 AV   5,1   MLH  =6,1 MLV  =6,2
CLL E(PKP)      17 53 20                                                                        D=132,6 DEG   AZ= 43       CLL
    E PP           55 44                                                                       DISTANCE 132 DEG
    I SKP          56 40,9D 2,2 /  200
    E SKP          56 54    2,0 /  125
      LM           18 57       T 18   AN   3    AE   1    AV   3     MLH  =6,0 MLV  =6,1
MOX E PKP       17 53 48                                                                        D=133,7 DEG   AZ= 42       MOX
    E SKP          56 43    1,2 /  29
      LMV          18 56       T 18                         AV   3,2   MLV  =6,1
      LMH          57          T 19,5 AN   3,7 AE   1,3           MLH  =6,1

1978 NOV 07     TAIWAN REGION                                                   MB=5,1 (26)   24,1N;122,6E  30KM H=18 01 59,3 (NEIS)
                                                                                24,5N;122,7E  33KM   18 02 01,2 (WDCB)
BRG E P         18 14 22,8                                                                      D= 82,6 DEG   AZ= 61       BRG
CLL E P         18 14 23                                                                        D= 82,9 DEG   AZ= 60       CLL

CLL  INTERRUPTION OF SOME RECORDS FROM 18H 28M TO 18H 39M

1978 NOV 07     ETHIOPIA                                                        MB=4,3 ( 1)   11,7N; 42,6E  33KM H=19 54 03,6 (NEIS)
BRG E P         20 02 24,5                                                                      D= 45,5 DEG   AZ=139       BRG
CLL E           20 02 33                                                                        D= 46,3 DEG   AZ=138       CLL

1978 NOV 07     AFGHANISTAN-USSR BORDER REGION                                  MB=4,8 (13)   37,3N; 71,4E 111KM H=22 07 21,6 (NEIS)
                                                                                37,4N; 71,3E 110KM   22 07 21,4 (WDCB)
BRG I AP        22 15 32,0  1,1 /  21                                                           D= 42,4 DEG   AZ= 86       BRG
    I XP           15 45,5
CLL E AP        22 15 35                                                                        D= 42,9 DEG   AZ= 86       CLL
MOX E AP        22 15 44,5                                                                      D= 43,9 DEG   AZ= 84       MOX
                                                                                                                 DEPTH 117 KM

1978 NOV 08     SOUTH OF FIJI ISLANDS                                           MB=4,5 ( 2)   23,5S;178,3W 372KM H=23 45 28,2 (NEIS)
CLL I PKP1      00 04 39   D 0,8 /  19                                                          D=150,9 DEG   AZ= 22       CLL
BRG I PKP1      00 04 39,5  0,6 /  15                                                          D=151,1 DEG   AZ= 24       BRG
    I              04 51,5

1978 NOV 08     KIRGHIZ SSR                                                     MB=5,5 (89)   39,3N; 72,6E  41KM H=00 57 47,9 (NEIS)
                                                                                39,5N; 72,6E  33KM   00 57 43,5 (WDCB)
BRG I P         01 05 36,4C 1,3 /  119                                                          D= 41,9 DEG   AZ= 82       BRG
    I PP           07 16,6                                                                     DISTANCE  43 DEG
    E S            11 54
      LMH          22       T 15   AN   2,2 AE   1,2           MLH  =5,2
      LMV          25       T 18                         AV   1,7   MLV  =5,1
CLL I P         01 05 40,4D 1,4 /  120                                                          D= 42,5 DEG   AZ= 82       CLL
    E PP           07 23
    E              12 27
    E SS           14 56
      LM           25       T 13   AN   2    AE   1,5 AV   2     MLH  =5,3 MLV  =5,3
MOX I P         01 05 48,5D 1,3 /  83                                                           MPV  =5,3
    E PP           07 31    1,8 /  88                                                          D= 43,4 DEG   AZ= 81       MOX
    E SS           15 40                                                                       MPPV =5,3
      LMH          26       T 12   AN   1,5 AE   1,7           MLH  =5,3
      LMV          26,1     T 12                         AV   1,8   MLV  =5,3

1978 NOV 08     ETHIOPIA                                                        MB=4,9 (51)   11,6N; 42,6E  62KM H=05 08 01,7 (NEIS)
                                                                                11,6N; 42,5E  33KM   05 07 59,6 (WDCB)
BRG I P         05 16 17,2D 1,1 /  29                                                           D= 45,6 DEG   AZ=139       BRG
    E S            23 05,0                                                                     DISTANCE  46 DEG
      LM           40       T 14   AN   2,3 AE   1,2           MLH  =5,3 MLV  =5,4 (NO DEPTH CORRECTION)
CLL I P         05 16 22,9D 1,9 /  78                                                           D= 46,3 DEG   AZ=138       CLL
    I PCP          17 59,0
      LM           40       T 14   AN   3    AE   2    AV   2,5   MLH  =5,5 MLV  =5,4 (NO DEPTH CORRECTION)
MOX E P         05 16 24    1,1 /  28                                                           MPV  =5,1
    E S            23 15                                                                       D= 46,5 DEG   AZ=136       MOX
      LMV          39,6     T 16                         AV   2,9
      LMH          41,4     T 17          AE   3,3
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1978 NOV 08     ETHIOPIA                                                        MB=4,8 ( 2)   11,7N; 42,4E  33KM H=07 42 22,2 (NEIS)
BRG E P         07 50 39,6                                                                      D= 45,5 DEG   AZ=139       BRG
CLL E P         07 50 44    TRACES                                                              D= 46,2 DEG   AZ=138       CLL

1978 NOV 08     ATLANTIC-INDIAN RISE                                            MB=5,7 (44)   28,5S; 62,4E  10KM H=12 30 29,3 (NEIS)
                                                                                28,4S; 62,4E  33KM   12 30 27,2 (WDCB)
BRG I P         12 43 29,3C 1,3 /  65                                                           D= 89,9 DEG   AZ=139       BRG
    I AP           43 39,0
CLL I P         12 43 32,9  1,5 /  59                                                           D= 90,6 DEG   AZ=138       CLL
    E AP           43 42
MOX E P         12 43 33    1,8 /  74                                                           MPV  =5,7
    E AP           43 42,5                                                                     D= 90,7 DEG   AZ=137       MOX

CLL  INTERRUPTION OF SOME RECORDS FROM 13H 21M TO 13H 50M

1978 NOV 08     MID-INDIAN RISE                                                 MB=5,2 (19)   25,5S; 70,0E  10KM H=14 07 37,5 (NEIS)
                                                                                25,5S; 70,0E  33KM   14 07 35,8 (WDCB)
BRG E P         14 20 42,9  1,8 /  24                                                           D= 90,7 DEG   AZ=131       BRG
CLL E P         14 20 46                                                                        D= 91,4 DEG   AZ=131       CLL

1978 NOV 09     NORTHERN YUGOSLAVIA                                             NO MB COMP.   45,7N; 14,2E  10KM H=00 30 01,0 (NEIS)
                                                                                46,1N; 14,5E  10KM   00 30 03,7 (CSEM)
BRG I           00 31 37,0                                                                      D=  5,2 DEG   AZ=178       BRG
    E SG           32 48,2
MOX E SG        00 32 53                                                                        D=  5,2 DEG   AZ=160       MOX
CLL E SG        00 33 02                                                                        D=  5,7 DEG   AZ=171       CLL

1978 NOV 09     ECUADOR                                                         MB=4,8 (48)    1,4S; 77,9W 182KM H=00 36 56,3 (NEIS)
CLL E P         00 49 45                                                                        D= 91,7 DEG   AZ=270       CLL
BRG E P         00 49 46,8  1,0 /  13                                                           D= 92,2 DEG   AZ=271       BRG

1978 NOV 09     SOLOMON ISLANDS                                                 MB=5,3 (24)   10,8S;161,4E  29KM H=00 51 28,3 (NEIS)
                                                                                10,4S;161,2E  33KM   00 51 24,8 (WDCB)
BRG E APKP      01 10 50,8                                                                      D=132,0 DEG   AZ= 45       BRG
    E SKP          14 18,7
    E SS           30 40
      LM           02 15       T 17   AN   1,2 AE   1,5 AV   2,1   MLH  =5,9 MLV  =5,9
CLL E APKP      01 10 51                                                                        D=132,1 DEG   AZ= 44       CLL
    E SKP          14 06                                                                       DISTANCE 132 DEG
    E SKP          14 19
      LMH          02 03       T 18   AN   1,5 AE   1            MLH  =5,8
      LMV          12          T 18                         AV   2    MLV  =5,9
MOX   LMH          02 03,3     T 17   AN   1,2 AE   1,7          MLH  =5,9
      LMV          13,8        T 18                         AV   1,6  MLV  =5,8

1978 NOV 09
CLL E           01 44 31

CLL  INTERRUPTION OF SOME RECORDS FROM 06H 12M TO 06H 30M

1978 NOV 09
CLL E           08 55 15

CLL  INTERRUPTION OF SOME RECORDS FROM 09H 44M TO 09H 53M

1978 NOV 09     KIPGHIZ SSR                                                     MB=4,5 (11)   39,3N; 72,4E  49KM H=11 13 03,5 (NEIS)
BRG E P         11 20 50,3                                                                      D= 41,8 DEG   AZ= 83       BRG

1978 NOV 09     RYUKYU ISLANDS                                                  MB=4,7 ( 3)   29,3N;130,5E  33KM H=11 46 34,2 (NEIS)
CLL E P         11 58 57                                                                        D= 82,8 DEG   AZ= 51       CLL

1978 NOV 09     TONGA ISLANDS                                                   MB=4,7 ( 2)   21,1S;175,6W  33KM H=15 13 53,1 (NEIS)
CLL E PKP1      15 38 40                                                                        D=149,1 DEG   AZ= 16       CLL
    E              39 28
BRG E PKP1      15 38 40,0                                                                      D=149,4 DEG   AZ= 18       BRG

1978 NOV 09
CLL E           19 22 39

1978 NOV 09
CLL E           22 27 05

1978 NOV 10     TAJIK-SINKIANG BORDER REGION                                    MB=4,4 ( 4)   38,2N; 73,1E 137KM H=02 26 55,2 (NEIS)
BRG E P         02 34 43,2                                                                      D= 42,9 DEG   AZ= 83       BRG

1978 NOV 10     PHILIPPINE ISLANDS REGION                                       MB=4,6 (11)   20,4N;121,4E  33KM H=09 03 48,5 (NEIS)
BRG I P         09 18 21,6C 1,1 /  17                                                           D= 84,8 DEG   AZ= 64       BRG
CLL I P         09 18 22,7                                                                      D= 85,2 DEG   AZ= 63       CLL
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1978 NOV 10
CLL I PKP       09 38 30,5  0,9 /   15
BRG E PKP       09 38 31,5

1978 NOV 10     PERU-BOLIVIA BORDER REGION                      MB=5,2 (51)   17,9S; 69,2W  88KM H=12 18 55,7 (NEIS)
                                                                              D= 99,0 DEG   AZ=253       CLL
CLL I P         12 32 28,5  1,2 /   14                                        D= 99,5 DEG   AZ=253       BRG
BRG E P         12 32 29,7

1978 NOV 10     SOLOMON ISLANDS                                 MB=5,6 (39)   11,2S;162,1E  33KM H=13 25 00,2 (NEIS)
                                                                              11,0S;160,9E  33KM   13 24 57,9 (WDCB)
                                                                              D=132,6 DEG   AZ= 45       BRG

BRG E PKP       13 44 14,9
    I SKP          47 41,3
      LM        14 50       T 18   AN   1,0 AE   1,2 AV   1,4   MLH =5,7 MLV =5,7
                                                                              D=132,7 DEG   AZ= 43       CLL
CLL E PKP       13 44 14    2,2 /   52                                        DISTANCE 132 DEG
    E              44 25
    E              44 45
    E PP           46 37
    E SKP          47 41
      LM        14 45       T 20   AN   1   AE   1   AV   1,5   MLH =5,6 MLV =5,7
                                                                              D=133,8 DEG   AZ= 42       MOX
MOX E PKIKP     13 44 18    TRACES
    E SKP          47 45
      LMV       14 46       T 18                    AV   1,2   MLV =5,6
      LMH          46       T 16   AN   0,8         MLH =5,5

1978 NOV 10     SOUTH OF HONSHU, JAPAN                          MB=5,0 (23)   30,9N;141,9E  33KM H=14 18 12,1 (NEIS)
                                                                              31,4N;141,7E  33KM   14 18 15,1 (WDCB)
BRG E P         14 30 55,0  2,0 /   24                                        D= 86,5 DEG   AZ= 43       BRG
    E AP           31 05,6
CLL E P         14 30 53                                                      D= 86,6 DEG   AZ= 42       CLL
    I AP           31 05,5

1978 NOV 10
CLL E P         15 12 56

                                                                                                         (VKA)
1978 NOV 10     VENETIA, ITALY
CLL E SG        17 05 55

1978 NOV 10
CLL E           20 39 28

1978 NOV 10     GULF OF ALASKA                                  MB=4,7 (20)   58,1N;148,9W  33KM H=23 42 03,8 (NEIS)
                                                                              57,1N;150,0W  33KM   23 42 02,6 (WDCB)
CLL E AP        23 53 23                                                      D= 69,9 DEG   AZ=350       CLL
MOX E P         23 53 18                                                      D= 70,4 DEG   AZ=349       MOX
BRG E P         23 53 18,3                                                    D= 70,5 DEG   AZ=350       BRG

1978 NOV 11
CLL E           00 50 46

1978 NOV 11     EASTERN TURKEY                                  MB=4,1 ( 9)   38,1N; 38,5E  10KM H=02 45 52,0 (NEIS)
BRG E P         02 50 46,7                                                    D= 21,6 DEG   AZ=117       BRG
CLL E(P)        02 51 55                                                      D= 22,3 DEG   AZ=116       CLL

1978 NOV 11     EASTERN TURKEY                                 /MB=4,5 ( 7)/  37,4N; 38,1E  33KM H=02 47 36,9  (ISC)
BRG E P         02 52 27,0  1,5 /   17                                        D= 21,8 DEG   AZ=119       BRG
CLL I P         02 52 34,8C 1,4 /   22                                        D= 22,6 DEG   AZ=118       CLL

1978 NOV 11
MOX E           05 19 48,5
CLL E           05 19 50
BRG E P         05 19 56,2

1978 NOV 11     SOUTH OF HONSHU, JAPAN                          MB=4,7 ( 7)   30,9N;141,9E  33KM H=05 08 43,5 (NEIS)
                                                                              31,3N;141,5E  33KM   05 08 47,3 (WDCB)
CLL E P         05 21 26                                                      D= 86,6 DEG   AZ= 42       CLL

1978 NOV 11     FIJI ISLANDS REGION                             MB=5,1 (11)   17,9S;179,4W 651KM H=06 42 14,8 (NEIS)
CLL I PKP1      07 00 42,8  0,9 /   17                                        D=145,2 DEG   AZ= 21       CLL
BRG E PKP1      07 00 43,5  1,0 /    8                                        D=145,4 DEG   AZ= 23       BRG

1978 NOV 11
MOX I PN        10 20 04,7
    E SG           20 26,5

1978 NOV 11
CLL I P         14 41 35,7
BRG I P         14 41 36,1  0,8 /    9

1978 NOV 11
BRG I(PG)       19 21 12,0
    E SG           21 57,7
CLL E           19 22 17

1978 NOV 11
CLL E           20 56 13   TRACES

1978 NOV 12     POLAND, UPPER SILESIA
BRG I(PG)       00 19 57,5
    E SG           20 43,0
CLL E           00 21 07

1978 NOV 12     POLAND, UPPER SILESIA
BRG I(PG)       03 23 38,0
    E SG           24 21,5
CLL E           03 24 44
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1978 NOV 12     SOUTHERN GREECE                                 MB=4,2 ( 1)   37,3N; 24,9E 136KM H=06 26 46,5 (NEIS)
CLL E           06 30 42                                                      D= 16,4 DEG   AZ=144       CLL

1978 NOV 12     SOLOMON ISLANDS                                 MB=5,2 (20)   10,5S;161,4E  61KM H=08 11 14,3 (NEIS)
BRG E APKP      08 30 38,0                                                    D=131,7 DEG   AZ= 45       BRG
    E SKP          33 53,5
CLL E           08 32 49                                                      D=131,8 DEG   AZ= 44       CLL

1978 NOV 12
CLL E           14 29 06

1978 NOV 12     BOUVET ISLAND REGION                            MB=5,3 ( 7)   54,1S;  1,8W  33KM H=21 37 42,9 (NEIS)
MOX   LMH       22 33,3     T 24   AN   1,0 AE   1,2           MLH =5,5                    D=105,0 DEG   AZ=188       MOX
      LMV          36,9     T 20                    AV   1,1   MLV =5,4
BRG I PP        21 56 22,5                                                    D=105,4 DEG   AZ=190       BRG
    E           58 39,0
    E SS        22 11 23
      LM            36       T 20   AN   1,7 AE   1,3 AV   2,2   MLH =5,7 MLV =5,7
CLL   LM        22 40                                                         D=105,8 DEG   AZ=189       CLL

1978 NOV 13     NEAR EAST COAST OF HONSHU, JAPAN                MB=5,2 (53)   38,8N;142,1E  43KM H=03 01 40,7 (NEIS)
                                                                              39,6N;141,6E 110KM   03 01 53,6 (WDCB)
BRG I P         03 13 45,9C 0,9 /   30                                        D= 79,8 DEG   AZ= 39       BRG
    E AP           13 59,0
CLL I P         03 13 46,1D 1,0 /   60                                        D= 79,8 DEG   AZ= 38       CLL
    E AP           13 58
MOX E P         03 13 52,5 (1,5)/   35                  MPV =5,1              D= 80,9 DEG   AZ= 37       MOX
      LMH          51,2     T 21   AN   0,6 AE   0,7   MLH =5,1
      LMV          52,8     T 18                    AV   0,6   MLV =5,0

1978 NOV 13     KERMADEC ISLANDS REGION                         NO MB COMP,   28,3S;176,7W  33KM H=07 05 41,4 (NEIS)
CLL E APKP2     07 26 16                                                      D=155,9 DEG   AZ= 21       CLL
BRG E PKP2      07 25 56,7                                                    D=156,1 DEG   AZ= 24       BRG

1978 NOV 13     HINDU KUSH REGION                               MB=5,0 (68)   36,5N; 70,7E 202KM H=07 27 17,3 (NEIS)
                                                                              36,4N; 70,8E 190KM   07 27 16,1 (WDCB)
BRG I P         07 34 54,4C 1,0 /   23                                        D= 42,4 DEG   AZ= 87       BRG
    E AP           35 38,5
CLL I P         07 34 58,4  1,0 /   18                                        D= 43,0 DEG   AZ= 87       CLL
    E AP           35 43
    E PP           36 30
MOX E P         07 35 06,5  1,8 /   37                  MPV =4,6              D= 43,9 DEG   AZ= 85       MOX

1978 NOV 13     CUBA REGION                                     MB=5,1 (55)   19,8N; 76,1W  33KM H=07 43 18,0 (NEIS)
                                                                              20,3N; 76,1W  33KM   07 43 20,5 (WDCB)
MOX E P         07 54 50   (1,4)/   26                  MPV =5,0              D= 73,5 DEG   AZ=281       MOX
CLL E P         07 54 54                                                      D= 74,3 DEG   AZ=282       CLL
BRG E P         07 54 57,7  1,4 /   19                                        D= 74,9 DEG   AZ=283       BRG

1978 NOV 13     KURILE ISLANDS                                  MB=5,3 (71)   44,6N;148,1E  64KM H=08 22 21,2 (NEIS)
                                                                              45,1N;147,7E  60KM   08 22 24,1 (WDCB)
CLL I P         08 34 07,4C 1,3 /   58                                        D= 76,9 DEG   AZ= 31       CLL
    E AP           34 24
BRG I P         08 34 08,2  1,0 /   15                                        D= 76,9 DEG   AZ= 32       BRG
MOX I P         08 34 13,5D 1,2 /   28                  MPV =5,1              D= 77,9 DEG   AZ= 30       MOX

1978 NOV 13     VANUATU ISLANDS                                 MB=5,2 ( 1)   15,5S;167,2E 121KM H=12 55 44,0 (NEIS)
BRG E PKP       13 14 55,4                                                    D=138,7 DEG   AZ= 41       BRG

1978 NOV 13     SOLOMON ISLANDS                                 MB=5,1 ( 6)   10,9S;161,3E  21KM H=16 24 07,3 (NEIS)
CLL   L         17 41                                                         D=132,1 DEG   AZ= 44       CLL

1978 NOV 14
BRG E(P)        03 01 57,5
CLL E           03 02 24

1978 NOV 14     POLAND, UPPER SILESIA
CLL E           03 18 44

1978 NOV 14     FIJI ISLANDS REGION                            /NO MB COMP,/  20,3S;178,4W 668KM H=04 56 48     (ISC)
CLL E           05 15 25   TRACES                                             D=147,8 DEG   AZ= 20       CLL

1978 NOV 14     TONGA ISLANDS                                   MB=5,4 (25)   15,7S;173,2W  33KM H=05 12 24,0 (NEIS)
                                                                              15,6S;173,2W  33KM   05 12 19,2 (WDCB)
CLL I PKP       05 31 56,0C 1,1 /   29                                        D=144,1 DEG   AZ= 10       CLL
    E              32 30
BRG E PKP       05 31 56,0  1,1 /   16                                        D=144,4 DEG   AZ= 12       BRG
MOX E PKP       05 31 58    1,4 /   44                                        D=144,9 DEG   AZ=  8       MOX
    E              32 14    1,6 /   49

1978 NOV 14
BRG E(P)        08 05 55,0

1978 NOV 14     OFF EAST COAST OF HONSHU, JAPAN                 MB=4,9 (22)   40,2N;143,3E  33KM H=10 11 46,6 (NEIS)
                                                                              40,9N;143,1E  33KM   10 11 51,6 (WDCB)
BRG E P         10 23 47,1                                                    D= 79,1 DEG   AZ= 37       BRG
CLL I P         10 23 49,8D 0,8 /   23                                        D= 79,1 DEG   AZ= 37       CLL
MOX E P         10 23 56                                                      D= 80,1 DEG   AZ= 35       MOX

1978 NOV 14
CLL E           12 13 40

1978 NOV 14     KURILE ISLANDS                                  MB=4,7 ( 9)   45,7N;149,6E 104KM H=14 42 15,5 (NEIS)
CLL I P         14 53 53,9 TRACES                                             D= 76,4 DEG   AZ= 30       CLL

1978 NOV 14     NORTHERN SINKIANG PROV., CHINA                  MB=4,6 (11)   43,2N; 82,8E  33KM H=15 55 49,5 (NEIS)
                                                                              43,5N; 82,6E  33KM   15 55 52,4 (WDCB)
BRG E AP        16 04 21,6                                                    D= 46,0 DEG   AZ= 72       BRG
CLL E P         16 04 15                                                      D= 46,4 DEG   AZ= 71       CLL
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1978 NOV 14 KERMADEC ISLANDS REGION MB=4,8 (3) 27,5S;176,3W 33KM H=19 41 23.7 (NEIS)
CLL E PKP1 20 01 23 D=155,2 DEG AZ= 20 CLL
BRG I PKP1 20 01 25,5 D=155,4 DEG AZ= 22 BRG

1978 NOV 15 POLAND, UPPER SILESIA
CLL E 01 09 34

1978 NOV 15
CLL E 03 53 24

1978 NOV 15 SOUTH OF HONSHU, JAPAN MB=5,1 (35) 31,0N;141,8E 42KM H=04 49 24.1 (NEIS)
31,1N;141,9E 33KM 04 49 18,5 (WDCB)
D= 86,4 DEG AZ= 43 BRG

BRG E P 05 02 03,5
E AP 02 18,3 D= 86,5 DEG AZ= 42 CLL
CLL E P 05 02 03

1978 NOV 15 FIJI ISLANDS REGION MB=4,7 (6) 14,8S;178,7W 395KM H=06 50 39,8 (NEIS)
BRG E PKP 07 09 28,6 D=142,6 DEG AZ= 20 BRG

1978 NOV 15 NORTHWEST OF KURILE ISLANDS MB=5,9(102) 47,9N;146,6E 29KM H=07 47 22,0 (NEIS)
48,0N;146,5E 33KM 07 47 23,3 (WDCB)
D= 73,5 DEG AZ= 31 CLL

CLL I P 07 58 52,5C 1,4 / 220
I AP 59 00,0
E 08 01 23
E PPP 03 22
LMH 29
LV 35 D= 73,5 DEG AZ= 31 BRG
BRG I P 07 58 53,0C 1,3 / 78
E 59 17,8
LMH 08 31 T 18 AN 1,8 AE 4,5 MLH =5,8
LMV 36 T 14 AV 2,5 MLV =5,7
MPV =5,8 D= 74,5 DEG AZ= 30 MOX
MOX I P 07 58 59,0C 1,6 / 159
LMH 08 30,1 T 19 AN 2,2 AE 3,7 MLH =5,8
LMV 30,8 T 20 AV 1,0 MLV =5,1

1978 NOV 16 MINDANAO, PHILIPPINE ISLANDS MB=5,4 (40) 8,0N;126,6E 56KM H=10 45 08,8 (NEIS)
BRG I P 10 58 39,6C 1,1 / 20 D= 97,7 DEG AZ= 67 BRG
E AP 58 57,0 D= 99,2 DEG AZ= 65 MOX
MOX E P 10 58 47 TRACES

1978 NOV 16 OFF EAST COAST OF HONSHU, JAPAN MB=4,8 (13) 34,1N;141,5E 33KM H=20 48 32,1 (NEIS)
34,6N;141,6E 33KM 20 48 29,9 (WDCB)
CLL E P 21 00 59 TRACES D= 83,7 DEG AZ= 41 CLL

1978 NOV 16 AZORES ISLANDS MB=5,0 (51) 39,8N; 29,8W 10KM H=22 02 32,6 (NEIS)
40,1N; 29,1W 10KM 22 02 40,1 (CSEM)
39,7N; 30,1W 33KM 22 02 29,1 (WDCB)
MOX E P 22 08 50,5 1,9 / 38 MPV =4,9 D= 30,7 DEG AZ=266 MOX
E S 13 55 TRACES
LMV 20 T 18 AV 3,9 MLV =5,2
LMH 20,1 T 17 AN 1,7 AE 2,9 MLH =5,1
CLL I P 22 08 58,5 1,3 / 22 D= 31,7 DEG AZ=266 CLL
LM 20 T 14 AN 2 AE 2,5 AV 3 MLH =5,2 MLV =5,3
BRG E P 22 09 03,3 D= 32,2 DEG AZ=267 BRG
LM 21 T 17 AN 1,4 AE 4,5 AV 5,8 MLH =5,3 MLV =5,4

1978 NOV 17
CLL E 03 25 26

1978 NOV 17 KOMANDORSKY ISLANDS REGION MB=5,2 (48) 54,1N;169,3E 10KM H=05 33 26,2 (NEIS)
54,0N;169,1E 33KM 05 33 28,8 (WDCB)
CLL E P 05 44 58 D= 73,1 DEG AZ= 14 CLL
BRG E P 05 45 00,0 D= 73,4 DEG AZ= 15 BRG
MOX E P 05 45 03 1,3 / 22 MPV =5,1 D= 74,0 DEG AZ= 13 MOX
LMH 06 20

1978 NOV 17 AFGHANISTAN-USSR BORDER REGION MB=5,0 (17) 38,5N; 70,5E 26KM H=12 59 33,2 (NEIS)
38,5N; 70,5E 33KM 12 59 30,6 (WDCB)
BRG E P 13 07 16,9 0,9 / 8 D= 41,1 DEG AZ= 85 BRG
E AP 07 23,2
CLL E P 13 07 25 D= 41,6 DEG AZ= 85 CLL

1978 NOV 17
CLL E 13 13 47

1978 NOV 17 EASTERN GULF OF ADEN MB=4,8 (9) 12,7N; 48,2E 33KM H=20 34 01,4 (NEIS)
BRG E P 20 42 32,4 D= 47,2 DEG AZ=131 BRG

1978 NOV 17 QINGHAI PROVINCE, CHINA MB=5,0 (40) 37,3N; 97,1E 33KM H=21 44 28,4 (NEIS)
37,2N; 97,1E 33KM 21 44 22,8 (WDCB)
BRG I P 21 54 21,5C 1,1 / 15 D= 58,2 DEG AZ= 69 BRG
CLL I P 21 54 23,8 1,2 / 19 D= 58,6 DEG AZ= 68 CLL
MOX E P 21 54 32 1,4 / 19 MPV =5,0 D= 59,6 DEG AZ= 67 MOX.

1978 NOV 18 FRG, CENTRAL REGION
NEAR RECKLINGHAUSEN (GRF)
BRG E 00 47 31
E SG 48 22,8
MOX E 00 47 34
CLL E 00 47 59

1978 NOV 18 TONGA ISLANDS REGION MB=4,5 (3) 22,2S;175,5W 111KM H=07 51 49,0 (NEIS)
CLL I PKP1 08 11 28,9D 1,1 / 26 D=150,2 DEG AZ= 16 CLL
BRG I PKP1 08 11 29,3 1,0 / 19 D=150,4 DEG AZ= 18 BRG

1978 NOV 18 FIJI ISLANDS REGION MB=5,3 (37) 16,8S;176,9W 402KM H=15 32 56,4 (NEIS)
16,7S;176,9W 350KM 15 32 51,8 (WDCB)
CLL I PKP 15 51 45,8C 1,4 / 125 D=144,7 DEG AZ= 17 CLL
I 51 51,3
I APKP 53 24,5
E SKP 54 51
(CONT.)

(CONT.)

BRG I PKP 15 51 47,1C 1,4 / 143 D=144,9 DEG AZ= 18 BRG
MOX I PKP 15 51 49,0C 1,6 / 170 D=145,5 DEG AZ= 15 MOX
E APKP 53 31,5 DEPTH 436 KM

1978 NOV 18 UNDERGROUND EXPLOSION MB=5,1 (40)
>QUARGEL<
MOX E P 19 12 18,5 1,2 / 18 37,1N;116,1W 0KM H=19 00 00,0 (NEIS)
CLL I P 19 12 18,1C 1,4 / 32 MPV =5,0 D= 81,3 DEG AZ=320 MOX
BRG E P 19 12 22,0 1,1 / 30 D= 81,3 DEG AZ=321 CLL
D= 82,0 DEG AZ=322 BRG

1978 NOV 18 FIJI ISLANDS REGION MB=3,9 (3) 17,6S;178,8W 544KM H=21 01 56,6 (NEIS)
CLL I PKP1 21 20 24,9D 1,0 / 23 D=145,1 DEG AZ= 20 CLL
BRG I PKP1 21 20 26,0C 0,8 / 11 D=145,3 DEG AZ= 22 BRG

1978 NOV 19 KERMADEC ISLANDS MB=5,4 (21) 30,2S;177,9W 62KM H=00 24 14,2 (NEIS)
30,3S;178,7W 33KM 00 24 06,3 (WDCB)
CLL E PKIKP 00 44 06 D=157,4 DEG AZ= 25 CLL
E PKP1 44 15
E PKP2 44 35
BRG E PKIKP 00 44 04,0 D=157,5 DEG AZ= 28 BRG
E PKP2 44 36,0
MOX E PKP2 00 44 40 1,2 / 26 D=158,4 DEG AZ= 23 MOX

1978 NOV 19 POLAND, UPPER SILESIA 50,4N; 18,8E H=03 32 18,5 (WAR)
BRG E SG 03 33 20,2 D= 3,1 DEG AZ= 97 BRG
E SG 34 01,0
CLL E 03 34 18 D= 3,8 DEG AZ=102 CLL
I SG 34 26,0
MOX E SG 03 34 45 D= 4,6 DEG AZ= 90 MOX

1978 NOV 19 FIJI ISLANDS REGION MB=4,7 (3) 21,7S;179,4W 512KM H=15 55 27,2 (NEIS)
CLL E PKP1 16 14 07 D=148,9 DEG AZ= 23 CLL
BRG I PKP1 16 14 07,7 D=149,1 DEG AZ= 25 BRG

1978 NOV 19 SOLOMON ISLANDS MB=5,6 (28) 7,2S;154,8E 33KM H=16 28 39,1 (NEIS)
10,5S;158,8E 100KM 16 28 22,9 (WDCB)
BRG E PKP 16 47 38,3 0,9 / 14 D=125,7 DEG AZ= 50 BRG
E APKP 47 52,7
CLL I PKP 16 47 39,0 0,9 / 13 D=125,9 DEG AZ= 49 CLL
E APKP 47 53
MOX E PKP 16 47(44) D=127,0 DEG AZ= 48 MOX
E APKP 47 55

1978 NOV 19 NEAR ISLANDS, ALEUTIAN TSIANDS MB=5,3 (79) 52,7N;172,5E 47KM H=19 42 35,7 (NEIS)
52,7N;172,1E 33KM 19 42 34,7 (WDCB)
CLL I P 19 54 12,1C 1,5 / 40 D= 74,9 DEG AZ= 13 CLL
LM 20 26
BRG I P 19 54 14,3C 1,2 / 35 D= 75,2 DEG AZ= 13 BRG
LM 20 31
MOX E P 19 54 17,5 1,2 / 24 MPV =5,0 D= 75,8 DEG AZ= 12 MOX
LMV 20 24,7 T 25 AV 1,2 MLV =5,2
LMH 25,2 T 24 AN 1,4 MLH =5,2

1978 NOV 20 POLAND, UPPER SILESIA 50,3N; 18,9E H=02 07 52,7 (WAR)
CLL E SG 02 10 00 D= 3,9 DEG AZ=103 CLL

1978 NOV 20
CLL E 02 16 27 TRACES

1978 NOV 20 SOLOMON ISLANDS MB=5,3 (11) 7,2S;154,8E 33KM H=02 35 31,8 (NEIS)
BRG E PKP 02 54 34,0 D=125,7 DEG AZ= 50 BRG
CLL E APKP 02 54 43 D=125,9 DEG AZ= 49 CLL

1978 NOV 20 OFF EAST COAST OF KAMCHATKA MB=4,9 (27) 52,6N;160,5E 48KM H=10 47 21,2 (NEIS)
52,7N;159,3E 100KM 10 47 29,8 (WDCB)
CLL I P 10 58 47,8 0,9 / 26 D= 72,9 DEG AZ= 20 CLL
I 58 54,5
BRG E P 10 58 48,0 D= 73,1 DEG AZ= 21 BRG
MOX E P 10 58 53,5 1,0 / 18 MPV =5,0 D= 73,8 DEG AZ= 19 MOX

1978 NOV 20
CLL E 11 24 25

1978 NOV 20
CLL E 21 47 36

1978 NOV 20
CLL E 22 39 10 TRACES

1978 NOV 21
CLL E 03 42 05

1978 NOV 21 BISMARCK SEA MB=5,6 (23) 3,3S;146,9E 33KM H=11 03 42,3 (NEIS)
3,4S;146,6E 33KM 11 03 38,0 (WDCB)
BRG E PKP 11 22 28,8 D=118,4 DEG AZ= 56 BRG
LM 12 17 T 17 AN 2,3 AE 2,4 AV 3,4 MLH =6,0 MLV =6,0
CLL E APP 11 24 02 D=118,6 DEG AZ= 55 CLL
LMH 12 15 T 18 AN 2 AE 2,5 MLH =6,0
LMV 16 T 18,5 AV 3,5 MLV =6,0
MOX LMV 12 17,9 T 17 AV 3,5 MLV =6,1 D=119,7 DEG AZ= 54 MOX
LMH 18 T 18,5 AN 2,0 AE 2,2 MLH =6,0

1978 NOV 21 KURILE ISLANDS REGION MB=5,1 (23) 43,9N;148,3E 33KM H=14 19 19,9 (NEIS)
44,5N;149,4E 33KM 14 19 13,1 (WDCB)
CLL I P 14 31 12,9C 1,1 / 40 D= 77,6 DEG AZ= 31 CLL
BRG E P 14 31 13,4 1,0 / 16 D= 77,6 DEG AZ= 32 BRG
MOX E P 14 31 18,5 1,2 / 20 MPV =5,0 D= 78,6 DEG AZ= 30 MOX

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1978 NOV 21      KYUSHU, JAPAN                                         MB=5,3 (33)   30,1N;131,1E  33KM H=19 36 49,2 (NEIS)
                                                                                     30,8N;130,8E  33KM   19 36 48,2 (WDCB)
                                                                                                D= 82,2 DEG   AZ= 51        BRG
BRG E P          19 49 09,4  1,6 /   23
      LMH        20 26       T 20   AN   2,1 AE   3,0              MLH  =5,7
      LMV           31       T 15                       AV   2,4   MLV  =5,7
CLL E P          19 49 09    1,7 /   48                                                 D= 82,4 DEG   AZ= 50        CLL
    I               49 28,7
    E PP            52 19
      LM         20 30       T 15   AN   2,5 AE   1,5 AV   2,5     MLH  =5,8 MLV  =5,8
                                                                   MPV  =5,2           D= 83,5 DEG   AZ= 49        MOX
MOX E P          19 49 16,5  2,0 /   43
      LMH        20 31,4     T 15   AN   1,8 AE   1,4              MLH  =5,7
      LMV           31,6     T 16                       AV   2,9   MLV  =5,8

1978 NOV 22      MOLUCCA PASSAGE                                       MB=5,4 (33)    1,6N;126,4E  50KM H=00 07 36,1 (NEIS)
BRG E P          00 21 30,5  0,7 /    6                                                 D=102,7 DEG   AZ= 71        BRG

1978 NOV 22
CLL E            02 38 55

1978 NOV 22      VANUATU ISLANDS                                       MB=5,1 ( 1)   19,6S;168,6E  33KM H=05 02 57,8 (NEIS)
BRG E PKP        05 22 31,2                                                             D=142,9 DEG   AZ= 42        BRG
MOX E PKP        05 22 29,5 TRACES                                                      D=144,1 DEG   AZ= 39        MOX
    E               22 37

1978 NOV 22      MINDANAO, PHILIPPINE ISLANDS                          MB=5,5 (34)    8,6N;126,0E  33KM H=09 32 19,9 (NEIS)
                                                                                      8,9N;125,9E  33KM   09 32 21,6 (WDCB)
BRG E P          09 45 49,3  1,4 /   26                                                 D= 96,9 DEG   AZ= 67        BRG
CLL E P          09 45 50                                                               D= 97,3 DEG   AZ= 67        CLL

1978 NOV 22      EASTERN TURKEY                                        NO MB COMP.   38,8N; 39,8E  33KM H=23 44 12,7 (NEIS)
BRG E            23 49 18,5                                                             D= 21,8 DEG   AZ=114        BRG
CLL E            23 49 19                                                               D= 22,5 DEG   AZ=113        CLL

1978 NOV 23
CLL E            01 51 03

1978 NOV 23      NORTHERN YUGOSLAVIA                                   NO MB COMP.   46,2N; 16,4E  10KM H=01 52 20,5 (NEIS)
BRG E PN         01 53 36,0                                                             D=  5,0 DEG   AZ=160        BRG
    E PG            53 57,2
    E SG            54 58,4
MOX E PN         01 53 44                                                               D=  5,5 DEG   AZ=143        MOX
    E SN            54 45   TRACES
    E SG            55 21
CLL E PG         01 54 09                                                               D=  5,6 DEG   AZ=155        CLL
    E               54 32
    E               54 53
    E SG            55 20

1978 NOV 23      NEAR S. COAST OF HONSHU, JAPAN                        MB=5,0 (34)   34,7N;139,1E   7KM H=01 43 49,7 (NEIS)
                                                                                     35,3N;138,8E  33KM   01 43 51,8 (WDCB)
CLL I P          01 56 14,0                                                             D= 82,2 DEG   AZ= 42        CLL
MOX E P          01 56 21                                                               D= 83,2 DEG   AZ= 41        MOX
      LMH        02 35,8
      LMV           37,6

1978 NOV 23      KURILE ISLANDS                                        MB=4,8 (39)   44,2N;149,2E  33KM H=03 24 30,5 (NEIS)
                                                                                     44,3N;149,4E  33KM   03 24 30,0 (WDCB)
CLL I P          03 36 23,9  1,1 /   22                                                 D= 77,6 DEG   AZ= 31        CLL
BRG E P          03 36 24,8  1,0 /   12                                                 D= 77,7 DEG   AZ= 31        BRG
MOX E P          03 36 30   TRACES                                                      D= 78,6 DEG   AZ= 30        MOX

1978 NOV 23      SOUTH OF FIJI ISLANDS                                 MB=5,5 (31)   26,2S;177,7W 172KM H=04 41 39,3 (NEIS)
                                                                                     26,2S;179,6E 500KM   04 42 17,5 (WDCB)
CLL I PKIKP      05 01 10,2  1,7 /   48                                                 D=153,6 DEG   AZ= 22        CLL
    I PKP1          01 18,8  1,2 /   90
    I PKP2          01 31,6  1,5 /  140
    E APKP2         02 19
    E PP            05 15
BRG I PKIKP      05 01 11,0                                                             D=153,8 DEG   AZ= 24        BRG
    I PKP1          01 19,4                                                             DISTANCE 154 DEG
    I PKP2          01 33,0
MOX E PKIKP      05 01 11    1,4 /   19                                                 D=154,6 DEG   AZ= 20        MOX
    E PKHKP         01 20    1,6 /   39
    E PKP2          01 35    1,5 /   85
    E PP            05 09

1978 NOV 23      WESTERN CAUCASUS                                      MB=4,6 (36)   44,0N; 39,4E  17KM H=15 24 37,3 (NEIS)
                                                                                     44,3N; 39,3E  36KM   15 24 43,4 (CSEM)
                                                                                     44,2N; 39,5E  33KM   15 24 36,1 (WDCB)
BRG E P          15 28 54,4                                                             D= 18,5 DEG   AZ=102        BRG
    E AP            28 59,6  1,1 /   15
CLL I P          15 29 02,6D 1,3 /   24                                                 D= 19,2 DEG   AZ=102        CLL
    I AP            29 07,0
    E               35 15
    E               35 51
MOX E P          15 29 11                                                               D= 19,9 DEG   AZ= 99        MOX
    E               29 21
    E               35 31

1978 NOV 23      KERMADEC ISLANDS REGION                               MB=5,3 ( 5)   31,3S;177,7W  33KM H=15 27 27,1 (NEIS)
CLL E PKP2       15 47 55    1,9 /   40                                                 D=158,5 DEG   AZ= 26        CLL
BRG E            15 47 40,5                                                             D=158,6 DEG   AZ= 28        BRG
    I PKP2          47 56,7  1,5 /   29

1978 NOV 23      KERMADEC ISLANDS                                      MB=5,0 ( 3)   29,3S;177,5W  71KM H=16 52 00,4 (NEIS)
CLL E PKP1       17 11 57   TRACES                                                      D=156,6 DEG   AZ= 24        CLL
BRG E PKP2       17 12 16,5                                                             D=156,8 DEG   AZ= 26        BRG
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1978 NOV 23      KERMADEC ISLANDS REGION                               MB=5,2 ( 1)   31,5S;177,7W  33KM H=17 34 53,6 (NEIS)
CLL E APKP2      17 55 35   TRACES                                                      D=158,7 DEG   AZ= 26        CLL
BRG E            17 55 17,3                                                             D=158,8 DEG   AZ= 28        BRG

1978 NOV 23      GREECE                                                MB=4,0 ( 7)   39,0N; 21,2E  36KM H=19 42 10,0 (NEIS)
                                                                                     39,1N; 21,2E  10KM   19 42 10,0 (CSEM)
BRG E            19 45 25,2                                                             D= 12,9 DEG   AZ=154        BRG
MOX E P          19 45 23                                                               D= 13,5 DEG   AZ=146        MOX
CLL E            19 45 36                                                               D= 13,6 DEG   AZ=152        CLL

1978 NOV 23      NORTH OF SVALBARD                                     MB=4,6 (11)   85,4N; 12,8E  10KM H=23 44 15,4 (NEIS)
                                                                                     85,3N; 15,1E  33KM   23 44 19,5 (WDCB)
CLL E P          23 51 02                                                               D= 34,2 DEG   AZ=360        CLL
    E AP            51 11
BRG E P          23 51 06,0  1,2 /   12                                                 D= 34,7 DEG   AZ=360        BRG
MOX E P          23 51 08,5                                                             D= 34,9 DEG   AZ=  0        MOX
    E               51 52

1978 NOV 24      CENTRAL ALASKA                                        MB=4,5 ( 2)   62,0N;150,5W  74KM H=00 28 12,8 (NEIS)
MOX E P          00 38 58   TRACES                                                      D= 66,8 DEG   AZ=351        MOX

1978 NOV 24      KURILE ISLANDS                                        MB=4,8 (38)   44,2N;149,2E  51KM H=04 53 52,7 (NEIS)
                                                                                     44,4N;149,4E  33KM   04 53 50,6 (WDCB)
CLL E P          05 05 44    1,7 /   39                                                 D= 77,6 DEG   AZ= 31        CLL
    I AP            05 57,4
BRG E P          05 05 45,0                                                             D= 77,7 DEG   AZ= 31        BRG
    E AP            05 58,0
MOX E P          05 05 50                                                               D= 78,6 DEG   AZ= 30        MOX

1978 NOV 24
CLL E            11 04 51

1978 NOV 24
CLL E            17 31 55   TRACES

1978 NOV 24 /    KERMADEC ISLANDS REGION                               MB=5,2 (10)
     NOV 25                                                                          27,9S;176,5W  32KM H=22 22 36,4 (NEIS)
                                                                                     28,1S;178,8W  33KM   22 22 40,8 (WDCB)
CLL E(PKIKP)     22 42 31                                                               D=155,5 DEG   AZ= 21        CLL
    I PKP2          42 56,4
    E PP            46 36
      LM         23 53
BRG E PKIKP      22 42 27,7  1,3 /   16                                                 D=155,7 DEG   AZ= 23        BRG
    I PKP2          42 59,3
MOX E PKP        22 42(36)                                                              D=156,5 DEG   AZ= 18        MOX
    E SS         23 06 30
      LMH        00 01       T 18   AN   0,6 AE   0,8              MLH  =5,6
      LMV           01       T 18                       AV   1,0   MLV  =5,7

1978 NOV 25
CLL E            02 16 56

1978 NOV 25      FIJI ISLANDS REGION                                   MB=5,1 (18)   20,2S;178,4W 582KM H=11 32 41,3 (NEIS)
                                                                                     20,1S;175,9W  33KM   11 31 35,6 (WDCB)
CLL I PKIKP      11 51 18,0                                                             D=147,7 DEG   AZ= 20        CLL
    I PKP1          51 22,0D 1,0 /  105                                                 DISTANCE 148 DEG  DEPTH 500 KM
    I PKP2          51 26,0C 0,9 /   59                            MC   =5,1
    E               51 41
    E(APKP)         53 20
BRG E PKIKP      11 51 18,8                                                             D=147,9 DEG   AZ= 22        BRG
    I PKP1          51 22,7                                                             DISTANCE 148 DEG
    I PKP2          51 27,1
MOX E PKIKP      11 51 19                                                               D=148,6 DEG   AZ= 18        MOX
    I PKHKP         51 24,0  1,4 /   56
    E PKP2          51 29    1,2 /   24

1978 NOV 25
CLL E            13 21 26
    I               22 29,5

1978 NOV 25      FIJI ISLANDS REGION                                   /NO MB COMP./ 17,7S;178,6W 560KM H=13 18 50,9  (ISC)
CLL I PKP        13 37 28,4C 0,9 /   20                                                 D=145,2 DEG   AZ= 20        CLL
BRG I PKP        13 37 29,2  0,9 /   11                                                 D=145,4 DEG   AZ= 21        BRG

1978 NOV 25      POLAND, UPPER SILESIA
CLL E            17 31 36

1978 NOV 25
BRG I(P)         21 48 43,9  0,8 /    8

1978 NOV 26
MOX   LMH        01 14,6
      LMV           21,7

1978 NOV 26      FRG, SOUTHWESTERN REGION                              NO MB COMP.   48,3N;  8,7E  10KM H=02 09 52,6 (NEIS)
MOX E SN         02 11 18                                                               D=  3,0 DEG   AZ=220        MOX
BRG E SG         02 12 03,2                                                             D=  4,3 DEG   AZ=235        BRG

1978 NOV 26
CLL E            04 57 11
    E               58 08

1978 NOV 26      CROATIA, YUGOSLAVIA                                                                                (VKA)
CLL E            06 34 16

1978 NOV 26      IRAN                                                  MB=4,4 ( 8)   32,5N; 55,6E  33KM H=07 11 08,6 (NEIS)
                                                                                     32,3N; 55,4E  33KM   07 11 04,8 (WDCB)
CLL E P          07 18 09                                                               D= 36,2 DEG   AZ=105        CLL
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1978 NOV 26   GULF OF CALIFORNIA   MB=5,1 (48)   28,0N;111.5W 15KM H=07 44 02.3 (NEIS)
28,8N;112,0W 33KM 07 44 02.8 (WDCB)
D= 87,0 DEG AZ=312 MOX

MOX E P   07 56 52   TRACES
E S   08 07 30   TRACES
LMH   37.6   T 17.5 AN 1.8 AE 1,8   MLH =5.7
LMV   39.3   T 14   AV 0.6   MLV =5.2
CLL E P   07 56 49   D= 87,2 DEG AZ=313 CLL
LM   08 38   T 17 AN 1 AE 2 AV 2   MLH =5,7 MLV =5,7
BRG E P   07 56 53,9 0,9 / 11   D= 87,9 DEG AZ=314 BRG
LM   08 39   T 17 AN 1.9 AE 2,1 AV 3.1   MLH =5.7 MLV =5,8

1978 NOV 26   EUROPEAN USSR (POSSIBLY EXPLOSION)   68 N; 34 E H=09 03 11 (UPP)
CLL E   09 12 26   D= 20 DEG AZ= 24 CLL
E LI   12 50
BRG E   09 11 04,0   D= 20 DEG AZ= 22 BRG
E   13 23,2

1978 NOV 26
CLL E   12 35 26

1978 NOV 26
CLL LM   17 54
MOX LM   17 55.6

1978 NOV 26   RYUKYU ISLANDS   MB=5,0 (18)   27,4N;129,5E 32KM H=20 19 21.8 (NEIS)
28,5N;128.7E 33KM 20 19 29.8 (WDCB)
BRG I P   20 31 49,8D 1.1 / 14   D= 83,6 DEG AZ= 54 BRG
CLL I P   20 31 50,2C 1.4 / 23   D= 83,8 DEG AZ= 53 CLL
LM   21 13
MOX E P   20 31 59,5   D= 84,9 DEG AZ= 52 MOX
LMH   21 14.6   T 15 AN 0.5 AE 0,3   MLH =5.1
LMV   14.7   T 15   AV 0.4   MLV =5.0

1978 NOV 27   POLAND, UPPER SILESIA
CLL E   05 45 58

1978 NOV 27   FIJI ISLANDS REGION   MB=5,1 (4)   14,8S;177,7W 33KM H=07 46 23.2 (NEIS)
MOX LMH   09 03.7   T 26 AN 0.5   MLH =5.1   D=143,5 DEG AZ= 15 MOX
LMV   04   T 28   AV 0.4   MLV =5.0

1978 NOV 27   SOUTH SANDWICH ISLANDS REGION   MB=5,6 (15)   57,9S; 25,2W 52KM H=09 43 25.6 (NEIS)
MOX LMV   10 42.8   T 24   AV 0.7   MLV =5.2   D=112,3 DEG AZ=200 MOX
LMH   43.5   T 24 AN 0.6   MLH =5.1

1978 NOV 27
CLL E   19 28 35   TRACES

1978 NOV 27   SOUTH PACIFIC CORDILLERA   MB=4,9 (4)   55,0S;132.1W 10KM H=23 15 07.6 (NEIS)
CLL E PKP2   23 35 43   D=158,9 DEG AZ=246 CLL
BRG E PKIKP   23 35 09,2   D=159,3 DEG AZ=245 BRG
E PKP2   35 49,5

1978 NOV 28   SOLOMON ISLANDS   MB=5,9 (57)   10,9S;162.1E 33KM H=23 50 21.4 (NEIS)
11,0S;162,9E 33KM 23 50 20.6 (WDCB)
BRG E PKP   00 09 33,7   D=132,4 DEG AZ= 45 BRG
I APKP   09 45,3
I PP   12 06,2
I SKP   13 00,3
E PKS   13 11,5
LM   01 12   T 20 AN 2.9 AE 2,2 AV 4.0   MLH =6.1 MLV =6,1
CLL E(APKP)   00 09 45 C 2,1 / 145   D=132,5 DEG AZ= 43 CLL
I   11 45,8   DISTANCE 131 DEG
I PP   12 06,7
E SKP   13 00
E   13 13
E   19 13   T 19 AN 2.5 AE 1 AV 2.5
E(SCPPKP)   21 39   T -0
E SS   29.6
LM   01 13
MOX E APKP   00 09 48   2.4 / 166   D=133,6 DEG AZ= 42 MOX
E   11 55
E PP   12 10.5   1.4 / 40   MPPV =5.5
E SKP   13 20
E SS   30 00
LMH   01 02.8   T 29 AN 1.6 AE 1,0   MLH =5.6
LMV   03   T 28   AV 2.1   MLV =5.7

1978 NOV 28   FIJI ISLANDS REGION   MB=5.1 (5)   18,0S;178,7W 573KM H=04 28 21.3 (NEIS)
CLL I PKP1   04 46 57,9D 0,9 / 15   D=145,5 DEG AZ= 20 CLL
BRG I PKP1   04 46 53,4   D=145,7 DEG AZ= 22 BRG

1978 NOV 28   ALBANIA   MB=4.6 (12)   41,7N; 20.0E 10KM H=17 42 10.3 (NEIS)
41,8N; 20.1E 10KM 17 42 14.0 (CSEM)
BRG E PN   17 44 43,5   D= 10,1 DEG AZ=153 BRG
E   46 20,2
E   47 22,0
MOX E PN   17 44 53
E SG   48 05   D= 10,7 DEG AZ=144 MOX
LM   48.4
CLL E SN   17 46 42
E   47 06   D= 10,7 DEG AZ=151 CLL
I SG   48 04,9
I   48 12,0
LM   49

1978 NOV 28   QUEENSLAND, AUSTRALIA   MB=4,8 (4)   23,3S;152,6E 19KM H=17 33 36.1 (NEIS)
BRG I PKP   17 53 01,0D 1.3 / 40   D=137,9 DEG AZ= 65 BRG
E   53 12,5
CLL E(PKP)   17 52 58   1.3 / 19   D=138,2 DEG AZ= 63 CLL
MOX E PKP   17 53 02   1.2 / 20   D=139,3 DEG AZ= 63 MOX
E   53 14

OR ANOTHER POSSIBILITY

1978 NOV 28   FOX ISLANDS, ALEUTIAN ISLANDS   MB=5.2 (41)   52,0N;170,1W 11KM H=17 41 04.1 (NEIS)
51,7N;170,3W 33KM 17 41 00.7 (WDCB)
CLL E P   17 52 58   1,3 / 19   D= 77,0 DEG AZ= 2 CLL

1978 NOV 28   DODECANESE ISLANDS   MB=5,0 (61)   36,2N; 26.4E 123KM H=18 02 20.1 (NEIS)
36,0N; 26.4E 112KM 18 02 19.5 (CSEM)
35,3N; 26,1E 33KM 18 02 05.9 (WDCB)
BRG E P   18 06 14,0 1.0 / 66   D= 17,2 DEG AZ=144 BRG
E PP   06 34,6
E SCP   14 15,2
CLL E P(1)   18 06 21   D= 17,9 DEG AZ=142 CLL
I P(2)   06 24,5 1,5 / 100
I(XP)   06 31,9
E   06 55
I SCP   14 17,5
MOX E P   18 06 24   1.1 / 32   D= 17,9 DEG AZ=138 MOX

1978 NOV 28
BRG E   23 46 03,3
E SG   46 33,0

1978 NOV 28   SWITZERLAND   NO MB COMP.   46,3N; 7,4E 10KM H=23 44 32.4 (NEIS)
46,3N; 7,5E 10KM 23 44 32,6 (CSEM)
MOX E PG   23 46 16   D= 5,2 DEG AZ=214 MOX
E SG   47 20
CLL E SG   23 47 56   D= 6,2 DEG AZ=219 CLL
BRG E SN   23 47 10,6   D= 6,3 DEG AZ=226 BRG
E SG   47 57,0

1978 NOV 29   UNDERGROUND EXPLOSION   MB=5,3 (60)   49,9N; 78,1E 0KM H=04 32 58,0 (NEIS)
BRG I P   04 40 34,1 0,9 / 20   D= 39,8 DEG AZ= 66 BRG
CLL I P   04 40 36,7C 0,9 / 32   D= 40,1 DEG AZ= 66 CLL
MOX I P   04 40 46,5C 0.8 / 46   MPV =5,3   D= 41,2 DEG AZ= 64 MOX
E PN   42 23,5

1978 NOV 29   UNDERGROUND EXPLOSION   MB=6,0 (61)   50,0N; 78,8E 0KM H=04 33 02,9 (NEIS)
BRG I P   04 40 41,9C 1,0 / 160   D= 40,1 DEG AZ= 65 BRG
E PN   42 11,1
CLL I P   04 40 44,7C 1,0 / 380   D= 40,5 DEG AZ= 65 CLL
E PN   42 14
MOX I P   04 40 54,0C 1,1 / 286   MPV =5,9   D= 41,5 DEG AZ= 64 MOX
E PN   42 31,5

1978 NOV 29   WESTERN POLAND   DISTANCE 1,6DEG
BRG I PG   05 33 29,5
I SG   33 49,2
CLL E   05 33 41
E SG   34 02
MOX E PG   05 33 57
E SG   34 37

1978 NOV 29   KURILE ISLANDS   MB=4,8 (21)   48,0N;154,4E 33KM H=09 36 40.1 (NEIS)
CLL I P   09 48 23,1 1,4 / 34   D= 75,7 DEG AZ= 26 CLL
BRG E P   09 48 23,9   D= 75,8 DEG AZ= 26 BRG
MOX E P   09 48 29   1.8 / 27   MPV =5,0   D= 76,7 DEG AZ= 25 MOX

1978 NOV 29
CLL E   10 20 22

1978 NOV 29   SOUTH OF FIJI ISLANDS   MB=5,0 (11)   24,4S;180 515KM H=10 08 31,2 (NEIS)
CLL I PKP1   10 27 26,4C 1,0 / 36   D=151,3 DEG AZ= 25 CLL
E APKP   29 31
BRG E PKIKP   10 27 21,4   D=151,5 DEG AZ= 27 BRG
I PKP1   27 27,8 1,2 / 32
I APKP   29 31,7
MOX E PKHKP   10 27 28   1.5 / 18   D=152,3 DEG AZ= 23 MOX
E APKP   29 33

1978 NOV 29   VANUATU ISLANDS   MB=5,5 (11)   15,5S;168,1E 33KM H=11 10 50,8 (NEIS)
BRG I PKP   11 30 17,8C 1.2 / 15   D=139,0 DEG AZ= 40 BRG

1978 NOV 29   LOYALTY ISLANDS REGION   /NO MB COMP./   22,5S;170,7E 46KM H=13 53 11.3 (ISC)
BRG I PKP   14 12 47,3D 0,9 / 14   D=146,4 DEG AZ= 41 BRG
CLL I PKP   14 12 46,8 1,1 / 15   D=146,4 DEG AZ= 39 CLL
E   12 58

1978 NOV 29   VANUATU ISLANDS   MB=4,7 (6)   13,2S;167,0E 190KM H=14 05 29,4 (NEIS)
BRG E PKP   14 24 30,0   D=136,5 DEG AZ= 40 BRG
CLL I PKP   14 24 32,2   D=136,6 DEG AZ= 38 CLL

1978 NOV 29   GULF OF CALIFORNIA   MB=5,4 (45)   30,2N;114,0W 15KM H=14 37 40,3 (NEIS)
31,5N;113,9W 33KM 14 37 49,1 (WDCB)
MOX E P   14 50 24   1.5 / 25   MPV =5.2   D= 86,3 DEG AZ=315 MOX
LMV   15 31.9   T 16   AV 1.1   MLV =5.4
LMH   32.6   T 14   AE 0,9   MLH =5.3
CLL E P   14 50 21   D= 86,4 DEG AZ=316 CLL
E   50 50
BRG E P   14 50 27,0 1.2 / 15   D= 87,1 DEG AZ=317 BRG

1978 NOV 29   TIBET   MB=4,2 (1)   32,6N; 85,6E 33KM H=14 42 12.8 (NEIS)
CLL E P   14 51 41   D= 54,8 DEG AZ= 80 CLL

1978 NOV 29
BRG E PG   15 04 03,0
E SG   04 27,0

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1978 NOV 29     SOUTHWESTERN RYUKYU ISLANDS                    MB=4.9 (10)   24.8N;125.0E  33KM H=16 32 40.8 (NEIS)
BRG  E P        16 45 07.0                                                         D= 83.3 DEG   AZ= 99       BRG
CLL  E P        16 45 07                                                           D= 83.6 DEG   AZ= 98       CLL

1978 NOV 29 /   OAXACA, MEXICO                                 MB=6.4 (69)
     NOV 30                                                                     16.0N; 96.6W  18KM H=19 52 47.6 (NEIS)
                                                                                16.9N; 96.5W  33KM   19 52 48.3 (WDCB)
MOX  E P        20 05 42    4.0 / 3603                            MPV  =7.0       D= 88.9 DEG   AZ=294        MOX
                            T 16                    AV  86.4    MPV  =7.7

     E PP           09 10
     E SKS          15 25
     E PS           17 40
       LMH          43        T 23   AN 242.6  AE 307.7          MLH  =7.8
       LMV          47        T 20                AV 292.6      MLV  =7.7
CLL  I P(1)     20 05 44.2C T 17   AN  .16   AE  24.8 AV( 90)    MPH  =7.7 MPV  =7.7 D= 89.4 DEG   AZ=295        CLL
     E P(2)        05 48                                                          DISTANCE  89 DEG
     E             05 56
     I PP          09 16.5  T 18   AN  27.5  AE  36.5           MPPH =7.8
     E SKS         16 19
     E S           16 46
     E             16 59
     E PS          17 50
     E PKPPKP      31 35
       LH          38        T 22   AN>150                      MLH  =7.8
       LH          38        T 32              AE 215
       LMH         41        T 23   AN(300)   AE(255)
       LH          50        T 18   AN(130)   AE>190
     E(PKPPKPPKP)  52 33
       FINAL    01
BRG  I P        20 05 48.0D 4.5 / 3700                         MPV  =7.0       D= 90.1 DEG   AZ=296        BRG
     E PP          09 20.0
     E PKPPKP      31 34.0
       LMV          45        T 18                AV 305.0    MLV  =7.8

1978 NOV 29     OAXACA, MEXICO                                 MB=5.3 ( 8)   16.2N; 96.7W  33KM H=20 04 46.8 (NEIS)
MOX  E          20 17 55    TRACES                                             D= 88.8 DEG   AZ=294        MOX
BRG  E(AP)      20 17 53.2                                                         D= 90.0 DEG   AZ=296        BRG

1978 NOV 29     OAXACA, MEXICO                                 MB=5.7 (60)   16.2N; 96.6W  22KM H=20 49 48.8 (NEIS)
                                                                                16.5N; 96.7W  33KM   20 49 47.3 (WDCB)
MOX  E P        21 02 44                                                           D= 88.7 DEG   AZ=294        MOX
     E          02 53
CLL  I AP       21 02 54.8  1.3 /   30                                            D= 89.2 DEG   AZ=295        CLL
     E PP          06 13
BRG  E P        21 02 49.0  2.0 /   66                                            D= 89.9 DEG   AZ=296        BRG

1978 NOV 29     NEAR EAST COAST OF HONSHU, JAPAN              /NO MB COMP./   38.3N;142.4E  21KM H=23 06 20.9  (ISC)
CLL  E P        23 18 31                                                           D= 80.4 DEG   AZ= 38       CLL

1978 NOV 29     NEAR COAST OF OAXACA, MEXICO                   MB=5.0 (35)   15.9N; 96.4W  33KM H=23 06 26.1 (NEIS)
BRG  I P        23 19 25.0D 1.3 /   13                                             D= 90.1 DEG   AZ=296        BRG

1978 NOV 30     KURILE ISLANDS                                 MB=4.8 (28)   44.3N;148.5E  45KM H=05 22 16.8 (NEIS)
CLL  I P        01 34 07.4  1.0 /   38                                           D= 77.3 DEG   AZ= 31       CLL
BRG  I P        01 34 07.9  1.0 /   10                                           D= 77.3 DEG   AZ= 32       BRG
MOX  E P        01 34 13.5  1.2 /   16                  MPV  =4.9                D= 78.3 DEG   AZ= 30       MOX

1978 NOV 30     POLAND, UPPER SILESIA
CLL  E          01 59 28

1978 NOV 30     KURILE ISLANDS                               /MB=4.8 ( 1)/   46.2N;153.3E  40KM H=05 07 01.6  (ISC)
CLL  I P        02 08 52.0                                                         D= 77.0 DEG   AZ= 27       CLL

1978 NOV 30     SOUTHERN SINKIANG PROV., CHINA                 MB=4.5 (12)   39.6N; 74.0E  62KM H=03 26 24.8 (NEIS)
                                                                                39.8N; 74.1E  33KM   03 26 21.4 (WDCB)
BRG  E P        03 34 16.9  1.0 /    8                                           D= 42.6 DEG   AZ= 81       BRG
CLL  E P        03 34 23    TRACES                                              D= 43.2 DEG   AZ= 81       CLL

1978 NOV 30     SOUTHERN SINKIANG PROV., CHINA                 MB=4.7 (19)   39.6N; 74.0E  67KM H=03 30 58.1 (NEIS)
                                                                                39.9N; 74.3E  33KM   03 30 54.4 (WDCB)
BRG  E P        03 38 50.2                                                         D= 42.6 DEG   AZ= 81       BRG
CLL  E P        03 38 55                                                           D= 43.2 DEG   AZ= 81       CLL
     E          40 44
MOX  E P        03 39 05.5 TRACES                                                  D= 44.1 DEG   AZ= 79       MOX
       LMH         57.7      T 19   AN   1.7
       LMV      04 00.5      T 19                AV   0.9

1978 NOV 30     TAJIK-SINKIANG BORDER REGION                   MB=4.6 (18)   39.5N; 73.9E  56KM H=04 06 07.2 (NEIS)
                                                                                39.9N; 73.9E  33KM   04 06 08.3 (WDCB)
BRG  E P        04 14 00.3  1.0 /   10                                           D= 42.6 DEG   AZ= 81       BRG
CLL  E P        04 14 06                                                           D= 43.2 DEG   AZ= 81       CLL

1978 NOV 30     TIBET                                          MB=4.8 (12)   32.7N; 85.6E  33KM H=06 49 15.4 (NEIS)
BRG  E P        06 58 43.0  1.0 /   12                                           D= 54.3 DEG   AZ= 80       BRG
MOX  E(P)       06 58 54.5  1.0 /    8    MPV  =4.4                             D= 55.8 DEG   AZ= 79       MOX
       LMH      07 22       T 22   AN   1.0  MLH  =4.8

1978 NOV 30     OAXACA, MEXICO                                 MB=5.1 (23)   16.0N; 97.0W  40KM H=10 22 43.5 (NEIS)
MOX    LMH      11 20.3     T 16              AE   0.8    MLH  =5.3             D= 89.1 DEG   AZ=294        MOX
       LMV         20.4     T 18                AV   1.0  MLV  =5.3
CLL  E(P)       10 35 46    1.6 /   24                                          D= 89.6 DEG   AZ=295        CLL
BRG  E P        10 35 42.0                                                         D= 90.3 DEG   AZ=296        BRG

1978 NOV 30
BRG  I(P)       10 36 42.4

1978 NOV 30
CLL  E          15 02 54    TRACES

1978 NOV 30
BRG  E(P)       15 52 57.0
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1978 NOV 30     POLAND, UPPER SILESIA
CLL  E          16 55 10
     E SG          56 24
BRG  E          16 55 22.8
     E SG          56 02.5

1978 NOV 30     TUAMOTU EXPLOSION (WEL)                        MB=5.9 (32)   21.9S;139.0W   0KM H=17 31 58.4 (NEIS)
MOX  I PKP      17 51 33.0C 1.4 /   51                                           D=143.2 DEG   AZ=310        MOX
CLL  I PKP      17 51 32.8C 1.6 /   63                                           D=143.5 DEG   AZ=313        CLL
BRG  I PKP      17 51 35.0D 1.2 /  100                                           D=144.2 DEG   AZ=314        BRG

1978 NOV 30     POLAND, UPPER SILESIA
BRG  E PG       20 33 10.0
     E SG          33 51.6
CLL  E          20 34 15
MOX  E SG       20 34 37

1978 NOV 30
CLL  E          22 41 03
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1978 DEC 01
CLL E          00 44 24

1978 DEC 01    RYUKYU ISLANDS                                   MB=4,7 ( 2)   27.1N;130.5E  33KM H=03 04 16.6 (NEIS)
BRG E P        03 16 47,8                                                          D= 84,4 DEG   AZ= 53       BRG
CLL E P        03 16 49                                                            D= 84,6 DEG   AZ= 53       CLL

1978 DEC 01    ALBANIA                                          MB=4,3 ( 4)   41.0N; 19,7E  10KM H=03 47 57.5 (NEIS)
                                                                              41.0N; 19,7E  10KM   03 48 00,4 (CSEM)
                                                                              40.9N; 19,5E  33KM   03 47 59,3 (WDCB)
                                                                                   D= 10,7 DEG   AZ=156       BRG
BRG E P        03 50 36,0
    E             50 45,0
    E             53 48,0
MOX E P        03 50 39                                                            D= 11,2 DEG   AZ=147       MOX
    E             50 53
      LMH         54.6     T 15   AN   1.1 AE   1.0           MLH  =4.0
      LMV         56.9     T 12.5                  AV   1.3
CLL E PP       03 50 52                                                            D= 11,3 DEG   AZ=153       CLL
    E(S)          52 41
    E             53 17
    E L           54 31

1978 DEC 01    KURILE ISLANDS REGION                            MB=5.5 (86)   50.9N;158.9E  42KM H=11 43 28.3 (NEIS)
                                                                              51.2N;158,6E  50KM   11 43 30.6 (WDCB)
CLL I P        11 55 01.1D 1.4 /  120                                              D= 74,1 DEG   AZ= 22       CLL
    I AP          55 15.5
    E             57 38
      LM       12 32
BRG I P        11 55 02.4D 1.5 /   73                                              D= 74,3 DEG   AZ= 22       BRG
    E AP          55 16.8
    E PP          57 47.5
MOX I P        11 55 07.0C 2.0 /  145                           MPV  =5.6          D= 75,1 DEG   AZ= 21       MOX
    E AP          55 30.5                                                                        DEPTH   50 KM
      LMV      12 31.0     T 22                    AV   0.9   MLV  =5.0
      LMH         31.4     T 22   AN   0.9                    MLH  =5.0

1978 DEC 01    SOLOMON ISLANDS                                  MB=6.0 (51)   10.2S;161.4E  93KM H=15 35 20.9 (NEIS)
                                                                              10.1S;161.3E  50KM   15 35 16.1 (WDCB)
BRG E PKP      15 54 24.1  1.5 /   40                                              D=131.4 DEG   AZ= 45       BRG
    E APKP        54 31.4
    E PP          56 43,3
    E PKS         57 31.0
CLL I PKP      15 54 24.4D 2.0 /   65                                              D=131.5 DEG   AZ= 44       CLL
    E APKP        54 51
    E             56 29
    I PP          56 42,8
    E SKP         57 45
      LM       16 55
MOX E PKP      15 54 26                                                            D=132.6 DEG   AZ= 42       MOX
    E             56 32,5
    E PPM         56 48    2.3 /   63                           MPPV =5.2
      LMV      16 53.3     T 22                    AV   1.2
      LMH         53.9     T 22   AN   1.5

1978 DEC 01    MINDANAO, PHILIPPINE ISLANDS                     MB=5,8 (51)    8.7N;122.2E  40KM H=17 10 29.5 (NEIS)
                                                                               8.9N;122.3E  40KM   17 10 30.2 (WDCB)
BRG I P        17 23 47.6D 1.4 /   36                                              D= 94,6 DEG   AZ= 70       BRG
    E PP          27 38.0
CLL I P        17 23 50,0C                                                         D= 95,0 DEG   AZ= 70       CLL
    E             29 08
      LM       18 23
MOX E P        17 23 51    1.4 /   16                           MPV  =5.3          D= 96,1 DEG   AZ= 69       MOX
      LM       18 25       T 20   AN   0.5 AE   0.8 AV   0.8   MLH  =5.3 MLV  =5.2

1978 DEC 01    OFF EAST COAST OF HONSHU, JAPAN                  MB=5.0 (19)   38.4N;143.3E  33KM H=23 03 40.3 (NEIS)
                                                                              38.7N;143.1E  33KM   23 03 37.4 (WDCB)
BRG E P        23 15 51,9  1.1 /   12                                              D= 80,6 DEG   AZ= 38       BRG
CLL I P        23 15 52,1                                                          D= 80,6 DEG   AZ= 37       CLL
MOX E P        23 15 57,5                                                          D= 81,7 DEG   AZ= 36       MOX

1978 DEC 01    HOKKAIDO, JAPAN, REGION                          MB=5.1 (44)   43.5N;145,3E 113KM H=23 36 31.6 (NEIS)
                                                                              44.1N;145,1E 120KM   23 36 34,9 (WDCB)
CLL I P        23 48 12,4D 1.3 /   43                                              D= 76,9 DEG   AZ= 34       CLL
    E AP          48 40
    E             48 58
BRG E P        23 48 12,8  0.6 /   13                                              D= 76,9 DEG   AZ= 34       BRG
MOX E P        23 48 19                                                            D= 77,9 DEG   AZ= 33       MOX

1978 DEC 02    NORTHERN ITALY            FRIULI                 NO MB COMP,   46.3N; 13,3E  10KM H=04 05 35.6 (CSEM)
                                                                              46.3N; 13,3E  10KM   04 05 33.9 (NEIS)
MOX I PN       04 06 43                                                            D=  4,5 DEG   AZ=165       MOX
    E PG          07 02,5                                                          DISTANCE   4,3DEG
    E SN          07 32
    E SG          07 57
BRG E PN       04 06 43,0                                                          D=  4,6 DEG   AZ=186       BRG.
    I PG          06 59,7
    E SN          07 34,5
    I SG          07 58,9
CLL I(PN)      04 06 51,1                                                          D=  5,0 DEG   AZ=178       CLL
    E(SN)         07 46
    I SG          08 11
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1978 DEC 02
CLL E SG       04 21 26

1978 DEC 02    FIJI ISLANDS REGION                              MB=5,1 ( 9)   20.1S;177.7W 536KM H=04 15 48.8 (NEIS)
CLL I PKP1     04 34 33,1D 1.0 /   20                                              D=147.7 DEG   AZ= 19       CLL
BRG I PKP1     04 34 34,7  1.1 /   12                                              D=147.9 DEG   AZ= 21       BRG
MOX E PKHKP    04 34 36                                                            D=148.6 DEG   AZ= 17       MOX

1978 DEC 02
CLL I SG       05 17 34

1978 DEC 02    NEAR COAST OF OAXACA, MEXICO                     MB=4.9 (14)   15.8N; 96.5W  33KM H=05 36 07.0 (NEIS)
MOX   LMV      06 32,6                                                             D= 89.0 DEG   AZ=294       MOX

1978 DEC 02    SOLOMON ISLANDS                                  MB=5,3 (12)    6.8S;154.6E  38KM H=08 22 50.7 (NEIS)
                                                                               6,4S;154.3E  33KM   08 22 46.9 (WDCB)
BRG I PKP      08 41 50,4C 1.3 /   22                                              D=125.3 DEG   AZ= 50       BRG
CLL E(PKP)     08 41 53                                                            D=125.5 DEG   AZ= 49       CLL

1978 DEC 02
BRG E PG       08 55 12,1
    E SG          55 37

1978 DEC 02    MINDANAO, PHILIPPINE ISLANDS                     MB=5.3 (26)    9.9N;126.3E  58KM H=18 07 16.2 (NEIS)
                                                                               9.9N;126.1E  33KM   18 07 08.1 (WDCB)
BRG E P        18 20 40,0                                                          D= 96.0 DEG   AZ= 66       BRG
CLL E          18 20 51                                                            D= 96.4 DEG   AZ= 66       CLL

1978 DEC 03
BRG E PG       00 16 13,4
    I SG          16 31,1
MOX E PN       00 16 26                                                            DISTANCE 200 KM
    E SG          16 53
CLL E          00 16 47

1978 DEC 03    POLAND, UPPER SILESIA
CLL E          02 05 11
MOX E          02 05 34

1978 DEC 03    SOUTHERN YUGOSLAVIA                              NO MB COMP.   42.8N; 18.8E  10KM H=02 23 00.4 (NEIS)
BRG E          02 25 51,0                                                          D=  8.7 DEG   AZ=156       BRG
    E             27 15,2
MOX E PN       02 25 16,5                                                          D=  9.3 DEG   AZ=145       MOX

1978 DEC 03    SOLOMON ISLANDS                                  MB=5.4 (12)    7.4S;155.3E  33KM H=03 44 58.1 (NEIS)
                                                                               5.9S;153.9E  33KM   03 45 03.9 (WDCB)
BRG E          04 04 11,8                                                          D=126.1 DEG   AZ= 50       BRG
    E             04 29,7
CLL E          04 04 16   TRACES                                                   D=126.3 DEG   AZ= 49       CLL

1978 DEC 03    SOLOMON ISLANDS                                  MB=5.4 (29)    7.2S;155.1E  33KM H=07 46 26.6 (NEIS)
BRG E PKP      08 05 27,0                                                          D=125.9 DEG   AZ= 50       BRG

1978 DEC 03    ALBANIA                                          MB=4.7 (14)   41.0N; 19.7E  10KM H=08 10 49.1 (NEIS)
                                                                              40.9N; 19.6E  12KM   08 10 52.1 (CSEM)
                                                                              40.6N; 19.5E  33KM   08 10 44.1 (WDCB)
BRG I P        08 13 24,3  1.1 /   10                                              D= 10.7 DEG   AZ=156       BRG
    E             15 18,0
    E             15 47,9
    E             16 52,0
      LM          18       T 14   AN   0.9 AE   1.5 AV   1.4   MLH  =4.1
MOX E P        08 13 32,5                                                          D= 11.2 DEG   AZ=147       MOX
      LMH         18,9     T 13          AE   1.1               MLH  =4.0
      LMV         19,6     T 10.5                  AV   1.5
CLL E(P)       08 13 41                                                            D= 11.3 DEG   AZ=153       CLL
    I             16 13,0
    E             16 50
    E L           17 13

1978 DEC 03    NEW BRITAIN REGION                               MB=5.5 (27)    4.5S;152.3E  33KM H=12 18 57.5 (NEIS)
                                                                               7.3S;154.5E  33KM   12 18 44.0 (WDCB)
BRG E PKP      12 37 53,0                                                          D=122.2 DEG   AZ= 51       BRG
    E             38 05,0
      LM       13 32       T 20                    AV   1.3   MLV  =5.5
CLL E          12 37 58   TRACES                                                   D=122.3 DEG   AZ= 50       CLL
MOX   LMH      13 22,4     T 25   AN   1.8                     MLH  =5.6           D=123.4 DEG   AZ= 49       MOX
      LMV         28,9     T 28                    AV   0.9   MLV  =5.3

1978 DEC 03    NEAR S. COAST OF HONSHU, JAPAN                   MB=5.3 (37)   34.8N;139.1E  17KM H=13 15 55.3 (NEIS)
                                                                              35.3N;139.1E  33KM   13 15 55.4 (WDCB)
BRG E P        13 28 16,0  1.0 /   13                                              D= 82.0 DEG   AZ= 43       BRG
      LMH      14 07       T 18   AN   1.7 AE   2,4             MLH  =5.7
CLL I P        13 28 16,5  1.1 /   26                                              D= 82.1 DEG   AZ= 42       CLL
    E PP          31 17
      LM       14 05
MOX E P        13 28 21    2.0 /   43                           MPV  =5.3          D= 83.1 DEG   AZ= 41       MOX
      LMH      14 06,0     T 17   AN   1.7 AE   0.8             MLH  =5.5
      LMV         10,4     T 16.5                  AV   1.3   MLV  =5.4

1978 DEC 03    CENTRAL ALASKA                                   MB=4.7 (19)   62.3N;149.8W  74KM H=19 39 31.2 (NEIS)
BRG E P        19 50 13,7                                                          D= 66.4 DEG   AZ=352       BRG

1978 DEC 04    SOUTHEAST OF SHIKOKU, JAPAN                      MB=5.2 (24)   31.9N;132.2E  33KM H=00 40 52.4 (NEIS)
                                                                              32.5N;131.8E  33KM   00 40 56.4 (WDCB)
BRG I P        00 53 07,0C 1.5 /   29                                              D= 81.3 DEG   AZ= 49       BRG
CLL I P        00 53 07,7  1.9 /   64                                              D= 81.4 DEG   AZ= 49       CLL
MOX E P        00 53 13,5  1.8 /   27                           MPV  =5.0          D= 82.5 DEG   AZ= 48       MOX
      LMH      01 35,0
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1978 DEC 04     EASTERN TURKEY                                     MB=5.1 (63)   38.1N; 37.5E  10KM H=03 12 34.0 (NEIS)
                                                                                 38.1N; 37.7E  10KM   03 12 34.8 (CSEM)
                                                                                 38.2N; 37.4E  33KM   03 12 33.1 (WDCB)
BRG E P         03 17 18.9  1.3 /   23                                                 D= 21.0 DEG   AZ=118     BRG
    I AP           17 23.1                                                             DISTANCE  22 DEG
    E S            21 20.0
      LM           26         T 10   AN   1.6 AE   1.8 AV   2.7   MLH  =4.9 MLV  =5.1
CLL I P         03 17 25.8C 1.4 /   63                                                 D= 21.7 DEG   AZ=118     CLL
    E AP           17 31                                                               DISTANCE  22 DEG
    I              17 41
    E S            21 28
      LM           27         T 11   AN   2   AE   1.5 AV   2     MLH  =4.9 MLV  =5.0
MOX E P         03 17 32      1.1 /   44                          MPV  =4.9            D= 22.2 DEG   AZ=114     MOX
    E S            21 40      T 12             AE   1.9           MSH  =5.3
      LMH          25.7       T 26   AN   1.4                     MLH  =4.3
      LMV          27.4       T 20                     AV   1.1   MLV  =4.4

1978 DEC 04     SOUTHEAST OF SHIKOKU, JAPAN                        MB=4.7 ( 6)   31.9N;132.3E  44KM H=04 22 06.9 (NEIS)
CLL E P         04 34 22                                                               D= 81.5 DEG   AZ= 49     CLL

1978 DEC 04
CLL E              17 25 58

1978 DEC 04     SWITZERLAND                                        NO MB COMP.   46.6N;  6.8E  10KM H=23 54 23.8 (NEIS)
                                                                                 46.5N;  7.0E  10KM   23 54 24.8 (CSEM)
MOX E PG        23 56 02                                                               D=  5.2 DEG   AZ=220     MOX
    E SN           56 37
    E SG           57 12
CLL E SN        23 57 07                                                               D=  6.2 DEG   AZ=223     CLL
    E SG           57 48
BRG E           23 56 24.9                                                             D=  6.4 DEG   AZ=231     BRG
    E SG           57 57.0

1978 DEC 05
CLL E           00 38 54   TRACES

1978 DEC 05     CENTRAL ITALY                                      NO MB COMP.   43.1N; 12.8E  10KM H=04 45 26.6 (NEIS)
                                                                                 43.0N; 12.8E  10KM   04 45 28.7 (CSEM)
MOX E PN        04 47 22                                                               D=  7.6 DEG   AZ=173     MOX
    E SN           48 42
    E SG           49 32
BRG E PN        04 47 22.2                                                             D=  7.8 DEG   AZ=186     BRG
    I SN           48 45.0
    E SG           49 45.0
CLL E(PN)       04 47 37                                                               D=  8.2 DEG   AZ=181     CLL
    E SN           48 56
    I SG           49 59.2

1978 DEC 05     OAXACA, MEXICO                                     MB=4.7 (12)   16.1N; 97.0W  33KM H=06 32 32.3 (NEIS)
MOX E P         06 45 25     1.5 /   20                             MPV  =5.2            D= 89.0 DEG   AZ=294     MOX
CLL E P         06 45 28    TRACES                                                     D= 89.5 DEG   AZ=295     CLL
BRG E P         06 45 32.1  1.3 /   18                                                 D= 90.3 DEG   AZ=296     BRG

1978 DEC 05     NORTHERN ITALY                                     MB=4.4 ( 5)   44.5N; 12.0E  35KM H=15 39 04.0 (NEIS)
                                                                                 44.4N; 12.1E  37KM   15 39 05.5 (CSEM)
                                                                                 44.5N; 10.8E  33KM   15 39 01.5 (WDCB)
MOX E PN        15 40 34.5                                                             D=  6.2 DEG   AZ=177     MOX
    I PG           40 59.5
    I SN           41 40
    E SG           42 27
      LMH          42.8       T  3.2           AE   5.6           MLH  =4.8
      LMV          43.2       T  4                     AV   2.0
BRG E PN        15 40 38.7                                                             D=  6.5 DEG   AZ=192     BRG
    I PG           41 11.2
    I SN           41 48.1
    E SG           42 36.8
CLL I PN        15 40 43.5D 0.3 /   50                                                 D=  6.8 DEG   AZ=186     CLL
    I              40 50.8                                                             DISTANCE   7.0DEG
    I              40 58
    I PG           41 19
    E              41 34
    E SN           41 57
    I              42 04.8
    E              42 17
    E              42 38
    E SG           42 49
      LMH          43.2       T  4.5 AN   3.5 AE   6              MLH  =4.9

1978 DEC 05
CLL E           18 14 45

1978 DEC 05
CLL E           20 40 49   TRACES

1978 DEC 05     NEW BRITAIN REGION
BRG E(PKP)      23 52 32.9  1.2 /   15                             MB=4.9 ( 4)    4.6S;152.3E  56KM H=23 33 36.4 (NEIS)
    E              52 55.1                                                             D=122.2 DEG   AZ= 52     BRG

1978 DEC 06
CLL E           00 24 39   TRACES

1978 DEC 06     VANUATU ISLANDS                                    MB=5.2 (27)   13.6S;167.1E 221KM H=01 58 08.9 (NEIS)
                                                                                 13.8S;166.9E  33KM   01 57 47.3 (WDCB)
BRG E PKP       02 17 07.0  1.3 /   22                                                 D=136.9 DEG   AZ= 40     BRG
    E SKP          20 25.5
CLL I PKP       02 17 07.0D                                                            D=137.0 DEG   AZ= 38     CLL
    E PP           19 50
    E SKP          20 25
MOX E PKP       02 17 09     1.4 /   23                                                D=138.0 DEG   AZ= 37     MOX
    E PP           19 48
    E SKP          20 30
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1978 DEC 06     TONGA ISLANDS                                    /MB=4.8 ( 5)/   20.8S;173.5W  33KM H=02 46 35.6  (ISC)
CLL I PKP1      03 06 24.0C 1.5 /   32                                                 D=149.1 DEG   AZ= 12     CLL
BRG I PKP1      03 06 25.0C 1.3 /   25                                                 D=149.4 DEG   AZ= 14     BRG
MOX E PKHKP     03 06 26                                                               D=149.9 DEG   AZ= 10     MOX

1978 DEC 06     KURILE ISLANDS                                     MB=4.9 (39)   48.4N;155.6E  33KM H=04 20 57.2 (NEIS)
                                                                                 48.5N;155.5E  33KM   04 20 53.0 (WDCB)
CLL I P         04 32 40.1D 1.4 /   52                                                 D= 75.6 DEG   AZ= 25     CLL
    E              32 50
BRG E P         04 32 40.9  1.1 /   16                                                 D= 75.8 DEG   AZ= 25     BRG
MOX I P         04 32 46.0  1.0 /   32                              MPV  =5.3            D= 76.6 DEG   AZ= 24     MOX

1978 DEC 06     WESTERN POLAND
BRG I PN        09 02 16.9
    I PG           02 18.1
    I SG           02 37.5
CLL E(PG)       09 02 27                                                               DISTANCE 220 KM
    E SG           02 52
MOX E PN        09 02 37.5
    E PG           02 45.5
    E SG           03 24

1978 DEC 06     VANUATU ISLANDS REGION                             MB=5.3 (13)   19.3S;167.8E  22KM H=09 52 34.7 (NEIS)
                                                                                 20.4S;167.6E  33KM   09 52 27.1 (WDCB)
BRG E PKP       10 12 03.0  1.2 /   15                                                 D=142.3 DEG   AZ= 43     BRG
CLL E PKP       10 12 03                                                               D=142.4 DEG   AZ= 41     CLL
MOX E PKP       10 12 06     1.5 /   30                                                D=143.5 DEG   AZ= 40     MOX

1978 DEC 06     NEAR EAST COAST OF KAMCHATKA                       MB=4.5 ( 6)   56.9N;161.5E  33KM H=10 27 40.5 (NEIS)
CLL E P         10 38 43                                                               D= 69.1 DEG   AZ= 18     CLL
BRG I P         10 38 44.1                                                             D= 69.3 DEG   AZ= 18     BRG
MOX E P         10 38 48                                                               D= 70.0 DEG   AZ= 17     MOX

1978 DEC 06     EL SALVADOR                                        MB=5.8 (92)   13.1N; 89.6W  33KM H=11 53 34.0 (NEIS)
                                                                                 13.1N; 89.8W  33KM   11 53 29.2 (WDCB)
MOX E P         12 06 16.5C 1.3 /   92                              MPV  =5.8            D= 87.0 DEG   AZ=287     MOX
    E AP           06 31
    E PP           09 40
    E S            16 50
    E PPS          18 10
    E SS           22 40
    E SSS          26 10
      LM           50.5       T 17             AE   4.7 AV   7.6   MLH  =6.0 MLV  =6.2
CLL I P         12 06 19.8C 1.3 /  115                                                 D= 87.6 DEG   AZ=288     CLL
      LM           46         T 18   AN   4   AE   2.5 AV   4      MLH  =5.9 MLV  =6.0
BRG I P         12 06 23.1C 1.3 /   92                                                 D= 88.3 DEG   AZ=289     BRG
    E PPS          18 38
    E SS           23 04
      LM           46         T 18   AN   3.5 AE   3.9 AV   5.0    MLH  =6.0 MLV  =6.0

1978 DEC 06     WESTERN TURKEY                                     MB=4.7 (24)   40.5N; 35.0E  10KM H=13 09 16.0 (NEIS)
                                                                                 40.5N; 34.8E  10KM   13 09 20.1 (CSEM)
                                                                                 40.7N; 34.9E  33KM   13 09 16.0 (WDCB)
BRG E P         13 13 28.0  1.8 /   45                                                 D= 17.9 DEG   AZ=117     BRG
CLL E P         13 13 38                                                               D= 18.7 DEG   AZ=117     CLL
MOX E P         13 13 42  D 2.6 /  173                              MPV  =4.8            D= 19.2 DEG   AZ=113     MOX

1978 DEC 06     NORTH ATLANTIC OCEAN                               MB=5.5 (58)   17.4N; 54.8W  10KM H=13 28 35.5 (NEIS)
                                                                                 18.9N; 59.1W  33KM   13 28 27.7 (WDCB)
MOX E P         13 38 55     2.2 /   44                             MPV  =5.3            D= 61.8 DEG   AZ=263     MOX
CLL E P         13 39 02.                                                              D= 62.8 DEG   AZ=264     CLL
    E              40 54
BRG E P         13 39 05.7  1.6 /   38                                                 D= 63.3 DEG   AZ=265     BRG

1978 DEC 06     KURILE ISLANDS                                     MB=6.7 (51)   44.6N;146.6E  91KM H=14 02 01.0 (NEIS)
                MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE                        45.1N;146.7E 150KM   14 02 10.0 (WDCB)
CLL I P(1)      14 13 41.1C(0.8 /  240)                                                D= 76.4 DEG   AZ= 32     CLL
    I P(2)         13 44.2                                                             DISTANCE  76 DEG  DEPTH 100 KM
    I PM           13 48     (1.2 / 5500)                           MPMV =7.3
                              T 12   AN  17.9 AE  10.0 AV  39.4   MPMH =7.1 MPMV =7.1
    I              13 52.6
    E(AP)          14 15
    E              14 56
    E PP           16.7
    E(APPP)        18.9
    E S            23 15
    I SM           23 22      T 11   AN(200)  AE 265               (MSH  =8.2)  UNUSUAL STRONG S-PHASE
    E SKS          23 42
    E PS           24 16
    E(PPS)         24 41
    E              25.3
    E              25.9
    E SSS          31.4
      LH           32
      LMH          42         T(20)  AN(475)  AE(450)              MLH  =7.8  (NO DEPTH CORRECTION)
      FINAL        18
BRG I P         14 13 41.5C 2.2 / 5080                                                 D= 76.4 DEG   AZ= 33     BRG
    I S            23 17.0                                                             DISTANCE  74 DEG
      LMV          40         T 14                    AV 125.0
MOX I P         14 13 47.0C 1.2 /  728                              MPV  =6.4            D= 77.4 DEG   AZ= 31     MOX
                              T 10                    AV  37.8     MPV  =7.1
    E S            23 15      T 12   AN  49.5 AE  48              MSH  =7.4
    E SS           28 30
    E SSS          31 25
    E              33 10
      LM           45.5       T 20.5          AE 585.5 AV 112.0

1978 DEC 06     OFF COAST OF CHIAPAS, MEXICO                       MB=5.7 (42)   13.7N; 92.3W  32KM H=14 26 52.6 (NEIS)
MOX E P         14 39 43                                                               D= 88.1 DEG   AZ=289     MOX
CLL E P         14 39 46                                                               D= 88.7 DEG   AZ=290     CLL
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1978 DEC 06 KURILE ISLANDS — MB=4.8 (I3) 44.8N;146.2E 155KM H=15 38 41.0 (NEIS)
CLL I(P) 15 50 17,0 — D= 76.1 DEG AZ= 32 CLL

1978 DEC 06 KURILE ISLANDS — MB=4.6 (8) 44.6N;146.4E 160KM H=15 49 59.1 (NEIS)
CLL I P 16 01 32,9 — D= 76.3 DEG AZ= 32 CLL

1978 DEC 06 IRAN — MB=5.3 (53) 33.3N; 57.2E 29KM H=17 18 13.7 (NEIS)
33.5N; 57.2E 52KM 17 18 19.6 (CSEM)
33.6N; 57.2E 33KM 17 18 11.7 (WDCB)

BRG E P 17 25 14,9 — D= 36.0 DEG AZ=102 BRG
E 25 25,0
CLL I P 17 25 20,7 1.6 / 90 — D= 36.7 DEG AZ=102 CLL
I AP 25 37,0
E 26 37
E PCP 27 46
L 43
MOX E P 17 25 28 — D= 37.4 DEG AZ=100 MOX

1978 DEC 06
CLL E 17 37 42

1978 DEC 06
CLL E 19 37 33

1978 DEC 06 IRAN — MB=4.6 (I8) 33.2N; 57.1E 20KM H=20 38 08.8 (NEIS)
33.8N; 57.3E 33KM 20 38 10.8 (WDCB)
CLL E P 20 45 18 — D= 36.7 DEG AZ=102 CLL

1978 DEC 07 FOX ISLANDS, ALEUTIAN ISLANDS — MB=4.6 (8) 54.7N;165.6W 127KM H=00 16 49.1 (NEIS)
BRG E P 00 28 16,9 — D= 74.8 DEG AZ=360 BRG

1978 DEC 07 TIBET — MB=4.8 (7) 32.7N; 86.0E 39KM H=02 04 22.0 (NEIS)
BRG I P 02 13 48,3D 1,0 / 15 — D= 54.5 DEG AZ= 80 BRG
MOX E P 02 13 59 TRACES — D= 56.0 DEG AZ= 78 MOX

1978 DEC 07 KURILE ISLANDS — MB=4.9 (21) 44.6N;146.5E 123KM H=02 29 22.4 (NEIS)
CLL I P 02 39 59,2 — D= 76.3 DEG AZ= 32 CLL

1978 DEC 07 NEAR EAST COAST OF HONSHU, JAPAN — MB=4.8 (I6) 34.7N;140.6E 55KM H=08 52 15.4 (NEIS)
34.9N;140.6E 33KM 08 52 14.1 (WDCB)
BRG E P 09 04 35,0 — D= 82.7 DEG AZ= 42 BRG
CLL I P 09 04 35,3C 1.1 / 18 — D= 82.8 DEG AZ= 41 CLL
MOX E P 09 04 40,5 TRACES — D= 83.9 DEG AZ= 40 MOX

1978 DEC 07 SOUTH OF FIJI ISLANDS — MB=5.1 (I6) 22.4S;179.5W 595KM H=09 56 02.9 (NEIS)
CLL I PKP1 10 14 46,5C 0.7 / 37 — D=149.5 DEG AZ= 23 CLL
E APKP 17 10
BRG I PKP1 10 14 47,0C 0.8 / 29 — D=149.7 DEG AZ= 25 BRG
I PKP2 14 54,4
E APKP 17 11,9
MOX E PKHKP 10 14 48,5 — D=150.5 DEG AZ= 21 MOX
E PKP2 14 58

1978 DEC 07 KURILE ISLANDS — MB=4.7 (35) 44.9N;146.2E 178KM H=14 15 21.6 (NEIS)
45.1N;146.1E 180KM 14 15 22.8 (WDCB)
CLL I P 14 26 49,7 0.9 / 26 — D= 76.0 DEG AZ= 32 CLL
BRG E P 14 26 49,7 0.9 / 10 — D= 76.0 DEG AZ= 33 BRG
MOX E P 14 26 56 1.6 / 27 — MPV =4.7 D= 77.0 DEG AZ= 31 MOX

1978 DEC 07 HALMAHERA — MB=5.1 (25) 1.9N;127.4E 116KM H=16 48 45.1 (NEIS)
1.7N;127.8E 33KM 16 48 33.8 (WDCB)
CLL E PP 17 06 50 — D=103.5 DEG AZ= 69 CLL

1978 DEC 07 NEAR EAST COAST OF HONSHU, JAPAN — MB=5.0 (30) 37.3N;141.3E 48KM H=18 37 25.8 (NEIS)
37.4N;141.3E 33KM 18 37 24.3 (WDCB)
BRG I P 18 49 36,4 1.0 / 15 — D= 80.8 DEG AZ= 40 BRG
I AP 49 49,1
CLL I P 18 49 35,9C 1.0 / 25 — D= 80.8 DEG AZ= 39 CLL
I AP 49 48,7
MOX E P 18 49 42 — D= 81.9 DEG AZ= 38 MOX
E AP 49 55 DEPTH 48 KM

1978 DEC 07
CLL E 19 42 49 TRACES

1978 DEC 07 NORTHERN ITALY FRIULI — 46.3N; 13.4E 21KM H=20 57 06.2 (ING)
MOX E SG 20 59 29 TRACES — D= 4.5 DEG AZ=164 MOX
CLL E SG 20 59 45 — D= 5.0 DEG AZ=177 CLL

1978 DEC 08 SOUTH BURMA — MB=5.0 (23) 16.6N; 96.0E 17KM H=00 22 06.5 (NEIS)
16.6N; 96.0E 33KM 00 22 08.5 (WDCB)
BRG E P 00 33 33,8 1.1 / 17 — D= 72.3 DEG AZ= 85 BRG
CLL E P 00 33 37 — D= 72.9 DEG AZ= 85 CLL
MOX E P 00 33 40 — D= 73.8 DEG AZ= 84 MOX
LMH 01 07,8

1978 DEC 08 WESTERN POLAND
BRG I PG 02 07 56,7
I SG 08 17,1
CLL E PG 02 08 05 — DISTANCE 220 KM
E SG 08 32
MOX E SG 02 09 05

1978 DEC 08 KURILE ISLANDS — MB=4.6 (I3) 45.7N;146.2E 108KM H=04 30 25.2 (NEIS)
CLL I P 04 41 56,8 — D= 75.3 DEG AZ= 32 CLL

1978 DEC 08 NORTHERN ITALY FRIULI — NO MB COMP. 46.3N; 13.2E 10KM H=06 17 36.8 (CSEM)
MOX E PN 06 18 45 46.0N; 13.1E 23KM 06 17 36.6 (NEIS)
E SN 19 36 D= 4.5 DEG AZ=166 MOX
E SG 20 01 DISTANCE 4.4DEG
(CONT.)

(CONT.)

BRG E PG 06 19 02,0
E SG 20 02,9
CLL E PN 06 18 53
E 19 57
I SG 20 17

1978 DEC 08 NORTH OF FRANZ JOSEF LAND — MB=5.1 (53) 86.3N; 35.5E 10KM H=06 34 56.5 (NEIS)
86.2N; 34.3E 10KM 06 34 59.2 (CSEM)
86.2N; 37.2E 33KM 06 34 55.6 (WDCB)
CLL I P 06 41 53,6 1.4 / 23 — D= 35.5 DEG AZ= 2 CLL
I AP 42 03,5
BRG I P 06 41 57,9D 1.4 / 30 — D= 35.9 DEG AZ= 2 BRG
I AP 42 07,5
MOX E P 06 42 00,5 1.4 / 51 — MPV =5.2 D= 36.2 DEG AZ= 3 MOX
E AP 42 10 1.2 / 49 DEPTH 50 KM

1978 DEC 08 KURILE ISLANDS — MB=4.6 (I0) 44.4N;146.7E 143KM H=10 33 40.7 (NEIS)
CLL E P 10 45 17 TRACES — D= 76.6 DEG AZ= 32 CLL

1978 DEC 08
BRG I PG 13 04 36,0
I SG 04 51,2

1978 DEC 08 SOUTH OF HONSHU, JAPAN — MB=4.7 (I3) 29.7N;138.6E 429KM H=13 08 40.6 (NEIS)
CLL E(AP) 13 22 25 — D= 86.2 DEG AZ= 45 CLL
E PP 24 03
E 24 16

1978 DEC 08
CLL E 15 26 36

1978 DEC 08 LOYALTY ISLANDS REGION — MB=5.3 (I0) 22.3S;171.5E 115KM H=18 59 51.1 (NEIS)
BRG I PKP1 19 19 19,0C 1.3 / 21 — D=146.5 DEG AZ= 40 BRG
CLL I PKP1 19 19 19,0 — D=146.6 DEG AZ= 38 CLL
E 19 30
MOX E PKHKP 19 19 22 — D=147.6 DEG AZ= 37 MOX

1978 DEC 08 KURILE ISLANDS — MB=4.7 (6) 44.1N;149.6E 33KM H=22 19 12.3 (NEIS)
CLL E P 22 31 08 — D= 77.8 DEG AZ= 30 CLL

1978 DEC 08 WESTERN POLAND
BRG E PG 23 05 11,0 — DISTANCE 1.6DEG
E SG 05 30,1
CLL E PN 23 05 18 — DISTANCE 220 KM
I PG 05 21,1
I 05 23,0
I SG 05 44,8
MOX E PG 23 05 38,5 — DISTANCE 2.9DEG
I SG 06 18,0

1978 DEC 09 KURILE ISLANDS — MB=5.6(101) 45.3N;150.1E 54KM H=04 17 05.8 (NEIS)
45.5N;150.0E 50KM 04 17 06.1 (WDCB)
CLL I P 04 28 52,7 1.1 / 140 — D= 76.9 DEG AZ= 30 CLL
I AP 29 07,1
I 30 15,0
E PS 39 28
E SSSS 49 16
LMH 05 05 T 20 AN 7.5 AE 3 MLH =6.1
LMV 06 T 18 AV 9 MLV =6.2
BRG I P 04 28 53,0 1.1 / 52 — D= 77.0 DEG AZ= 30 BRG
E 29 10,5 DISTANCE 78 DEG
E S 38 52,0
LM 05 06 T 18 AN 10.7 AE 6.6 AV 14.0 MLH =6.3 MLV =6.4
MOX E P 04 28 59 1.3 / 87 — MPV =5.6 D= 77,9 DEG AZ= 29 MOX
E S 39 10
E SS 44 30
E SSS 48 00
LM 05 06.5 T 20 AN 9.0 AV 10.6 MLH =6.1 MLV =6.2

1978 DEC 09 EGYPT — MB=5.3 (61) 24.0N; 26.4E 10KM H=07 12 52.4 (NEIS)
24.0N; 26.1E 33KM 07 12 50.8 (WDCB)
BRG I P 07 18 49,4C 1.3 / 27 — D= 28.5 DEG AZ=156 BRG
MOX E P 07 18 53,5 — D= 29.0 DEG AZ=151 MOX
E AP 18 59
CLL I P 07 18 59,1C 1.2 / 28 — D= 29.2 DEG AZ=154 CLL
I AP 18 58,4

1978 DEC 09 KURILE ISLANDS — MB=5.2 (62) 44.7N;146.5E 130KM H=21 00 59.2 (NEIS)
45.0N;146.6E 150KM 21 01 01.8 (WDCB)
CLL I P(1) 21 12 34,5 — D= 76.3 DEG AZ= 32 CLL
I P(2) 12 37,2C 0.8 / 39
BRG E P 21 12 34,7 — D= 76.3 DEG AZ= 33 BRG
MOX E P 21 12 41 — D= 77.3 DEG AZ= 31 MOX

1978 DEC 10 PAKISTAN — MB=4.9 (25) 28.7N; 66.5E 33KM H=01 30 16.7 (NEIS)
28.9N; 66.5E 33KM 01 30 14.4 (WDCB)
BRG I P 01 38 32,0C 1.6 / 42 — D= 44.9 DEG AZ= 99 BRG
CLL E P 01 38 36 — D= 45.6 DEG AZ= 99 CLL
E 40 16
E 40 42
LMH 59 T 20 AN 2.5 MLH =5.2
LV 02 02
MOX E P 01 38 43 1.4 / 33 — MPV =5.1 D= 46.4 DEG AZ= 97 MOX
LMH 02 00.5 T 17 AN 1.3 MLH =4.9
LMV 04.4 T 14 AV 1.0 MLV =5.0

1978 DEC 10 KERMADEC ISLANDS — MB=5.5 (2) 30.3S;177.9W 134KM H=03 25 40.1 (NEIS)
CLL I PKP2 03 45 52,3 — D=157.5 DEG AZ= 23 CLL
BRG I PKP2 03 45 53,1 1.2 / 11 — D=157.6 DEG AZ= 28 BRG
E 46 20,5
(CONT.)

(CONT.)

MOX E PKP2	03 45 58									D=158.5 DEG AZ= 23	MOX
1978 DEC 10	BANDA SEA							MB=5.7 (39)	4.6S;129.7E 33KM H=02 38 03.5 (NEIS)		
									4.4S;129.6E 33KM 02 38 04.4 (WDCB)		
CLL L	03 53								D=110.1 DEG AZ= 71		CLL
MOX LMV	03 56,5	T 16			AV	0.9	MLV =5.5		D=111.1 DEG AZ= 71		MOX
LMH	57,5	T 16	AE	0.5			MLH =5.2				
1978 DEC 10	KAMCHATKA							MB=4.9 (37)	51.3N;156.5E 120KM H=05 37 43.3 (NEIS)		
									51.0N;157.5E 140KM 05 37 40.7 (WDCB)		
CLL E P	05 49 02								D= 73.2 DEG AZ= 23		CLL
BRG E P	05 49 03,5								D= 73.4 DEG AZ= 23		BRG
1978 DEC 10	GULF OF CALIFORNIA							MB=5.3 (40)	25.6N;109.6W 15KM H=06 39 55.3 (NEIS)		
MOX E P	06 52 45,5								D= 88.1 DEG AZ=309		MOX
LMV	07 32,8	T 16			AV	1.2	MLV =5.4				
LMH	33,3	T 16	AE	0.9			MLH =5.3				
CLL E P	06 52 47								D= 88.3 DEG AZ=310		CLL
L	07 31										
BRG E P	06 52 51,9 1.2 / 13								D= 89.1 DEG AZ=311		BRG
E AP	52 57,2										
1978 DEC 10											
BRG E	07 01 47,1										
1978 DEC 10											
CLL I	09 49 11,9										
1978 DEC 10	TONGA ISLANDS							MB=4.7 (4)	19.7S;175.6W 233KM H=10 37 25.9 (NEIS)		
CLL I PKP1	10 56 44,9D 0.9 / 18								D=147.7 DEG AZ= 15		CLL
E APKP	57 48										
BRG I PKP1	10 56 46,0 0.9 / 12								D=148.0 DEG AZ= 17		BRG
E APKP	57 51,0										
MOX E PKHKP	10 56 48 TRACES								D=148.6 DEG AZ= 13		MOX
1978 DEC 10	WESTERN POLAND										
BRG I PG	12 09 54,5										
I SG	10 14,2										
CLL E	12 10 07										
I SG	10 27,5										
1978 DEC 10											
CLL E	20 42 41										
1978 DEC 10	NORTH ATLANTIC OCEAN							MB=4.7 (21)	53.4N; 35.3W 10KM H=21 15 59.8 (NEIS)		
									53.3N; 35.3W 10KM 21 16 01.8 (CSEM)		
CLL I P	21 22 01,4C 1.0 / 16								D= 29.1 DEG AZ=293		CLL
BRG I P	21 22 06,1 0.8 / 12								D= 29.9 DEG AZ=294		BRG
1978 DEC 11	POLAND, UPPER SILESIA										
CLL E	01 13 19										
1978 DEC 11	NEAR COAST OF GUERRERO, MEXICO							MB=5.3 (48)	16.5N;100.0W 42KM H=02 08 01.8 (NEIS)		
									17.1N;100.1W 33KM 02 07 58.4 (WDCB)		
MOX E P	02 21 06 2.0 / 43							MPV =5.4	D= 90.4 DEG AZ=297		MOX
E PP	24 36										
E S	31 40										
E SS	38 00										
LMV	03 07,7	T 16			AV	1.0	MLV =5.3				
LMH	09,1	T 16	AE	1.0			MLH =5.4				
CLL I P	02 21 03,5 2.3 / 81								D= 90.9 DEG AZ=298		CLL
E PPS	33 30										
L	03 07										
BRG E P	02 21 05,8 1.4 / 24								D= 91.6 DEG AZ=299		BRG
E PS	24 48,0										
E	26 25,0										
LM	03 11	T 16	AE	1.8	AV	1.5	MLH =5.6	MLV =5.6			
1978 DEC 11	FLORES SEA							MB=5.9 (71)	7.1S;118.0E 463KM H=03 33 52.8 (NEIS)		
									7.1S;118.0E 450KM 03 33 51.3 (WDCB)		
BRG I P	03 47 08,0C 1.2 / 19								D=104.3 DEG AZ= 84		BRG
E	50 20,1										
E PP	51 31,7										
I PKKP1	04 02 54,0 0.8 / 23										
I PKKP2	03 14,5										
CLL E P	03 47 10								D=104.9 DEG AZ= 83		CLL
E	50 30										
E	51 10										
E PP	51 43										
E	52 29										
E	54 50										
E PPPP	55 47										
E(S)	58 20										
I PKKP1	04 02 52,0D 0.9 / 30										
E PKKP2	03 12										
MOX E P	03 47 15										
E PKKP1	04 02 50 C								D=105.8 DEG AZ= 82		MOX
E PKKP2	03 08										
1978 DEC 11	SOUTH OF FIJI ISLANDS							MB=5.2 (9)	22.5S;179.3E 587KM H=07 58 11.2 (NEIS)		
CLL I PKP1	08 16 55,8C 1.0 / 30								D=149.3 DEG AZ= 25		CLL
BRG I PKP	08 16 51,8								D=149.5 DEG AZ= 27		BRG
I PKP1	16 56,4 0.8 / 24										
MOX E PKHKP	08 16 59								D=150.3 DEG AZ= 23		MOX
1978 DEC 11	ALGERIA							MB=4.9 (11)	33.3N; 0.2E 10KM H=08 56 36.7 (NEIS)		
									33.3N; 0.1E 10KM 08 56 39.0 (CSEM)		
									33.5N; 0.1E 33KM 08 56 40.6 (WDCB)		
MOX E P	09 01 03								D= 19.3 DEG AZ=210		MOX
BRG I P	09 01 14,9C 1.1 / 27								D= 20.2 DEG AZ=215		BRG
CLL E P	09 01 14								D= 20.3 DEG AZ=212		CLL

1978 DEC 11	MID-INDIAN RISE							MB=4.9 (3)	12.8S; 66.4E 10KM H=13 28 58.5 (NEIS)		
BRG E P	13 41 00,2 1.5 / 32								D= 78.1 DEG AZ=128		BRG
CLL E P	13 41 04 2.1 / 55								D= 78.8 DEG AZ=127		CLL
1978 DEC 11	MID-INDIAN RISE							MB=5.3 (16)	12.7S; 66.3E 10KM H=13 34 16.1 (NEIS)		
BRG E P	13 46 16,9 1.6 / 34								12.8S; 66.6E 33KM 13 34 14.1 (WDCB)		
E	46 23,2								D= 78.0 DEG AZ=128		BRG
CLL E P	13 46 21 2.2 / 83										
MOX E P	13 46 23,5 2.0 / 60							MPV =5.3	D= 78.7 DEG AZ=127		CLL
									D= 79.0 DEG AZ=126		MOX
1978 DEC 11	FIJI ISLANDS REGION							MB=4.8 (2)	20.9S;179.1W 695KM H=13 56 15.8 (NEIS)		
CLL I PKP1	14 14 50,3 TRACES								D=148.2 DEG AZ= 22		CLL
I PKP2	14 55,0										
BRG E PKP1	14 14 50,5								D=148.4 DEG AZ= 24		BRG
1978 DEC 11	MID-INDIAN RISE							MB=5.1 (2)	13.5S; 66.3E 10KM H=14 03 30.9 (NEIS)		
BRG E P	14 20 38,7								D= 78.6 DEG AZ=128		BRG
1978 DEC 11	MID-INDIAN RISE							MB=5.2 (2)	13.0S; 66.3E 10KM H=14 25 17.4 (NEIS)		
BRG E P	14 37 18,8								D= 78.2 DEG AZ=128		BRG
CLL E P	14 37 22 TRACES								D= 79.0 DEG AZ=127		CLL
1978 DEC 11	POLAND, UPPER SILESIA										
BRG E PG	15 59 06,0										
E SG	59 51,0										
CLL E	16 00 14										
MOX E	16 00 15										
1978 DEC 11											
CLL E	20 00 46										
1978 DEC 11											
CLL E	22 50 05										
1978 DEC 12	MINDANAO, PHILIPPINE ISLANDS							MB=6.2 (79)	7.3N;123.5E 33KM H=11 44 16.0 (NEIS)		
BRG I P	11 57 43,9D 1.6 / 183								7.5N;123.5E 33KM 11 44 11.2 (WDCB)		
E PP	12 01 33,0								D= 96.5 DEG AZ= 70		BRG
E SKS	08 24,0								DISTANCE 97 DEG		
E S	09 09,0										
E SS	15 48,0										
LM	44	T 18	AN	19.5	AE	75.7	AV 53.7	MLH =7.2	MLV =7.2		
CLL I P	11 57 45,3D 1.9 / 200								D= 96.9 DEG AZ= 69		CLL
E	58 01								DISTANCE (98)DEG		
E	58 39										
I PP	12 01 40,8										
E	04 46										
E(S)	09,2										
E	09 38										
E	10 17										
E PS	10 40										
E(PPS)	11 30										
E SS	15,7										
E(SSS)	20,6										
LH	38	T 20	AN	48	AE	25,5					
L	43	T 18	AN	24	AE	45	AV 42				
LM	49	T 17	AN(	50)	AE	41	AV 40	MLH =7.2	MLV =7.0		
FINAL	16										
MOX E P	11 57 51 1.6 / 159							MPV =6.3	D= 97.9 DEG AZ= 68		MOX
E PP	12 01 53										
E SKS	08 26										
E S	09 22										
E SS	16 12										
LMH	42,0	T 18	AN	47.9	AE	33,0		MLH =7.1			
LMV	45,2	T 15				AV	39.0	MLV =7.0			
1978 DEC 12	SOUTHEAST OF TAIWAN							MB=5.6 (64)	22.0N;123.8E 33KM H=13 47 19.7 (NEIS)		
	END SUPERPOSED BY PRECEDING QUAKE								22.4N;123.8E 33KM 13 47 21.9 (WDCB)		
BRG I P	13 59 54,0C 2.0 / 92								D= 84.9 DEG AZ= 61		BRG
E PP	14 03 10,2										
CLL I P	13 59 55,1C 1.9 / 130								D= 85.2 DEG AZ= 61		CLL
I	14 00 24,6										
E PP	03 14										
MOX E P	14 00 01 1.8 / 122							MPV =5.8	D= 86.3 DEG AZ= 59		MOX
E	00 30										
E PP	03 24										
1978 DEC 12	NORTHERN ITALY FRIULI							MB=4.5 (4)	46.3N; 12.8E 8KM H=15 14 49.8 (CSEM)		
									46.3N; 12.7E 10KM 15 14 48.4 (NEIS)		
									46.7N; 12.9E 33KM 15 14 51.6 (WDCB)		
MOX I PN	15 15 56,0								D= 4.4 DEG AZ=169		MOX
I PQ	16 15,0								DISTANCE 4.2DEG		
I SN	16 45,0										
I SQ	17 12,0										
LMH	17,3	T 10			AE	3.5		MLH =3.8			
LMV	17,8	T 12				AV	1.7				
BRG I PN	15 15 59,4								D= 4.6 DEG AZ=190		BRG
I PQ	16 16,4								DISTANCE 4.2DEG		
E SQ	17 12,0										
CLL I PN	15 16 04,0								D= 5.0 DEG AZ=182		CLL
I	16 07,1								DISTANCE 5.1DEG		
I PQ	16 23,0										
E	16 40										
I SN	17 12,2										
I SQ	17 27,0										
I LMH	17 42	T(8)	AN(2)		AE(3)			MLH =4.1			
1978 DEC 12	VANUATU ISLANDS							MB=5.2 (31)	17.7S;168.7E 217KM H=17 14 48.2 (NEIS)		
BRG E PKP	17 33 48,2								17.7S;169.0E 33KM 17 14 26.9 (WDCB)		
E	33 55,9								D=141.3 DEG AZ= 41		BRG
E SKP	37 10,9										
CLL E PKP	17 33 50								D=141.3 DEG AZ= 39		CLL
E SKP	37 11										
E	37 40										
MOX E PKP	17 33 52								D=142.4 DEG AZ= 37		MOX

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1978 DEC 12     FIJI ISLANDS REGION                                  MB=5.0 (16)   18.0S;178.5W 582KM H=21 02 56.7 (NEIS)
CLL E PKP1      21 21 31    1.1 /   14                                              D=145.5 DEG   AZ= 20        CLL
BRG I PKP1      21 21 32,8  1.2 /   13                                              D=145.7 DEG   AZ= 21        BRG

1978 DEC 12     SOUTH OF KERMADEC ISLANDS                            MB=5.1 ( 6)   32.7S;178.9W  50KM H=22 31 40.4 (NEIS)
                                                                                   (42,5S;179.0E  33KM   22 31 26.7)(WDCB)
CLL E PKP2      22 52 13                                                           D=159.5 DEG   AZ= 30        CLL
BRG E PKIKP     22 51 33,5                                                         D=159.5 DEG   AZ= 32        BRG
    I PKP2         52 12,0  1.0 /   12
    E              52 34,1
MOX E PKP2      22 52 20                                                           D=160.5 DEG   AZ= 27        MOX

1978 DEC 13     FIJI ISLANDS REGION                                 /MB=4.1 ( 3)/  18.5S;177.9W 586KM H=02 39 05.0  (ISC)
CLL I PKP1      02 57 41,8D                                                        D=146.1 DEG   AZ= 19        CLL
BRG I PKP1      02 57 42,0  1.0 /   11                                             D=146.4 DEG   AZ= 21        BRG

1978 DEC 13     KURILE ISLANDS                                       MB=4.6 (19)   44.7N;146.2E 177KM H=06 02 42.6 (NEIS)
                                                                                   44.4N;146.1E 170KM   06 02 40.8 (WDCB)
CLL E P         06 14 13                                                           D= 76.2 DEG   AZ= 32        CLL
BRG E P         06 14 16,5                                                         D= 76.2 DEG   AZ= 33        BRG

1978 DEC 14
CLL E           00 15 04
    E              17 13

1978 DEC 14     FIJI ISLANDS REGION                                  MB=4.9 (11)   20.0S;177.8W 349KM H=04 05 27.1 (NEIS)
CLL I PKP1      04 24 31,6C 1.1 /   28                                             D=147.6 DEG   AZ= 19        CLL
    I PKP2         24 35,1
BRG I PKP1      04 24 32,2  1.0 /   15                                             D=147.8 DEG   AZ= 21        BRG
    I PKP2         24 36,3
MOX E PKHKP     04 24 34                                                           D=148.5 DEG   AZ= 17        MOX

1978 DEC 14     UNDERGROUND EXPLOSION(UPP)                           MB=4.8 (15)   49.9N; 78.2E    0KM H=04 42 57.5 (NEIS)
BRG E P         04 50 34,3                                                         D= 39.8 DEG   AZ= 65        BRG
CLL I P         04 50 37,5  0.6 /   15                                             D= 40.2 DEG   AZ= 65        CLL
MOX I P         04 50 47,0  0.9 /   20                                 MPV =4.8    D= 41.3 DEG   AZ= 64        MOX

1978 DEC 14     SOUTHWESTERN USSR                                    MB=4.5 ( 3)   45.6N; 37.3E  33KM H=05 08 23.0 (NEIS)
                                                                                   45.6N; 38.1E  10KM   05 08 19.7 (CSEM)
                                                                                   45.5N; 37.4E  33KM   05 08 25.8 (WDCB)
BRG E P         05 12 18,0  1.4 /   18                                             D= 16.4 DEG   AZ=100        BRG
    E              15 20,6
CLL I(P)        05 12 26,0                                                         D= 17.1 DEG   AZ=100        CLL

1978 DEC 14     WESTERN IRAN                                         MB=5.7 (89)   32.1N; 49.6E  33KM H=07 05 20.6 (NEIS)
                MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE                          32.2N; 49.6E  68KM   07 05 26.7 (CSEM)
                                                                                   31.6N; 49.7E  33KM   07 05 12.8 (WDCB)
BRG I P         07 11 47,2D 1.4 /   76                                             D= 32.2 DEG   AZ=112        BRG
    E PCP          14 39,4                                                         DISTANCE  32 DEG
    E S            17 10,8
    E SCP          18 27,4
    LM             28       T 17   AN   8.0 AE  24.0 AV  21.0   MLH =6.0 MLV =6.0
CLL I P         07 11 53,1C 2.0 /   115                                            D= 32.9 DEG   AZ=111        CLL
    I              11 56,3  1.6 /   130                                            DISTANCE  32 DEG
    E              12 25
    E PCP          14 40
    E S            17 12
    E SCP(1)       18 25
    I SCP(2)       18 29,3
    LH             19,9
    LM             27       T 16   AN  26   AE  13   AV  13     MLH =6.1 MLV =5.8
MOX E P         07 12 01,5  2.0 /   137                                MPV =5,5    D= 33.5 DEG   AZ=109        MOX
    E              14 14
    E PCP          14 30
    E              16 41
    E S            17 13
    E SCP(1)       18 24
    E SCP(2)       18 31
    LMV            25,9     T  9                  AV  5.5   MLV =5.7
    LMH            28,9     T 15   AN  14.1 AE   8.2       MLH =5.9

1978 DEC 14     MOLUCCA PASSAGE                                      MB=6.0 (81)    0.5N;126.0E  60KM H=19 25 59.3 (NEIS)
                                                                                    1.3N;125.7E  50KM   19 26 02.5 (WDCB)
BRG E P         19 39 55,4  1.3 /   36                                             D=103.4 DEG   AZ= 72        BRG
    E              42 41,6
    I PP           44 14,0
    LM          20 28       T 22   AN  2.7 AE  7.3 AV  6.1   MLH =6.2 MLV =6.1 (NO DEPTH CORRECTION)
CLL E P         19 39 57                                                           D=103.8 DEG   AZ= 71        CLL
    E              43 15
    E PP           44 24
    LM          20 31
MOX E P         19 40 04                                                           D=104.8 DEG   AZ= 70        MOX
    E PP           44 25
    LMH         20 30.0     T 22.5 AN  4.2 AE  4.1
    LMV            30,3     T 23                  AV  3.8

1978 DEC 14
CLL E           23 09 26

1978 DEC 15
CLL E           01 30 59

1978 DEC 15     KERMADEC ISLANDS                                     MB=5.4 ( 1)   30.4S;177.8W  33KM H=01 35 42.8 (NEIS)
CLL E PKP2      01 56 06                                                           D=157.6 DEG   AZ= 25        CLL
BRG I PKP2      01 56 08,1  0.7 /   14                                             D=157.7 DEG   AZ= 28        BRG
MOX E PKP2      01 56 12                                                           D=158.6 DEG   AZ= 23        MOX
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1978 DEC 15     KURILE ISLANDS                                       MB=4.6 (29)   44.6N;146.5E 152KM H=02 25 54.6 (NEIS)
                                                                                   44.4N;146.5E 160KM   02 25 53.6 (WDCB)
CLL I P         02 37 27,7  1.0 /   23                                             D= 76.3 DEG   AZ= 32        CLL
BRG E P         02 37 28,0                                                         D= 76.4 DEG   AZ= 33        BRG
MOX E P         02 37 33    TRACES                                                 D= 77.4 DEG   AZ= 31        MOX

1978 DEC 15
CLL E           03 30 59

1978 DEC 15     SOUTHERN SINKIANG PROV., CHINA                       MB=4.5 (18)   39.8N; 74.1E  56KM H=03 34 25.3 (NEIS)
                                                                                   39.9N; 74.1E  33KM   03 34 25.3 (WDCB)
BRG E P         03 42 18,0                                                         D= 42.6 DEG   AZ= 81        BRG
CLL E           03 42 26    TRACES                                                 D= 43.1 DEG   AZ= 81        CLL
MOX E P         03 42 30    TRACES                                                 D= 44.1 DEG   AZ= 79        MOX

1978 DEC 15
BRG E(P)        08 25 24,6

1978 DEC 15     RAT ISLANDS, ALEUTIAN ISLANDS                        MB=5.6(105)   52.1N;175.2E  47KM H=08 30 34.7 (NEIS)
                                                                                   52.2N;174.8E  50KM   08 30 35.5 (WDCB)
CLL I P         08 42 17,0  1.7 /   55                                             D= 75.9 DEG   AZ= 11        CLL
    E AP           42 30
    E              42 40
    LM          09 13
BRG E P         08 42 19,0  1.3 /   30                                             D= 76.2 DEG   AZ= 12        BRG
    E AP           42 32,4
    LM          09 15       T 20   AN  1.8 AE  2.2 AV  3.0   MLH =5.6 MLV =5.6
MOX E P         08 42 22,5  1.4 /   28                                MPV =5.0    D= 76.7 DEG   AZ= 10        MOX
    LMV         09 13.0     T 26                        AV  4.0   MLV =5.6
    LMH            15.0     T 21   AN  1.8 AE  1.7       MLH =5.5

1978 DEC 15
CLL E           11 24 04
MOX E           11 24 38    TRACES

1978 DEC 15
BRG E(P)        20 04 58,8  1.0 /    8

1978 DEC 15     WESTERN IRAN                                         MB=4.8 (34)   32.0N; 49.5E  33KM H=20 53 22.8 (NEIS)
                                                                                   31.8N; 49.3E 164KM   20 53 36.9 (CSEM)
                                                                                   32.2N; 49.5E  33KM   20 53 19.8 (WDCB)
BRG E P         20 59 52,5                                                         D= 32.2 DEG   AZ=112        BRG
CLL E P         20 59 58                                                           D= 32.9 DEG   AZ=112        CLL

1978 DEC 16
CLL E           10 28 40

1978 DEC 16
BRG E PG        10 46 40,3
    I SG           47 01,0

1978 DEC 16
CLL E           11 34 44

1978 DEC 16     UNDERGROUND EXPLOSION                                MB=5.5 (65)   37.3N;116.4W   0KM H=15 30 00.2 (NEIS)
                >FARM<                                 MPV =5.3                    D= 81.2 DEG   AZ=321        MOX
MOX I P         15 42 18,5  1.3 /   39                                             D= 81.3 DEG   AZ=321        CLL
CLL I P         15 42 18,0  1.2 /   41                                             D= 82.0 DEG   AZ=322        BRG
BRG I P         15 42 21,6C 1.1 /   43

1978 DEC 16     FIJI ISLANDS REGION                                  MB=4.7 ( 9)   20.4S;177.8W 302KM H=20 44 45.6 (NEIS)
CLL I PKP1      21 03 35,1D 0.8 /   49                                             D=148.0 DEG   AZ= 19        CLL
BRG I PKIKP     21 03 31,1                                                         D=148.2 DEG   AZ= 21        BRG
    I PKP1         03 35,0                                                         DISTANCE 149 DEG
    I PKP2         03 40,0
    E APKP         05 42,7
MOX E PKHKP     21 03 37    1.4 /   30                                             D=148.9 DEG   AZ= 17        MOX

1978 DEC 16     FIJI ISLANDS REGION                                  MB=5.1 ( 1)   20.3S;178.5W 535KM H=20 50 39.6 (NEIS)
CLL E PKP1      21 09 23                                                           D=147.8 DEG   AZ= 21        CLL
BRG E PKP1      21 09 22,8                                                         D=147.9 DEG   AZ= 22        BRG

1978 DEC 17     CENTRAL YUGOSLAVIA                                   MB=4.4 ( 8)   43.4N; 17.3E  10KM H=02 16 47.8 (NEIS)
                                                                                   43.4N; 17.3E  10KM   02 16 50.1 (CSEM)
                                                                                   43.5N; 17.0E  33KM   02 16 51.5 (WDCB)
BRG E PN        02 18 44,0                                                         D=  7.8 DEG   AZ=162        BRG
    E              18 57,6
    I SG           21 10,0                                                         D=  8.2 DEG   AZ=150        MOX
MOX E PN        02 18 49    1.0 /   71
    E SN           20 20
    E SG           21 20
    LM             22,1     T  9,5 AN  1.1 AE  0.9 AV  1.9   MLH =3.9
CLL E PN        02 18 52                                                           D=  8.4 DEG   AZ=158        CLL
    I              19 17,8
    I              19 29,5
    E              20 11
  (CONT.)
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(CONT.)

E 02 20 50
E SG 21 20
I 21 29
LM 22,1 T 8 AN 2 AE 1 AV 2 MLH =4.3

1978 DEC 17 NORTHERN YUGOSLAVIA NO MB COMP. 46.1N; 14.1E 10KM H=03 48 10.9 (NEIS)
46.1N; 14.3E 10KM 03 48 13.4 (CSEM)

BRG E PN 03 49 23,0 D= 4.8 DEG AZ=179 BRG
I PG 49 41,2
E 49 57,4
E SG 50 45,3
MOX E PN 03 49 24 D= 4.8 DEG AZ=159 MOX
E PG 49 44
E SN 50 19
E SG 50 48
CLL E PN 03 49 30 D= 5.3 DEG AZ=172 CLL
DISTANCE! 5.2DEG
I 49 36,7
I PG 49 49,5
I 50 38,5
I 50 44,9
I SG 50 59

1978 DEC 17 OFF COAST OF MEXICO MB=5.2 (17) 8.7N;102.9W 33KM H=08 01 32.0 (NEIS)
MOX LM 08 53,9 T 26 AN 1.0 AE 0,8 AV 1.2 MLH =5.3 MLV =5.3 D= 98.4 DEG AZ=295 MOX
CLL L 08 57 D= 98.9 DEG AZ=296 CLL

1978 DEC 17 CENTRAL ALASKA MB=4.8 (31) 64.0N;147.4W 22KM H=13 15 26.0 (NEIS)
MOX E P 13 26 03 D= 64.5 DEG AZ=350 MOX
BRG E P 13 26 02,5 D= 64.5 DEG AZ=351 BRG

1978 DEC 18 SOUTH OF FIJI ISLANDS MB=4.5 (4) 24.5S;177.0W 135KM H=00 36 33.8 (NEIS)
CLL I PKP1 00 56 13,9 0.9 / 30 D=152.1 DEG AZ= 20 CLL
E APKP 56 50
BRG I PKIKP 00 56 07,3 0.8 / 7 D=152.3 DEG AZ= 22 BRG
I PKP1 56 14,6
E APKP 56 53,1
MOX E PKHKP 00 56 16 D=153.1 DEG AZ= 18 MOX

1978 DEC 18
CLL E 01 03 48

1978 DEC 18 EL SALVADOR MB=5.3 (61) 13.0N; 88.3W 85KM H=02 31 27.1 (NEIS)
14.0N; 88.2W 33KM 02 31 19.8 (WDCB)

MOX E P 02 44 00 1.8 / 47 MPV =5.2 D= 86.2 DEG AZ=286 MOX
E PP 47 27
LMV 03 14,8 T 30 AV 0.5
LMH 15,5 T 24 AN 0.5
CLL I P 02 44 03,0C 1.8 / 44 D= 86.9 DEG AZ=287 CLL
E PP 47 30
BRG I P 02 44 07,1C 1.6 / 24 D= 87.6 DEG AZ=288 BRG
I PP 47 35,3

1978 DEC 18 CENTRAL MID-ATLANTIC RIDGE MB=4.9 (5) 8.8N; 39.4W 10KM H=04 28 25.3 (NEIS)
MOX E P 04 38 27 D= 59.1 DEG AZ=244 MOX
E 38 35
CLL E P 04 38 36 TRACES D= 60.2 DEG AZ=244 CLL
BRG E P 04 38 38,1 D= 60.6 DEG AZ=246 BRG

1978 DEC 18 CENTRAL MID-ATLANTIC RIDGE MB=4.8 (18) 8.6N; 39.5W 10KM H=04 37 51.2 (NEIS)
MOX E P 04 47 56 1.8 / 27 MPV =5.1 D= 59.4 DEG AZ=243 MOX
LMV 05 11.2 T 20 AV 0.5 MLV =4.7
LMH 12,5 T 17 AE 0.4 MLH =4.6
CLL E P 04 48 01 D= 60.4 DEG AZ=244 CLL
L 05 11
BRG E P 04 48 06,1 1.5 / 19 D= 60.8 DEG AZ=246 BRG

1978 DEC 18 UNDERGROUND EXPLOSION MB=6.0 (87) 47.8N; 48.2E 0KM H=07 59 56.3 (NEIS)
47.9N; 48.2E 0KM 07 59 58.9 (CSEM)

BRG I P 08 04 57,8C 1.5 / 680 MPV =5.9 D= 22.4 DEG AZ= 84 BRG
E S 08 57
LM 15 T 10 AN 3,8 AE 1,5 AV 3,6 MLH =5.2 MLV =5.2 DISTANCE 22 DEG
CLL I P 08 05 03,0 (1,4)/ 1000 MPV =6.2 D= 23.0 DEG AZ= 85 CLL
T 1,8 AN 0.8 AE 1,3 AV 1.5 DISTANCE 23 DEG
I 05 07,5
E PP 05 35
E 13 24
LM 15 T 13 AN 2,5 AE 3,5 AV 4.5 MLH =5.1 MLV =5.3
FINAL 08 40
MOX I P 08 05 13,2C 1.9 / 1060 MPV =6.1 D= 23.9 DEG AZ= 83 MOX
LMH 16,1 T 11,5 AN 2.7 MLH =4.9
LMV 17,0 T 10 AV 2.5 MLV =5.0

1978 DEC 18 NORTHERN SUMATERA MB=5.4 (70) 4.2N; 95.4E 71KM H=08 26 20.1 (NEIS)
4.3N; 95.6E 60KM 08 26 19.1 (WDCB)

BRG E P 08 38 31,1 1.2 / 24 D= 81.4 DEG AZ= 94 BRG
E 38 48,1
E PP 41 44,0
CLL E P 08 38 35 D= 82.0 DEG AZ= 93 CLL
E(AP) 38 55
E APP 42 10
LM 59
MOX E P 08 38 39 2.0 / 34 MPV =5.0 D= 82.8 DEG AZ= 92 MOX

1978 DEC 18 MARIANA ISLANDS MB=5.2 (51) 18.6N;145.5E 210KM H=08 46 01.9 (NEIS)
18.2N;145.7E 33KM 08 47 40.8 (WDCB)

BRG E AP 09 02 13,3 D= 98.8 DEG AZ= 46 BRG
E PP 05 30,4
E APP 06 11,5
CLL E(AP) 09 02 05 D= 98.9 DEG AZ= 45 CLL
E 02 42
E 04 46
E(APP) 06 07 D 1.7 / 45
E 06 24
MOX E AP 09 02 19 D=100.0 DEG AZ= 44 MOX
E APP 06 20

1978 DEC 18
CLL E 09 31 04

1978 DEC 18 BOUVET ISLAND REGION MB=5.4 (16) 54.5S; 2.1E 10KM H=10 15 53.1 (NEIS)
(51.9S; 11.3E 33KM 10 15 58.6)(WDCB)

MOX E PDIF 10 30 05 D=105.1 DEG AZ=186 MOX
E PP 34 20
E SKS 40 50
E S 41 35
E PS 43 30
E SS 49 20
E SSS 53 15
LM 11 16,7 T 18 AN 9,7 AE 7,4 AV 11.2 MLH =6.5 MLV =6.4
BRG E PDIF 10 30 17,4 D=105.5 DEG AZ=187 BRG
DISTANCE 105 DEG
E PP 34 27,3
E SKS 40 46,0
E PS 43 42,0
E SS 49 31,0
LM 11 19 T 17 AN 4,9 AE 8,5 AV 8.4 MLH =6.4 MLV =6.3
CLL E AP 10 30 18 D=105.8 DEG AZ=187 CLL
DISTANCE 103 DEG
E 33 40
E PP 34 35 T 16 AV 1.5 MPPV =6.4
E 36 10
E PPP 36 44
E(SKS) 40.9
E(PS) 43 34
E PPS 44.6
E SS 49 34
LM 11 08 T 25 AN 10,5 AE(8,5)AV 5.5 MLH =6.4 MLV =6.1
LH 18 T 18 AN 6,5 AE 5,5
L 25
FINAL 13

1978 DEC 18
CLL E 11 47 16

1978 DEC 18 OFF COAST OF OREGON MB=4.4 (4) 44.6N;129.6W 15KM H=12 10 35.5 (NEIS)
CLL I(P) 12 22 47,8C D= 79.1 DEG AZ=334 CLL
I 33 19,6
BRG I(P) 12 22 51,7C 1.4 / 14 D= 79.8 DEG AZ=334 BRG

1978 DEC 18 BANDA SEA MB=5.6 (45) 6.2S;130.7E 92KM H=18 57 59.1 (NEIS)
BRG E PKP 19 16 20,3 D=111.5 DEG AZ= 73 BRG
E PP 17 06,2 1.2 / 9

1978 DEC 19 WESTERN POLAND
BRG E PG 02 33 24,7
I SG 33 46,3 DISTANCE 220 KM
CLL E(PG) 02 33 36
E SG 34 02
MOX E PG 02 33 53
E SN 34 16
E SG 34 33

1978 DEC 19 NEGROS, PHILIPPINE ISLANDS MB=5.1 (18) 9.6N;122.1E 67KM H=02 54 37.0 (NEIS)
10.0N;122.2E 33KM 02 54 35.6 (WDCB)

BRG E P 03 07 48,3 1.2 / 16 D= 93.8 DEG AZ= 70 BRG
E AP 08 04,1
CLL E P 03 07 50 D= 94.2 DEG AZ= 69 CLL
E AP 08 06

1978 DEC 19
CLL E 04 58 13

1978 DEC 19 HOKKAIDO, JAPAN, REGION MB=4.7 (12) 41.2N;142.0E 94KM H=07 15 06.4 (NEIS)
41.0N;141.8E 33KM 07 15 00.0 (WDCB)
CLL E P 07 26 55 TRACES D= 77.7 DEG AZ= 37 CLL

1978 DEC 19 GDR, VOGTLAND
MOX I PG 07 31 20,3
I SG 31 28,5
CLL I PG 07 31 28,1
I 31 30,6
I SG 31 42,8
BRG I PG 07 31 29,1
I 31 31,2
I SG 31 43,6

1978 DEC 19 NEAR COAST OF NICARAGUA MB=5,3 (23) 11,8N; 87.4W 32KM H=08 57 25.2 (NEIS)
11,5N; 87.6W 33KM 08 57 26.6 (WDCB)
MPV =5.1 D= 86.6 DEG AZ=284 MOX
MOX E P 09 10 08 1.5 / 20
E S 20 40
E PS 21 50
LM 47,4 T 18 AN 0,9 AE 2,8 AV 2.7 MLH =5.7 MLV =5.7
D= 87.3 DEG AZ=285 CLL
CLL E(P) 09 10 16 1.6 / 27
E SKS 20 42 MLH =5,5 MLV =5.6
LM 45 T 19 AN 1 AE 1,5 AV 2
L 57 T 16 AN 0,5 AE 1 AV 1.5
D= 88.0 DEG AZ=286 BRG
BRG E P 09 10 13,8
E PP 13 36,0
LM 47 T 19 AN 1,1 AE 3,5 AV 3,9 MLH =5,8 MLV =5.9

1978 DEC 19 SOUTH OF HONSHU, JAPAN MB=5,0 (49) 33,2N;140,7E 63KM H=16 32 20.2 (NEIS)
33,4N;140.7E 33KM 16 32 17.7 (WDCB)
BRG I P 16 44 45,1C 0.9 / 16 D= 84.0 DEG AZ= 42 BRG
CLL I P 16 44 45,5C 0.9 / 29 D= 84.1 DEG AZ= 42 CLL
I 44 48,4
MOX E P 16 44 50,5 1,8 / 27 MPV =5,0 D= 85.2 DEG AZ= 41 MOX

1978 DEC 19 TUAMOTU EXPLOSION(WEL) MB=4,9 (9) 21,7S;139.0W 0KM H=16 57 00.1 (NEIS)
BRG I PKP 17 16 37,0 0,8 / 14 D=144.0 DEG AZ=314 BRG

1978 DEC 19
CLL E 19 59 03
MOX E P 19 59 11

1978 DEC 20 WESTERN POLAND
BRG I PG 02 14 02,1
I SG 14 20,6
MOX E(SG) 02 15 08

1978 DEC 20 NORTHERN ITALY NO MB COMP. 44.5N; 10.4E 33KM H=02 25 13.1 (NEIS)
44,4N; 10.5E 23KM 02 25 13.0 (CSEM)
MOX E SG 02 28 07 D= 6.2 DEG AZ=188 MOX
BRG E PN 02 26 51,0 0.6 / 9 D= 6.8 DEG AZ=202 BRG
I SN 28 06,0
E SG 28 49,0
CLL E 02 28 38 D= 7.0 DEG AZ=195 CLL
E SG 29 10

1978 DEC 20 UNDERGROUND EXPLOSION(FOA) MB=4.7 (23) 49,9N; 78.2E 0KM H=04 32 57.3 (NEIS)
BRG I P 04 40 34,0 D= 39.8 DEG AZ= 65 BRG
CLL I P 04 40 36,9 D= 40.2 DEG AZ= 65 CLL
MOX I P 04 40 46,0 0.7 / 15 MPV =4.8 D= 41.3 DEG AZ= 64 MOX

1978 DEC 20 HOKKAIDO, JAPAN, REGION MB=4.5 (22) 42,6N;142.4E 111KM H=11 12 27.0 (NEIS)
CLL I P 11 24 06,2 D= 76.7 DEG AZ= 36 CLL

1978 DEC 20 TALAUD ISLANDS MB=5.7 (62) 3.9N;126.7E 33KM H=15 51 58.1 (NEIS)
4,4N;126.5E 33KM 15 51 56.3 (WDCB)
BRG I P 16 05 46,9C 1.0 / 40 D=101.1 DEG AZ= 70 BRG
E PP 10 05,0
LM 55 T 19 AN 0.0 AE 0,1 AV 1.3 MLH =5.4 MLV =5.5
CLL I P 16 05 48,9D D=101.5 DEG AZ= 69 CLL
E AP 05 58
E 08 49
L 58
MOX E P 16 05 53 1.1 / 20 MPV =5,7 D=102.5 DEG AZ= 68 MOX
E PP 10 02
LMH 57,3 T 17 AN 0.5 MLH =5.1
LMV 17 05,3 T 19 AV 0.6 MLV =5.2

1978 DEC 20
CLL E 23 13 48

1978 DEC 20
CLL E 23 54 22

1978 DEC 21 FIJI ISLANDS REGION MB=5.6 (47) 21,8S;179.5W 593KM H=00 35 50.3 (NEIS)
21,9S;179.8W 450KM 00 35 36.8 (WDCB)
CLL E PKIKP 00 54 27 D=149.0 DEG AZ= 23 CLL
I PKP1 54 33,1D 1.0 / 150 DISTANCE 149 DEG DEPTH 600 KM
I PKP2 54 39,2 0.9 / 170 MC =5.5
E APKP 56 53
E SKP 57 14
E PP 58 07
BRG E PKIKP 00 54 28,7
I PKP1 54 33,6 1.0 / 140 D=149.1 DEG AZ= 25 BRG
I PKP2 54 40,7 0.9 / 100
E APKP 56 55,1
E SKP 57 16,5
MOX E PKIKP 00 54 30
I PKHKP 54 35,5D 1.3 / 92 D=149.9 DEG AZ= 21 MOX
E PKP2 54 43 1.4 / 65
E APKP 56 58
E SS 01 16 44

1978 DEC 21 NEAR COAST OF CENTRAL CHILE MB=5.7 (31) 36,3S; 72.4W 47KM H=01 13 55.0 (NEIS)
36,2S; 72.7W 33KM 01 13 49.2 (WDCB)
MOX E PKP 01 32 30 D=113.6 DEG AZ=241 MOX
E APKP 32 43 DEPTH 50 KM
E 33 44
LMH 02 16,5 T 22 AN 1.3 AE 1.1 MLH =5.6
LMV 22,4 T 18 AV 1.2 MLV =5.5
(CONT.)

(CONT.)
CLL E PKP 01 32 31 D=114.7 DEG AZ=242 CLL
I APKP 32 45,3
LM 02 18 T 21 AN 1 AE 1,5 AV 2 MLH =5.6 MLV =5.8
L 22
BRG E PKP 01 32 32,1 0.9 / 8 D=115.0 DEG AZ=243 BRG
I APKP 32 46,2
E PP 33 40,4
E SP 43 08
E PKKP 43 23,0
E SS 49 44
LM 02 20 T 20 AN 0.9 AE 2.0 AV 2.2 MLH =5.8 MLV =5.8

1978 DEC 21 POLAND, UPPER SILESIA /NO MB COMP./ (50.1N; 19.2E 0KM H=03 50 33) (ISC)
BRG E PG 03 51 30,1 D= 3.4 DEG AZ=101 BRG
E SG 52 15,8
CLL E 03 52 35 D= 4.1 DEG AZ=105 CLL
MOX E(SG) 03 53 12 D= 4.9 DEG AZ= 94 MOX

1978 DEC 21 ETHIOPIA MB=5.2 (40) 11.5N; 43.1E 33KM H=04 03 55.7 (NEIS)
11.6N; 43.4E 33KM 04 03 51.6 (WDCB)
BRG E P 04 12 16,7 1.2 / 28 D= 45,9 DEG AZ=138 BRG
E 12 58,5
E S 19 07
LMH 34 T 14 AN 1.6 AE 2,0
LMV 36 T 14 AV 2.6
CLL I P 04 12 22,0 2,0 / 87 D= 46.6 DEG AZ=137 CLL
E PP 14 14 DISTANCE 48 DEG
E(S) 19 18
L 33
LM 36 T 14 AN 3 AE 2 AV 2.5 MLH =5,5 MLV =5.5
MOX E P 04 12 23,5 2.0 / 68 MPV =5,3 D= 46.8 DEG AZ=135 MOX
E S 19 16
LMH 34,5 T 20 AN 2,2 AE 1.2 MLH =5.2
LMV 35,3 T 18 AV 1.6 MLV =5.0

1978 DEC 21 KURILE ISLANDS MB=4.7 (22) 44,1N;148.8E 33KM H=06 36 54.2 (NEIS)
MULTIPLE SHOCK, MB IS AN INADEQUATE VALUE 44,2N;148,9E 33KM 06 36 54.4 (WDCB)
CLL E P(1) 06 48 49 D= 77.5 DEG AZ= 31 CLL
I P(2) 49 00,9D 1.1 / 55
BRG E P(1) 06 48 52,0 D= 77.6 DEG AZ= 32 BRG
I P(2) 49 01,7 1.2 / 29
MOX E P(1) 06 48 56 D= 78,6 DEG AZ= 30 MOX
E P(2) 49 07 1.4 / 42

1978 DEC 21
CLL E 08 19 38

1978 DEC 21 KURILE ISLANDS REGION /MB=4.9 (20)/ (43,5N;148.7E 0KM H=08 08 36) (ISC)
CLL I P 08 20 41,8C 1.3 / 50 D= 78.0 DEG AZ= 31 CLL
BRG I P 08 20 41,7 1.1 / 16 D= 78.1 DEG AZ= 32 BRG
MOX E P 08 20 48 1.4 / 26 MPV =5.1 D= 79.1 DEG AZ= 30 MOX

1978 DEC 21 NORTHERN YUGOSLAVIA NO MB COMP. 45.9N; 15.1E 10KM H=11 41 54.4 (NEIS)
45,9N; 15.0E 10KM 11 41 56.5 (CSEM)
BRG E SN 11 44 06,1 D= 5.0 DEG AZ=171 BRG
E SG 44 34,3
MOX E PN 11 43 10 D= 5,3 DEG AZ=153 MOX
E 44 27 DISTANCE 5,3DEG
E SG 44 39
LM 44,7 D= 5,6 DEG AZ=165 CLL
CLL E(SG) 11 44 46

1978 DEC 21 NORTHERN ITALY NO MB COMP. 44.5N; 11.0E 33KM H=13 01 50,8 (NEIS)
44,5N; 11.0E 10KM 13 01 50.4 (CSEM)
MOX E 13 04 31 D= 6.2 DEG AZ=184 MOX
BRG E(PN) 13 03 34,0 D= 6.7 DEG AZ=198 BRG
E SG 05 29,4
CLL E SG 13 05 36 D= 6.9 DEG AZ=192 CLL
E 05 44

1978 DEC 21
CLL E 13 07 48

1978 DEC 21 SOUTHEAST OF TAIWAN MB=5.1 (28) 22,0N;125.3E 10KM H=14 07 47.2 (NEIS)
22,5N;125.4E 33KM 14 07 53.4 (WDCB)
BRG E P 14 20 28,3 1.1 / 14 D= 85.8 DEG AZ= 60 BRG
CLL I P 14 20 29,9D 1.3 / 25 D= 86.0 DEG AZ= 59 CLL
MOX E P 14 20 35 1.2 / 12 MPV =5.1 D= 87.1 DEG AZ= 58 MOX
E 20 40 2.0 / 34

1978 DEC 21 SOLOMON ISLANDS MB=5.6 (25) 11.2S;162.6E 30KM H=14 36 53.3 (NEIS)
10,9S;163.2E 33KM 14 36 51.1 (WDCB)
BRG E 14 56 16,2 D=132,9 DEG AZ= 44 BRG
E PP 58 48,1
E SS 15 16 22,0
LMH 56 T 19 AN 3.4 AE 5.7 MLH =6.3
LMV 58 T 19 AV 7.7 MLV =6.4 D=133.0 DEG AZ= 43 CLL
CLL E 14 56 26
E PP 58 38
E 15 00 10
E PPP 01 44
E(SS) 16,2
LMH 51 T 20 AN 5,5 AE 6 AV 8 MLH =6.4
LMV 57 T 18 AN 5 AE 3 AV 8 MLV =6.6 D=134.0 DEG AZ= 41 MOX
MOX E 14 56 24
E PP 58 40
E SS 15 16 30
E SSS 21 20
LM 58 T 20 AN 6,5 AE 4,1 AV 6,6 MLH =6,4 MLV =6.3

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1978 DEC 21      KURILE ISLANDS                                        MB=5.0 (56)   44,0N;148.2E  33KM H=19 41 32.3 (NEIS)
                                                                                     44,5N;148.0E  70KM   19 41 38.8 (WDCB)
CLL I P          19 53 25,0C 1.0 /   47                                                      D= 77.4 DEG   AZ= 31      CLL
BRG I P          19 53 25,7C 1.0 /   18                                                      D= 77.5 DEG   AZ= 32      BRG
MOX E P          19 53 31,5  1.0 /   24                                MPV =5.2              D= 78.5 DEG   AZ= 30      MOX

1978 DEC 22      DODECANESE ISLANDS                                    NO MB COMP.   36,6N; 28.2E  10KM H=03 53 22.4 (NEIS)
MOX E            03 57 44                                                                    D= 18.4 DEG   AZ=133      MOX

1978 DEC 22
CLL E            04 32 57

1978 DEC 22      KOMANDORSKY ISLANDS REGION                            MB=4,8 (24)   55,0N;164.5E  33KM H=07 46 22.8 (NEIS)
                                                                                     55,1N;164.0E  25KM   07 46 24.3 (WDCB)
CLL E P          07 57 41                                                                    D= 71.4 DEG   AZ= 17      CLL
BRG E P          07 57 42,6                                                                  D= 71.7 DEG   AZ= 17      BRG
MOX E P          07 57 47   TRACES                                                           D= 72.3 DEG   AZ= 16      MOX

1978 DEC 22      NORTHERN ITALY               FRIULI                   NO MB COMP.   46,2N; 13.0E  10KM H=23 00 27.3 (CSEM)
                                                                                     46,2N; 13.0E   9KM   23 00 26.1 (NEIS)
MOX E PN         23 01 35                                                                    D=  4.5 DEG   AZ=168      MOX
    E(PG)           01 54,5
    E SN            02 27
    E(SG)           02 50
    E LM            03 02
BRG E PN         23 01 37,4                                                                  D=  4.7 DEG   AZ=188      BRG
    E PG            01 56,1
    E SN            02 29,2
    E SG            02 55,4
CLL I PN         23 01 43,3                                                                  D=  5.1 DEG   AZ=180      CLL
    E SN            02 40
    E SG            03 10

1978 DEC 22
BRG E            23 55 57,6
CLL E            23 56 19

1978 DEC 23      OFF EAST COAST OF HONSHU, JAPAN                       MB=4,6 (16)   38,9N;144.3E  33KM H=01 39 40.5 (NEIS)
BRG I P          01 51 51,5                                                                  D= 80.6 DEG   AZ= 37      BRG
CLL E P          01 51 51                                                                    D= 80.6 DEG   AZ= 36      CLL
    E AP            52 02

1978 DEC 23      FLORES ISLAND REGION                                  MB=5,8 (53)    8,3S;121.5E  33KM H=05 10 50.8 (NEIS)
                                                                                      7,0S;120.9E  40KM   05 10 58.3 (WDCB)
BRG I            05 28 51,0                                                                  D=107.5 DEG   AZ= 82      BRG
    E PP            29 37,0
    E SKS           35 43,0
    E SP            38 50
    I PKKP          40 33,6
      LM         06 23        T 18   AN   1,4 AE   2,2 AV   2,2  MLH =5.8 MLV =5.8
CLL E            05 26 28                                                                    D=108.0 DEG   AZ= 81      CLL
    E PKP           29 21
    E PP            29 40
    E(SKS)          35 40
    E PS            39,0
      LM         06 20
MOX E(PP)        05 30 15                                                                    D=109.0 DEG   AZ= 80      MOX
      LMH        06 23,8      T 19            AE   1,9            MLH =5.7
      LMV           24,2      T 17                      AV   1.5  MLV =5.6

1978 DEC 23      NORTHERN ITALY                                        NO MB COMP.   44,3N; 12.2E  33KM H=07 33 37.1 (NEIS)
                                                                                     44,3N; 12.2E  30KM   07 33 38.4 (CSEM)
MOX E PN         07 35 11                                                                    D=  6.4 DEG   AZ=176      MOX
    E PG            35 42
    E SN            36 20
    E SG            37 03
BRG E PG         07 35 44,7                                                                  D=  6.7 DEG   AZ=191      BRG
    E SN            36 28,7
    E SG            37 16,3
CLL E            07 37 10                                                                    D=  7.0 DEG   AZ=185      CLL
    E               37 45

1978 DEC 23      NORTHERN SUMATERA                                     MB=5,0 (22)    2,0N; 97.2E  57KM H=07 50 53.1 (NEIS)
BRG E P          08 03 21,7                                                                  D= 84.2 DEG   AZ= 94      BRG
    E               03 27,4
MOX E P          08 03 28                                                                    D= 85.7 DEG   AZ= 92      MOX

1978 DEC 23      RYUKYU ISLANDS REGION                                 MB=4,9 ( 9)   29,4N;131.5E  31KM H=09 59 16.9 (NEIS)
CLL E P          10 10 43   TRACES                                                           D= 83.2 DEG   AZ= 51      CLL

1978 DEC 23
CLL E            10 29 27

1978 DEC 23      SOUTH OF HONSHU, JAPAN                                MB=5,5 (66)   32,5N;141.4E  21KM H=10 24 16.2 (NEIS)
                                                                                     33,0N;141.2E  33KM   10 24 16.7 (WDCB)
BRG I P          10 36 51,6C 1,2 /   25                                                      D= 84.9 DEG   AZ= 42      BRG
    E AP            37 02,6                                                                  DISTANCE  84 DEG
    E               37 09,0
    E PP            40 07,7
    E S             47 17
      LM         11 18        T 16   AN   1,7 AE   3,9 AV   4,4   MLH =5.9 MLV =6.0
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CLL I P          10 36 51,6D 1,3 /   54
    I(AP)           37 02,5                                                                  D= 85.0 DEG   AZ= 42      CLL
    E               37 49                                                                    DISTANCE  85 DEG
    E PP            40 08
    E S             47 22
      LM         11 18        T 16   AN   2,5 AE   2,5 AV   4     MLH =5.9 MLV =6.0
MOX E P          10 36 57     2.1 /   57                          MPV =5.4                   D= 86.1 DEG   AZ= 41      MOX
    E               37 15
    E               37 57
    E PP            40 31
    E S             47 26
      LMH        11 16.6      T 15,5 AN   1.8 AE   2,5            MLH =5.8
      LMV           24.9      T 15                AV   4,4        MLV =6.0

1978 DEC 23      TAIWAN REGION                                         MB=6.6(115)   23,2N;122.1E  33KM H=11 23 12.0 (NEIS)
                                                                                     23,4N;122.2E  40KM   11 23 12.8 (WDCB)
BRG I P          11 35 35,2C 1.7 / 1670                            MPV =6.9                  D= 83.0 DEG   AZ= 62      BRG
    E PP            38 48,0                                                                  DISTANCE  82 DEG
    E S             45 48,0
    E PS            46 30,0
    E SS            51 03,0
    E PKKP          53 58,8
    E PKPPKP     12 02 02,0
      LMH           10
      LMV           16        T 17                AV 206.0        MLV =7.6
CLL I P          11 35 36,6C 1.4 / 1600                           MPV =7.0                   D= 83,3 DEG   AZ= 61      CLL
                              T 12   AN   4,4 AE   5,3 AV  14.0   MPH =7.2 MPV =7.1          DISTANCE  82 DEG
    I               35 52
    E PP            38 48
    E SKS           45 51     T 15   AN  23,5 AE  10,8
    E PKKP          53 56
    E               56.1
    E(SSSS)         57.4
    E PKPPKP     12 02 00
      LMH           09        T 20   AN 285   AE 165              MLH =7.8
      LMV           12        T 20                AV(165)         MLV =7.5
      L             16        T 17   AN 140   AE 160
      L             19
      FINAL      15
MOX I P          11 35 42,3C 1,7 / 1424                           MPV =6.9                   D= 84.4 DEG   AZ= 60      MOX
    E PP            38 44
    E PPP           40 40
    E S             46 00
    E PS            46 50
    E PKKP          53 54     1.8 /   81
    E PKPPKP     12 02 00     2.0 /  120
      LMH           09.8      T 20.5 AN 198.9 AE 214.3            MLH =7.6
      LMV           17.8      T 16                AV 190.7        MLV =7.7

1978 DEC 23      NORTH ATLANTIC OCEAN                                  MB=5.2 (51)   53,1N; 35.2W  10KM H=12 49 36.4 (NEIS)
                                                                                     53,2N; 34.8W  10KM   12 49 41.0 (CSEM)
                                                                                     53,4N; 35.1W  33KM   12 49 36.3 (WDCB)
MOX E P          12 55 34,5   2.0 /   94                          MPV =5.2                   D= 28.6 DEG   AZ=293      MOX
    E PP            56 23
CLL I P          12 55 39,0   1.8 /   85                                                     D= 29.2 DEG   AZ=293      CLL
BRG I P          12 55 45,9D 1.7 /   47                                                      D= 29.9 DEG   AZ=294      BRG

1978 DEC 23      TAIWAN                                                MB=4.7 ( 6)   23,1N;121.9E  33KM H=13 01 41.6 (NEIS)
BRG E P          13 14 07,1                                                                  D= 83.0 DEG   AZ= 62      BRG
CLL E            13 14 15   TRACES                                                           D= 83,3 DEG   AZ= 61      CLL

1978 DEC 23      TAIWAN                                                MB=5,0 (11)   23,4N;121.9E  33KM H=13 08 39.9 (NEIS)
                                                                                     21,9N;123.5E  33KM   13 08 22.2 (WDCB)
CLL E            13 21 08   TRACES                                                           D= 83.1 DEG   AZ= 61      CLL

1978 DEC 23      NORTHERN ITALY               FRIULI                                 46,3N; 13.2E  12KM H=14 45 26.3  (OGS)
CLL E SG         14 48 10   TRACES                                                           D=  5.0 DEG   AZ=178      CLL

1978 DEC 23      TAIWAN                                                MB=5.0 (17)   23,1N;121.9E  33KM H=15 03 52.9 (NEIS)
                                                                                     24,3N;122.7E  33KM   15 04 03.5 (WDCB)
BRG E(P)         15 16 25,2   1.6 /   17                                                     D= 83.0 DEG   AZ= 62      BRG
CLL E(P)         15 16 25     1.5 /   20                                                     D= 83.3 DEG   AZ= 61      CLL

1978 DEC 23      SOUTH OF HONSHU, JAPAN                                MB=4.6 ( 5)   32,4N;141.4E  33KM H=22 37 33.0 (NEIS)
BRG E P          22 50 06,6                                                                  D= 85.0 DEG   AZ= 42      BRG
    E AP            50 17,8
CLL E P          22 50 07                                                                    D= 85.1 DEG   AZ= 42      CLL
    E AP            50 18

1978 DEC 24
CLL E            00 15 24

1978 DEC 24      NORTHERN CHILE                                        MB=5.4 (30)   20,0S; 69.8W  48KM H=00 02 01.7 (NEIS)
                                                                                     20,3S; 70.2W  33KM   00 02 01.4 (WDCB)
CLL E            00 16 08                                                                    D=101.0 DEG   AZ=252      CLL
BRG E P          00 15 49,8                                                                  D=101.4 DEG   AZ=253      BRG
    E PP            20 17,7

1978 DEC 24
CLL E            00 20 14

1978 DEC 24
CLL E            04 11 21   TRACES

1978 DEC 24      POLAND, UPPER SILESIA
BRG E PG         07 12 38,2
    E SG            13 20,4
CLL E            07 13 42

1978 DEC 24      POLAND, UPPER SILESIA
BRG E PG         07 15 03,8
    E SG            15 48,5
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CLL E SG	07 16 10					
1978 DEC 24						
CLL E	09 30 54			MB=5,0 (4)	23,9S;179,5E 556KM H=09 43 44,4 (NEIS)	
					D=150,7 DEG AZ= 26	CLL
1978 DEC 24	SOUTH OF FIJI ISLANDS				D=150,8 DEG AZ= 28	BRG
CLL I PKP1	10 02 28,8					
BRG I PKP1	10 02 29,8			MB=5,0 (30)	63,6N;157,6W 33KM M=13 13 08,1 (NEIS)	
1978 DEC 24	CENTRAL ALASKA				63,0N;158,5W 33KM 13 13 03,8 (WDCB)	
					D= 65,2 DEG AZ=355	CLL
CLL E(P)	13 23 52 1,7 / 30				D= 65,7 DEG AZ=356	BRG
BRG E P	13 23 54,1			MPV =5,2	D= 65,8 DEG AZ=355	MOX
MOX E P	13 23 53,5 1,5 / 30					
1978 DEC 24	FRG, SOUTHWESTERN REGION			NO MB COMP.		
	SWABIAN JURA				48,4N; 9,0E 10KM H=16 56 21,2 (NEIS)	
					48,4N; 9,0E 1KM 16 56 21,3 (CSEM)	
MOX E PN	16 57 05				D= 2,8 DEG AZ=218	MOX
E PG	57 14					
E SN	57 39					
E SG	57 49				D= 3,9 DEG AZ=223	CLL
CLL E PG	16 57 41					
E SG	58 28				D= 4,1 DEG AZ=234	BRG
BRG E PG	16 57 38,7					
E SG	58 29,6					
1978 DEC 24	NORWEGIAN SEA			MB=4,5 (18)	72,8N; 4,9E 10KM H=22 52 19,0 (NEIS)	
					72,1N; 6,0E 10KM 22 52 29,1 (CSEM)	
					72,7N; 5,0E 33KM 22 52 18,4 (WDCB)	
CLL I P	22 57 13,6 1,8 / 40				D= 21,9 DEG AZ=354	CLL
I	57 27,2					
E(PP)	57 42				D= 22,4 DEG AZ=353	BRG
BRG E P	22 57 16,4 2,0 / 40			MPV =4,4	D= 22,4 DEG AZ=355	MOX
MOX E P	22 57 19 1,8 / 27					
E	57 24					
1978 DEC 25	POLAND, UPPER SILESIA					
BRG E PG	00 00 47,5					
E SG	01 31,6					
CLL E	00 01 50					
1978 DEC 25						
CLL E	03 56 29					
1978 DEC 25						
CLL E	04 23 46 TRACES					
1978 DEC 25	WEST CHILE RISE			MB=4,5 (2)	41,5S; 86,1W 10KM H=03 28 14,3 (NEIS)	
MOX LMV	04 37,2 T 22		AV 0,8 MLV =5,3		D=125,0 DEG AZ=245	MOX
1978 DEC 25						
CLL E	15 16 44					
1978 DEC 25	ANDREANOF ISLANDS, ALEUTIAN IS,			MB=4,3 (8)	51,6N;173,2W 33KM H=16 12 12,7 (NEIS)	
BRG E P	16 24 07,5				D= 77,7 DEG AZ= 5	BRG
1978 DEC 25	SOUTH OF HONSHU, JAPAN			MB=4,9 (23)	30,8N;141,7E 33KM H=21 03 00,3 (NEIS)	
					30,9N;141,6E 33KM 21 02 56,2 (WDCB)	
BRG E AP	21 15 49,9				D= 86,5 DEG AZ= 43	BRG
CLL E(P)	21 15 45 1,4 / 23				D= 86,6 DEG AZ= 42	CLL
1978 DEC 25						
CLL E	21 18 25					
1978 DEC 25	SOUTH OF HONSHU, JAPAN			MB=4,8 (19)	32,4N;141,5E 33KM H=21 38 11,4 (NEIS)	
					32,4N;141,5E 33KM 21 38 11,5 (WDCB)	
BRG E P	21 50 44,2				D= 85,1 DEG AZ= 42	BRG
CLL E P	21 50 46				D= 85,1 DEG AZ= 42	CLL
1978 DEC 25	NORTHERN ITALY			NO MB COMP.	44,9N; 11,1E 33KM H=22 53 42,4 (NEIS)	
					44,9N; 11,2E 14KM 22 53 42,4 (CSEM)	
MOX E PN	22 55 06				D= 5,8 DEG AZ=184	MOX
I PG	55 33,0					
I SN	56 12,0					
E SG	56 56					
BRG I PN	22 55 13,1				D= 6,3 DEG AZ=199	BRG
I	55 15,3				DISTANCE 6,3DEG	
I PG	55 40,3					
E SG	57 03,2					
CLL I PN	22 55 16,7 1,0 / 25				D= 6,5 DEG AZ=192	CLL
E PG	55 46				DISTANCE 6,8DEG	
E	56 37					
E SG	57 13					
E	57 24					
1978 DEC 26	OFF COAST OF MEXICO			MB=5,8 (53)	10,4N;103,9W 10KM H=23 57 55,0 (NEIS)	
					11,3N;104,4W 33KM 23 57 57,1 (WDCB)	
MOX E P	00 11 32,5				D= 97,6 DEG AZ=296	MOX
E PP	15 30					
E SKS	22 20					
E PS	24 15					
E	24 55					
E SS	29 40					
E LM	38 50					
E LV	43 30					
LM	55 T 20,5		AE 12,2 AV 13,0 MLW =6,4 MLV =6,4			
CLL E P	00 11 34				D= 98,0 DEG AZ=298	CLL
E	15 08				DISTANCE 93 DEG	
E PP	15 34					

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E	00 20 50					
E(SKS)	22 24					
E PS	24 28					
E SS	29 44					
LMH	51 T 21 AN 10 AE 11,5 AV 9,5 MLW =6,5					
LMV	56 T 19 AN 6,5 AE 7,5 AV 12 MLV =6,5					
BRG I P	00 11 38,0				D= 98,8 DEG AZ=298	BRG
E	11 50,6				DISTANCE 99 DEG	
E PP	15 43,0					
E	19 04,0					
E SKS	22 27,0					
E PS	24 38,0					
E SS	30 03,0					
LM	53 T 23 AN 13,0 AE 16,3 AV 16,4 MLW =6,6 MLV =6,5					
1978 DEC 26	FIJI ISLANDS REGION			/MB=4,4 (2)/	20,3S;177,6W 493KM H=23 57 15,2 (ISC)	
CLL I PKP1	00 16 06,8				D=148,0 DEG AZ= 19	CLL
BRG I PKP1	00 16 07,7				D=148,2 DEG AZ= 21	BRG
1978 DEC 26	SOUTH OF HONSHU, JAPAN			MB=5,2 (41)	32,4N;141,6E 33KM H=03 37 06,9 (NEIS)	
					32,8N;141,5E 33KM 03 37 04,7 (WDCB)	
BRG I P	03 49 40,8C 1,1 / 20				D= 85,1 DEG AZ= 42	BRG
CLL I P	03 49 40,8C 1,2 / 41				D= 85,2 DEG AZ= 42	CLL
MOX E P	03 49 46,5 1,4 / 28			MPV =5,3	D= 86,3 DEG AZ= 41	MOX
1978 DEC 26	NORTH ATLANTIC RIDGE			MB=4,4 (13)	49,8N; 28,9W 10KM H=04 29 05,0 (NEIS)	
MOX E PP	04 34 44 1,6 / 33				D= 25,7 DEG AZ=284	MOX
CLL E P	04 34 44				D= 26,4 DEG AZ=283	CLL
BRG E P	04 34 53,8				D= 27,1 DEG AZ=285	BRG
1978 DEC 26	SOUTH OF MARIANA ISLANDS			MB=5,2 (43)	12,0N;141,2E 75KM H=05 49 42,0 (NEIS)	
MOX LMH	06 50,7 T 24 AN 1,0				D=103,7 DEG AZ= 51	MOX
LMV	50,8 T 23		AV 0,9			
1978 DEC 26	TAIWAN REGION			MB=5,1 (22)	22,9N;121,7E 10KM H=07 49 08,4 (NEIS)	
					22,9N;121,5E 33KM 07 49 09,5 (WDCB)	
BRG E P	08 01 41,2 1,8 / 33				D= 83,0 DEG AZ= 62	BRG
CLL I(P)	08 01 42,2D 1,6 / 32				D= 83,4 DEG AZ= 62	CLL
E PP	04 54					
LM	42					
MOX LMH	08 39,7 T 14 AN 1,1		MLW =5,4		D= 84,4 DEG AZ= 60	MOX
LMV	43,6 T 12		AV 1,2 MLV =5,5			
1978 DEC 26	FIJI ISLANDS REGION			MB=4,8 (16)	17,8S;179,8W 655KM H=08 55 22,8 (NEIS)	
CLL I PKP1	09 14 49,2D 0,9 / 74 SUPERPOSED BY SUPERSONIC				D=145,1 DEG AZ= 22	CLL
BRG I PKP1	09 14 50,0 1,1 / 49				D=145,2 DEG AZ= 23	BRG
MOX E PKHKP	09 14 51				D=146,0 DEG AZ= 20	MOX
1978 DEC 26						
CLL I(P)	09 19 36,1					
1978 DEC 27						
CLL E P	04 03 34					
BRG E P	04 03 36,3					
1978 DEC 27						
CLL E	04 15 11					
BRG E	04 15 12,5					
1978 DEC 27						
CLL E	05 29 48					
1978 DEC 27	EASTER ISLAND CORDILLERA			MB=4,1 (2)	52,9S;118,1W 10KM H=09 04 42,1 (NEIS)	
MOX E PKHKP	09 24 36				D=149,3 DEG AZ=246	MOX
E(PKP2)	24 46					
CLL E(PKIKP)	09 24 34				D=150,4 DEG AZ=247	CLL
I(PKP1)	24 38,8D					
BRG E(PKIKP)	09 24 35,2				D=150,8 DEG AZ=247	BRG
E(PKP1)	24 39,7 1,3 / 20					
E	24 50,4					
1978 DEC 27						
BRG E PG	11 09 34,0					
E SG	10 22,2					
1978 DEC 27	MARIANA ISLANDS REGION			MB=5,1 (35)	17,7N;147,0E 54KM H=12 48 40,0 (NEIS)	
					17,6N;147,0E 33KM 12 48 36,9 (WDCB)	
BRG E PP	13 06 25,4				D=100,3 DEG AZ= 45	BRG
CLL E PP	13 06 28				D=100,4 DEG AZ= 44	CLL
1978 DEC 27	TAIWAN REGION			MB=4,9 (17)	23,2N;122,2E 33KM H=14 46 34,8 (NEIS)	
					23,5N;121,9E 33KM 14 46 36,3 (WDCB)	
BRG E P	14 58 57,5				D= 83,1 DEG AZ= 62	BRG
CLL E P	14 58 59				D= 83,4 DEG AZ= 61	CLL
1978 DEC 27	SOUTH PACIFIC CORDILLERA			MB=5,1 (2)	56,5S;142,6W 10KM H=16 24 25,5 (NEIS)	
CLL E(PKP2)	16 45 30				D=164,8 DEG AZ=241	CLL
BRG E PKP2	16 45 32,3 1,7 / 19				D=165,0 DEG AZ=239	BRG
1978 DEC 27	SOUTHERN ITALY			MB=5,6 (86)		
	NORTHERN TYRRHENIAN SEA				41,1N; 13,6E 390KM H=17 46 10,4 (NEIS)	
					41,1N; 13,5E 398KM 17 46 12,1 (CSEM)	
					41,6N; 14,0E 430KM 17 46 16,6 (WDCB)	
MOX I P	17 48 26,0D T 3,2		AV 20,0 MPV =6,9		D= 9,6 DEG AZ=171	MOX
E	49 34					
E S	50 09 T 10,5		AE 42,0 MSH =5,8			
I	50 50					
BRG I P	17 48 27,7D 0,9 / 7650				D= 9,8 DEG AZ=182	BRG
E	49 37,6					
I S	50 16,6 T 8 AN 15,0 AE 58,7 AV 15,9					

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CLL I P         17 48 33,3D(1,5 / 6800)              1,5 / 2200  MPV  =6,9          D= 10,2 DEG   AZ=177        CLL
                      T( 2,5)AM  14,4 AE   3,3 AV  13,4   MPH  =7,1 MPV  =6,9 DISTANCE  10 DEG
      I           48 48,4
      I           48 50,2
      I           49 12
      I           49 19
      I           49 34
      E           49 43
      I S         50 26,8  2,7/(10000)              2,4 / 8100
                           T( 4)  AM  20,3 AE  55,2 AV  23,0   MSH  =4,4
      I           50 41
      I           51 08
      I           51 27,6
      I           51 47
      I           52 16

1978 DEC 27     ALASKA PENINSULA                                MB=4,7 (17)   54,2N;162,6W  37KM H=19 50 33,1 (NEIS)
BRG E P         20 02 13,8                                                    D= 75,3 DEG   AZ=358        BRG
MOX E P         20 02 15                                                      D= 75,4 DEG   AZ=356        MOX

1978 DEC 27     JAN MAYEN ISLAND REGION                         MB=4,2 ( 9)   69,0N; 16,8W  10KM H=21 13 28,6 (NEIS)
CLL E P         21 23 30                                                      D= 22,7 DEG   AZ=332        CLL
MOX E P         21 23 34,5  1,4 /   21                            MPV  =4,5   D= 22,9 DEG   AZ=334        MOX
BRG E P         21 23 38,9  1,2 /   15                                        D= 23,4 DEG   AZ=332        BRG

1978 DEC 27     POLAND, UPPER SILESIA
BRG E PG        23 18 56,4
    E SG           19 38,6
CLL E           23 20 01
MOX E           23 20 30

1978 DEC 28     KURILE ISLANDS                                  MB=4,8 (25)   44,4N;147,3E 113KM H=01 10 31,3 (NEIS)
                                                                              44,9N;147,1E 110KM   01 10 34,5 (WDCB)
CLL I P         01 22 12,1C 1,1 /   24                                        D= 76,8 DEG   AZ= 32        CLL
BRG I P         01 22 12,3                                                    D= 76,8 DEG   AZ= 32        BRG

1978 DEC 28     POLAND, UPPER SILESIA
BRG I SG        03 42 13,8
CLL E           03 42 37

1978 DEC 28     SOLOMON ISLANDS                                 MB=5,4 (46)    5,4S;154,2E 137KM H=06 21 50,0 (NEIS)
                                                                               5,2S;154,0E  33KM   06 21 38,9 (WDCB)
BRG I PKP       06 40 33,8C 0,9 /   18                                        D=123,9 DEG   AZ= 50        BRG
CLL E PKP       06 40 33                                                      D=124,0 DEG   AZ= 49        CLL

1978 DEC 28
BRG E           11 27 14,7
    E SG           28 08,6

1978 DEC 28     UZBEK SSR                                       MB=4,8 (13)   40,5N; 63,6E  33KM H=12 39 46,8 (NEIS)
                                                                              40,7N; 63,5E  33KM   12 39 42,7 (WDCB)
BRG I P         12 45 43,2                                                    D= 35,6 DEG   AZ= 87        BRG
CLL E P         12 45 48                                                      D= 36,2 DEG   AZ= 87        CLL

1978 DEC 28     POLAND, UPPER SILESIA                                         50,3N; 18,8E       H=15 35 45,0  (WAR)
BRG I(PG)       15 36 44,1                                                    D=  3,1 DEG   AZ= 99        BRG
    E SG           37 28,4
CLL E SG        15 37 52                                                      D=  3,8 DEG   AZ=103        CLL

1978 DEC 28     TAJIK SSR                                       MB=4,7 (13)   37,1N; 73,9E  77KM H=17 51 50,5 (NEIS)
BRG I P         17 59 52,1                                                    D= 44,1 DEG   AZ= 84        BRG

1978 DEC 28     OAXACA, MEXICO                                  MB=5,4 (44)   16,0N; 96,5W  33KM H=19 48 04,5 (NEIS)
MOX E P         20 00 56                                                      D= 98,8 DEG   AZ=294        MOX
BRG I P         20 01 02,0D                                                   D= 90,1 DEG   AZ=298        BRG
    E PP           04 35,5

1978 DEC 28     POLAND, UPPER SILESIA
CLL E           23 21 18

1978 DEC 28     TONGA ISLANDS REGION                           /MB=4,3 ( 2)/  19,1S;172,9W( 33KM H=23 14 32  ) (ISC)
CLL E PKP1      23 34 19    1,6 /   29                                        D=147,5 DEG   AZ= 10        CLL

1978 DEC 29     NEAR WEST COAST OF COLOMBIA                     MB=4,9 ( 8)    6,6N; 77,9W  47KM H=02 03 22,1 (NEIS)
BRG E P         02 16 03,0                                                    D= 86,1 DEG   AZ=276        BRG

1978 DEC 29     SOUTH OF KERMADEC ISLANDS                       MB=5,2 (12)   33,2S;179,7W  90KM H=01 57 55,4 (NEIS)
CLL I PKP2      02 16 21,2D 1,3 /   27                                        D=159,7 DEG   AZ= 32        CLL
BRG E PKIKP     02 17 41,6                                                    D=159,7 DEG   AZ= 35        BRG
    I PKP2         18 21,2
MOX E PKP2      02 18 26    1,3 /   22                                        D=160,7 DEG   AZ= 30        MOX

1978 DEC 29     TONGA ISLANDS                                   MB=5,3 (13)   21,4S;174,5W  45KM H=05 47 14,4 (NEIS)
                                                                              20,9S;177,0W  33KM   05 47 19,9 (WDCB)
CLL E PKP1      06 09 01    2,2 /   98                                        D=149,6 DEG   AZ= 14        CLL
    E              09 08
    E              09 21
BRG E PKP1      06 08 59,3  2,0 /   83                                        D=149,8 DEG   AZ= 16        BRG
MOX E PKHKP     06 09 03    1,7 /   70                                        D=150,4 DEG   AZ= 12        MOX

1978 DEC 29     POLAND, UPPER SILESIA
CLL E           08 04 11

1978 DEC 29     BURMA-INDIA BORDER REGION                       MB=4,8 (14)   23,6N; 93,0E  33KM H=08 53 21,7 (NEIS)
                                                                              23,7N; 92,9E  33KM   08 53 23,7 (WDCB)
BRG E P         09 04 05,0                                                    D= 65,3 DEG   AZ= 83        BRG
CLL E P         09 04 07                                                      D= 65,8 DEG   AZ= 82        CLL
MOX E P         09 04 15   TRACES                                            D= 66,8 DEG   AZ= 81        MOX
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1978 DEC 29     HOKKAIDO, JAPAN, REGION                         MB=4,8 (22)   41,0N;142,3E  45KM H=10 35 02,8 (NEIS)
CLL E AP        10 47 10                                                      41,4N;142,5E  60KM   10 35 06,2 (WDCB)
                                                                              D= 78,0 DEG   AZ= 37        CLL
1978 DEC 30
CLL I PKP       01 44 15,9D 0,9 /   32
BRG I PKP       01 44 16,6

1978 DEC 30     AFGHANISTAN-USSR BORDER REGION                  MB=4,9 (23)   38,5N; 70,6E  10KM H=05 06 54,2 (NEIS)
BRG I P         05 14 41,8D 0,8 /   14                                        38,3N; 70,6E  33KM   05 06 57,0 (WDCB)
CLL E P         05 14 46                                                      D= 41,2 DEG   AZ= 85        BRG
                                                                              D= 41,7 DEG   AZ= 85        CLL
1978 DEC 30
CLL E           09 57 29

1978 DEC 30     NORTHERN ITALY                                  NO MB COMP.   44,9N; 11,1E  20KM H=10 38 46,5 (NEIS)
MOX E PN        10 40 11                                                      44,9N; 11,1E  19KM   10 38 47,1 (CSEM)
    E PG           40 36                                                      D=  5,8 DEG   AZ=184        MOX
    E SG           41 50
BRG I PN        10 40 19,1                                                    D=  6,3 DEG   AZ=199        BRG
    I PG           40 44,2
    E SG           42 06,8
CLL E PG        10 40 54                                                      D=  6,5 DEG   AZ=192        CLL
    E SG           42 18

1978 DEC 30     WESTERN POLAND
BRG I PG        11 32 11,0
    I SG           32 30,4
CLL E           11 32 50
MOX E(SG)       11 33 20

1978 DEC 30     ADRIATIC SEA                                   /NO MB COMP./  44,6N; 14,2E  33KM H=14 54 20    (ISC)
BRG E(SG)       14 57 45                                                      D=  6,3 DEG   AZ=178        BRG
CLL E SG        14 58 10                                                      D=  6,8 DEG   AZ=173        CLL

1978 DEC 31     OFF EAST COAST OF HONSHU, JAPAN                 MB=5,3 (53)   36,4N;144,4E  40KM H=10 51 44,0 (NEIS)
                                                                              36,4N;144,6E  33KM   10 51 38,5 (WDCB)
BRG I P         11 04 05,9D 0,9 /   25                                        D= 92,8 DEG   AZ= 38        BRG
CLL I P         11 04 05,5  1,0 /   51                                        D= 92,8 DEG   AZ= 38        CLL
MOX E P         11 04 11,5                                                    D= 93,9 DEG   AZ= 37        MOX

CLL  INTERRUPTION OF LONGPERIODIC RECORDS FROM 12H 00M TO 14H 42M

1978 DEC 31
BRG E           14 18 37,6
    E SG           19 18,8

1978 DEC 31     BULGARIA                                        MB=4,4 ( 9)   42,0N; 23,2E  22KM H=15 56 14,0 (NEIS)
                                                                              42,0N; 23,3E  14KM   15 56 15,3 (CSEM)
                                                                              41,8N; 23,1E  33KM   15 56 13,2 (WDCB)
BRG E P         15 58 54,0                                                    D= 10,9 DEG   AZ=141        BRG
    E           16 01 58,2
CLL E PP        15 59 16                                                      D= 11,6 DEG   AZ=139        CLL
    E           16 01 49
    E              03 06
MOX E P         15 59 09                                                      D= 11,8 DEG   AZ=133        MOX

1978 DEC 31     BULGARIA                                        MB=4,4 ( 3)   42,0N; 23,2E  22KM H=16 26 07,0 (NEIS)
                                                                              42,0N; 23,3E  10KM   16 26 07,7 (CSEM)
                                                                              41,7N; 22,5E  33KM   16 25 59,8 (WDCB)
BRG E           16 29 17,6                                                    D= 10,9 DEG   AZ=141        BRG
    E           31 09,1
CLL E           16 31 15                                                      D= 11,6 DEG   AZ=139        CLL
    E           31 55
MOX E           16 29 20                                                      D= 11,8 DEG   AZ=133        MOX

CLL  INTERRUPTION OF LONGPERIODIC RECORDS FROM 17H 09M TO 17H 41M AND FROM 21H 44M TO 24H 00M

1978 DEC 31     PANAMA-COLOMBIA BORDER REGION                   MB=4,6 ( 6)    7,8N; 77,5W  49KM H=20 38 38,5 (NEIS)
BRG E(P)        20 51 11,5                                                    D= 84,9 DEG   AZ=276        BRG

1978 DEC 31     SOLOMON ISLANDS                                 MB=5,3 (27)   10,3S;161,3E  66KM H=23 00 51,8 (NEIS)
BRG E PKP       23 19 51,0                                                    D=131,5 DEG   AZ= 45        BRG
    E SKP          23 21,6
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