Sta. code	Δ (deg.)	Az (deg.)	Phase	UTC h min s	Resid (s)	T (s)	A (μm)
			1987 4 1				
			O = 01 48 07.3	**± 0.26s**			
			LAT = 22.66 S	**± 2.46km**			
			LONG = 66.27 W	**± 2.22km**			
			DEPTH = 233 km	**± 2.32km**			
			STATIONS USED = 93, STAND DEV = 1.39s				
				m_B = 6.4 / 11			
KSH	143.9	54	PKP	02 07 14.0	−2.0		
			sPKP	02 08 30.0			
			PP	02 10 31.0	−3.4		
			PPMZ	m_B = 6.9		5.0	7.80
WMQ	149.9	39	PKP	02 07 26.4	0.5		
			sPKP	02 08 43.0			
			PP	02 11 11.0	2.2		
			SKKS	02 17 34.0			
			LE			30.0	11.9
MDJ	154.5	333	ePKP	02 07 32.0	−0.4		
			pPKP	02 08 30.0	−1.2		
			sPKP	02 07 56.0			
			PKP_2	02 09 04.0			
			PP	02 11 31.0	−3.7		
			PPMZ	m_B = 6.4		6.0	2.10
			SKKS	02 17 54.0			
			SS	02 30 50.0	−3.1		
			LE			30.0	13.1
CN2	156.8	338	−PKP	02 07 33.0	−2.5		
			pPKP	02 08 30.0	−4.3		
			PKP_2	02 08 50.0			
			ePP	02 11 44.0	−3.2		
			PPMZ	m_B = 6.2		8.0	1.80
			SKKS	02 18 10.0			
			eSS	02 31 14.0	−3.6		
LSA	158.6	66	ePKP	02 07 38.6	0.4		
			PKP_2	02 08 13.0			
			sPKP	02 09 10.0			
			SKKS	02 18 23.0			
SNY	159.2	339	−PKP	02 07 37.0	−1.4		
			PKP_2	02 08 17.5			
			PP	02 11 57.5	−2.7		
			SKKS	02 18 13.0			
GTA	159.5	32	PKP	02 07 38.5	−0.5		
			PKP_2	02 08 19.0			
			PP	02 11 59.0	−2.8		
			SKKS	02 18 23.5			
			LE			17.0	2.18
HHC	161.8	5	+iPKP	02 07 43.0	1.8		
			PKP_2	02 08 32.0			
			PP	02 12 21.0	6.9		
			SKKS	02 18 44.0			
			LN			18.0	3.96
			LE			16.0	4.07
BTO	161.8	9	PKP	02 07 41.0	−0.3		
			PKP_2	02 08 30.0			
			pPKP	02 08 37.0	−3.2		
			SKKS	02 18 37.0			
			SS	02 32 08.0	−2.8		
			LN			24.0	4.50
			LE			23.0	2.70
DL2	162.5	339	ePKP	02 07 42.0	0.2		
			PKP_2	02 08 31.0			
			pPKP	02 08 45.0	4.2		
			PP	02 12 13.5	−4.1		
			PPMZ	m_B = 6.4		7.0	2.43
			cSKKS	02 18 35.0			
			LN			18.0	3.00
BJI	162.6	354	+PKP	02 07 42.0	0.1		
			PKP_2	02 08 32.0			
			pPKP	02 08 44.0	3.1		
			PP	02 12 14.0	−3.9		
			PPMZ	m_B = 6.3		12.0	3.68
LZH	164.1	31	ePKP	02 07 44.5	0.9		
			PKP_2	02 08 40.0			
			PP	02 12 23.0	−3.8		
			PPMZ	m_B = 6.7		6.0	5.00
			SS	02 32 34.0	−0.3		
TIY	165.0	4	ePKP	02 07 43.4	−1.0		
			iPP	02 12 28.0	−3.0		
			PPMZ			18.0	4.22
			SS	02 32 44.0	1.3		
TIA	166.2	348	PKP	02 07 45.5	0.2		
			PKP_2	02 08 47.0			
			pPKP	02 08 43.0	−1.4		
			sPKP	02 09 08.0			
			PP	02 12 34.0	−3.3		
			PPMZ	m_B = 6.3		9.0	2.68
			SKS	02 14 22.0	−1.0		
			SKKS	02 18 54.0			
			LN			25.0	5.43
			LE			25.0	7.20
CD2	167.9	45	ePKP	02 07 45.8	−0.6		
			PKP_2	02 08 56.0			
			PP	02 12 47.0	1.2		
			SKKS	02 19 09.0			

			LE			44.4	27.7
XAN	167.9	19	PKP	02 07 46.6	0.2		
			PKP_2	02 08 53.0			
			$pPKP_2$	02 09 59.0			
			PP	02 12 42.0	−3.9		
			PPMZ	$m_B = 6.4$		6.0	2.71
			SKKS	02 19 10.5			
			LN			18.0	1.59
			LE			19.0	3.12
SSE	169.3	323	PKP	02 07 47.5	0.3		
			PKP_2	02 08 54.5			
			sPKP	02 09 12.0			
			PP	02 12 48.0	−4.7		
			SKKS	02 19 16.0			
			SS	02 33 26.0	0.6		
			LE			16.0	2.05
NJ2	169.6	335	+PKP	02 07 48.0	0.6		
			pPKP	02 08 47.0	0.5		
			PKP_2	02 08 58.5			
			PP	02 12 50.0	−4.3		
KMI	169.6	74	+PKP	02 07 49.0	1.3		
			PKP_2	02 08 56.0			
			sPKP	02 09 10.0			
			$sPKP_2$	02 09 53.0			
			PP	02 12 55.0	0.5		
			PPMZ			17.0	5.69
			iSKS	02 14 23.0	−2.0		
			SKKS	02 19 18.0			
			SS	02 33 35.0	5.9		
			LN			20.0	3.10
WHN	172.1	356	PKP	02 07 49.0	0.1		
			sPKP	02 09 13.0			
			PKP_2	02 09 18.0			
			PP	02 13 06.0	−0.8		
			SKKS	02 19 32.0			
			LE			22.0	4.03
GYA	172.5	58	PKP	02 07 49.0	−0.3		
			PKP_2	02 09 15.0			
			PP	02 13 08.0	−0.8		
			PPMZ	$m_B = 6.4$		8.0	3.70
			SKKS	02 19 30.0			
			LN			48.0	3.80
			LE			48.0	8.20
QZN	174.9	134	cPKP	02 07 51.0	1.1		
			pPKP	02 08 50.0	0.9		
			PKP_2	02 09 24.0			
			PP	02 13 14.0	−6.2		
			PPMZ	$m_B = 6.8$		6.5	9.30
			SKS	02 14 32.0	5.3		
			SKKS	02 19 42.0			
			LN			19.0	2.60
			LE			20.0	3.90
QZH	175.0	298	cPKP	02 07 50.0	0.1		
			pPKP	02 08 56.0	6.9		
			PKP_2	02 09 27.0			
			PP	02 13 17.0	−3.9		
			PPMZ	$m_B = 6.4$		5.0	2.56
			SKKS	02 19 42.0			
			SS	02 34 24.0	3.7		

1987 4 1
O = 02 49 45.5 ± 0.06s
LAT = 0.13 N ± 0.77km
LONG = 130.15 E ± 2.06km
DEPTH = 32 km ± 0.42km
STATIONS USED = 19, STAND DEV = 1.29s

XAN	39.2	332	cP	02 57 12.0	−0.4
TIY	40.8	338	cP	02 57 26.5	0.4
BJI	41.7	344	cP	02 57 32.5	−1.0
LZH	43.3	328	cP	02 57 47.5	0.6
GTA	47.9	328	P	02 58 22.5	−0.9
WMQ	57.6	325	P	02 59 35.0	−0.3

1987 4 1
O = 04 49 11.8 ± 0.10s
LAT = 4.50 S ± 0.93km
LONG = 102.67 E ± 1.22km
DEPTH = 90 km ± 1.21km
STATIONS USED = 25, STAND DEV = 0.99s

XAN	38.8	8	+iP	04 56 29.4	−0.2
TIY	43.0	11	+P	04 57 05.2	1.1
GTA	43.8	357	+P	04 57 10.8	0.1
WMQ	49.9	346	eP	04 57 59.4	0.3
CN2	52.3	21	eP	04 58 14.4	−2.3
MDJ	54.5	23	eP	04 58 32.5	−0.8

1987 4 1
O = 10 38 47.6 ± 0.06s
LAT = 2.18 N ± 0.49km
LONG = 125.68 E ± 0.25km
DEPTH = 186 km ± 0.54km
STATIONS USED = 10, STAND DEV = 1.04s

BJI	38.7	348	eP	10 45 55.5	0.4

1987 4 1
O = 12 59 54.4 ± 0.10s
LAT = 36.62 N ± 1.77km
LONG = 70.87 E ± 1.65km
DEPTH = 216 km ± 0.60km
STATIONS USED = 92, STAND DEV = 1.51s

				m_B = 4.9 / 2			
KSH	4.9	53	P	13 01 09.0	−0.2		
			sP	13 01 56.0	3.2		
			S	13 02 07.0	0.3		
			SME			5.0	17.3
WMQ	14.7	56	+iP	13 03 12.2	−1.7		
			sP	13 04 12.0	3.7		
			S	13 05 56.8	5.7		
			SMN			1.5	0.21
LSA	18.3	106	+P	13 03 54.9	−0.6		
			S	13 07 14.0	5.9		
			SME	m_B = 5.0		4.0	0.37
GTA	22.9	74	+iP	13 04 42.5	1.4		
LZH	26.5	81	+iP	13 05 15.0	0.7		
			PMZ			1.5	0.090
CD2	27.8	92	+iP	13 05 26.8	0.5		
			PMZ			1.1	8.90
BTO	30.7	70	P	13 05 51.8	0.4		
XAN	31.0	83	+iP	13 05 54.0	−0.4		
HHC	31.8	70	+P	13 06 02.0	0.6		
GYA	32.0	98	+P	13 06 02.6	−0.3		
			PcP	13 08 46.8	−0.1		
			S	13 11 00.6	3.9		
			PcS	13 12 27.4	−2.8		
TIY	32.9	75	+P	13 06 11.0	−0.1		
			PMZ			0.8	0.030
			eS	13 11 19.0	6.3		
BJI	35.4	70	−P	13 06 33.0	1.1		
			PcP	13 08 56.5	−0.1		
WHN	36.5	87	+iP	13 06 42.0	1.0		
			PMZ			1.0	0.14
TIA	36.9	76	eP	13 06 45.0	0.2		
QZN	38.4	106	eP	13 06 56.2	−0.4		
GZH	38.9	98	+iP	13 07 02.0	0.8		
NJ2	39.6	82	−iP	13 07 07.6	1.1		
			PcP	13 09 09.6	0.2		
DL2	39.8	71	P	13 07 09.2	1.0		
SNY	40.6	66	+iP	13 07 15.0	−0.3		
			PcP	13 09 13.0	0.2		
CN2	41.6	63	+P	13 07 23.6	0.0		
			pP	13 08 08.0	−0.9		
			PcP	13 09 16.0	−0.2		
			ScP	13 12 46.0	1.8		
SSE	41.8	82	−P	13 07 25.5	1.0		
			PMZ			1.0	0.060
			cPcP	13 09 16.0	−0.6		
			eS	13 13 23.0	−2.5		
			esS	13 14 47.0	2.0		
QZH	42.2	92	P	13 07 28.7	0.4		
MDJ	44.4	61	eP	13 07 44.5	−1.5		

1987 4 1

O = 16 01 45.9 ± 0.16s
LAT = 21.87 N ± 1.99km
LONG = 98.58 E ± 1.70km
DEPTH = 14 km ± 0.22km
STATIONS USED = 76, STAND DEV = 2.21s
Ms = 5.2 / 37, M_L = 5.2 / 3, m_B = 5.4 / 2

KMI	5.0	49	Pn	16 02 57.0	−4.3		
			Pg	16 03 19.0	4.7		
			Sg	16 04 18.0	−4.8		
			LE	Ms = 5.3		8.0	35.9
GYA	8.7	57	P	16 03 53.6	−0.8		
			S	16 05 30.6	−2.0		
			SMN	M_L = 5.5		1.4	0.90
			SME			1.4	1.10
			LN	Ms = 5.4		9.0	15.0
			LE			9.0	13.4
CD2	10.1	26	eP	16 04 14.4	0.1		
			eS	16 06 10.0	1.2		
			LE	Ms = 5.6		6.0	15.0
LSA	10.3	321	P	16 04 15.3	−1.4		
			S	16 06 13.0	1.1		
			LN	Ms = 4.4		10.0	1.68
			LE			9.0	0.65
QZN	10.9	103	eP	16 04 23.6	−1.7		
			eS	16 06 28.5	0.1		
			LN	Ms = 4.9		9.0	3.60
			LE			9.5	2.10
LZH	14.9	17	+iP	16 05 20.0	1.7		
			PMZ			2.0	0.18
			LN	Ms = 5.3		9.0	5.91
			LE			8.0	1.56
XAN	15.2	35	eP	16 05 18.0	−3.7		
			sP	16 05 26.0	−4.5		
			SS	16 08 28.0	0.8		
			LN	Ms = 5.3		7.0	4.15
			LE			8.0	3.27
WHN	16.6	55	eP	16 05 38.5	−1.1		
			eS	16 08 41.0	−2.0		
			iSS	16 09 00.0	−2.1		
			LN	Ms = 5.3		10.0	6.10
GTA	17.5	3	P	16 05 52.5	0.7		
			LE	Ms = 5.3		11.0	5.90
QZH	18.6	77	eP	16 06 07.0	1.7		
			LN	Ms = 5.2		11.0	4.28
TIY	19.8	34	P	16 06 18.0	−1.2		
NJ2	20.7	56	eP	16 06 29.0	0.6		
			LN	Ms = 5.4		11.0	6.10
BTO	21.0	25	P	16 06 31.0	−1.2		

			pP	16 06 39.0	1.1		
			ePP	16 06 55.0	0.7		
			S	16 10 19.0	−1.5		
			LN	Ms=5.1		8.0	1.70
			LE			9.0	1.20
TIA	21.6	44	eP	16 06 37.9	0.6		
			sP	16 06 47.0	0.6		
			eS	16 10 35.5	4.4		
			LN	Ms=5.1		13.0	2.28
			LE			13.0	2.10
HHC	21.9	27	eP	16 06 40.0	−0.7		
SSE	22.2	61	eP	16 06 43.0	−0.6		
			eS	16 10 41.0	−1.7		
			sS	16 10 48.0	−4.4		
			LN	Ms=5.8		12.0	12.6
			LE			12.0	7.23
BJI	23.5	36	eP	16 06 58.5	2.0		
			SMN	m_B=5.3		10.0	0.56
			SME			9.0	0.75
			LN	Ms=4.7		10.0	0.83
WMQ	23.7	340	eP	16 07 01.0	2.7		
			SMN			16.0	0.73
			LN	Ms=4.7		16.0	1.39
KSH	26.1	317	P	16 07 23.0	1.8		
			sP	16 07 30.0	−0.1		
			eS	16 11 53.0	3.2		
			LE	Ms=5.2		14.0	3.20
SNY	28.9	41	eP	16 07 47.8	0.7		
			sP	16 07 54.0	−2.2		
			eS	16 12 40.0	4.0		
			LN	Ms=5.1		20.0	1.92
			LE			20.0	2.13
CN2	31.2	39	eP	16 08 06.0	−1.3		
			eS	16 13 09.0	−3.0		

1987 4 1
O=17 35 26.8 ± 0.15s
LAT=33.20 N ± 1.16km
LONG=120.44 E ± 1.75km
DEPTH= 13 km ± 0.13km
STATIONS USED = 26, STAND DEV= 2.56s
Ms=3.5/ 2, M_L=4.1/15,

NJ2	1.8	230	−iPn	17 35 58.0	0.6		
			Pg	17 36 00.8	2.9		
			Sg	17 36 28.2	6.2		
SSE	2.2	163	Pn	17 36 03.0	−0.3		
			Pg	17 36 09.0	3.5		
			Sn	17 36 30.5	−1.7		
			Sg	17 36 38.0	2.4		
			SMN	M_L=4.1		1.0	1.12
			SME			1.0	1.37
TIA	4.1	319	−Pn	17 36 28.7	−0.3		
			Pg	17 36 39.9	1.5		
			Sg	17 37 32.4	−1.5		
			SMN	M_L=4.0		0.8	0.29
			SME			1.0	0.29
DL2	5.8	9	ePg	17 37 10.5	1.7		
			Sg	17 38 24.5	−3.2		
			SMN	M_L=4.5		1.0	0.45
			SME			1.0	0.40
WHN	5.8	245	ePn	17 36 50.0	−3.1		
			Pg	17 37 13.5	4.0		
			Sn	17 37 56.0	−5.9		
			Sg	17 38 26.5	−2.5		
			SMN	M_L=3.8		1.0	0.10
			SME			0.6	0.050
			LN	Ms=3.4		8.0	0.34
BJI	7.6	335	ePn	17 37 16.5	−1.6		
XAN	9.6	278	eP	17 37 54.0	5.4		
GYA	13.7	244	eP	17 38 46.6	2.9		

1987 4 1
O=20 19 37.5 ± 0.08s
LAT= 1.34 S ± 1.55km
LONG= 89.43 E ± 1.42km
DEPTH= 11 km ± 0.23km
STATIONS USED = 57, STAND DEV= 1.03s
Ms=4.9/ 4, m_B=5.4/ 1

QZN	28.5	44	eP	20 25 35.0	−0.4		
			eS	20 30 20.5	−1.2		
			LN	Ms=4.8		16.0	1.20
LSA	30.9	3	−P	20 25 57.3	−0.1		
GYA	32.3	30	+P	20 26 09.4	0.5		
CD2	34.9	22	P	20 26 31.0	−0.3		
			PMZ			0.9	3.00
LZH	39.6	18	eP	20 27 10.0	−1.3		
WHN	39.6	35	P	20 27 12.6	1.4		
XAN	39.7	26	+P	20 27 11.2	−0.7		
GTA	41.7	12	+P	20 27 28.6	0.3		
SSE	44.2	40	eP	20 27 46.5	−2.1		
			esS	20 34 28.0	−2.9		
			LN	Ms=5.0		16.0	0.97
TIY	44.3	26	eP	20 27 50.6	0.8		
			LZ	Ms=4.7		12.0	0.38
WMQ	45.0	358	P	20 27 55.0	−0.3		
BTO	45.8	22	eP	20 28 01.1	−0.5		
HHC	46.6	23	eP	20 28 09.0	1.0		
BJI	47.9	28	eP	20 28 19.0	0.8		
DL2	49.8	33	eP	20 28 33.0	0.1		
CN2	55.3	31	eP	20 29 12.0	−1.9		

MDJ	58.0	33	eP	20 29 33.5	0.0	

1987 4 1
O = 21 39 04.7 ± 0.10s
LAT = 37.15 N ± 1.31km
LONG = 71.93 E ± 1.46km
DEPTH = 147 km ± 1.06km
STATIONS USED = 19, STAND DEV = 2.12s

KSH	3.9	53	P	21 40 06.8	1.6		
			S	21 40 54.5	3.5		
			SME			2.0	0.70
WMQ	13.7	56	P	21 42 13.1	−1.3		
LSA	17.7	109	−P	21 43 04.8	1.3		
GTA	22.0	76	+P	21 43 52.0	4.2		
SSE	40.9	84	eP	21 46 35.0	1.0		

1987 4 2
O = 05 46 05.0 ± 0.14s
LAT = 12.00 N ± 1.85km
LONG = 87.10 W ± 2.04km
DEPTH = 22 km ± 1.42km
STATIONS USED = 20, STAND DEV = 1.72s

XAN	131.8	342	PKP	06 05 19.2	1.3
WHN	132.9	334	ePKP	06 05 22.0	1.9
LSA	138.5	2	ePKP	06 05 30.1	−0.8
GYA	139.5	341	PKP	06 05 34.8	2.5
QZN	144.9	331	+PKP	06 05 42.0	0.3

1987 4 2
O = 10 48 02.1 ± 0.07s
LAT = 34.73 N ± 0.98km
LONG = 136.92 E ± 1.32km
DEPTH = 332 km ± 1.33km
STATIONS USED = 57, STAND DEV = 1.25s
m_B = 4.5 / 1

MDJ	11.4	332	eP	10 50 37.6	−0.2		
SNY	12.6	308	−iP	10 50 54.3	1.1		
CN2	12.7	319	−P	10 50 53.6	0.0		
DL2	12.9	293	P	10 50 57.0	0.3		
NJ2	15.3	265	+P	10 51 23.4	−0.3		
TIA	16.2	281	eP	10 51 32.5	−0.6		
BJI	17.3	294	eP	10 51 43.0	−1.6		
WHN	19.5	264	−P	10 52 07.5	1.4		
TIY	20.0	286	P	10 52 11.0	−0.3		
BTO	22.0	293	eP	10 52 32.4	0.9		
XAN	23.1	276	−P	10 52 41.3	0.1		
GYA	27.2	261	−P	10 53 18.4	−0.6		
CD2	28.1	272	−iP	10 53 25.6	−0.6		
			PMZ			0.6	0.13
GTA	29.8	290	−iP	10 53 41.2	−0.7		
KMI	31.0	261	eP	10 53 52.0	−0.1		
WMQ	38.7	299	eP	10 54 58.0	1.4		

1987 4 2
O = 11 23 15.5 ± 0.20s
LAT = 8.41 S ± 2.62km
LONG = 116.70 E ± 3.32km
DEPTH = 9 km ± 0.20km
STATIONS USED = 50, STAND DEV = 2.70s
Ms = 4.9 / 8, m_B = 5.3 / 2

QZN	28.1	346	eP	11 29 14.6	4.7		
			LN	Ms = 4.9		17.0	1.10
			LE			15.0	1.30
KMI	36.0	338	+P	11 30 21.5	2.1		
			sP	11 30 29.5	2.2		
			LE	Ms = 4.8		17.0	0.96
GYA	36.0	345	P	11 30 19.6	0.2		
			S	11 35 50.0	−6.7		
WHN	38.8	357	eP	11 30 45.5	2.8		
			eS	11 36 43.0	2.8		
			LN	Ms = 4.9		12.0	0.63
NJ2	40.3	3	eP	11 30 57.5	2.5		
CD2	41.0	343	eP	11 31 00.4	−0.8		
			S	11 37 12.0	−0.6		
XAN	42.9	350	eP	11 31 14.8	−1.4		
			eS	11 37 41.0	0.2		
			LN	Ms = 4.9		14.0	0.74
LZH	45.9	345	eP	11 31 42.0	1.3		
TIY	46.1	355	eP	11 31 37.0	−5.0		
			LN	Ms = 4.9		14.0	0.56
BJI	48.2	359	eP	11 31 57.5	−1.3		
BTO	49.1	353	eP	11 32 06.2	−0.1		
GTA	50.1	343	−P	11 32 14.4	0.9		
			eS	11 39 21.0	−3.2		
			SMN	m_B = 5.3		8.0	0.33
			LE	Ms = 4.9		24.0	1.02
SNY	50.4	7	eP	11 32 19.5	3.9		
			S	11 39 24.0	−2.9		
CN2	52.6	8	eP	11 32 33.0	0.9		
MDJ	54.0	11	eP	11 32 41.0	−2.1		
WMQ	58.2	336	eP	11 33 13.1	−0.2		

1987 4 2
O = 11 42 48.7 ± 0.14s
LAT = 8.50 S ± 1.62km
LONG = 116.70 E ± 2.30km
DEPTH = 30 km ± 0.74km
STATIONS USED = 11, STAND DEV = 3.33s

CD2	41.1	343	eP	11 50 31.6	−0.5
GTA	50.2	343	eP	11 51 42.0	−2.3

1987 4 2
O=13 13 36.5 ± 0.09s
LAT=40.39 N ± 0.24km
LONG=141.49 E ± 0.88km
DEPTH=126 km ± 0.87km
STATIONS USED = 18, STAND DEV= 1.22s

MDJ	9.7	300	−P	13 15 56.7	1.9		
BJI	19.3	277	eP	13 17 53.5	−0.9		

1987 4 2
O=13 28 03.6 ± 0.49s
LAT=36.43 N ± 4.53km
LONG= 81.04 E ± 0.62km
DEPTH= 15 km
STATIONS USED = 7, STAND DEV= 3.84s
M_L=4.0/ 4,

KSH	5.0	309	ePg	13 29 36.5	4.2		
			Sg	13 30 39.5	−1.0		
			SME	M_L=4.2	0.2	0.30	

1987 4 2
O=13 30 42.5 ± 0.14s
LAT=35.88 N ± 1.35km
LONG= 80.76 E ± 1.41km
DEPTH= 21 km ± 0.35km
STATIONS USED = 44, STAND DEV= 2.18s
Ms=4.6/ 4, M_L=4.9/ 4,

KSH	5.2	315	Pg	13 32 14.0	−0.8		
			Sg	13 33 26.0	0.1		
			LN	Ms=4.5		8.0	5.60
WMQ	9.6	32	P	13 33 02.6	0.4		
			LN	Ms=4.6		9.0	2.48
GTA	15.5	71	P	13 34 26.7	4.8		
			LN	Ms=4.1		9.0	0.42
LZH	18.7	83	P	13 35 01.5	−0.5		
CD2	19.8	98	eP	13 35 16.6	1.7		
KMI	21.7	114	eP	13 35 33.5	−1.2		
XAN	23.1	86	eP	13 35 48.4	−0.1		
GYA	24.0	106	P	13 35 57.6	0.4		
TIY	25.4	76	eP	13 36 10.4	0.1		
			eS	13 40 33.5	0.2		
			LN	Ms=4.6		19.0	1.07
SSE	33.9	86	eP	13 37 26.0	−0.3		
			PcS	13 43 46.0	−3.1		

1987 4 2
O=15 38 27.4 ± 0.17s
LAT=52.80 N ± 5.05km
LONG=168.31 W ± 2.80km
DEPTH= 33 km ± 0.69km
STATIONS USED = 34, STAND DEV= 1.20s

CN2	43.5	286	eP	15 46 29.0	−1.1
WHN	58.9	281	eP	15 48 25.5	−0.6
XAN	59.6	287	P	15 48 30.2	−0.8
GTA	60.9	298	P	15 48 38.0	−1.7
CD2	64.9	288	eP	15 49 06.3	0.2
GYA	66.5	283	P	15 49 16.4	−0.1
KMI	69.8	285	eP	15 49 37.5	0.2

1987 4 2
O=18 45 41.7 ± 0.08s
LAT=36.22 N ± 1.45km
LONG= 71.09 E ± 1.36km
DEPTH=103 km ± 0.35km
STATIONS USED =105, STAND DEV= 1.26s
m_B=5.7/ 31

KSH	5.0	49	+iP	18 46 59.5	2.9		
			S	18 47 54.0	0.2		
WMQ	14.8	54	−iP	18 49 05.0	−2.2		
			sP	18 49 36.5	0.3		
			LN			6.0	4.34
LSA	18.0	105	−P	18 49 45.4	−2.3		
			SS	18 53 26.0	−2.9		
GTA	22.9	73	−iP	18 50 38.5	1.1		
			PMZ	m_B=6.0		3.5	2.28
			sP	18 51 16.0	4.4		
			LN			10.0	2.60
			LE			8.0	3.09
LZH	26.4	80	−iP	18 51 12.0	1.3		
			PMZ			1.5	0.49
			PP	18 51 52.0	−5.5		
			S	18 55 33.0	−0.8		
			SMN	m_B=5.8		8.0	2.67
			ScS	19 01 52.0	0.5		
CD2	27.7	92	+iP	18 51 22.6	0.4		
			PMZ			1.2	0.55
			pP	18 51 47.5	3.1		
			S	18 55 59.0	4.6		
KMI	29.3	103	−P	18 51 36.0	−0.8		
			PMZ	m_B=5.9		4.0	0.90
			pP	18 52 01.0	2.0		
			sP	18 52 12.0	0.4		
			S	18 56 20.0	0.0		
			sS	18 57 03.0	2.7		
			SS	18 58 01.0	2.3		
BTO	30.6	70	−iP	18 51 49.5	0.6		
			pP	18 52 13.5	2.1		
			ePP	18 52 54.0	1.4		
			S	18 56 42.5	0.7		

			esS	18 57 25.0	2.7		
			SS	18 58 33.0	2.2		
			LN			11.0	1.00
			LE			11.0	0.70
XAN	30.9	83	−iP	18 51 50.2	−0.8		
			sP	18 52 27.5	1.3		
			S	18 56 48.0	2.3		
			sS	18 57 27.5	1.2		
			LN			7.0	0.41
			LE			9.0	0.83
GYA	31.8	98	−P	18 51 58.0	−0.6		
			PMZ			2.0	0.70
			sP	18 52 34.0	0.2		
			PcP	18 54 46.0	−1.1		
			S	18 57 00.0	0.8		
			ScS	19 02 13.0	−3.5		
HHC	31.8	69	−P	18 51 59.0	0.0		
			S	18 57 02.5	2.7		
			LN			7.0	0.50
			LE			7.0	0.66
TIY	32.9	75	−iP	18 52 08.5	0.1		
			PMZ			1.2	0.23
			pP	18 52 33.5	2.4		
			S	18 57 18.0	1.3		
			SMN	$m_B = 5.2$		9.0	0.62
			sS	18 58 01.0	3.5		
			LN			8.0	0.95
BJI	35.4	70	−P	18 52 30.0	0.3		
			sP	18 53 08.0	2.7		
			PP	18 53 50.0	−0.9		
			eS	18 57 58.0	1.8		
			SMN	$m_B = 5.3$		8.0	0.53
			ScP	18 58 34.0	1.7		
			esS	18 58 42.0	5.6		
WHN	36.3	86	−P	18 52 38.2	0.4		
			PMZ			3.0	1.55
			sP	18 53 15.0	1.6		
			S	18 58 10.0	0.0		
			SMN	$m_B = 5.3$		10.0	0.74
			sS	18 58 54.0	2.8		
			LN			10.0	1.07
TIA	36.9	76	−P	18 52 42.7	0.4		
			pP	18 53 08.9	3.4		
			sP	18 53 20.0	2.2		
			S	18 58 21.5	3.5		
			SMN	$m_B = 5.7$		7.0	1.07
			sS	18 59 03.0	3.6		
			ScS	19 02 42.5	−1.2		
			LN			10.5	0.77
QZN	38.1	106	eP	18 52 51.1	−1.2		
			eS	18 58 36.5	−0.8		
			sS	18 59 20.0	2.2		
GZH	38.7	98	−iP	18 52 58.0	0.6		
			pP	18 53 22.0	1.3		
			sP	18 53 33.0	−0.1		
			S	18 58 40.0	−5.7		
			LE			10.0	0.76
NJ2	39.4	82	−iP	18 53 04.0	0.4		
			S	18 58 59.0	2.0		
			SMN	$m_B = 5.8$		7.0	1.30
			sS	18 59 44.0	5.4		
			ScS	19 02 57.0	−1.5		
DL2	39.7	70	P	18 53 07.5	1.4		
			PMZ			1.0	0.79
			pP	18 53 30.0	0.5		
			S	18 59 04.0	2.6		
			LN			8.0	1.08
SNY	40.6	66	−iP	18 53 13.0	−0.5		
			S	18 59 15.0	0.3		
			SMN	$m_B = 5.4$		8.0	0.57
			sS	18 59 56.5	0.0		
			SS	19 02 16.0	1.1		
			ScS	19 03 04.0	−1.5		
			LN			15.0	1.16
SSE	41.6	82	+P	18 53 22.5	0.8		
			PMZ			1.0	0.15
			pP	18 53 48.0	2.7		
			sP	18 53 59.0	1.5		
			iS	18 59 32.0	1.4		
			SMN	$m_B = 5.7$		6.0	0.85
			sS	19 00 15.0	3.5		
			eSS	19 02 32.0	−2.3		
			ScS	19 03 16.0	4.5		
			LN			14.0	0.69
CN2	41.7	62	−P	18 53 21.0	−1.0		
			pP	18 53 46.0	0.5		
			eS	18 59 28.0	−3.1		
			SMN	$m_B = 5.4$		7.0	0.50
			sS	19 00 12.0	0.0		
			SS	19 02 31.0	−3.9		
QZH	42.0	92	+P	18 53 26.0	1.0		
			S	18 59 38.0	2.5		
			SMN	$m_B = 5.5$		6.0	0.47
			sS	19 00 20.0	2.5		
			LN			8.0	0.39
MDJ	44.5	60	+P	18 53 44.5	−0.3		
			pP	18 54 09.0	0.5		
			S	19 00 10.0	−0.9		
			SMN	$m_B = 5.4$		8.0	0.45
			LN			8.0	0.81

1987 4 2
O = 19 21 13.4 ± 0.04s
LAT = 29.89 N ± 0.69km
LONG = 139.23 E ± 0.82km
DEPTH = 389 km ± 0.23km
STATIONS USED = 45, STAND DEV = 0.70s

MDJ	16.6	335	eP	19 24 45.0	0.1	
DL2	17.1	306	eP	19 24 50.0	0.0	
SNY	17.4	317	−iP	19 24 53.4	0.3	
NJ2	17.6	282	eP	19 24 56.0	0.4	
CN2	17.7	325	−P	19 24 56.7	0.2	
			sP	19 26 32.0	−3.6	
TIA	19.6	295	eP	19 25 15.0	0.1	
BJI	21.4	304	eP	19 25 32.0	−0.5	
TIY	23.5	296	eP	19 25 51.4	−1.2	
HHC	25.0	303	P	19 26 05.2	−0.4	
XAN	26.0	287	eP	19 26 14.2	−0.6	
BTO	26.0	302	eP	19 26 14.8	−0.4	
CD2	30.5	281	+iP	19 26 54.5	−0.2	
GTA	33.6	297	−iP	19 27 20.4	−0.3	
WMQ	42.8	304	P	19 28 37.4	0.4	

1987 4 2
O = 22 55 45.4 ± 0.13s
LAT = 15.91 N ± 2.53km
LONG = 122.17 E ± 2.65km
DEPTH = 41 km ± 0.83km
STATIONS USED = 57, STAND DEV = 2.21s
Ms = 4.2 / 6,

QZN	12.2	287	eP	22 58 38.3	−0.8		
			LN	Ms = 4.1		16.0	1.10
SSE	15.1	357	eP	22 59 20.5	2.2		
			epP	22 59 27.0	0.5		
			eSS	23 02 24.0	1.7		
			LE	Ms = 3.9		20.0	0.58
WHN	16.2	335	eP	22 59 35.0	2.8		
NJ2	16.3	350	+P	22 59 37.0	3.3		
GYA	17.8	309	P	22 59 52.0	−0.7		
KMI	20.4	300	eP	23 00 21.5	0.0		
TIA	20.7	348	eP	23 00 23.7	−1.3		
XAN	21.6	329	P	23 00 33.7	−0.7		
CD2	22.5	315	eP	23 00 42.0	−0.9		
DL2	22.9	359	eP	23 00 49.0	2.0		
TIY	23.4	340	eP	23 00 50.1	−1.3		
			eS	23 04 57.0	−0.7		
			LN	Ms = 4.5		19.0	1.06
BJI	24.6	349	eP	23 01 03.0	−0.4		
SNY	25.9	2	+P	23 01 14.2	−1.0		
LZH	25.9	324	eP	23 01 15.0	−0.8		
HHC	26.5	342	eP	23 01 20.4	−1.0		
BTO	26.8	339	eP	23 01 22.5	−1.3		
CN2	27.9	5	eP	23 01 32.0	−2.4		
MDJ	29.3	11	eP	23 01 44.8	−1.7		
GTA	30.5	325	eP	23 01 55.0	−2.4		

1987 4 3
O = 01 17 10.7 ± 0.07s
LAT = 49.90 N ± 1.19km
LONG = 78.82 E ± 1.10km
DEPTH = 23 km ± 0.23km
STATIONS USED = 104, STAND DEV = 1.19s
Ms = 5.2 / 28, M_L = 5.9 / 1,

WMQ	8.6	132	+iP	01 19 16.0	−1.1		
			S	01 20 54.0	−0.1		
			LN	Ms = 5.8		4.0	21.5
KSH	10.6	192	P	01 19 45.5	0.3		
			eS	01 21 41.0	−3.7		
			LE			3.0	17.4
GTA	18.2	117	P	01 21 22.0	−1.9		
			eS	01 24 50.0	6.5		
			LN	Ms = 5.3		6.5	2.30
			LE			6.0	2.27
LSA	22.2	151	+P	01 22 08.1	0.0		
			eS	01 26 14.0	6.8		
			LN	Ms = 4.7		10.0	0.64
			LE			8.0	0.52
LZH	22.8	118	+iP	01 22 14.0	0.7		
			PMZ			1.5	1.21
			LN	Ms = 5.3		9.0	2.71
			LE			10.0	2.33
BTO	23.7	101	+iP	01 22 23.0	0.8		
			eS	01 26 32.0	−0.8		
			LN	Ms = 5.3		10.0	2.50
			LE			10.0	2.50
HHC	24.6	99	+P	01 22 31.0	0.6		
			S	01 26 45.0	−1.4		
			PcS	01 29 53.0	5.7		
			LN	Ms = 5.7		9.0	3.69
			LE			10.0	6.42
CD2	26.6	126	+iP	01 22 49.8	−0.2		
			PMZ			0.8	0.57
			eS	01 27 22.0	0.1		
TIY	26.9	104	+iP	01 22 52.8	0.3		
			PMZ			0.9	0.13
			eS	01 27 23.0	−3.4		
			LN	Ms = 5.4		10.0	2.46
			LE			9.0	1.67
XAN	27.2	114	+iP	01 22 54.5	−0.5		
			LN	Ms = 5.1		9.0	1.44

BJI	27.9	96	+iP	01 23 02.0	0.2		
			PcP	01 26 17.0	0.5		
			eS	01 27 48.0	5.1		
			LN	Ms=5.4	12.0	2.31	
			LE		11.0	2.43	
TIA	30.8	102	+P	01 23 27.9	0.6		
			PcP	01 26 23.8	0.1		
			LN	Ms=5.2	11.0	1.25	
			LE		11.0	1.17	
KMI	30.9	134	+P	01 23 28.0	−0.6		
			sP	01 23 40.0	0.7		
			eS	01 28 29.0	−1.7		
			LN	Ms=4.7	14.0	0.80	
GYA	31.7	127	+P	01 23 34.8	−0.8		
			PcP	01 26 26.8	0.6		
			S	01 28 38.0	−4.0		
SNY	31.8	87	+iP	01 23 35.3	−0.8		
			PP	01 24 35.0	−6.0		
			PcP	01 26 26.4	0.0		
			LN	Ms=5.2	8.0	0.85	
			LE		9.0	1.19	
CN2	32.0	83	+iP	01 23 37.6	−0.7		
			eS	01 28 46.0	−1.9		
DL2	32.1	93	+P	01 23 38.0	−0.6		
			LN	Ms=5.1	10.0	1.40	
WHN	32.9	113	+iP	01 23 45.7	0.1		
			PMZ		0.6	1.33	
			PcP	01 26 29.0	−0.4		
			eS	01 29 04.0	2.9		
			LN	Ms=5.3	10.0	2.14	
MDJ	34.3	79	+iP	01 23 57.4	−0.6		
			PcP	01 26 33.0	−0.4		
NJ2	34.6	106	+iP	01 24 01.0	0.7		
			PcP	01 26 34.2	0.0		
			LN	Ms=5.3	10.0	1.60	
SSE	36.7	105	−iP	01 24 18.5	0.3		
			PMZ		1.0	0.11	
			PcP	01 26 39.6	−0.7		
			eS	01 30 02.0	2.1		
			LN	Ms=5.0	10.0	0.66	
			LE		10.0	0.48	
GZH	38.0	122	+iP	01 24 29.8	0.7		
QZN	39.5	130	+iP	01 24 42.6	0.8		
QZH	39.6	114	eP	01 24 42.5	0.5		

1987 4 3
O=03 32 21.4 ± 0.13s
LAT=25.19 S ± 1.35km
LONG=179.93 E ± 0.94km
DEPTH=485 km ± 1.75km

STATIONS USED = 47, STAND DEV= 0.88s

SSE	79.3	312	P	03 43 36.6	−1.0	
			PMZ		1.0	0.030
NJ2	81.4	311	+iP	03 43 49.4	0.6	
MDJ	83.3	326	−P	03 43 58.3	0.1	
WHN	83.7	308	P	03 44 00.0	−0.3	
SNY	84.6	321	eP	03 44 04.5	−0.1	
CN2	84.9	324	−P	03 44 05.5	−0.5	
TIA	85.1	314	−P	03 44 07.0	0.1	
GYA	87.3	301	P	03 44 17.4	−0.5	
BJI	87.9	316	eP	03 44 20.5	0.1	
TIY	89.0	313	−iP	03 44 26.2	0.5	
			PMZ		1.0	0.070
KMI	89.8	298	eP	03 44 30.0	0.5	
LZH	94.1	308	P	03 44 50.0	0.7	

1987 4 3
O=05 48 00.5 ± 0.07s
LAT=24.90 N ± 1.15km
LONG= 95.18 E ± 0.73km
DEPTH=152 km ± 0.42km
STATIONS USED = 29, STAND DEV= 1.34s

LSA	6.0	324	+P	05 49 28.6	0.2
KMI	6.9	87	eP	05 49 40.0	−0.1
GYA	10.5	79	P	05 50 31.0	3.1
GTA	15.0	14	P	05 51 28.3	2.2
WHN	17.9	67	eP	05 52 00.8	−0.2
NJ2	22.0	66	+P	05 52 44.0	1.0
SSE	23.8	69	eP	05 53 01.0	0.8
			PMZ		1.0 0.030

1987 4 3
O=11 10 21.0 ± 0.24s
LAT=27.32 S ± 2.01km
LONG= 63.49 W ± 2.87km
DEPTH=577 km ± 2.66km
STATIONS USED = 17, STAND DEV= 3.03s

KSH	144.3	60	PKP	11 28 53.0	−0.1
LSA	157.6	78	ePKP	11 29 13.3	0.1
GTA	161.6	45	−PKP	11 29 17.2	0.1

1987 4 3
O=17 44 49.7 ± 0.11s
LAT= 4.17 S ± 1.62km
LONG=129.64 E ± 2.73km
DEPTH= 33 km ± 0.19km
STATIONS USED = 53, STAND DEV= 1.48s
Ms=4.7/ 2,

SSE	36.0	348	eP	17 51 50.0	0.2
			pP	17 52 00.5	1.5

			S	17 57 27.0	2.1		
			LE	Ms=4.2		28.0	0.39
WHN	37.5	338	eP	17 52 03.0	0.6		
GYA	37.7	325	P	17 52 05.0	0.5		
KMI	39.1	319	eP	17 52 18.0	1.6		
XAN	42.7	334	eP	17 52 45.0	−1.1		
TIY	44.6	340	−P	17 53 01.2	−0.2		
BJI	45.7	346	eP	17 53 09.0	−0.8		
SNY	46.1	354	eP	17 53 12.6	−0.5		
LZH	46.8	331	eP	17 53 18.5	0.1		
CN2	47.9	356	eP	17 53 26.0	−1.1		
MDJ	48.6	360	eP	17 53 32.5	0.2		
GTA	51.3	330	P	17 53 53.1	−0.6		
WMQ	60.8	326	P	17 55 01.7	−0.1		

1987 4 3
O=17 54 22.7 ± 0.13s
LAT= 4.67 S ± 1.47km
LONG=144.27 E ± 1.76km
DEPTH= 90 km ± 0.57km
STATIONS USED = 98, STAND DEV= 1.31s
m_B=5.9 / 48

QZH	38.6	321	−P	18 01 39.0	0.1		
			PMZ	m_B=6.1		3.5	1.04
			iS	18 07 30.0	1.6		
			SME	m_B=5.9		9.0	2.12
			LE			15.0	0.93
GZH	40.9	314	−iP	18 02 01.0	3.0		
			pP	18 02 15.0	−3.9		
			sP	18 02 28.0	−1.8		
			S	18 08 05.5	3.6		
			SMN	m_B=6.0		8.0	1.49
			SME			10.0	2.03
			sS	18 08 39.0	−0.2		
			SS	18 11 05.0	1.9		
QZN	41.3	306	P	18 02 02.5	1.5		
			PcP	18 03 58.0	−0.3		
			S	18 08 08.0	0.6		
			SME	m_B=5.7		9.0	1.30
			sS	18 08 51.0	6.3		
			SS	18 11 10.5	0.0		
			LN			14.0	2.40
			LE			12.5	1.20
SSE	41.8	330	−P	18 02 06.0	0.3		
			PMZ			1.0	0.16
			pP	18 02 29.0	2.3		
			sP	18 02 40.0	2.5		
			iS	18 08 16.0	−0.8		
			SMN	m_B=5.8		8.0	0.63
			SME			8.0	1.19
			sS	18 08 56.0	2.8		
			SS	18 11 24.0	3.3		
			ScS	18 11 58.0	1.5		
			LN			12.0	0.60
			LE			12.0	0.55
NJ2	43.8	328	+P	18 02 20.0	−1.7		
			ScP	18 07 52.5	3.9		
			iS	18 08 50.0	4.6		
			SMN	m_B=6.1		8.0	1.30
			SME			7.5	2.00
			LE			7.5	3.30
WHN	45.2	323	−P	18 02 34.0	1.0		
			PMZ	m_B=6.1		5.0	1.20
			sP	18 03 08.0	3.1		
			iS	18 09 10.0	4.2		
			SME	m_B=5.8		9.0	1.30
			SS	18 12 24.0	2.6		
			LN			16.0	0.84
GYA	47.8	312	P	18 02 54.4	1.1		
			sP	18 03 26.0	0.9		
			S	18 09 47.0	5.9		
			ScS	18 12 38.0	3.9		
TIA	47.9	330	P	18 02 54.0	−0.6		
			pP	18 03 17.0	1.2		
			ScP	18 08 08.3	2.4		
			S	18 09 41.0	−2.6		
			SMN	m_B=5.9		9.0	0.81
			SME			9.0	1.32
			eScS	18 12 38.3	3.1		
			LN			13.0	1.14
			LE			13.0	1.05
DL2	48.1	336	−P	18 02 57.0	0.9		
			PcP	18 04 20.0	−2.0		
			PP	18 04 50.0	1.2		
			PcS	18 08 19.0	2.8		
			eS	18 09 52.0	4.6		
			LN			13.0	0.76
			LE			15.0	0.87
SNY	50.0	340	−iP	18 03 09.4	−0.7		
			PMZ	m_B=6.0		5.5	1.12
			sP	18 03 46.0	3.8		
			PcP	18 04 25.0	−3.6		
			PP	18 05 06.0	−1.0		
			iS	18 10 16.0	3.2		
			SMN	m_B=6.0		8.0	1.06
			SME			7.0	0.98
			sS	18 10 56.0	5.9		
KMI	50.0	308	eP	18 03 11.0	0.1		
			sP	18 03 44.0	1.3		
			PP	18 05 11.0	3.4		

			iS	18 10 18.0	3.8		
			SME	$m_B = 6.1$		7.0	1.80
MDJ	50.8	346	eP	18 03 15.8	−0.7		
			pP	18 03 39.0	1.1		
			PcP	18 04 30.0	−1.6		
			S	18 10 25.0	1.8		
			SMN			20.0	1.50
XAN	50.9	322	P	18 03 17.0	−0.6		
			sP	18 03 53.0	3.3		
			ePP	18 05 17.0	1.3		
			ScP	18 08 22.0	3.5		
			S	18 10 23.0	−2.2		
			SME	$m_B = 5.9$		10.0	1.69
			LN			13.0	0.75
			LE			14.0	0.60
CN2	51.1	343	+P	18 03 18.0	−1.1		
			PMZ	$m_B = 5.9$		5.0	0.70
			sP	18 03 53.0	1.8		
			ScP	18 08 18.0	−1.4		
			eS	18 10 28.0	−1.1		
BJI	51.4	332	eP	18 03 20.5	−0.8		
			PMZ	$m_B = 5.8$		4.0	0.53
			eS	18 10 30.0	−3.2		
			SMN	$m_B = 5.8$		6.0	0.43
			SME			8.0	0.80
			LN			16.0	0.99
TIY	51.5	328	−P	18 03 21.5	−0.4		
			S	18 10 36.0	3.0		
			SME	$m_B = 5.8$		8.0	0.93
			SS	18 14 07.0	−0.5		
			LN			16.0	1.68
CD2	52.4	315	P	18 03 28.6	0.0		
			S	18 10 48.0	2.7		
HHC	54.3	330	−P	18 03 43.0	0.4		
			sP	18 04 12.0	−2.7		
			S	18 11 16.0	5.2		
			SME	$m_B = 5.7$		10.0	1.09
			sS	18 11 49.0	−0.6		
			ScS	18 13 24.0	5.4		
			LN			12.0	0.73
BTO	54.9	328	P	18 03 46.0	−1.1		
			pP	18 04 09.5	0.8		
			PP	18 05 53.0	1.0		
			S	18 11 22.0	3.1		
			LN			17.0	0.90
			LE			17.0	1.10
LZH	55.4	320	−P	18 03 51.5	0.5		
			sP	18 04 22.0	−1.1		
			ScP	18 08 43.0	5.0		
			S	18 11 28.0	1.9		
			SME	$m_B = 5.9$		8.0	1.56
			sS	18 12 07.0	1.9		
			ScS	18 13 32.0	5.2		
			LE			26.0	1.67
GTA	60.0	321	−P	18 04 22.4	−0.5		
			PMZ	$m_B = 5.7$		6.0	0.54
			iS	18 12 29.0	1.8		
			SME	$m_B = 5.7$		12.0	1.51
			SS	18 16 18.0	−6.7		
			LE			12.0	0.54
LSA	61.3	307	P	18 04 31.8	−0.1		
			sP	18 05 07.5	3.6		
			iS	18 12 46.0	1.9		
			SME	$m_B = 5.7$		8.0	0.92
WMQ	70.0	320	P	18 05 27.0	−0.5		
			PMZ			2.0	0.18
			PcP	18 05 47.0	−1.3		
			pP	18 05 50.0	0.0		
			sP	18 06 03.0	2.8		
			S	18 14 31.1	2.6		
			SME	$m_B = 6.0$		7.0	1.48
KSH	76.4	312	P	18 06 07.0	1.8		
			epP	18 06 30.0	2.1		
			esP	18 06 42.0	4.0		
			ePP	18 08 56.0	−3.1		
			iS	18 15 46.0	3.4		
			SME	$m_B = 6.4$		8.0	2.60

1987 4 4
O = 00 17 01.4 ± 0.31s
LAT = 14.48 S ± 2.57km
LONG = 70.95 W ± 2.79km
DEPTH = 159 km ± 2.78km
STATIONS USED = 41, STAND DEV = 2.43s

MDJ	145.3	334	−PKP	00 36 20.4	−0.8
WMQ	145.5	28	PKP	00 36 21.0	−0.8
CN2	147.6	338	ePKP	00 36 24.0	−1.1
SNY	150.0	338	−PKP	00 36 33.5	4.7
GTA	153.9	16	PKP	00 36 34.4	−0.3
TIA	157.2	343	ePKP	00 36 39.5	0.6
XAN	160.5	0	ePKP	00 36 43.4	0.5
GYA	167.9	10	PKP	00 36 49.6	0.0

1987 4 4
O = 07 58 39.0 ± 0.12s
LAT = 22.16 S ± 1.11km
LONG = 179.54 W ± 0.70km
DEPTH = 587 km ± 1.50km
STATIONS USED = 55, STAND DEV = 0.77s
$m_B = 5.5$ / 1

SSE	77.7	311	eP	08 09 37.1	−0.7	
GZH	79.3	300	+iP	08 09 47.5	1.1	
NJ2	79.8	311	+iP	08 09 50.2	0.9	
QZN	80.2	295	eP	08 09 51.2	−0.1	
MDJ	81.1	326	eP	08 09 55.0	−0.5	
			pP	08 11 56.4	−2.7	
WHN	82.3	307	eP	08 10 02.0	0.3	
SNY	82.6	321	+iP	08 10 03.0	−0.1	
CN2	82.7	323	−P	08 10 03.0	−1.1	
			PMZ		2.0	0.30
			pP	08 12 10.0	1.8	
			eS	08 19 33.0	−1.9	
TIA	83.3	313	−P	08 10 07.1	0.0	
BJI	86.1	316	eP	08 10 20.5	0.2	
GYA	86.2	300	−P	08 10 21.4	0.2	
TIY	87.3	313	+P	08 10 26.9	0.6	
XAN	88.0	308	−iP	08 10 29.9	0.5	
CD2	90.5	303	eP	08 10 40.8	−0.2	
GTA	96.9	310	eP	08 11 10.1	−0.2	

1987 4 4

O = 09 51 38.2 ± 0.11s
LAT = 16.83 S ± 2.18km
LONG = 172.44 W ± 2.65km
DEPTH = 37 km ± 0.39km
STATIONS USED = 52, STAND DEV = 1.21s
Ms = 5.2 / 1,

SSE	79.6	307	−P	10 03 40.0	−3.8	
			eS	10 13 38.0	−3.9	
MDJ	80.7	322	eP	10 03 49.5	−0.6	
CN2	82.8	320	+P	10 03 59.0	−1.7	
			epP	10 04 09.0	−2.0	
			esP	10 04 15.0	−0.2	
			eS	10 14 14.0	−1.2	
SNY	82.9	317	−P	10 04 01.4	−0.2	
			eS	10 14 16.0	−0.9	
WHN	84.7	304	eP	10 04 10.5	0.2	
TIA	84.8	310	−P	10 04 11.2	0.0	
BJI	87.1	313	eP	10 04 22.5	0.1	
TIY	88.9	310	eP	10 04 31.2	0.3	
			eS	10 15 17.0	2.6	
			LN	Ms = 5.2	17.0	0.46
GYA	89.5	298	P	10 04 35.0	1.0	
XAN	90.2	305	eP	10 04 37.2	0.0	
HHC	90.7	313	P	10 04 40.0	0.6	
BTO	91.7	312	eP	10 04 43.0	−1.1	
KMI	92.5	295	eP	10 04 48.0	0.2	
LZH	94.8	306	eP	10 04 58.0	−0.4	

1987 4 4

O = 11 00 27.4 ± 0.11s
LAT = 41.54 N ± 0.98km
LONG = 79.14 E ± 1.44km
DEPTH = 27 km ± 0.58km
STATIONS USED = 8, STAND DEV = 3.00s
M_L = 3.1 / 5,

KSH	3.2	230	ePg	11 01 25.0	0.9	
			Sg	11 02 09.0	1.4	
WMQ	6.7	67	ePg	11 02 28.0	1.9	

1987 4 4

O = 12 12 16.3 ± 0.43s
LAT = 14.48 S ± 4.89km
LONG = 75.23 W ± 3.46km
DEPTH = 40 km ± 3.82km
STATIONS USED = 43, STAND DEV = 2.68s

MDJ	143.3	330	ePKP	12 31 43.0	−4.3
KSH	144.5	40	ePKP	12 31 46.0	−3.6
CN2	145.9	333	PKP	12 31 50.0	−1.7
			pPKP	12 32 06.0	2.9
WMQ	147.3	23	PKP	12 31 55.5	1.2
SNY	148.3	333	−PKP	12 31 59.0	3.4
HHC	153.1	349	ePKP	12 32 05.0	1.9
BTO	153.6	351	ePKP	12 32 07.2	3.4
GTA	154.8	9	+PKP	12 32 06.0	0.5
TIY	155.9	345	ePKP	12 32 07.8	1.0
XAN	160.2	350	PKP	12 32 12.2	0.1
GYA	168.0	352	PKP	12 32 20.2	1.0

1987 4 4

O = 12 40 35.1 ± 0.14s
LAT = 34.01 N ± 1.62km
LONG = 114.59 E ± 1.04km
DEPTH = 12 km ± 0.74km
STATIONS USED = 8, STAND DEV = 3.95s
M_L = 2.8 / 8,

TIA	3.0	43	Pn	12 41 19.9	−3.4	
			Pg	12 41 25.4	−3.1	
			SMN	M_L = 3.0	0.4	0.060
			SME		0.4	0.060
TIY	4.1	335	Pg	12 41 50.5	3.0	
			Sg	12 42 36.5	−6.8	
			SME	M_L = 3.0	0.8	0.030
XAN	4.7	272	Pn	12 41 44.2	−2.2	
			Pg	12 41 58.2	0.0	
			eSg	12 42 58.2	−4.3	
			SMN	M_L = 2.7	0.6	0.010
			SME		0.6	0.010

1987 4 4

O=15 59 06.7 ± 0.28s
LAT=36.71 N ± 4.43km
LONG= 28.33 E ± 2.34km
DEPTH= 21 km ± 0.42km
STATIONS USED = 46, STAND DEV= 1.72s

WMQ	45.0	62	P	16 07 23.5	0.3	
LSA	52.2	78	P	16 08 19.0	−0.4	
GTA	55.0	64	P	16 08 38.8	−0.7	
CD2	61.4	71	eP	16 09 24.2	−0.5	
BTO	61.7	59	eP	16 09 25.6	−0.8	
HHC	62.6	58	eP	16 09 33.0	0.2	
XAN	63.9	66	eP	16 09 40.0	−0.7	
TIY	64.7	61	eP	16 09 45.9	−0.1	
GYA	65.8	74	P	16 09 53.2	−0.4	
BJI	66.1	57	P	16 09 55.5	0.1	
TIA	68.7	60	eP	16 10 11.1	−0.3	
WHN	69.6	67	P	16 10 21.0	4.1	
SNY	70.1	52	+P	16 10 19.6	−0.5	
CN2	70.2	50	−P	16 10 20.0	−0.9	
NJ2	72.1	63	eP	16 10 31.0	−0.9	
MDJ	72.3	47	eP	16 10 34.5	1.2	

1987 4 4
O=17 41 56.8 ± 0.13s
LAT=11.56 S ± 1.50km
LONG=117.39 E ± 1.70km
DEPTH= 35 km ± 0.31km
STATIONS USED = 25, STAND DEV= 1.61s

GYA	39.2	345	P	17 49 24.4	0.6		
WHN	42.0	356	eP	17 49 47.5	1.0		
CD2	44.2	343	P	17 50 05.0	0.1		
			PMZ			0.6	0.030
XAN	46.1	350	eP	17 50 18.9	−0.8		
BJI	51.3	359	eP	17 51 00.5	0.0		
GTA	53.3	343	P	17 51 15.2	0.0		
CN2	55.6	7	eP	17 51 30.0	−1.8		
MDJ	57.0	10	eP	17 51 41.2	−0.8		

1987 4 4
O=17 45 12.7 ± 0.11s
LAT=42.55 N ± 1.20km
LONG= 80.10 E ± 1.29km
DEPTH= 29 km ± 0.31km
STATIONS USED = 33, STAND DEV= 2.23s
Ms=4.2/ 1, M_L=4.3/ 6,

KSH	4.4	227	Pg	17 46 32.0	1.4		
			Sg	17 47 30.0	−0.5		
			LN	Ms=4.2		4.0	1.90
WMQ	5.7	75	Pn	17 46 40.1	4.2		
			Pg	17 46 53.0	−0.4		
			Sg	17 48 10.5	−0.9		
			SMN	M_L=4.4		1.5	0.31
GTA	15.2	95	−P	17 48 44.0	−3.5		
LSA	15.6	142	P	17 48 54.1	1.2		
TIY	25.1	90	+P	17 50 38.3	1.5		

1987 4 4
O=20 32 14.8 ± 0.08s
LAT=58.86 S ± 2.18km
LONG= 25.30 W ± 2.20km
DEPTH= 33 km ± 0.34km
STATIONS USED = 10, STAND DEV= 1.96s

TIY	145.6	109	ePKP	20 51 50.5	−0.5
BJI	149.3	111	ePKP	20 52 00.5	3.6

1987 4 5
O=11 33 29.7 ± 0.11s
LAT=41.93 S ± 5.57km
LONG= 18.77 W ± 2.65km
DEPTH= 10 km
STATIONS USED = 17, STAND DEV= 2.48s
Ms=5.5/ 1,

GTA	134.2	72	ePKP	11 52 55.0	5.7		
TIY	142.7	80	ePKP	11 53 02.3	−2.2		
TIA	145.6	85	ePKP	11 53 09.8	0.4		
BJI	146.2	78	ePKP	11 53 11.0	0.5		
SSE	146.3	96	PKP	11 53 10.5	−0.2		
			LE	Ms=5.5		20.0	0.58
CN2	153.8	74	ePKP	11 53 22.0	−0.2		
MDJ	156.9	73	ePKP	11 53 30.0	3.7		

1987 4 6
O=00 24 08.7 ± 0.10s
LAT=51.97 N ± 5.03km
LONG=173.67 W ± 2.23km
DEPTH= 27 km ± 1.35km
STATIONS USED = 58, STAND DEV= 1.59s
Ms=5.0/ 11,

MDJ	37.6	282	eP	00 31 25.0	1.7		
			pP	00 31 33.2	1.6		
			eS	00 37 10.0	−1.0		
			LE	Ms=5.2		20.0	2.20
CN2	40.5	283	−P	00 31 47.8	0.0		
			cpP	00 31 57.0	0.9		
			S	00 37 55.0	0.6		
SNY	42.8	282	+iP	00 32 06.2	−0.1		
			sP	00 32 19.0	0.7		
DL2	45.8	280	eP	00 32 30.5	0.4		
BJI	48.3	285	eP	00 32 51.5	1.1		
			eS	00 39 44.0	−4.1		

			LN	Ms=4.9	17.0	0.73
TIA	50.2	280	eP	00 33 05.3	0.4	
			LN	Ms=5.0	16.0	0.82
HHC	50.6	289	eP	00 33 08.0	0.4	
SSE	51.2	273	P	00 33 11.0	−1.1	
			sP	00 33 25.0	0.9	
			eS	00 40 29.0	1.5	
			sS	00 40 44.0	2.4	
			LE	Ms=4.8	18.0	0.57
BTO	51.6	289	P	00 33 15.0	−0.6	
			sP	00 33 31.0	3.5	
			ePP	00 35 12.0	−0.8	
			eS	00 40 33.0	−1.0	
			LN	Ms=5.1	17.0	0.80
			LE		17.0	0.70
NJ2	52.0	275	eP	00 33 17.5	−0.5	
TIY	52.1	285	eP	00 33 19.5	0.6	
			sP	00 33 34.5	3.7	
			eS	00 40 41.5	1.4	
			LE	Ms=5.3	21.0	1.69
WHN	55.8	277	P	00 33 46.0	−0.1	
			sP	00 33 58.0	−0.2	
			S	00 41 33.0	4.2	
			LE	Ms=5.3	22.0	1.73
XAN	56.7	284	P	00 33 52.6	0.1	
GTA	58.3	295	P	00 34 03.7	−0.3	
			LE	Ms=5.3	16.0	1.10
WMQ	61.7	306	eP	00 34 28.7	1.6	
CD2	61.9	285	eP	00 34 27.8	−1.3	
GYA	63.4	280	eP	00 34 38.6	−0.3	
KMI	66.8	281	−P	00 35 01.0	0.3	
			sP	00 35 15.0	2.4	
			eS	00 43 50.0	−0.3	
QZN	67.0	272	eP	00 35 07.0	5.4	
LSA	70.2	293	−P	00 35 21.8	−0.4	
KSH	70.7	310	eP	00 35 22.0	−2.9	

1987 4 6

O=08 42 46.4 ± 0.07s
LAT=39.48 N ± 0.56km
LONG=118.15 E ± 0.59km
DEPTH= 12 km ± 0.09km
STATIONS USED = 9, STAND DEV= 3.32s

M_L=2.9/ 9,

BJI	1.6	291	Pg	08 43 14.5	−0.6	
			Sg	08 43 35.5	−1.8	
			SMN	M_L=2.7	0.5	0.090
			SME		0.5	0.10
DL2	2.8	101	cPg	08 43 42.0	6.7	
			Sg	08 44 11.0	−2.1	
			SMN	M_L=3.1	0.6	0.10
			SME		0.6	0.080
TIA	3.4	194	ePg	08 43 47.8	1.9	
			Sg	08 44 30.1	−1.7	
			SMN	M_L=2.6	0.3	0.020
			SME		0.3	0.020

1987 4 6

O=09 25 39.6 ± 0.07s
LAT= 8.01 S ± 1.11km
LONG=156.54 E ± 1.68km
DEPTH= 35 km ± 0.46km
STATIONS USED = 66, STAND DEV= 0.99s

Ms=5.0/ 7,

SSE	51.6	321	eP	09 34 45.5	0.6	
			eS	09 42 04.0	2.0	
			sS	09 42 14.0	−4.3	
			LN	Ms=5.0	20.0	0.60
			LE		20.0	0.58
NJ2	53.7	320	eP	09 35 02.5	1.8	
WHN	55.7	315	eP	09 35 16.0	0.3	
DL2	56.8	328	eP	09 35 23.0	−0.6	
TIA	57.5	322	eP	09 35 27.8	−0.6	
			LN	Ms=5.0	13.0	0.44
MDJ	57.7	337	−P	09 35 30.5	0.4	
SNY	58.1	331	eP	09 35 31.0	−1.3	
			eS	09 43 32.0	2.8	
CN2	58.8	334	eP	09 35 36.0	−1.2	
			eS	09 43 37.0	−1.5	
GYA	59.3	307	eP	09 35 41.0	0.0	
BJI	60.6	325	eP	09 35 49.5	−0.5	
TIY	61.3	321	eP	09 35 54.8	−0.1	
			eS	09 44 06.0	−5.8	
			LN	Ms=4.8	11.0	0.25
XAN	61.5	316	P	09 35 55.0	−1.0	
KMI	61.9	304	+P	09 35 59.0	0.5	
			eS	09 44 16.0	−2.6	
CD2	63.6	310	P	09 36 10.0	−0.2	
HHC	63.8	323	eP	09 36 11.6	0.2	
BTO	64.6	322	eP	09 36 16.5	0.0	
LZH	66.1	315	eP	09 36 26.5	0.2	
GTA	70.5	317	P	09 36 53.5	−0.3	
			LE	Ms=5.0	26.0	0.70
LSA	73.1	304	−P	09 37 09.4	−0.1	
WMQ	80.6	317	eP	09 37 51.6	0.4	
KSH	87.8	310	P	09 38 30.0	2.5	

1987 4 6

O=10 23 12.7 ± 0.16s
LAT=51.91 N ± 0.37km

LONG = 176.19 W ± 1.00km
DEPTH = 64 km ± 1.50km
STATIONS USED = 68, STAND DEV = 1.04s

CN2	39.0	282	eP	10 30 34.0	−1.3
			pP	10 30 52.0	1.6
			eS	10 36 26.0	−3.4
SNY	41.3	281	+iP	10 30 55.1	1.2
DL2	44.2	278	eP	10 31 18.0	0.1
BJI	46.8	283	eP	10 31 39.5	0.8
TIA	48.7	279	+P	10 31 53.7	0.5
SSE	49.6	271	eP	10 31 57.0	−3.2
			pP	10 32 19.0	3.4
			sS	10 39 26.0	−3.2
BTO	50.2	288	eP	10 32 06.0	1.4
NJ2	50.4	273	+P	10 32 06.4	0.1
			pP	10 32 24.0	2.3
TIY	50.6	283	+P	10 32 09.0	1.4
			eS	10 39 21.0	5.3
WHN	54.2	275	P	10 32 34.7	−0.1
XAN	55.2	282	P	10 32 41.4	−0.2
LZH	56.8	288	eP	10 32 53.5	0.0
GTA	56.9	293	P	10 32 54.4	0.4
GZH	60.2	270	eP	10 33 17.5	0.4
WMQ	60.4	304	P	10 33 19.0	0.5
CD2	60.5	283	eP	10 33 18.8	0.0
GYA	61.9	278	+P	10 33 28.4	−0.1
KMI	65.3	280	+P	10 33 51.0	0.2
QZN	65.4	270	eP	10 33 48.0	−3.5
LSA	68.8	291	−P	10 34 13.4	0.1

1987 4 6
O = 15 01 15.8 ± 0.10s
LAT = 37.19 N ± 1.39km
LONG = 71.66 E ± 1.29km
DEPTH = 112 km ± 0.52km
STATIONS USED = 14, STAND DEV = 2.40s

KSH	4.1	55	P	15 02 22.0	4.3	
			S	15 03 08.9	4.5	
			SMN		0.2	0.30
			SME		0.2	0.30
WMQ	13.9	57	P	15 04 27.8	−1.1	
GTA	22.2	76	P	15 06 04.4	0.6	

1987 4 6
O = 18 51 37.3 ± 0.18s
LAT = 5.94 S ± 1.46km
LONG = 151.07 E ± 2.53km
DEPTH = 34 km ± 0.32km
STATIONS USED = 52, STAND DEV = 1.43s
Ms = 5.1 / 4, m_B = 5.6 / 1

SSE	46.6	324	eP	19 00 05.0	0.5	
			pP	19 00 14.2	0.2	
			eS	19 06 54.0	3.4	
			LN	Ms = 5.0	20.0	0.60
			LE		20.0	0.81
GZH	46.8	309	eP	19 00 06.0	−0.1	
NJ2	48.7	323	−P	19 00 22.0	1.3	
			pP	19 00 30.8	0.6	
			eS	19 07 20.0	0.1	
WHN	50.5	318	eP	19 00 35.0	0.2	
			LE	Ms = 4.6	24.0	0.50
DL2	52.3	331	eP	19 00 48.0	−0.2	
GYA	53.7	309	P	19 01 00.2	1.1	
CN2	54.7	337	eP	19 01 11.0	5.3	
BJI	55.9	328	eP	19 01 15.0	0.2	
XAN	56.3	318	eP	19 01 16.6	−0.9	
TIY	56.4	324	eP	19 01 20.0	1.7	
			LN	Ms = 5.2	22.0	1.32
CD2	58.2	312	eP	19 01 30.6	−0.4	
BTO	59.7	325	eP	19 01 41.0	−0.6	
LZH	60.9	317	P	19 01 49.0	−0.6	
GTA	65.3	318	+P	19 02 18.4	−0.7	
WMQ	75.4	318	P	19 03 19.0	−1.3	

1987 4 6
O = 18 56 52.5 ± 0.12s
LAT = 19.39 N ± 1.63km
LONG = 146.45 E ± 3.32km
DEPTH = 64 km ± 0.77km
STATIONS USED = 32, STAND DEV = 2.13s

CN2	30.0	329	eP	19 02 57.2	−0.8
GYA	37.2	288	P	19 04 01.6	1.7
BTO	37.6	312	eP	19 04 02.6	−0.6
GTA	44.7	307	P	19 05 01.6	0.0
LSA	50.9	293	eP	19 05 51.0	0.5
WMQ	54.4	310	+P	19 06 15.0	−0.8

1987 4 6
O = 21 07 32.1 ± 0.13s
LAT = 3.50 N ± 1.75km
LONG = 128.29 E ± 3.00km
DEPTH = 33 km ± 0.48km
STATIONS USED = 25, STAND DEV = 2.36s

WHN	30.0	335	eP	21 13 34.0	−5.8
XAN	35.3	332	+P	21 14 27.3	0.4
BJI	38.0	345	eP	21 14 50.0	0.8
LZH	39.5	328	+P	21 15 03.5	1.6
GTA	44.1	328	+P	21 15 40.7	1.0
WMQ	53.8	324	P	21 16 55.5	1.0

1987 4 6

O = 23 28 35.2 ± 0.16s
LAT = 26.59 N ± 2.12km
LONG = 96.11 E ± 1.38km
DEPTH = 93 km ± 0.63km
STATIONS USED = 32, STAND DEV = 2.74s

LSA	5.4	306	+iP	23 29 55.2	0.3	
CD2	8.0	56	eP	23 30 36.6	6.2	
GYA	9.5	88	P	23 30 50.6	0.1	
XAN	13.3	53	eP	23 31 46.6	4.6	
WMQ	18.5	341	+P	23 32 47.7	1.0	

1987 4 7

O = 00 40 41.2 ± 0.10s
LAT = 37.36 N ± 1.91km
LONG = 141.68 E ± 1.92km
DEPTH = 26 km ± 0.57km
STATIONS USED = 96, STAND DEV = 1.68s
Ms = 6.6 / 52, m_B = 6.6 / 43

MDJ	11.7	312	+iP	00 43 31.0	1.9	
			S	00 45 42.0	2.9	
CN2	13.9	303	+iP	00 44 00.0	0.9	
			PMZ	m_B = 7.0	8.0	22.9
			pP	00 44 06.0	0.5	
			S	00 46 37.0	3.8	
			SMN	m_B = 6.6	10.0	39.6
			SME		10.0	9.00
SNY	14.6	293	+iP	00 44 11.0	2.1	
			PMZ	m_B = 6.6	8.0	9.20
			pP	00 44 17.0	1.7	
			PP	00 44 23.0	2.6	
			S	00 46 57.0	6.2	
			LN	Ms = 6.1	13.0	55.0
DL2	15.9	282	+iP	00 44 27.0	2.5	
			PMZ	m_B = 6.9	12.0	63.5
			sP	00 44 38.0	2.7	
			iS	00 47 24.0	4.4	
			LN	Ms = 6.8	12.0	49.4
			LE		12.0	254
SSE	18.0	256	+iP	00 44 52.0	−0.1	
			PMZ	m_B = 6.3	9.0	14.4
			epP	00 44 58.0	−0.8	
			sP	00 45 05.0	2.0	
			PP	00 45 07.0	0.5	
			S	00 48 16.0	6.7	
			SS	00 48 34.0	1.6	
			PcP	00 49 28.0	1.6	
			LE	Ms = 6.7	15.0	198
NJ2	19.5	261	+iP	00 45 08.0	−1.2	
			LE	Ms = 6.8	16.0	214
TIA	19.7	274	+iP	00 45 09.9	−1.7	
			PMZ	m_B = 6.2	8.0	9.86
			S	00 48 49.0	2.6	
			sS	00 48 55.0	−2.5	
			LN	Ms = 6.6	12.0	40.5
			LE		12.0	96.3
BJI	20.1	286	eP	00 45 13.0	−2.7	
			PMZ		1.5	0.71
			eS	00 48 50.0	−5.0	
			SMN	m_B = 6.5	9.0	18.0
			LN	Ms = 6.3	14.0	57.9
			LE		15.0	30.4
TIY	23.2	280	+iP	00 45 46.0	−1.0	
			PMZ		1.2	0.78
			S	00 49 59.0	6.8	
			SMN	m_B = 7.0	10.0	20.4
			SME		10.0	39.7
			PcS	00 53 12.0	−1.7	
			LN	Ms = 7.2	14.0	95.4
			LE		13.0	381
QZH	23.2	244	+P	00 45 46.0	−1.7	
			PMZ	m_B = 6.3	8.0	9.58
			iS	00 49 52.0	−2.4	
			SMN	m_B = 6.5	11.0	18.8
			LN	Ms = 6.5	18.0	66.5
			LE		18.0	83.1
HHC	23.6	288	eP	00 45 49.0	−2.1	
			PP	00 46 18.5	−4.4	
			PcP	00 49 41.0	4.2	
			S	00 49 55.0	−4.5	
			SME	m_B = 6.7	11.0	25.4
			SS	00 50 47.0	−0.7	
			LN	Ms = 6.3	13.0	26.3
			LE		13.0	40.6
WHN	23.6	261	+iP	00 45 51.0	−0.3	
			PMZ	m_B = 6.6	8.0	22.0
			pP	00 45 58.0	−1.1	
			PcP	00 49 40.0	3.1	
			iS	00 49 59.0	−2.0	
			SME		14.0	33.6
			LE	Ms = 6.6	16.0	107
BTO	24.8	287	+iP	00 46 01.0	−1.5	
			pP	00 46 09.0	−1.2	
			PP	00 46 36.0	−2.6	
			S	00 50 16.0	−3.8	
			SMN	m_B = 6.4	10.0	4.50
			SME		10.0	10.4
			LN	Ms = 6.5	13.0	47.0
			LE		13.0	47.0
XAN	26.7	273	+P	00 46 19.8	−1.2	

			PMZ		$m_B=6.7$	6.5	11.5
			S	00 50 54.0	1.5		
			SMN		$m_B=6.5$	10.0	9.48
			SME			14.0	13.9
			LN		Ms=6.6	13.0	45.9
			LE			13.0	52.0
GZH	28.2	248	+P	00 46 36.0	1.9		
			PMZ		$m_B=6.8$	10.0	18.9
			iS	00 51 19.0	2.3		
			SMN		$m_B=7.0$	10.0	22.9
			SME			10.0	24.1
			LN		Ms=6.7	17.0	56.0
			LE			18.0	87.1
LZH	30.2	279	+iP	00 46 52.0	−0.5		
			PMZ			2.0	1.86
			S	00 51 42.0	−6.4		
			SME			22.0	41.7
			LE		Ms=6.9	17.0	159
GYA	31.5	260	+P	00 47 01.0	−2.6		
			PMZ			3.0	4.40
			pP	00 47 10.0	−1.4		
			PP	00 48 11.0	3.8		
			S	00 52 04.0	−4.2		
			SMN		$m_B=6.6$	8.0	8.40
			SME			8.0	5.60
			LN		Ms=6.8	15.0	47.5
			LE			15.0	78.0
CD2	31.9	270	+iP	00 47 06.5	−0.6		
			PMZ		$m_B=6.4$	7.0	4.77
			PP	00 48 13.5	1.1		
			S	00 52 12.0	−2.5		
			LE		Ms=6.9	13.0	107
GTA	32.7	287	+iP	00 47 13.6	−0.5		
			PP	00 48 19.0	−3.7		
			PcP	00 50 00.0	1.1		
			iS	00 52 24.0	−3.9		
			SMN		$m_B=6.3$	10.0	5.55
			LE		Ms=6.0	11.5	10.2
			SS	00 54 30.0	5.3		
			ScS	00 57 34.4	−3.6		
			LE		Ms=6.7	24.0	108
QZN	33.3	246	+P	00 47 20.5	1.5		
			PMZ		$m_B=6.6$	7.0	6.90
			PP	00 48 34.0	4.0		
			iS	00 52 41.0	4.3		
			SMN		$m_B=6.7$	10.5	8.40
			SME			10.5	12.3
			LN		Ms=6.6	18.0	50.6
			LE			15.0	40.9
KMI	35.2	261	+iP	00 47 36.0	−0.1		
			PMZ		$m_B=6.5$	7.0	5.5
			pP	00 47 42.0	−1.9		
			LE		Ms=6.8	17.0	10
WMQ	40.9	297	+iP	00 48 24.7	1.4		
			PP	00 50 03.0	2.3		
			PcP	00 50 26.0	2.4		
			S	00 54 35.0	2.8		
			LN		Ms=6.7	15.0	55.
LSA	42.4	275	+iP	00 48 36.8	0.7		
			PMZ		$m_B=6.4$	7.0	3.9
			PP	00 50 13.0	−3.9		
			PcS	00 54 19.0	−0.3		
			S	00 54 56.0	1.5		
			SMN		$m_B=6.5$	10.0	7.7
			LE		Ms=6.4	16.0	25.
KSH	50.5	294	+iP	00 49 42.0	2.2		
			pP	00 49 46.0	−1.7		
			PP	00 51 40.0	4.5		
			iS	00 56 58.0	6.9		
			SME		$m_B=7.1$	9.0	20.6
			LE		Ms=7.2	17.0	133

1987 4 7
O=00 51 36.8 ± 0.12s
LAT=22.76 S ± 1.44km
LONG= 66.08 W ± 1.04km
DEPTH=205 km ± 0.99km
STATIONS USED = 35, STAND DEV= 1.45s

KSH	143.8	54	PKP	01 10 47.5	−1.2
MDJ	154.7	333	ePKP	01 11 06.2	0.8
CN2	157.0	338	ePKP	01 11 07.8	−0.7
BJI	162.7	354	ePKP	01 11 15.0	0.2
GYA	172.4	59	PKP	01 11 22.6	0.5
			PKP_2	01 12 47.6	

1987 4 7
O=05 57 03.1 ± 0.12s
LAT= 2.53 N ± 1.14km
LONG=126.81 E ± 1.89km
DEPTH=121 km ± 0.93km
STATIONS USED = 32, STAND DEV= 1.51s

SSE	28.9	350	eP	06 02 55.0	1.9
			eS	06 07 37.0	3.5
TIA	34.7	346	eP	06 03 43.8	0.3
XAN	35.5	334	eP	06 03 49.4	−1.2
DL2	36.5	353	eP	06 03 57.0	−1.9
TIY	37.4	341	eP	06 04 10.0	3.4
BJI	38.6	347	−P	06 04 16.5	0.5
SNY	39.2	356	−P	06 04 21.9	0.4
LZH	39.6	330	eP	06 04 26.5	1.9

CN2	41.1	359	eP	06 04 38.0	0.9	
MDJ	42.0	3	eP	06 04 43.0	−1.2	
LSA	43.3	312	−P	06 04 56.2	0.9	

1987 4 7
O = 15 31 50.3 ± 0.03s
LAT = 44.06 N ± 0.31km
LONG = 84.66 E ± 0.26km
DEPTH = 15 km
STATIONS USED = 5, STAND DEV = 3.37s
M_L = 2.6 / 5,

1987 4 7
O = 17 10 08.2 ± 0.03s
LAT = 35.37 N ± 0.43km
LONG = 105.10 E ± 0.31km
DEPTH = 17 km ± 0.22km
STATIONS USED = 7, STAND DEV = 1.23s
M_L = 3.0 / 6,

LZH	1.2	305	Pg	17 10 31.0	0.3	
			Sg	17 10 48.5	0.8	
			SMN	M_L = 3.0	0.5	0.22
			SME		0.5	0.27
XAN	3.4	112	Pg	17 11 08.0	−0.7	
			Sg	17 11 51.8	−3.5	
			SMN	M_L = 2.5	0.6	0.010
			SME		0.6	0.020
GTA	5.8	315	Pn	17 11 35.2	0.6	
			Pg	17 11 57.5	6.3	
			Sn	17 12 41.0	−2.1	
			Sg	17 13 11.4	0.5	
			SMN	M_L = 2.9	0.7	0.010
			SME		0.6	0.010

1987 4 7
O = 20 17 34.7 ± 0.11s
LAT = 23.26 N ± 1.87km
LONG = 143.85 E ± 2.57km
DEPTH = 35 km ± 0.54km
STATIONS USED = 31, STAND DEV = 1.46s

SSE	21.6	296	eP	20 22 24.0	0.3
MDJ	24.3	335	eP	20 22 52.3	2.0
CN2	25.5	328	eP	20 23 03.0	1.3
GYA	33.8	283	P	20 24 15.8	−0.5
GTA	40.5	304	eP	20 25 11.8	−0.7
LSA	47.3	290	eP	20 26 07.2	−0.4
WMQ	50.1	308	P	20 26 28.6	−0.2

1987 4 7
O = 21 17 11.1 ± 0.70s
LAT = 35.44 N ± 6.13km
LONG = 77.88 E ± 2.60km
DEPTH = 20 km
STATIONS USED = 10, STAND DEV = 3.74s
M_L = 4.4 / 3,

KSH	4.3	340	cPn	21 18 19.4	3.4	
			Sn	21 19 00.9	−6.3	
			SMN	M_L = 4.4	0.2	0.60
			SME		0.2	0.80
WMQ	11.3	39	eP	21 19 52.4	−2.4	
			SMN	,	0.4	0.030
			SME		0.6	0.030

1987 4 7
O = 22 48 20.6 ± 0.12s
LAT = 11.59 N ± 1.21km
LONG = 125.67 E ± 2.69km
DEPTH = 29 km ± 0.41km.
STATIONS USED = 9, STAND DEV = 2.32s

SSE	19.9	349	eP	22 52 51.7	−0.6
WHN	21.6	333	eP	22 53 14.0	3.7
GYA	23.2	312	P	22 53 28.0	1.3

1987 4 8
O = 06 30 32.3 ± 0.10s
LAT = 0.14 N ± 1.29km
LONG = 130.16 E ± 2.29km
DEPTH = 34 km ± 0.38km
STATIONS USED = 70, STAND DEV = 1.26s
Ms = 4.6 / 9,

QZH	27.1	336	eP	06 36 14.0	−0.1	
			eS	06 40 50.0	1.8	
QZN	27.4	314	eP	06 36 17.0	0.1	
			eS	06 40 53.5	0.3	
			LN	Ms = 4.6	13.0	0.60
GZH	28.1	326	eP	06 36 22.0	−1.1	
SSE	31.9	345	eP	06 36 57.5	0.0	
			eS	06 42 08.0	2.5	
			eSS	06 44 00.0	2.3	
			LN	Ms = 4.5	20.0	0.70
NJ2	33.5	342	+P	06 37 11.2	0.3	
WHN	33.8	335	+P	06 37 15.0	1.7	
			S	06 42 40.0	7.0	
GYA	34.6	321	P	06 37 21.4	0.8	
KMI	36.3	315	−P	06 37 37.0	1.6	
TIA	37.9	343	eP	06 37 48.0	−0.3	
			eS	06 43 34.0	−3.2	
			LN	Ms = 4.6	12.0	0.39
XAN	39.2	332	−P	06 37 58.6	−0.4	
DL2	39.4	349	eP	06 38 01.0	0.4	

CD2	39.5	323	eP	06 38 02.2	0.0		
TIY	40.8	338	+P	06 38 13.0	0.3		
			eS	06 44 24.0	2.5		
			LN	Ms=4.6		15.0	0.44
BJI	41.7	344	eP	06 38 20.0	0.0		
SNY	41.9	353	eP	06 38 21.8	0.1		
			S	06 44 41.0	4.1		
			LN	Ms=4.9		21.0	1.16
LZH	43.3	328	−iP	06 38 34.0	0.6		
			PMZ			1.5	0.14
CN2	43.7	355	eP	06 38 35.4	−0.7		
			eS	06 45 00.0	−3.5		
HHC	43.9	340	P	06 38 39.0	1.0		
BTO	44.2	338	eP	06 38 40.0	−0.7		
MDJ	44.3	359	eP	06 38 41.5	0.5		
LSA	47.4	312	−P	06 39 05.4	−0.5		
GTA	47.9	328	−P	06 39 09.8	−0.2		
			PcP	06 40 37.2	−0.4		
			LN	Ms=4.6		13.0	0.28
WMQ	57.6	325	P	06 40 21.6	−0.3		

1987 4 8
O=06 58 40.8 ± 0.08s
LAT=36.73 N ± 2.03km
LONG=142.04 E ± 1.62km
DEPTH= 50 km ± 1.22km
STATIONS USED = 54, STAND DEV= 1.69s
Ms=4.2/ 5,

MDJ	12.3	314	eP	07 01 36.0	0.2		
CN2	14.5	304	eP	07 02 04.0	−0.7		
SNY	15.2	295	−P	07 02 13.0	−0.5		
SSE	18.2	258	eP	07 02 53.0	1.6		
			eSS	07 06 27.0	−5.6		
			LE	Ms=4.2		12.0	0.54
BJI	20.5	287	P	07 03 15.5	−2.0		
TIY	23.6	281	eP	07 03 51.0	3.2		
			eS	07 07 54.0	−0.8		
			SS	07 08 39.0	−4.7		
			LN	Ms=4.7		14.0	0.74
			LE			14.0	0.91
WHN	23.8	263	eP	07 03 50.2	−0.1		
BTO	25.2	289	eP	07 04 02.0	−2.0		
XAN	27.1	274	eP	07 04 21.3	0.3		
LZH	30.6	280	−iP	07 04 53.5	0.6		
GYA	31.7	261	P	07 05 01.8	−0.3		
CD2	32.2	271	P	07 05 06.2	−0.3		
GTA	33.1	288	P	07 05 15.2	0.3		
QZN	33.3	247	eP	07 05 17.8	1.9		
WMQ	41.4	297	eP	07 06 26.1	1.6		
LSA	42.7	276	P	07 06 37.0	1.3		

1987 4 8
O=09 49 38.1 ± 0.14s
LAT= 5.33 S ± 1.27km
LONG=153.05 E ± 1.70km
DEPTH= 59 km ± 0.91km
STATIONS USED = 80, STAND DEV= 1.27s
Ms=5.3/ 21, m_B=5.6/ 4

SSE	47.3	322	P	09 58 08.0	−0.2		
			PMZ			1.4	0.050
			pP	09 58 20.0	−2.5		
			eS	10 04 56.0	−0.1		
			esS	10 05 16.0	−5.0		
			LN	Ms=5.3		26.0	1.33
			LE			26.0	2.48
GZH	48.0	308	eP	09 58 14.0	0.6		
			eS	10 05 06.0	0.4		
QZN	49.0	301	P	09 58 21.9	1.0		
			eS	10 05 21.5	2.2		
			eSS	10 08 47.8	2.6		
NJ2	49.4	321	+P	09 58 25.0	0.5		
			S	10 05 24.0	−0.6		
WHN	51.4	316	eP	09 58 40.0	0.3		
			S	10 05 58.0	5.8		
			sS	10 06 15.0	−3.4		
			LE	Ms=5.1		24.0	1.51
DL2	52.8	329	eP	09 58 48.0	−1.8		
TIA	53.3	324	+P	09 58 53.0	−0.8		
			eS	10 06 19.7	0.7		
			ScS	10 08 40.0	6.9		
			LN	Ms=4.8		34.0	0.63
			LE			34.0	0.71
MDJ	54.0	339	+P	09 58 58.3	−0.7		
			sP	09 59 16.0	−3.8		
			eS	10 06 30.0	1.3		
			LE	Ms=5.1		35.0	1.77
SNY	54.1	333	eP	09 58 55.0	−4.6		
			eS	10 06 28.0	−1.8		
			LN	Ms=5.3		29.0	2.00
			LE			28.0	1.29
CN2	54.9	336	+P	09 59 04.0	−1.5		
			PMZ	m_B=5.8		4.0	0.50
			PcP	10 00 06.0	0.3		
			ScP	10 04 03.0	5.7		
			eS	10 06 36.0	−4.5		
			SS	10 10 17.0	−5.5		
GYA	54.9	308	P	09 59 06.2	0.4		
			S	10 06 45.0	5.2		
			LE	Ms=5.3		20.0	1.50
BJI	56.5	326	eP	09 59 16.0	−0.9		

			eS	10 07 00.0	−1.7		
			esS	10 07 22.0	−4.9		
			LN	Ms=5.3		24.0	0.99
			LE			24.0	1.40
TIY	57.1	322	+P	09 59 21.0	−0.5		
			pP	09 59 37.5	1.5		
			S	10 07 13.0	4.2		
			sS	10 07 37.0	1.8		
			LN	Ms=5.4		24.0	1.71
			LE			20.0	1.45
XAN	57.2	317	+P	09 59 21.4	−0.6		
KMI	57.5	304	+P	09 59 25.0	0.7		
			sP	09 59 43.5	−1.5		
			eS	10 07 20.0	4.5		
CD2	59.3	311	eP	09 59 36.2	−0.4		
			S	10 07 36.0	−1.1		
			LE	Ms=5.2		24.0	1.30
HHC	59.6	324	P	09 59 38.8	−0.3		
BTO	60.4	323	+P	09 59 44.0	−0.2		
			epP	09 59 57.5	−1.3		
			S	10 07 50.0	−1.3		
LZH	61.8	316	+iP	09 59 54.5	0.7		
			PMZ			2.0	0.080
			pP	10 00 09.0	0.6		
			eS	10 08 12.0	1.2		
GTA	66.2	317	+iP	10 00 23.1	0.4		
			PMZ	m_B=5.8		3.5	0.41
			S	10 09 09.5	5.5		
			SMN	m_B=5.2		10.0	0.30
			LN	Ms=5.2		11.0	0.49
LSA	68.7	305	+P	10 00 38.8	−0.1		
WMQ	76.3	317	+P	10 01 24.2	1.0		
			sS	10 11 28.0	0.3		
			LE	Ms=5.5		23.0	1.70
KSH	83.5	311	P	10 02 04.0	2.4		
			epP	10 02 18.0	1.4		
			esP	10 02 23.5	0.8		
			eSKS	10 12 20.0	6.9		
			S	10 12 22.0	6.9		
			LE	Ms=5.7		12.0	1.20

1987 4 8
O=15 42 33.1 ± 0.29s
LAT=37.01 N ± 2.95km
LONG= 81.23 E ± 1.40km
DEPTH= 15 km ± 0.09km
STATIONS USED = 7, STAND DEV= 4.31s
M_L=4.1/ 3,

KSH	4.8	302	ePn	15 43 46.5	1.0		
			eSn	15 44 48.0	5.2		
			SMN	M_L=4.3		0.5	0.50
			SME			0.5	0.40
GTA	14.8	75	eP	15 46 04.3	0.1		

1987 4 8
O=15 45 13.5 ± 0.14s
LAT=11.88 N ± 3.21km
LONG= 87.20 W ± 4.76km
DEPTH= 31 km ± 1.50km
STATIONS USED = 32, STAND DEV= 2.19s
Ms=5.1/ 1,

BJI	124.0	338	ePKP	16 04 11.5	1.7		
TIY	127.3	340	ePKP	16 04 17.0	0.5		
SSE	129.3	328	ePKP	16 04 20.0	−0.1		
			LZ	Ms=5.1		24.0	0.31
XAN	131.8	342	ePKP	16 04 28.6	3.6		
GYA	139.6	341	PKP	16 04 42.6	3.2		
QZN	145.0	331	ePKP	16 04 49.4	0.6		

1987 4 8
O=17 42 36.7 ± 0.34s
LAT=11.82 N ± 7.75km
LONG= 86.42 W ± 5.45km
DEPTH= 51 km ± 3.28km
STATIONS USED = 77, STAND DEV= 2.64s
Ms=6.6/26, m_B=5.9/ 2

MDJ	115.0	332	ePKP	18 01 14.2	1.3		
			LZ	Ms=5.9		30.0	2.60
CN2	117.5	334	ePKP	18 01 17.0	−0.6		
			PP	18 02 28.0	−5.7		
			PPMZ	m_B=5.9		12.0	0.90
			eSS	18 18 30.0	−7.0		
			LZ	Ms=6.6		20.0	9.40
SNY	119.9	334	ePKP	18 01 23.2	0.9		
			PP	18 02 50.0	0.4		
			PPMZ			23.0	1.26
			LN	Ms=6.6		20.0	6.41
			LE			20.0	7.18
DL2	123.2	334	ePKP	18 01 29.0	0.4		
			PP	18 03 11.0	−1.3		
			LN	Ms=6.7		22.0	8.04
			LE			20.0	6.19
BJI	124.3	339	ePKP	18 01 32.5	1.7		
			ePP	18 03 16.0	−4.2		
			eSKKS	18 10 06.0			
			eSS	18 20 00.0	−4.3		
			LN	Ms=6.6		20.0	8.25
			LE			20.0	3.00
WMQ	124.4	5	PKP	18 01 32.3	1.3		
			PP	18 03 16.0	−4.6		

			LZ	Ms=7.0	21.0	23.5
HHC	125.0	343	ePKP	18 01 33.0	0.7		
			LN	Ms=6.8	22.0	12.8
			LE		22.0	6.28
BTO	125.7	345	PKP	18 01 35.0	1.5		
			LN	Ms=6.7	20.0	9.80
			LE		25.0	3.80
KSH	126.4	17	PKP	18 01 39.0	4.0		
			PP	18 03 31.0	−2.9		
			PPMZ	m_B=6.0	4.0	0.40
			SKS	18 08 44.0	5.6		
			LN	Ms=6.9	20.0	17.1
TIA	127.3	336	ePKP	18 01 38.0	1.3		
			ePP	18 03 36.5	−2.8		
			eSS	18 20 36.0	−6.5		
			LN	Ms=6.6	20.0	6.71
			LE		20.0	2.89
TIY	127.6	341	+PKP	18 01 39.0	1.6		
			sPKP	18 01 51.0			
			PP	18 03 39.0	−2.8		
			PKS	18 05 22.5			
			eSKKS	18 10 26.0			
			LN	Ms=6.9	22.0	13.8
			LE		21.0	10.4
GTA	128.7	354	+PKP	18 01 40.8	1.3		
			PP	18 03 48.0	−1.3		
			LZ	Ms=6.9	21.0	17.8
SSE	129.8	329	−PKP	18 01 43.0	1.7		
			sPKP	18 01 55.0			
			PP	18 03 56.0	0.2		
			PKS	18 05 13.0			
			SKS	18 08 46.0	1.5		
			SKKS	18 10 47.0			
			eSS	18 21 10.0	−2.7		
			LN	Ms=6.4	22.0	3.68
			LE		22.0	4.00
NJ2	130.1	332	+PKP	18 01 43.5	1.5		
			PKS	18 05 16.0			
			LN	Ms=6.6	19.0	6.90
LZH	131.4	349	+PKP	18 01 47.0	2.4		
			LN	Ms=7.0	20.0	16.1
			LE		20.0	7.25
XAN	132.1	343	+PKP	18 01 47.4	1.5		
			PP	18 04 16.3	5.3		
			PKS	18 05 22.3			
			LN	Ms=6.9	22.0	9.68
			LE		22.0	14.1
WHN	133.4	335	PKP	18 01 50.0	1.8		
			sPKP	18 02 03.6			
			PP	18 04 18.0	−0.8		
			PKS	18 05 18.0			
			SS	18 22 00.0	3.1		
			LN	Ms=6.6	20.0	6.20
			LE		26.0	5.21
QZH	136.1	326	ePKP	18 01 48.0	−5.1		
			PP	18 04 38.0	2.3		
			LN	Ms=6.5	20.0	3.44
			LE		20.0	4.18
CD2	136.4	347	ePKP	18 01 53.4	−0.5		
			PP	18 04 40.0	2.3		
			PKS	18 05 29.0			
			LN	Ms=6.9	19.0	12.7
GYA	139.9	342	+PKP	18 02 02.0	1.7		
			PP	18 05 06.0	6.5		
			PKS	18 05 37.0			
			LN	Ms=6.8	23.0	12.1
			LE		23.0	6.70
GZH	140.3	331	ePKP	18 01 56.0	−4.8		
			LN	Ms=6.6	20.0	6.79
KMI	142.2	346	−PKP	18 02 02.0	−2.5		
			sPKP	18 02 16.0			
			LE	Ms=6.6	20.0	7.40
QZN	145.4	332	+iPKP	18 02 13.0	3.2		
			sPKP	18 02 27.5			
			PP	18 05 32.0	−0.6		
			PKS	18 05 43.0			
			LN	Ms=6.7	21.0	8.70

1987 4 8
O=19 58 04.1 ± 0.18s
LAT= 8.51 S ± 3.26km
LONG=111.13 E ± 3.48km
DEPTH= 63 km ± 0.51km
STATIONS USED = 33, STAND DEV= 1.60s

GYA	35.0	353	P	20 04 54.8	1.6
CD2	39.8	350	eP	20 05 33.8	0.4
NJ2	41.0	10	eP	20 05 45.0	2.0
TIY	46.0	1	eP	20 06 23.8	0.2
BJI	48.5	5	eP	20 06 43.0	−0.3
GTA	48.8	348	eP	20 06 45.6	−0.1
			PcP	20 08 09.5	0.8
SNY	51.4	12	eP	20 07 03.6	−1.4
CN2	53.7	13	eP	20 07 20.0	−2.1
MDJ	55.4	16	eP	20 07 34.3	−0.8
WMQ	56.2	340	P	20 07 40.8	−0.2

1987 4 8
O=22 43 46.2 ± 0.14s
LAT=25.04 S ± 1.84km
LONG=179.75 E ± 2.66km

DEPTH = 508 km ± 0.85km
STATIONS USED = 42, STAND DEV = 1.58s

QZN	80.9	296	eP	22 55 08.8	0.2			
NJ2	81.2	311	+P	22 55 10.6	0.2			
MDJ	83.1	326	eP	22 55 19.5	−0.3			
WHN	83.5	308	eP	22 55 22.0	0.1			
CN2	84.7	324	−P	22 55 27.1	−0.5			
			pP	22 57 21.0	2.3			
GYA	87.1	301	P	22 55 39.8	0.3			
BJI	87.7	317	eP	22 55 41.5	−0.5			
TIY	88.8	313	−P	22 55 47.8	0.5			
XAN	89.3	308	eP	22 55 50.0	0.5			
CD2	91.5	303	eP	22 56 00.4	0.6			
GTA	98.2	310	eP	22 56 30.0	−0.6			

1987 4 9
O = 00 48 53.9 ± 0.11s
LAT = 1.26 N ± 1.51km
LONG = 128.54 E ± 1.96km
DEPTH = 33 km ± 0.17km
STATIONS USED = 98, STAND DEV = 1.26s
Ms = 6.1 / 53, m_B = 5.9 / 22

QZH	25.4	339	+P	00 54 20.0	−0.5			
			sP	00 54 38.5	4.9			
			S	00 58 44.0	1.8			
			SMN	m_B = 5.8		8.0	2.02	
QZN	25.4	315	−P	00 54 21.6	0.9			
			sP	00 54 33.5	−0.3			
			S	00 58 44.0	1.5			
			SMN	m_B = 6.0		11.0	4.20	
			sS	00 58 59.0	0.9			
			SS	00 59 47.0	1.3			
			PcS	01 01 33.5	1.9			
			LN	Ms = 6.1		16.0	21.5	
			LE			16.0	18.0	
GZH	26.2	327	+P	00 54 27.5	−0.6			
			pP	00 54 40.0	2.9			
			S	00 59 01.5	6.1			
			sS	00 59 15.0	3.6			
			LN	Ms = 6.3		19.0	37.1	
			LE			19.0	42.8	
SSE	30.5	347	−P	00 55 04.0	−2.3			
			PMZ	m_B = 5.8		10.0	1.92	
			pP	00 55 15.0	−0.5			
			sP	00 55 22.0	2.4			
			PP	00 56 04.0	−2.1			
			iS	01 00 00.0	−4.3			
			SME			20.0	3.65	
			sS	01 00 20.0	0.3			
			PcS	01 01 42.0	−5.1			
			ScS	01 05 34.0	−3.9			
			LN	Ms = 6.0		15.0	8.15	
			LE			16.0	14.3	
NJ2	32.0	344	+P	00 55 18.0	−1.4			
			iS	01 00 24.0	−3.6			
			LN	Ms = 5.9		10.5	9.10	
WHN	32.1	337	+P	00 55 20.0	−0.5			
			pP	00 55 29.0	−0.6			
			PP	00 56 29.0	2.0			
			S	01 00 28.0	−0.7			
			sS	01 00 42.0	−3.0			
			LE	Ms = 5.8		16.0	11.3	
GYA	32.7	322	P	00 55 26.8	0.7			
			pP	00 55 35.0	−0.2			
			S	01 00 34.0	−4.5			
			LN	Ms = 6.3		16.0	25.9	
			LE			16.0	19.3	
KMI	34.4	316	+iP	00 55 42.0	1.3			
			pP	00 55 49.0	−0.8			
			eS	01 01 03.0	−2.9			
			LN	Ms = 6.0		18.0	14.3	
TIA	36.4	344	eP	00 55 56.0	−1.1			
			epP	00 56 05.0	−1.4			
			ePP	00 57 19.0	−1.4			
			S	01 01 35.0	0.3			
			SMN	m_B = 5.8		11.0	2.15	
			sS	01 01 48.0	−3.2			
			SS	01 04 04.5	3.6			
			LN	Ms = 6.0		14.0	11.2	
			LE			12.0	4.55	
XAN	37.4	333	+iP	00 56 06.1	−0.1			
			LN	Ms = 5.8		14.0	7.48	
CD2	37.7	324	P	00 56 09.9	1.4			
			pP	00 56 16.0	−1.8			
			S	01 01 54.5	−0.7			
			LE	Ms = 6.2		17.0	18.4	
DL2	38.0	351	eP	00 56 11.0	0.1			
			epP	00 56 21.0	0.6			
			eS	01 02 00.0	−0.8			
			LN	Ms = 6.0		10.0	1.68	
			LE			14.0	9.19	
TIY	39.2	340	eP	00 56 20.0	−1.0			
			pP	00 56 30.0	−0.3			
			sP	00 56 37.5	3.2			
			PP	00 57 54.0	−1.0			
			PcP	00 58 27.0	−2.8			
			iS	01 02 19.5	0.4			
			SMN	m_B = 5.9		9.0	1.24	
			SME			10.0	1.72	
			sS	01 02 40.5	6.0			

			ScS	01 06 21.0	−3.5		
			LN	Ms=6.2		32.0	13.6
			LE			27.0	31.5
BJI	40.2	345	P	00 56 29.0	−0.3		
			eS	01 02 28.0	−6.1		
			SME	m_B=5.4		12.0	0.78
			LE	Ms=6.1		25.0	23.6
SNY	40.6	354	+iP	00 56 32.0	−0.8		
			PMZ			15.0	1.35
			pP	00 56 42.2	0.0		
			sP	00 56 50.0	3.7		
			S	01 02 40.6	1.1		
			SME	m_B=5.7		11.0	1.58
			sS	01 02 58.0	2.0		
			LN	Ms=6.3		21.0	9.14
			LE			22.0	30.1
LZH	41.5	329	eP	00 56 41.5	1.0		
			PMZ			1.5	0.14
			pP	00 56 48.0	−1.7		
			S	01 02 56.0	3.0		
			SME			13.0	9.66
			sS	01 03 13.0	3.6		
			LN	Ms=6.2		15.0	11.9
			LE			15.0	9.13
HHC	42.3	341	+P	00 56 47.0	0.3		
			PP	00 58 25.5	−2.3		
			S	01 03 02.0	−2.2		
			LN	Ms=6.0		16.0	7.75
			LE			15.0	5.48
CN2	42.4	357	+P	00 56 46.0	−1.8		
			PMZ	m_B=5.5		6.0	0.50
			pP	00 56 56.0	−1.2		
			eS	01 03 02.0	−5.4		
			SME	m_B=6.0		10.0	2.80
			LN	Ms=6.0		28.0	17.2
BTO	42.6	339	P	00 56 48.0	−1.2		
			PP	00 58 25.0	−5.7		
			S	01 03 04.0	−4.7		
			LN	Ms=6.3		19.0	14.6
			LE			19.0	16.4
MDJ	43.2	1	eP	00 56 53.0	−0.8		
			sP	00 57 11.0	3.8		
			S	01 03 19.0	1.9		
			SME	m_B=5.8		10.0	1.73
LSA	45.4	312	−P	00 57 12.8	0.5		
			S	01 03 56.0	6.5		
			SMN	m_B=6.3		7.0	3.40
			LN	Ms=6.0		22.0	11.7
GTA	46.1	329	+iP	00 57 17.9	0.3		
			pP	00 57 23.8	−3.1		
			S	01 04 00.0	0.4		
			SMN	m_B=5.6		10.0	0.82
			sS	01 04 13.0	−3.3		
			LE	Ms=6.1		17.5	13.1
WMQ	55.8	325	+iP	00 58 30.1	−0.4		
			S	01 06 10.3	−2.1		
			LN	Ms=6.5		18.0	24.3
KSH	61.0	315	P	00 59 08.0	0.6		
			S	01 07 28.0	6.9		
			eSS	01 11 29.0	6.8		
			LN	Ms=6.4		19.0	16.6

1987 4 9
O=01 36 02.9 ± 0.15s
LAT= 1.19 N ± 1.81km
LONG=128.73 E ± 2.99km
DEPTH= 36 km ± 0.80km
STATIONS USED = 22, STAND DEV= 2.53s

QZN	25.6	315	eP	01 41 34.4	3.2
GZH	26.4	327	eP	01 41 41.4	3.1
CD2	37.9	324	eP	01 43 17.4	−1.2
TIY	39.3	339	eP	01 43 33.2	2.5
BJI	40.3	345	eP	01 43 36.0	−2.9
LZH	41.7	329	eP	01 43 52.0	1.5
GTA	46.3	329	eP	01 44 29.2	1.6
WMQ	55.9	325	eP	01 45 41.6	1.2

1987 4 9
O=02 51 50.5 ± 0.12s
LAT= 1.17 N ± 1.45km
LONG=128.88 E ± 2.64km
DEPTH= 33 km ± 0.76km
STATIONS USED = 17, STAND DEV= 2.54s

XAN	37.7	332	eP	02 59 03.4	−1.3
CD2	38.0	324	eP	02 59 11.2	3.9
LZH	41.8	329	eP	02 59 39.0	−0.1
WMQ	56.0	325	eP	03 01 26.3	−2.7

1987 4 9
O=04 55 45.0 ± 0.06s
LAT=44.15 N ± 1.82km
LONG=149.29 E ± 1.13km
DEPTH= 38 km ± 0.38km
STATIONS USED = 31, STAND DEV= 1.11s

MDJ	14.1	279	eP	04 59 03.5	−1.0
CN2	17.2	277	eP	04 59 44.0	0.2
SNY	18.9	272	eP	05 00 05.4	−0.3
BJI	24.8	272	eP	05 01 05.5	0.1
TIA	25.7	263	eP	05 01 14.5	0.7
TIY	28.4	270	eP	05 01 39.0	0.4

LZH	35.3	273	eP	05 02 39.5	0.4		
CD2	38.0	265	eP	05 03 01.6	0.0		
GYA	38.5	257	P	05 03 06.0	−0.1		

1987 4 9
O=05 18 42.5 ± 0.07s
LAT=38.69 N ± 0.64km
LONG= 98.61 E ± 0.59km
DEPTH= 20 km
STATIONS USED = 8, STAND DEV= 1.94s
M_L=3.0/ 4,

GTA	1.2	52	−iPg	05 19 02.8	−1.0		
			Sg	05 19 20.4	0.4		
			LE			5.0	0.31
LZH	4.9	120	ePg	05 20 09.5	0.0		

1987 4 9
O=07 25 33.4 ± 0.11s
LAT=35.48 N ± 1.45km
LONG= 87.01 E ± 1.19km
DEPTH= 24 km ± 0.08km
STATIONS USED = 74, STAND DEV= 1.91s
Ms=5.2/ 39, m_B=5.3/ 1

LSA	6.7	148	ePn	07 27 07.0	−4.9		
			Pg	07 27 34.0	1.5		
			Sg	07 29 04.0	−0.8		
			LN	Ms=5.2		9.0	17.4
WMQ	8.3	3	eP	07 27 36.0	0.0		
			S	07 29 07.5	−2.5		
			LN	Ms=5.4		4.5	10.7
KSH	9.6	298	P	07 27 57.0	3.2		
			sP	07 28 07.0	3.2		
			S	07 29 43.0	1.2		
			LE	Ms=5.7		8.0	28.8
GTA	10.9	65	P	07 28 09.4	−2.2		
			LN	Ms=5.2		12.0	11.7
LZH	13.7	83	+P	07 28 47.0	−1.9		
			eSS	07 31 36.0	−0.4		
			LN	Ms=5.3		7.5	4.87
			LE			6.0	1.81
CD2	14.7	103	eP	07 29 03.6	0.9		
			LN	Ms=5.0		10.0	4.07
KMI	17.0	123	−P	07 29 33.5	1.2		
			sP	07 29 42.0	−0.6		
			eS	07 32 41.0	0.8		
			LN	Ms=5.1		10.0	3.90
XAN	18.1	88	eP	07 29 44.4	−0.5		
			S	07 33 08.0	5.7		
			LN	Ms=5.2		10.0	3.41
			LE			8.0	2.06

BTO	18.8	67	eP	07 29 53.0	−1.1		
			ePP	07 30 04.0	−5.6		
			S	07 33 16.0	−3.2		
			LN	Ms=5.0		12.0	2.30
			LE			12.0	2.30
GYA	19.1	113	P	07 29 57.4	0.0		
			sP	07 30 06.8	−1.0		
			PP	07 30 16.0	2.6		
			S	07 33 31.0	5.8		
			LN	Ms=5.2		12.0	2.80
			LE			12.0	3.30
HHC	20.0	67	+P	07 30 08.0	0.3		
			S	07 33 45.0	−0.8		
			LN	Ms=5.3		15.0	6.21
			LE			13.0	1.47
TIY	20.5	76	P	07 30 11.9	−1.1		
			SMN	m_B=5.3		9.0	0.45
			SME			6.0	0.72
			LN	Ms=5.2		11.5	4.21
WHN	23.4	94	+P	07 30 42.5	0.6		
			pP	07 30 51.0	1.6		
			iS	07 34 46.0	−4.1		
			LN	Ms=5.2		8.0	2.07
BJI	23.5	70	eP	07 30 44.0	1.8		
			epP	07 30 52.0	2.3		
			eS	07 34 51.0	0.3		
			LN	Ms=5.4		16.0	6.24
TIA	24.4	79	eP	07 30 53.0	1.7		
			LN	Ms=5.5		13.0	5.83
			LE			13.0	1.36
QZN	26.0	123	eP	07 31 06.0	−0.6		
			ePP	07 31 50.0	2.8		
			eS	07 35 37.0	3.2		
			sS	07 35 49.0	2.6		
			LN	Ms=5.2		11.0	1.60
			LE			11.0	2.10
NJ2	26.6	88	eP	07 31 13.0	0.5		
			LN	Ms=5.2		10.0	2.40
DL2	27.7	73	eP	07 31 21.0	−1.1		
			LN	Ms=5.2		15.0	2.16
			LE			12.0	1.35
SSE	28.8	89	eP	07 31 33.0	0.7		
			eS	07 36 18.5	−1.0		
			LN	Ms=5.4		12.0	3.32
SNY	29.1	66	eP	07 31 35.2	0.5		
			LN	Ms=5.4		14.0	4.41
CN2	30.5	62	eP	07 31 47.0	−0.5		
			eS	07 36 43.0	−3.6		

1987 4 9

O = 07 50 34.7 ± 0.09s
LAT = 35.86 N ± 1.44km
LONG = 140.79 E ± 0.90km
DEPTH = 63 km ± 1.40km
STATIONS USED = 33, STAND DEV = 1.46s

TIA	19.1	278	eP	07 54 54.3	−1.4			
BJI	19.8	290	eP	07 55 02.5	−0.6			
WHN	22.7	264	eP	07 55 33.0	0.7			
XAN	26.1	275	eP	07 56 05.0	0.0			
GYA	30.5	262	P	07 56 44.2	−0.6			
GTA	32.4	289	P	07 57 02.2	0.6			

1987 4 9
O = 16 44 23.6 ± 0.19s
LAT = 51.28 N ± 1.21km
LONG = 175.98 W ± 1.19km
DEPTH = 52 km ± 1.53km
STATIONS USED = 26, STAND DEV = 1.52s

BTO	50.5	288	eP	16 53 18.0	−1.1			
TIY	50.9	284	eP	16 53 22.6	0.8			
XAN	55.4	283	eP	16 53 54.2	−1.4			
LZH	57.1	288	+iP	16 54 07.0	−0.9			
CD2	60.7	284	eP	16 54 31.8	−1.0			
GYA	62.1	278	P	16 54 42.4	0.3			

1987 4 9
O = 17 12 14.9 ± 0.09s
LAT = 46.47 N ± 1.71km
LONG = 144.47 E ± 0.83km
DEPTH = 339 km ± 1.41km
STATIONS USED = 33, STAND DEV = 1.41s

MDJ	10.6	265	eP	17 14 41.2	−0.1			
CN2	13.7	266	eP	17 15 15.0	−3.3			
SNY	15.7	260	+iP	17 15 39.6	−0.6			
BJI	21.5	263	eP	17 16 39.0	0.3			
TIA	22.8	253	eP	17 16 52.2	0.9			
HHC	24.3	269	cP	17 17 06.0	0.8			
TIY	25.2	261	eP	17 17 13.2	0.4			
BTO	25.5	269	eP	17 17 16.0	0.2			
GTA	33.1	274	−P	17 18 22.6	0.4			
CD2	34.9	258	eP	17 18 37.8	0.0			
GYA	35.9	249	P	17 18 45.4	−0.7			

1987 4 9
O = 17 26 22.4 ± 0.28s
LAT = 21.76 N ± 2.84km
LONG = 111.67 E ± 1.86km
DEPTH = 10 km ± 0.52km
STATIONS USED = 16, STAND DEV = 3.65s
M_L = 4.4 / 12,

QZN	3.2	213	Pn	17 27 14.6	1.3			
			Pg	17 27 23.6	4.5			
			Sn	17 27 52.2	−1.3			
			Sg	17 28 05.0	2.0			
			SMN	M_L = 3.8		0.6	0.29	
			SME			0.6	0.30	
QZH	7.1	62	cPn	17 28 05.5	−1.3			
			Sn	17 29 25.2	−4.8			
			SMN	M_L = 4.4		0.8	0.19	
			SME			0.8	0.15	

1987 4 9
O = 18 04 04.7 ± 0.18s
LAT = 21.98 N ± 1.53km
LONG = 112.47 E ± 1.52km
DEPTH = 30 km
STATIONS USED = 5, STAND DEV = 4.54s
M_L = 3.2 / 4,

GZH	1.4	36	−iPg	18 04 31.5	2.2			
			Sg	18 04 50.5	2.2			
			SMN	M_L = 3.3		0.4	0.58	
			SME			0.4	0.41	
QZN	3.8	220	ePn	18 05 01.7	−0.5			
			Pg	18 05 14.2	1.7			
			Sn	18 05 44.8	−3.1			
			Sg	18 06 03.2	−1.8			
			SMN	M_L = 2.9		0.5	0.020	
			SME			0.6	0.030	

1987 4 9
O = 20 01 17.8 ± 0.15s
LAT = 35.83 N ± 1.96km
LONG = 80.65 E ± 1.84km
DEPTH = 27 km ± 0.30km
STATIONS USED = 60, STAND DEV = 2.58s
Ms = 4.7 / 13, M_L = 4.6 / 2, m_B = 5.0 / 1

KSH	5.2	316	Pn	20 02 38.5	4.3			
			Sn	20 03 37.0	2.2			
			LN	Ms = 4.8		9.0	12.3	
WMQ	9.6	32	eP	20 03 35.2	−3.0			
			LN	Ms = 4.9		9.0	5.61	
LSA	10.7	122	−P	20 03 54.0	0.3			
GTA	15.6	71	+P	20 05 02.8	4.9			
			LE	Ms = 4.5		10.0	0.97	
LZH	18.8	82	+iP	20 05 37.0	−0.8			
			S	20 09 08.0	5.8			
			LN	Ms = 4.7		11.0	1.37	
CD2	19.9	98	eP	20 05 49.0	−1.4			
			S	20 09 28.0	0.7			
			LN	Ms = 4.9		10.0	1.91	

KMI	21.8	113	eP	20 06 08.5	−1.4	
			eS	20 10 01.0	−3.7	
			LN	Ms=4.5	12.0	0.70
XAN	23.2	86	eP	20 06 25.0	1.0	
			LN	Ms=4.7	10.0	0.65
			LE		12.0	0.61
BTO	23.5	69	eP	20 06 28.3	1.4	
			eS	20 10 35.5	−0.2	
			LN	Ms=4.5	11.0	0.30
			LE		11.0	0.50
GYA	24.1	106	P	20 06 32.6	0.1	
			S	20 10 42.0	−2.7	
			LE	Ms=4.5	15.0	0.80
HHC	24.7	69	eP	20 06 43.6	5.3	
			LN	Ms=4.6	10.0	0.48
			LE		11.0	0.41
TIY	25.5	76	eP	20 06 46.0	0.3	
			eS	20 11 06.0	−3.0	
			sS	20 11 20.5	−1.6	
			LN	Ms=4.7	14.0	0.93
BJI	28.2	71	eP	20 07 11.0	0.1	
SSE	34.0	86	eP	20 08 03.5	1.9	

1987 4 9

O=22 59 53.8 ± 0.10s

LAT=52.95 N ± 3.03km

LONG=168.33 W ± 1.27km

DEPTH= 32 km ± 0.07km

STATIONS USED = 80, STAND DEV= 1.04s

Ms=5.4/22, m_B=5.3/ 3

MDJ	40.6	284	eP	23 07 31.0	−1.3	
			eS	23 13 37.0	−2.6	
CN2	43.5	286	P	23 07 54.0	−2.0	
			ePP	23 09 36.0	−3.2	
			eS	23 14 17.0	−5.3	
SNY	45.8	285	+iP	23 08 14.0	−0.4	
			pP	23 08 26.0	2.3	
			PP	23 10 00.0	−1.6	
			S	23 14 54.0	−0.3	
			sS	23 15 15.0	4.3	
			LN	Ms=5.4	21.0	2.80
			LE		21.0	0.96
DL2	48.8	283	eP	23 08 39.5	1.5	
BJI	51.2	288	eP	23 08 57.0	0.4	
			eS	23 16 09.0	−2.8	
			LN	Ms=5.4	19.0	2.02
TIA	53.2	283	−P	23 09 11.7	−0.1	
			eS	23 16 35.5	−4.0	
			LN	Ms=5.3	18.0	1.59
HHC	53.3	291	eP	23 09 13.0	0.5	
			S	23 16 39.7	0.3	
			LN	Ms=5.6	19.0	1.98
			LE		19.0	2.28
BTO	54.3	292	P	23 09 20.0	−0.1	
			ePP	23 11 21.0	−1.7	
			S	23 16 55.0	1.5	
			LN	Ms=5.7	19.0	2.60
			LE		19.0	2.70
SSE	54.4	276	−P	23 09 20.5	0.3	
			PMZ		1.5	0.19
			pP	23 09 30.7	1.1	
			eS	23 16 56.0	1.1	
			LN	Ms=5.6	26.0	2.66
			LE		26.0	2.79
TIY	54.9	288	+P	23 09 24.5	0.1	
			PP	23 11 26.0	−2.0	
			S	23 17 03.0	1.7	
			LN	Ms=5.4	19.0	1.48
			LE		20.0	1.45
NJ2	55.1	278	+P	23 09 24.5	−1.0	
			S	23 17 05.0	1.5	
WHN	58.9	280	P	23 09 52.0	−0.2	
			S	23 17 56.0	2.8	
			LE	Ms=5.2	26.0	1.68
XAN	59.5	287	+P	23 09 56.2	−0.8	
			LE	Ms=5.5	18.0	1.99
QZH	60.4	273	+iP	23 10 03.0	0.1	
			eS	23 18 12.0	−2.4	
			SMN	m_B=5.3	9.0	0.32
GTA	60.8	297	+P	23 10 04.5	−1.1	
			eS	23 18 20.0	0.6	
			LN	Ms=5.7	26.0	3.25
			LE		17.0	1.77
LZH	61.0	292	+iP	23 10 06.5	−0.4	
			PMZ		1.5	0.14
WMQ	63.7	308	−P	23 10 25.1	0.2	
CD2	64.8	288	eP	23 10 32.0	−0.1	
			eS	23 19 08.0	−1.6	
GZH	65.0	276	+P	23 10 33.5	0.3	
GYA	66.4	283	P	23 10 42.6	0.0	
			S	23 19 30.0	1.9	
			LE	Ms=5.4	20.0	1.40
KMI	69.7	285	+P	23 11 03.5	0.1	
			sP	23 11 20.5	3.9	
			eS	23 20 15.0	5.5	
QZN	70.2	275	+P	23 11 07.0	1.2	
			eS	23 20 11.0	−3.0	
			LN	Ms=5.5	22.0	1.70
KSH	72.5	313	P	23 11 20.0	0.1	
			eS	23 20 42.0	0.6	

		LE	Ms=5.6	14.0	1.60	
LSA	72.8	296	+P	23 11 22.0	0.1	

1987 4 10
O=06 13 46.2 ± 0.19s
LAT= 6.27 S ± 1.62km
LONG=147.55 E ± 1.95km
DEPTH= 84 km ± 1.04km
STATIONS USED = 57, STAND DEV= 1.53s

SSE	44.9	327	+P	06 21 56.0	1.4	
NJ2	46.9	326	+P	06 22 12.0	1.5	
WHN	48.5	321	P	06 22 24.7	1.9	
GYA	51.3	311	P	06 22 45.0	0.7	
SNY	52.6	338	eP	06 22 54.0	−0.4	
MDJ	53.2	344	eP	06 22 56.5	−1.9	
CN2	53.7	340	eP	06 23 01.0	−1.2	
			epP	06 23 22.0	−0.6	
			eS	06 30 28.0	−0.5	
XAN	54.2	320	+P	06 23 06.0	−0.2	
BJI	54.4	331	eP	06 23 07.0	−0.4	
TIY	54.6	326	eP	06 23 09.6	0.4	
CD2	55.9	314	eP	06 23 17.8	−0.2	
HHC	57.3	328	eP	06 23 29.5	0.8	
BTO	58.0	327	eP	06 23 33.0	−0.2	
LZH	58.8	319	P	06 23 40.0	1.4	
GTA	63.3	320	P	06 24 09.5	0.3	
LSA	64.8	307	−P	06 24 19.4	−0.2	
WMQ	73.3	319	P	06 25 06.0	−5.5	

1987 4 10
O=06 43 24.6 ± 0.23s
LAT=37.13 N ± 2.43km
LONG= 57.60 E ± 2.20km
DEPTH= 48 km ± 0.90km
STATIONS USED = 68, STAND DEV= 1.65s
Ms=5.1/18, m_B=5.3/ 2

KSH	14.6	75	P	06 46 47.0	−3.6	
			S	06 49 24.0	−6.7	
			LN	Ms=5.4	10.0	9.90
WMQ	23.8	64	P	06 48 34.8	0.8	
			LN	Ms=5.1	6.5	1.41
LSA	28.9	95	eP	06 49 20.0	−1.7	
			SME	m_B=5.3	9.0	0.62
GTA	33.0	73	eP	06 49 58.0	0.0	
			ePP	06 51 13.5	5.2	
			LE	Ms=5.1	11.0	1.30
LZH	36.9	77	eP	06 50 32.0	1.2	
			LN	Ms=4.9	20.0	1.19
KMI	40.1	94	+P	06 50 58.0	0.0	
BTO	40.5	68	eP	06 51 04.0	3.1	
			eS	06 57 10.0	4.0	
			LN	Ms=5.1	13.0	0.80
			LE		13.0	0.80
XAN	41.4	78	eP	06 51 09.4	0.6	
			LN	Ms=5.1	18.0	1.34
HHC	41.6	68	eP	06 51 11.6	1.7	
			eS	06 57 23.4	1.2	
			LN	Ms=5.0	11.0	0.49
			LE		9.0	0.41
GYA	42.6	90	P	06 51 18.6	0.0	
TIY	43.0	72	eP	06 51 22.7	0.9	
			PP	06 53 09.0	5.1	
			ScS	07 01 10.5	−4.0	
			LN	Ms=5.0	19.0	1.06
			LE		11.0	0.43
BJI	45.2	67	eP	06 51 39.0	0.0	
TIA	47.1	72	eP	06 51 55.2	1.3	
			LN	Ms=5.2	14.0	0.89
			LE		14.0	0.58
QZN	48.9	97	eP	06 52 07.8	−0.3	
			eS	06 59 07.0	0.0	
			LN	Ms=5.0	14.0	0.50
			LE		13.0	0.50
CN2	50.7	60	eP	06 52 22.5	0.1	
			eS	06 59 32.0	−1.0	
SSE	52.1	77	eP	06 52 34.0	1.2	
			LE	Ms=5.2	16.0	1.15
MDJ	53.3	58	eP	06 52 42.5	0.6	

1987 4 10
O=09 29 24.3 ± 0.04s
LAT=40.42 N ± 0.35km
LONG=109.01 E ± 0.31km
DEPTH= 14 km ± 0.06km
STATIONS USED = 9, STAND DEV= 2.62s
M_L=3.4/ 8,

HHC	2.0	77	−Pg	09 29 58.6	−1.0	
			Sg	09 30 23.8	−2.9	
			SMN	M_L=3.7	0.6	0.71
			SME		0.6	0.65
TIY	3.8	134	cPn	09 30 22.7	−0.2	
			Pg	09 30 29.8	−1.6	
			Sn	09 31 08.1	−1.1	
			Sg	09 31 17.2	−6.1	
			SMN	M_L=3.5	0.6	0.10
			SME		0.6	0.11
BJI	5.5	92	Pg	09 31 01.0	−0.4	
			Sg	09 32 11.0	−5.5	
			SMN	M_L=2.9	0.5	0.010
			SME		0.5	0.010

1987 4 10
O=10 32 29.6 ± 0.47s
LAT=37.61 N ± 4.76km
LONG= 79.09 E ± 1.46km
DEPTH= 22 km ± 0.14km
STATIONS USED = 7, STAND DEV= 3.43s
M_L=4.2/ 5,

KSH	3.1	308	−Pn	10 33 17.6	0.3		
			Pg	10 33 22.0	−1.6		
			Sn	10 33 57.5	2.7		
			Sg	10 34 02.5	−3.0		
			SMN	M_L=4.7		0.5	3.50
			SME			0.5	1.90
WMQ	9.0	44	eP	10 34 42.7	1.0		
			S	10 36 28.1	5.0		

1987 4 10
O=10 59 38.1 ± 0.09s
LAT=35.98 N ± 1.70km
LONG=139.79 E ± 1.74km
DEPTH= 61 km ± 0.75km
STATIONS USED = 74, STAND DEV= 1.72s
Ms=4.4/ 8, m_B=5.2/ 1

MDJ	11.6	321	eP	11 02 26.7	3.2		
			sP	11 02 43.0	1.7		
CN2	13.5	310	eP	11 02 50.0	1.5		
			sP	11 03 05.0	−1.5		
			eS	11 05 20.0	3.5		
SNY	13.9	300	−P	11 02 55.4	1.5		
			sP	11 03 13.0	1.0		
			LN	Ms=4.3		15.0	0.81
			LE			16.0	0.93
SSE	16.3	258	P	11 03 26.0	1.9		
			PMZ			1.0	0.030
			eS	11 06 25.0	3.7		
			SS	11 06 48.0	6.6		
NJ2	17.8	263	eP	11 03 45.4	2.1		
TIA	18.3	277	eP	11 03 49.4	−0.3		
			esP	11 04 08.0	−0.5		
			eS	11 07 09.2	1.1		
BJI	19.0	289	eP	11 03 57.0	−1.1		
			eS	11 07 21.0	−2.9		
WHN	21.9	263	P	11 04 29.2	1.0		
			sP	11 04 50.0	1.4		
			S	11 08 22.0	1.7		
			LE	Ms=4.3		12.0	0.50
TIY	21.9	283	eP	11 04 28.0	−0.4		
			sP	11 04 51.5	2.8		
			LE	Ms=4.6		19.0	1.46
HHC	22.6	291	+P	11 04 35.7	0.8		
BTO	23.8	290	eP	11 04 45.0	−1.2		
XAN	25.3	275	−P	11 05 00.4	−0.7		
GZH	26.3	248	eP	11 05 11.0	1.2		
LZH	29.0	281	eP	11 05 32.0	−2.6		
GYA	29.8	261	P	11 05 40.8	−0.8		
CD2	30.4	271	eP	11 05 45.0	−2.0		
QZN	31.3	245	eP	11 05 55.4	0.3		
GTA	31.6	288	P	11 05 57.8	−0.4		
KMI	33.5	262	+P	11 06 14.0	−0.6		
WMQ	40.2	298	eP	11 07 10.5	0.2		
LSA	41.0	276	−iP	11 07 18.5	0.7		

1987 4 10
O=18 43 06.5 ± 0.15s
LAT= 0.20 N ± 1.95km
LONG=130.39 E ± 3.97km
DEPTH= 34 km ± 0.17km
STATIONS USED = 38, STAND DEV= 1.89s

QZN	27.5	314	eP	18 48 50.4	−1.8
WHN	33.8	335	eP	18 49 44.0	−3.9
KMI	36.4	315	+P	18 50 11.0	0.4
XAN	39.2	331	eP	18 50 32.0	−1.7
CD2	39.6	323	eP	18 50 36.8	−0.3
TIY	40.8	338	eP	18 50 46.8	−0.3
BJI	41.7	344	eP	18 50 54.0	−0.2
LZH	43.4	328	eP	18 51 09.0	0.8
LSA	47.5	312	eP	18 51 40.6	−0.6
WMQ	57.7	324	P	18 52 55.5	−1.2

1987 4 10
O=22 10 01.0 ± 0.10s
LAT=16.72 S ± 0.63km
LONG=174.25 W ± 1.03km
DEPTH=207 km ± 0.77km
STATIONS USED = 31, STAND DEV= 1.05s

MDJ	79.6	323	eP	22 21 47.0	−0.2
CN2	81.6	321	P	22 21 57.0	−0.7
BJI	85.8	314	eP	22 22 19.0	0.1
TIY	87.5	310	eP	22 22 27.8	0.6
GYA	87.9	298	P	22 22 31.0	1.6
XAN	88.7	306	eP	22 22 34.0	0.9

1987 4 10
O=23 03 28.5 ± 0.12s
LAT=46.29 N ± 3.86km
LONG=152.40 E ± 2.52km
DEPTH= 31 km ± 1.56km
STATIONS USED = 66, STAND DEV= 1.77s
Ms=4.6/ 7,

MDJ	16.1	272	eP	23 07 16.3	2.0	
			eS	23 10 10.0	−1.7	
			LE	Ms=4.3	25.0	1.42
CN2	19.2	272	eP	23 07 51.0	−1.6	
			eS	23 11 17.0	−5.0	
SNY	21.1	268	−P	23 08 12.6	−0.8	
			eS	23 12 00.0	−2.1	
			LE	Ms=4.6	17.0	1.28
DL2	23.7	263	eP	23 08 40.0	1.0	
			eS	23 12 56.0	6.9	
BJI	27.0	270	eP	23 09 11.0	1.1	
			eS	23 13 48.0	4.4	
NJ2	29.4	253	eP	23 09 31.0	−0.6	
HHC	29.8	274	eP	23 09 35.4	−0.3	
TIY	30.6	268	eP	23 09 43.0	0.2	
			LN	Ms=4.8	17.0	0.31
			LE		18.0	1.06
BTO	31.0	275	eP	23 09 47.6	1.5	
WHN	33.3	255	eP	23 10 05.0	−1.3	
XAN	35.0	265	+P	23 10 20.0	−0.6	
LZH	37.4	272	+iP	23 10 41.5	0.3	
			PMZ		1.5	0.080
GTA	38.6	279	P	23 10 50.9	0.1	
CD2	40.4	265	eP	23 11 05.4	−0.2	
GYA	41.1	257	P	23 11 11.6	−0.5	
KMI	44.7	259	+P	23 11 40.5	−0.6	
LSA	49.8	273	+P	23 12 21.2	−0.4	
KSH	54.4	292	eP	23 12 57.0	1.3	

1987 4 11
O=01 59 02.8 ± 0.10s
LAT= 7.52 S ± 1.00km
LONG=147.11 E ± 1.51km
DEPTH= 11 km ± 0.24km
STATIONS USED = 57, STAND DEV= 1.10s

QZN	45.2	306	eP	02 07 21.0	−1.3
SSE	45.7	328	eP	02 07 26.5	0.2
			sP	02 07 34.0	−0.7
NJ2	47.7	327	eP	02 07 42.5	0.6
WHN	49.2	322	+P	02 07 55.0	1.6
GYA	51.8	312	P	02 08 14.0	0.7
DL2	51.9	335	eP	02 08 14.0	−0.1
KMI	54.0	308	+P	02 08 31.5	1.4
CN2	54.7	341	eP	02 08 37.0	2.0
XAN	54.9	321	−iP	02 08 36.0	−0.6
BJI	55.3	331	eP	02 08 36.5	−2.6
TIY	55.4	327	eP	02 08 40.0	−0.2
CD2	56.4	315	eP	02 08 46.6	−0.7
BTO	58.8	328	eP	02 09 03.8	−0.5
LZH	59.4	320	−iP	02 09 09.0	0.3
			PMZ		1.5 0.12
GTA	64.0	321	−iP	02 09 39.2	0.0
WMQ	74.0	320	P	02 10 41.1	0.0
KSH	80.4	312	eP	02 11 19.5	2.3

1987 4 11
O=09 05 10.9 ± 0.18s
LAT=20.36 S ± 2.01km
LONG=173.97 W ± 3.27km
DEPTH= 36 km ± 0.35km
STATIONS USED = 29, STAND DEV= 1.48s

MDJ	82.6	323	eP	09 17 33.5	0.8
CN2	84.5	321	eP	09 17 42.0	−0.5
WHN	85.4	305	eP	09 17 49.0	2.1
TIA	86.0	311	eP	09 17 50.4	0.7
BJI	88.5	314	eP	09 18 02.0	0.3
XAN	91.1	306	eP	09 18 14.8	0.8
HHC	92.0	313	eP	09 18 19.4	1.1

1987 4 11
O=11 50 26.7 ± 0.25s
LAT=11.55 N ± 1.98km
LONG=144.60 E ± 1.31km
DEPTH= 42 km ± 1.27km
STATIONS USED = 32, STAND DEV= 1.25s

BJI	37.9	323	eP	11 57 42.0	0.1
GYA	38.6	298	P	11 57 50.4	2.1
TIY	38.8	318	eP	11 57 50.5	0.8
XAN	39.5	310	P	11 57 55.4	0.3
CD2	42.4	303	eP	11 58 19.4	0.5
GTA	48.3	313	eP	11 59 07.2	0.5
WMQ	58.4	315	P	12 00 21.1	0.5

1987 4 11
O=12 43 50.3 ± 0.15s
LAT= 0.65 N ± 1.54km
LONG=126.38 E ± 2.51km
DEPTH= 66 km ± 1.11km
STATIONS USED = 29, STAND DEV= 2.28s

QZN	24.4	319	eP	12 49 07.2	3.0
XAN	37.0	336	eP	12 50 55.0	−0.9
DL2	38.3	354	eP	12 51 07.5	0.8
TIY	39.1	342	eP	12 51 16.4	3.5
BJI	40.3	348	eP	12 51 21.5	−1.5
SNY	41.1	357	eP	12 51 30.0	0.6
MDJ	43.9	3	eP	12 51 54.0	1.6
LSA	44.3	314	eP	12 51 54.3	−1.6
WMQ	55.0	327	P	12 53 17.2	−1.0

1987 4 11

O = 14 25 01.5 ± 0.12s
LAT = 11.68 S ± 1.49km
LONG = 166.52 E ± 1.84km
DEPTH = 190 km ± 0.73km
STATIONS USED = 77, STAND DEV = 1.06s
m_B = 5.4 / 1

SSE	60.8	316	+iP	14 34 56.0	−0.4		
			PMZ			0.9	0.070
GZH	62.5	304	P	14 35 08.0	0.7		
NJ2	63.0	315	+P	14 35 10.8	0.0		
QZN	63.6	298	−P	14 35 16.0	1.0		
MDJ	65.3	332	+iP	14 35 26.1	0.6		
WHN	65.4	311	P	14 35 26.0	−0.2		
DL2	65.4	323	P	14 35 25.4	−1.2		
TIA	66.6	318	eP	14 35 33.0	−1.0		
CN2	66.7	329	+iP	14 35 34.1	−0.4		
			epP	14 36 15.5	−3.1		
GYA	69.4	304	P	14 35 51.8	0.3		
BJI	69.5	321	eP	14 35 51.5	−0.1		
TIY	70.5	317	+iP	14 35 58.6	0.3		
			PMZ			1.0	0.050
XAN	71.1	312	+iP	14 36 01.9	0.2		
KMI	72.1	301	+P	14 36 09.0	1.2		
HHC	72.8	319	+P	14 36 12.4	0.5		
CD2	73.6	307	P	14 36 16.5	0.1		
BTO	73.7	319	eP	14 36 16.1	−0.8		
LZH	75.7	312	+iP	14 36 30.0	1.2		
			PMZ			1.0	0.13
GTA	80.0	314	+iP	14 36 53.0	0.7		
LSA	83.3	302	+P	14 37 09.6	0.0		
WMQ	90.1	315	+iP	14 37 41.5	−0.3		

1987 4 11
O = 16 22 08.3 ± 0.12s
LAT = 53.43 N ± 3.85km
LONG = 167.39 W ± 1.78km
DEPTH = 33 km ± 0.37km
STATIONS USED = 48, STAND DEV = 2.01s
Ms = 4.9 / 3,

MDJ	41.0	284	cP	16 29 50.0	−0.3		
CN2	43.9	286	cP	16 30 13.4	−0.5		
			cS	16 36 40.0	−2.8		
SNY	46.2	285	cP	16 30 34.4	2.1		
BTO	54.7	292	cP	16 31 36.6	−0.5		
TIY	55.3	288	cP	16 31 43.4	1.7		
			S	16 39 23.0	2.0		
			LN	Ms = 4.9		12.0	0.35
WHN	59.3	281	P	16 32 10.5	0.5		
XAN	59.9	288	eP	16 32 14.0	−0.2		
GTA	61.1	298	P	16 32 21.5	−0.5		
			LE	Ms = 5.0		14.0	0.46
WMQ	63.8	309	P	16 32 40.3	0.0		
CD2	65.2	289	eP	16 32 49.8	0.7		
GYA	66.9	283	P	16 33 01.0	1.1		
QZN	70.7	276	eP	16 33 25.2	1.8		
LSA	73.1	297	P	16 33 38.2	0.1		

1987 4 11
O = 17 17 43.4 ± 0.16s
LAT = 23.68 N ± 2.55km
LONG = 121.69 E ± 2.38km
DEPTH = 13 km ± 0.94km
STATIONS USED = 71, STAND DEV = 2.56s
Ms = 4.5 / 12, M_L = 4.5 / 12,

QZH	3.1	295	Pn	17 18 32.3	−0.1		
			Pg	17 18 40.4	2.3		
			Sn	17 19 05.5	−5.7		
			Sg	17 19 24.0	3.5		
			SMN	M_L = 4.5		0.7	1.69
			SME			0.9	1.53
			LN			3.0	4.03
SSE	7.4	357	eP	17 19 31.0	−3.0		
			S	17 20 52.5	−5.9		
			SMN	M_L = 4.5		1.0	0.13
			SME			1.0	0.21
GZH	7.7	267	eP	17 19 32.0	−6.1		
			SMN	M_L = 4.6		1.0	0.24
			SME			0.8	0.12
WHN	9.5	318	eP	17 20 00.0	−2.6		
			LN	Ms = 4.4		6.0	1.25
QZN	12.0	250	eP	17 20 41.4	4.4		
			eS	17 22 51.7	0.2		
TIA	13.1	343	eP	17 20 53.1	0.9		
			LN	Ms = 4.6		10.0	1.35
			LE			9.0	0.70
GYA	13.9	285	P	17 21 01.4	−1.5		
			S	17 23 31.6	−5.9		
			LE	Ms = 4.5		12.0	1.50
DL2	15.2	360	eP	17 21 25.0	5.5		
XAN	15.2	316	eP	17 21 23.8	3.8		
			LE	Ms = 4.3		10.0	0.64
TIY	16.1	333	eP	17 21 33.2	1.9		
			LE	Ms = 4.4		11.0	0.80
BJI	17.0	345	eP	17 21 48.0	5.6		
KMI	17.3	279	eP	17 21 50.0	2.8		
CD2	17.5	298	eP	17 21 49.2	0.3		
			LE	Ms = 4.8		18.0	3.46
HHC	19.1	336	eP	17 22 11.0	1.9		
BTO	19.5	333	eP	17 22 13.2	−0.5		
LZH	19.8	313	eP	17 22 16.5	−0.1		

			LE	Ms=4.5	10.0	0.70	
CN2	20.3	8	eP	17 22 22.6	0.4		
			eS	17 25 59.0	−5.7		
MDJ	21.9	15	eP	17 22 39.2	1.1		
GTA	24.3	315	−P	17 23 02.1	0.2		
LSA	27.9	289	P	17 23 36.3	0.3		
WMQ	34.3	314	P	17 24 32.5	0.1		

1987 4 11

O=18 13 24.9 ± 0.11s

LAT=23.97 N ± 1.55km

LONG=122.09 E ± 1.58km

DEPTH= 26 km ± 0.37km

STATIONS USED =105, STAND DEV= 1.89s

Ms=5.4/ 42, M_L=5.1/ 4, m_B=5.3/ 5

QZH	3.3	288	+iPn	18 14 17.0	1.2		
			Sn	18 14 52.7	−3.6		
			SMN	M_L=5.1	1.2	6.38	
			SME		1.4	6.80	
			LE	Ms=4.8	12.0	35.2	
SSE	7.1	354	eP	18 15 09.0	−1.5		
			eS	18 16 30.0	−1.4		
			SMN	M_L=5.0	1.1	0.44	
			SME		1.0	0.75	
GZH	8.1	265	+P	18 15 23.0	−0.5		
			LN	Ms=5.2	9.0	5.94	
			LE		11.0	13.6	
NJ2	8.5	341	−P	18 15 27.6	−2.4		
			S	18 17 03.8	−2.5		
			LE	Ms=5.2	8.0	10.8	
WHN	9.5	315	cP	18 15 41.0	−2.3		
			pP	18 15 46.0	−3.8		
			S	18 17 28.0	−2.1		
			LE	Ms=5.4	8.0	14.6	
QZN	12.4	249	eP	18 16 23.7	0.6		
			eS	18 18 39.8	−1.8		
			SS	18 18 55.0	−0.9		
			LN	Ms=4.8	15.0	2.50	
			LE		16.0	4.60	
TIA	12.9	342	eP	18 16 31.2	1.2		
			ePP	18 16 42.5	2.3		
			LN	Ms=5.2	11.5	6.88	
			LE		11.5	4.51	
GYA	14.2	283	P	18 16 46.8	0.2		
			PP	18 16 57.0	−0.7		
			S	18 19 21.2	−2.3		
			LN	Ms=5.5	12.0	7.00	
			LE		12.0	14.0	
DL2	14.9	359	P	18 17 00.0	4.3		
			csP	18 17 07.0	0.5		
			S	18 19 45.0	4.8		
			LN	Ms=5.0	13.0	4.58	
			LE		12.0	2.06	
XAN	15.3	314	−P	18 17 01.1	0.5		
			pP	18 17 06.4	−0.6		
			sP	18 17 12.0	0.7		
			S	18 19 52.0	3.1		
			LN	Ms=5.5	8.0	6.17	
			LE		12.0	11.1	
TIY	16.0	331	eP	18 17 13.2	3.1		
			sP	18 17 22.5	1.7		
			S	18 20 10.0	4.0		
			LN	Ms=5.4	14.0	10.7	
BJI	16.8	344	eP	18 17 22.0	2.1		
			eS	18 20 29.0	4.3		
			SMN	m_B=5.1	10.0	0.56	
			SME		9.0	0.92	
			LN	Ms=5.1	15.0	5.20	
KMI	17.6	278	−P	18 17 33.0	1.9		
			sP	18 17 42.5	0.8		
			eS	18 20 46.0	1.0		
			sS	18 20 54.0	−1.3		
			SS	18 21 08.5	2.4		
			LN	Ms=5.7	11.0	8.00	
			LE		11.0	11.9	
CD2	17.7	297	eP	18 17 31.3	0.1		
			PP	18 17 41.5	−3.7		
			LE	Ms=5.7	13.0	16.2	
SNY	17.8	4	eP	18 17 33.8	0.5		
			pP	18 17 39.0	−1.1		
			cS	18 20 56.0	6.9		
			LN	Ms=5.3	11.5	5.20	
			LE		14.0	2.86	
HHC	19.0	335	P	18 17 48.8	1.1		
			sP	18 17 58.0	−0.5		
			PP	18 18 04.0	0.4		
			S	18 21 18.5	3.9		
			LN	Ms=5.3	13.0	5.72	
			LE		13.0	2.94	
BTO	19.4	331	P	18 17 52.0	−0.5		
			sP	18 18 02.0	−1.4		
			PP	18 18 10.0	0.4		
			S	18 21 21.5	−2.6		
			cSS	18 21 48.0	−2.7		
			LN	Ms=5.4	13.0	3.40	
			LE		13.0	6.00	
LZH	19.8	312	−iP	18 17 58.0	0.9		
			PMZ		2.0	0.63	
			sP	18 18 08.0	−0.3		
			S	18 21 33.0	−0.4		

			SMN		$m_B=5.3$	12.0	1.57
			sS	18 21 42.0	−2.7		
			LN		Ms=5.8	11.0	8.05
			LE			16.0	16.0
CN2	20.0	7	P	18 17 56.0	−2.3		
			sP	18 18 07.0	−2.7		
			eS	18 21 30.0	−6.7		
			PcP	18 22 12.2	−1.2		
MDJ	21.5	15	−P	18 18 15.4	1.4		
			PP	18 18 39.0	1.1		
			S	18 22 10.0	4.7		
			PcP	18 22 16.0	−0.3		
GTA	24.3	315	−iP	18 18 42.1	0.1		
			pP	18 18 52.0	2.3		
			eS	18 22 55.5	−1.7		
			sS	18 23 09.0	−0.7		
			SS	18 23 49.0	−0.7		
			LE		Ms=5.6	12.0	7.90
LSA	28.1	288	−P	18 19 17.5	−0.4		
			LE		Ms=5.4	13.0	3.86
WMQ	34.4	314	+iP	18 20 12.1	−0.4		
			eS	18 25 41.0	2.8		
			PcS	18 26 31.0	−1.6		
			LE		Ms=5.7	12.0	5.89
KSH	41.7	303	−P	18 21 15.0	1.2		
			sP	18 21 26.0	0.6		
			PP	18 22 54.0	0.7		
			eS	18 27 33.0	3.8		
			LE		Ms=6.0	14.0	8.50

1987 4 11
O=18 53 59.8 ± 0.16s
LAT= 1.02 N ± 2.61km
LONG=128.53 E ± 4.00km
DEPTH= 47 km ± 0.42km
STATIONS USED = 52, STAND DEV= 2.14s
Ms=5.0/ 4,

QZN	25.6	315	eP	18 59 27.4	0.6		
GZH	26.4	327	eP	18 59 39.0	4.6		
WHN	32.3	337	eP	19 00 27.5	0.7		
			LN		Ms=4.9	10.0	0.71
GYA	32.9	322	P	19 00 32.4	0.2		
KMI	34.6	316	−P	19 00 47.0	0.4		
XAN	37.6	333	eP	19 01 11.4	−1.0		
CD2	37.9	324	eP	19 01 14.2	−0.3		
TIY	39.4	340	eP	19 01 26.6	−0.6		
BJI	40.4	345	eP	19 01 34.0	−1.6		
SNY	40.9	354	eP	19 01 44.2	5.0		
LZH	41.7	329	−P	19 01 47.5	1.0		
			PMZ			1.5	0.080
HHC	42.5	341	eP	19 01 52.2	−0.8		
BTO	42.8	339	eP	19 01 52.6	−2.8		
MDJ	43.4	1	eP	19 02 00.0	−0.1		
GTA	46.3	329	P	19 02 23.0	−0.6		
WMQ	55.9	325	P	19 03 34.5	−1.7		

1987 4 11
O=19 02 06.2 ± 0.15s
LAT= 1.10 N ± 2.30km
LONG=128.63 E ± 2.64km
DEPTH= 35 km ± 0.31km
STATIONS USED = 78, STAND DEV= 1.70s
Ms=5.1/ 27, m_B=5.8/ 5

QZH	25.6	339	P	19 07 34.5	0.1		
			PMZ		$m_B=5.8$	4.0	0.95
			SMN		$m_B=6.2$	11.0	7.78
			LN		Ms=5.0	17.0	2.46
QZN	25.6	315	eP	19 07 35.4	0.9		
			sS	19 12 08.0	−5.5		
			LN		Ms=5.2	17.0	3.00
			LE			17.0	2.70
GZH	26.4	327	+P	19 07 42.4	0.5		
			S	19 12 15.0	4.6		
			LN		Ms=5.2	20.0	3.23
			LE			21.0	3.00
NJ2	32.1	344	+P	19 08 32.5	−0.6		
			LE		Ms=5.0	9.0	0.90
WHN	32.3	337	P	19 08 35.5	1.3		
			S	19 13 47.0	3.5		
			sS	19 13 56.0	−4.2		
			LE		Ms=5.0	14.0	1.50
GYA	32.9	322	P	19 08 40.0	0.2		
			PP	19 09 50.0	0.4		
			LE		Ms=5.2	18.0	2.60
KMI	34.6	316	−P	19 08 56.0	1.7		
			sP	19 09 06.0	−1.7		
			eS	19 14 24.0	3.4		
			sS	19 14 35.0	−1.0		
			LE		Ms=4.9	16.0	1.20
TIA	36.5	344	eP	19 09 10.3	−0.5		
			eS	19 14 48.9	−1.5		
			LN		Ms=5.1	12.0	1.22
XAN	37.6	333	+P	19 09 19.4	−0.5		
			PP	19 10 46.0	−2.3		
			S	19 15 08.0	2.1		
			LN		Ms=5.1	16.0	1.43
			LE			16.0	0.95
CD2	37.9	324	eP	19 09 21.0	−1.1		
DL2	38.2	351	eP	19 09 25.0	0.5		
			sP	19 09 37.0	−1.2		

			eS	19 15 20.0	4.6		
			LN	Ms=5.3		15.0	2.16
TIY	39.4	340	+P	19 09 34.5	−0.1		
			PP	19 11 10.0	0.8		
			S	19 15 37.0	4.3		
			sS	19 15 52.5	2.9		
			LE	Ms=4.7		29.0	1.15
BJI	40.4	345	eP	19 09 42.0	−0.9		
			LN	Ms=4.8		13.0	0.60
SNY	40.8	354	+P	19 09 45.8	−0.6		
LZH	41.7	329	−P	19 09 55.0	0.9		
			eS	19 16 11.0	2.0		
			LN	Ms=5.5		18.0	1.88
			LE			18.0	3.02
HHC	42.5	341	eP	19 10 00.0	−0.3		
CN2	42.6	357	eP	19 10 01.4	0.1		
			eS	19 16 21.0	−0.7		
BTO	42.8	339	P	19 10 02.0	−0.8		
			PP	19 11 45.0	0.4		
			eS	19 16 21.5	−3.1		
			LN	Ms=5.3		22.0	1.90
			LE			22.0	2.30
MDJ	43.3	1	−P	19 10 08.2	1.0		
			eS	19 16 30.0	−2.4		
LSA	45.6	312	P	19 10 25.0	−0.8		
			S	19 17 07.0	3.1		
			SME	m_B=5.6		8.0	0.65
GTA	46.3	329	P	19 10 30.5	−0.7		
			eS	19 17 18.0	2.5		
			sS	19 17 33.0	1.7		
			LE	Ms=5.0		13.0	0.79
WMQ	55.9	325	eP	19 11 42.3	−1.6		
			eS	19 19 25.1	−3.1		
			LE	Ms=5.7		19.0	3.96
KSH	61.2	315	−iP	19 12 21.0	0.3		
			eS	19 20 36.0	−0.8		
			LE	Ms=5.5		9.0	1.00

1987 4 11
O=19 09 23.0 ± 0.06s
LAT=14.60 N ± 1.06km
LONG=146.79 E ± 0.80km
DEPTH= 52 km ± 0.70km
STATIONS USED = 13, STAND DEV= 1.32s

GYA	39.2	294	P	19 16 50.8	2.3		

1987 4 11
O=20 44 31.2 ± 0.14s
LAT=39.48 N ± 1.42km
LONG=106.81 E ± 1.18km
DEPTH= 20 km ± 0.79km
STATIONS USED = 15, STAND DEV= 3.36s
M_L=3.4 / 14,

BTO	2.7	65	ePn	20 45 12.8	−1.5		
			Pg	20 45 18.0	−1.1		
			Sn	20 45 45.0	−3.1		
			Sg	20 45 53.8	−2.4		
			SMN	M_L=3.3		0.2	0.16
			SME			0.2	0.15
HHC	3.9	68	Pg	20 45 44.0	3.8		
			Sg	20 46 36.0	2.7		
			SMN	M_L=4.0		0.4	0.31
			SME			0.6	0.33
LZH	4.1	216	ePg	20 45 47.5	3.1		
			Sg	20 46 37.0	−3.5		
			SMN	M_L=3.5		1.0	0.090
			SME			1.5	0.080
TIY	4.7	110	ePn	20 45 38.4	−4.0		
			Pg	20 45 54.5	−0.6		
			Sn	20 46 35.6	−3.1		
			SMN	M_L=3.4		0.6	0.050
			SME			0.7	0.050
GTA	5.4	271	Pn	20 45 49.2	−2.3		
			Pg	20 46 07.0	0.2		
			Sg	20 47 17.0	−3.9		
			SMN	M_L=3.0		0.7	0.020
			SME			0.7	0.010
XAN	5.7	162	ePg	20 46 10.0	−1.9		
			SMN	M_L=3.2		0.6	0.020
			SME			1.0	0.020

1987 4 11
O=22 01 30.0 ± 0.13s
LAT=31.25 N ± 2.43km
LONG=132.06 E ± 2.55km
DEPTH= 5 km ± 1.34km
STATIONS USED = 65, STAND DEV= 2.16s
Ms=4.4 / 12, m_B=5.0 / 1

SSE	9.3	272	eP	22 03 49.0	0.8		
			esS	22 05 41.0	0.0		
			LE	Ms=3.9		15.0	0.86
NJ2	11.3	278	−P	22 04 16.6	1.3		
			LE	Ms=4.2		12.0	1.20
DL2	11.5	315	eP	22 04 18.0	0.4		
			eS	22 06 27.0	−0.2		
			LN	Ms=4.2		13.0	1.24
SNY	12.6	330	+iP	22 04 33.0	0.5		
TIA	13.4	296	−P	22 04 44.6	1.1		
			LN	Ms=4.5		14.0	1.48
			LE			14.0	1.01

MDJ	13.5	352	−P	22 04 47.0	2.1		
CN2	13.6	339	eP	22 04 45.0	−1.1		
			sP	22 04 54.0	0.8		
			eS	22 07 15.0	−3.6		
BJI	15.6	309	eP	22 05 16.5	4.0		
			LE	Ms=4.2		13.0	0.64
TIY	17.4	297	eP	22 05 36.2	0.5		
			LN	Ms=4.5		12.5	0.67
			LE			14.0	1.00
HHC	19.1	306	−P	22 05 55.6	−1.0		
XAN	19.7	284	−P	22 06 01.9	−1.2		
			pP	22 06 07.6	0.3		
			LE	Ms=4.5		13.0	0.88
BTO	20.1	304	eP	22 06 05.5	−2.4		
GYA	22.7	264	P	22 06 34.6	0.0		
LZH	23.9	289	eP	22 06 45.0	−1.4		
CD2	24.2	277	eP	22 06 48.3	−0.8		
GTA	27.4	296	P	22 07 16.6	−2.7		
			LE	Ms=4.6		13.0	0.70
WMQ	36.9	303	P	22 08 40.2	−2.1		

1987 4 11
O=23 50 28.2 ± 0.11s
LAT=31.57 N ± 2.49km
LONG= 55.96 E ± 1.80km
DEPTH= 23 km ± 0.29km
STATIONS USED = 59, STAND DEV= 1.68s
Ms=5.4/18, m_B=5.5/ 2

KSH	18.1	59	eP	23 54 41.0	1.0		
			eS	23 57 58.0	−0.4		
			LN	Ms=5.6		10.0	11.0
WMQ	27.8	55	P	23 56 18.8	1.0		
			S	24 01 00.0	3.3		
			LN	Ms=5.5		22.0	9.88
LSA	30.3	84	+P	23 56 40.5	0.0		
			SME	m_B=5.8		10.0	1.95
GTA	36.3	65	P	23 57 32.0	−0.3		
			S	24 03 15.0	5.0		
			LN	Ms=5.0		10.0	0.74
LZH	39.7	70	+P	23 58 03.5	2.3		
			eS	24 04 05.0	1.2		
			LN	Ms=5.4		12.0	1.21
			LE			12.0	1.77
CD2	40.6	78	eP	23 58 07.8	−0.7		
			cS	24 04 18.0	1.0		
			LN	Ms=5.1		26.0	2.11
KMI	41.4	87	+P	23 58 16.5	1.2		
BTO	44.0	63	eP	23 58 36.0	−0.3		
			epP	23 58 40.0	−3.9		
			cS	24 05 08.0	1.0		
			LN	Ms=5.5		14.0	1.80
			LE			15.0	1.90
XAN	44.2	72	P	23 58 38.0	0.4		
			S	24 05 09.0	0.8		
			LN	Ms=5.3		13.0	1.16
			LE			11.0	0.91
GYA	44.3	83	P	23 58 39.6	0.8		
HHC	45.2	62	eP	23 58 48.4	2.9		
TIY	46.3	66	eP	23 58 54.5	0.1		
			S	24 05 33.5	−4.7		
			LN	Ms=5.5		17.0	1.84
			LE			20.5	2.86
BJI	48.8	62	eP	23 59 15.5	1.9		
			cS	24 06 17.0	2.7		
			LN	Ms=5.3		20.0	2.02
TIA	50.3	67	eP	23 59 25.2	0.0		
			LN	Ms=5.5		17.0	1.96
			LE			17.0	1.19

1987 4 12
O=02 47 18.4 ± 0.09s
LAT=35.41 N ± 1.59km
LONG= 23.39 E ± 1.44km
DEPTH= 49 km ± 0.48km
STATIONS USED = 78, STAND DEV= 1.27s
m_B=5.3/ 1

KSH	41.5	68	+P	02 55 04.0	1.3		
			sP	02 55 18.0	−2.3		
			S	03 01 15.0	2.0		
			SME	m_B=5.3		6.0	0.30
WMQ	49.1	60	P	02 56 04.5	0.7		
			PMZ			1.5	0.040
			PP	02 58 03.7	6.8		
			S	03 03 04.5	1.5		
GTA	59.1	61	+iP	02 57 16.4	−0.6		
LZH	63.4	63	+P	02 57 45.5	−0.3		
			PMZ			2.0	0.12
CD2	65.7	68	P	02 58 00.0	−0.4		
BTO	65.8	56	eP	02 58 00.8	−0.4		
HHC	66.7	56	+P	02 58 07.3	0.2		
KMI	67.6	74	eP	02 58 13.5	0.3		
XAN	68.0	63	+P	02 58 15.0	−0.4		
TIY	68.8	58	−iP	02 58 20.4	0.4		
GYA	70.0	71	P	02 58 27.6	−0.3		
BJI	70.2	55	eP	02 58 28.5	−0.1		
TIA	72.8	58	eP	02 58 43.6	−0.5		
WHN	73.7	64	eP	02 58 49.0	−0.8		
SNY	74.0	50	−iP	02 58 51.0	−0.5		
CN2	74.1	47	+P	02 58 51.8	0.0		
DL2	74.4	53	eP	02 58 53.0	−0.4		

MDJ	76.1	45	eP	02 59 00.7	−2.5
NJ2	76.2	61	eP	02 59 03.5	−0.4
QZN	76.4	76	eP	02 59 06.0	0.8

1987 4 12
O = 03 25 48.9 ± 0.07s
LAT = 27.51 N ± 0.55km
LONG = 101.18 E ± 0.72km
DEPTH = 13 km ± 0.26km
STATIONS USED = 5, STAND DEV = 2.80s
M_L = 2.5 / 2,

CD2	4.1	33	ePg	03 26 59.1	−1.7	
			SME	M_L = 2.5	0.9	0.010

1987 4 12
O = 14 15 55.6 ± 0.11s
LAT = 40.36 N ± 1.69km
LONG = 142.40 E ± 1.28km
DEPTH = 79 km ± 0.86km
STATIONS USED = 15, STAND DEV = 2.03s

MDJ	10.4	298	eP	14 18 24.0	0.4
CN2	13.1	291	eP	14 19 03.0	3.5
BJI	20.0	278	eP	14 20 21.0	−3.8
WMQ	40.1	294	P	14 23 25.8	0.1

1987 4 12
O = 19 30 00.4 ± 0.09s
LAT = 5.03 N ± 1.52km
LONG = 94.15 E ± 1.16km
DEPTH = 46 km ± 0.41km
STATIONS USED = 41, STAND DEV = 1.21s
Ms = 4.5 / 1,

QZN	20.7	46	eP	19 34 39.8	0.5
KMI	21.6	22	eP	19 34 48.0	−0.9
GYA	24.4	28	P	19 35 16.6	0.2
CD2	27.3	18	P	19 35 41.2	−1.8
WHN	31.7	35	eP	19 36 22.0	−0.5
XAN	32.0	24	+P	19 36 22.4	−2.2
GTA	34.6	8	+iP	19 36 46.2	−1.4
NJ2	35.5	38	+P	19 36 54.5	−0.3
TIY	36.6	25	+P	19 37 05.7	1.5
HHC	38.9	21	eP	19 37 24.3	0.2
WMQ	39.0	353	P	19 37 25.8	0.9
BJI	40.1	27	eP	19 37 34.0	0.3
CN2	47.4	31	eP	19 38 32.0	−0.8
MDJ	50.2	33	eP	19 38 53.7	−0.2

1987 4 12
O = 19 59 29.9 ± 0.11s
LAT = 10.74 S ± 1.18km
LONG = 162.47 E ± 0.92km
DEPTH = 111 km ± 1.36km
STATIONS USED = 30, STAND DEV = 1.26s

MDJ	62.6	334	eP	20 09 46.0	0.6
CN2	63.9	331	eP	20 09 53.4	−0.1
BJI	66.3	323	eP	20 10 09.0	0.1
XAN	67.6	314	+P	20 10 17.2	0.0
CD2	69.9	309	eP	20 10 31.4	−0.1
GTA	76.5	315	−P	20 11 10.8	0.3
WMQ	86.6	316	P	20 12 04.0	1.1

1987 4 13
O = 08 06 40.9 ± 0.25s
LAT = 37.21 S ± 3.60km
LONG = 78.22 E ± 4.19km
DEPTH = 11 km ± 0.37km
STATIONS USED = 63, STAND DEV = 1.89s
Ms = 5.6 / 22, m_B = 5.7 / 3

QZN	63.4	34	eP	08 17 15.0	1.7		
			eS	08 25 41.5	−3.0		
			LN	Ms = 5.6		19.0	2.40
KMI	66.2	24	+P	08 17 32.0	0.5		
			pP	08 17 37.0	0.0		
			sP	08 17 39.0	−0.7		
LSA	67.6	12	P	08 17 40.0	−1.2		
			iS	08 26 43.0	5.4		
			LN	Ms = 5.7		20.0	2.74
GYA	68.7	27	P	08 17 48.0	0.3		
			pP	08 17 53.0	−0.3		
CD2	71.9	23	eP	08 18 06.0	−0.6		
			S	08 27 29.0	4.1		
			LN	Ms = 5.4		37.0	2.59
WHN	75.4	32	eP	08 18 29.5	2.2		
			S	08 28 06.0	1.1		
			sS	08 28 16.0	0.3		
			LE	Ms = 5.4		44.0	2.50
KSH	76.3	358	P	08 18 34.0	1.4		
			sP	08 18 42.0	1.3		
			eS	08 28 10.0	−6.6		
			LN	Ms = 5.9		18.0	3.40
XAN	76.4	26	eP	08 18 32.2	−1.0		
			pP	08 18 37.8	−0.9		
			eS	08 28 20.0	2.3		
			SS	08 33 20.0	6.5		
			LN	Ms = 5.6		16.0	0.95
			LE			16.0	0.95
LZH	76.7	21	eP	08 18 35.0	0.2		
			S	08 28 17.0	−2.0		
			LN	Ms = 5.6		15.0	1.42
NJ2	78.7	34	eP	08 18 45.8	0.3		

			LE		Ms=5.3	15.0	0.70
GTA	78.8	17	eP	08 18 45.8	−0.5		
			PMZ		m_B=5.7	5.0	0.40
			S	08 28 47.0	5.5		
			LN		Ms=5.5	24.0	1.75
SSE	78.9	37	eP	08 18 50.0	3.0		
			eS	08 28 46.0	1.3		
			SS	08 33 55.0	3.9		
			LN		Ms=5.5	14.0	0.69
			LE			14.0	0.72
TIY	81.0	27	eP	08 18 57.0	−1.0		
			S	08 29 06.5	2.1		
			LN		Ms=5.7	17.0	1.53
			LE			19.0	0.83
WMQ	81.1	7	P	08 18 58.4	−0.3		
			PMZ			1.8	0.060
			sP	08 19 07.0	0.2		
			S	08 29 09.0	3.3		
			LN		Ms=5.9	24.0	4.02
TIA	81.5	31	eP	08 19 00.0	−0.5		
			eS	08 29 11.0	−0.2		
			LN		Ms=5.7	16.0	1.24
			LE			16.0	1.01
BTO	82.7	24	P	08 19 07.0	−0.2		
			sP	08 19 14.0	−1.3		
			ePP	08 22 15.0	−2.9		
			S	08 29 19.5	−2.9		
			LN		Ms=5.7	17.0	1.40
			LE			17.0	1.10
HHC	83.5	25	eP	08 19 10.4	−0.6		
			eS	08 29 30.0	−1.8		
			LN		Ms=5.8	17.0	1.88
			LE			16.0	1.25
BJI	84.4	28	eP	08 19 12.5	−3.1		
DL2	85.6	33	eP	08 19 20.0	−1.7		
			eS	08 29 50.0	−2.9		
			LN		Ms=5.6	16.0	1.29
CN2	91.3	32	eP	08 19 49.0	0.2		
			eS	08 30 43.0	−2.5		

1987 4 13

O=09 11 00.2 ± 0.17s
LAT=16.89 S ± 1.01km
LONG=179.16 W ± 1.94km
DEPTH=517 km ± 1.57km
STATIONS USED = 41, STAND DEV= 1.57s

MDJ	76.9	325	−P	09 22 02.0	1.0	
			sP	09 24 44.0	0.6	
			cS	09 31 12.0	4.3	
CN2	78.8	323	−P	09 22 10.6	−0.3	
			pP	09 23 58.0	−3.8	
TIA	80.0	313	eP	09 22 17.5	0.0	
BJI	82.6	316	eP	09 22 30.0	−0.3	
TIY	84.1	312	+P	09 22 38.3	0.4	
			pP	09 24 26.0	−4.4	
			eS	09 32 15.0	−4.7	
XAN	85.1	308	eP	09 22 42.7	−0.2	
HHC	86.1	315	eP	09 22′47.0	−0.6	
GTA	93.8	310	P	09 23 23.1	−0.7	

1987 4 13

O=10 34 57.5 ± 0.10s
LAT=11.58 S ± 1.64km
LONG=117.63 E ± 1.97km
DEPTH= 32 km ± 0.13km
STATIONS USED = 19, STAND DEV= 1.97s

XAN	46.1	350	eP	10 43 20.0	−1.2
BJI	51.4	359	eP	10 44 03.0	1.3
GTA	53.4	343	+P	10 44 16.8	−0.1
MDJ	57.0	10	eP	10 44 43.0	0.1

1987 4 13

O=15 05 14.5 ± 0.17s
LAT=32.75 N ± 1.18km
LONG=104.02 E ± 1.89km
DEPTH= 15 km
STATIONS USED = 14, STAND DEV= 2.78s

			M_L=3.3 / 7,			
CD2	1.8	187	Pn	15 05 47.3	1.0	
			Pg	15 05 48.1	0.9	
			Sg	15 06 16.6	4.1	
			SMN	M_L=3.0	0.8	0.14
			SME		0.8	0.16
LZH	3.3	358	Pn	15 06 11.0	4.2	
			Sn	15 06 52.5	4.6	
			SMN	M_L=3.3	1.0	0.11
			SME		1.0	0.070
XAN	4.3	71	cPn	15 06 19.2	−0.7	
			Pg	15 06 30.0	−0.4	
			SMN	M_L=3.5	0.7	0.12
			SME		0.7	0.070
GYA	6.7	159	cPn	15 06 53.6	0.9	
			Sn	15 08 10.0	−0.8	

1987 4 13

O=15 58 51.3 ± 0.05s
LAT=15.15 S ± 3.13km
LONG=167.32 E ± 3.19km
DEPTH=145 km ± 2.07km
STATIONS USED = 6, STAND DEV= 0.64s

TIY	73.6	317	eP	16 10 10.8	−0.5		
KMI	74.6	302	eP	16 10 17.5	0.5		
GTA	83.0	314	+P	16 11 02.5	−0.1		

1987 4 13
O=17 18 42.6 ± 0.07s
LAT= 7.10 S ± 1.53km
LONG=124.76 E ± 2.45km
DEPTH=515 km ± 0.15km
STATIONS USED = 42, STAND DEV = 1.12s

QZN	29.8	331	P	17 24 10.0	0.6		
GZH	32.0	340	P	17 24 27.5	−0.4		
GYA	37.7	333	P	17 25 15.8	0.4		
SSE	38.1	355	eP	17 25 19.5	0.7		
KMI	38.5	327	eP	17 25 24.0	1.6		
WHN	38.7	346	P	17 25 24.5	0.8		
NJ2	39.3	352	+P	17 25 29.7	1.1		
CD2	42.8	333	eP	17 25 58.8	2.3		
XAN	43.6	341	+iP	17 26 01.6	−0.9		
LZH	47.2	337	+iP	17 26 31.5	0.5		
			PMZ			1.0	0.060
BJI	47.6	351	eP	17 26 32.0	−1.2		
LSA	48.8	320	+P	17 26 42.0	−1.1		
CN2	50.7	1	+P	17 26 55.0	−1.4		
MDJ	51.7	4	eP	17 27 04.0	0.3		
GTA	51.7	335	+P	17 27 04.8	0.5		
WMQ	60.8	330	P	17 28 06.2	−0.2		

1987 4 13
O=21 43 56.6 ± 0.09s
LAT= 6.24 S ± 1.30km
LONG=103.82 E ± 1.35km
DEPTH= 33 km ± 0.02km
STATIONS USED = 12, STAND DEV= 0.83s

TIY	44.5	10	eP	21 52 07.8	0.8		
GTA	45.6	356	P	21 52 15.8	−0.2		
BJI	47.4	13	eP	21 52 30.0	−0.5		
WMQ	51.9	345	P	21 53 05.0	0.1		
CN2	53.5	19	eP	21 53 15.0	−1.8		

1987 4 14
O=02 08 13.3 ± 0.08s
LAT=18.85 N ± 1.19km
LONG=146.97 E ± 1.90km
DEPTH= 22 km ± 0.22km
STATIONS USED = 95, STAND DEV= 1.07s
Ms=6.1/51, m_B=6.1/25

SSE	26.3	303	+iP	02 13 49.0	−0.5		
			PMZ			1.0	0.030
			pP	02 13 56.0	−0.7		
			sP	02 14 05.0	4.9		
			PP	02 14 30.0	−1.3		
			S	02 18 16.0	−2.2		
			sS	02 18 37.0	5.9		
			SS	02 19 32.0	5.1		
			LN	Ms=6.1		15.0	15.5
			LE			15.0	23.2
QZH	27.0	288	+iP	02 13 55.0	−0.9		
			PMZ	m_B=6.0		6.0	1.94
			sP	02 14 04.0	−2.5		
			S	02 18 24.0	−5.7		
			LE	Ms=6.0		20.0	28.9
NJ2	28.5	303	+P	02 14 07.5	−2.0		
			PMZ			14.0	2.80
			PP	02 15 00.0	−0.8		
			PcP	02 17 22.0	1.3		
			S	02 18 52.0	−1.8		
			LN	Ms=6.3		14.0	32.3
MDJ	29.5	334	+iP	02 14 19.7	1.0		
			PMZ	m_B=6.4		4.0	2.89
			sP	02 14 30.0	0.6		
			S	02 19 17.0	6.9		
			sS	02 19 27.0	3.8		
DL2	29.7	318	+P	02 14 20.0	−0.3		
			pP	02 14 27.0	−0.7		
			sP	02 14 32.0	1.0		
			eS	02 19 13.0	−0.9		
			csS	02 19 26.0	−0.1		
			ScP	02 21 00.0	−3.0		
			ScS	02 24 57.0	0.5		
			LN	Ms=6.1		15.0	15.9
			LE			10.0	10.6
SNY	30.3	324	+iP	02 14 24.5	−1.6		
			PMZ			19.0	4.24
			pP	02 14 32.0	−1.5		
			iS	02 19 23.0	−1.2		
			sS	02 19 36.0	−0.5		
			LN	Ms=6.1		18.0	17.9
			LE			20.0	17.4
CN2	30.8	329	+P	02 14 29.0	−0.7		
			PMZ	m_B=6.1		6.0	1.90
			pP	02 14 36.0	−1.0		
			eS	02 19 28.0	−2.6		
			SMN	m_B=5.9		7.0	2.00
TIA	31.4	309	+P	02 14 35.1	−0.7		
			PMZ	m_B=6.4		5.0	3.32
			cpP	02 14 41.0	−2.0		
			cPP	02 15 40.0	0.9		
			S	02 19 45.0	4.5		
			SMN			17.0	6.85

			SME			17.0	10.4
			LN	Ms=6.2		16.0	23.9
			LE			16.0	11.5
GZH	31.6	284	+P	02 14 38.0	0.5		
			PP	02 15 40.0	−1.7		
			S	02 19 50.0	6.4		
			SME			15.0	16.8
			LN	Ms=6.2		15.0	10.4
			LE			19.0	25.3
WHN	31.7	298	+iP	02 14 38.0	−0.3		
			PMZ	m_B=5.8		12.0	1.81
			sP	02 14 48.0	−1.0		
			PP	02 15 47.0	4.1		
			iS	02 19 52.0	6.1		
			SME			20.0	10.2
			LE	Ms=6.0		17.0	16.5
BJI	33.9	315	eP	02 14 56.5	−0.4		
			epP	02 15 04.0	−0.3		
			PMZ			3.0	2.68
			eS	02 20 20.0	0.8		
			SMN	m_B=6.4		6.0	3.87
			SME			6.0	1.78
			esS	02 20 31.0	−0.5		
			eScS	02 25 17.0	−0.4		
			LN	Ms=6.0		16.0	15.4
			LE			14.0	2.82
QZN	35.1	276	−P	02 15 08.6	1.3		
			PP	02 16 25.0	−0.5		
			S	02 20 40.5	3.5		
			ScP	02 21 19.0	−2.4		
			LN	Ms=6.2		18.0	11.8
			LE			18.0	24.1
TIY	35.5	309	+iP	02 15 11.5	0.7		
			PMZ			1.8	0.58
			PcP	02 17 34.0	−5.6		
			S	02 20 44.0	0.7		
			sS	02 20 58.0	1.5		
			ScP	02 21 22.0	−0.8		
			LN	Ms=6.3		17.0	26.7
			LE			16.0	9.40
XAN	37.0	302	+P	02 15 23.4	−0.6		
			pP	02 15 30.0	−1.3		
			PP	02 16 57.0	6.9		
			PcP	02 17 45.0	0.8		
			ScS	02 25 37.0	2.4		
			LN	Ms=6.3		16.0	11.4
			LE			17.0	21.4
HHC	37.4	314	+iP	02 15 27.0	0.2		
			PP	02 16 53.0	−1.0		
			S	02 21 15.0	2.7		
			SS	02 23 48.0	3.6		
			LN	Ms=6.3		18.0	21.8
			LE			18.0	15.4
GYA	37.8	289	P	02 15 31.2	0.4		
			pP	02 15 37.6	−0.5		
			S	02 21 26.0	6.5		
			LN	Ms=6.3		18.0	20.8
			LE			18.0	15.0
BTO	38.3	312	+iP	02 15 35.0	0.1		
			PMZ	m_B=6.4		5.0	3.00
			pP	02 15 45.0	2.8		
			PP	02 17 11.0	5.5		
			S	02 21 29.0	2.0		
			sS	02 21 41.0	0.7		
			SS	02 24 11.0	4.4		
			LN	Ms=6.4		16.0	22.6
			LE			17.0	24.7
CD2	40.8	296	eP	02 15 54.4	−0.6		
			PP	02 17 38.0	6.0		
			S	02 22 08.0	4.5		
			LE	Ms=6.3		17.0	21.2
KMI	41.3	287	+P	02 16 00.5	0.5		
LZH	41.6	303	+iP	02 16 02.0	0.3		
			PMZ			1.5	0.77
			S	02 22 09.0	−6.4		
			LN	Ms=6.2		16.0	15.8
GTA	45.4	307	+iP	02 16 32.2	−0.7		
			PMZ	m_B=6.3		5.0	2.07
			pP	02 16 38.5	−1.8		
			PP	02 18 19.0	−0.1		
			S	02 23 10.0	−1.4		
			SME	m_B=6.1		6.5	1.67
			sS	02 23 21.0	−3.9		
			SS	02 26 27.0	0.2		
			LN	Ms=6.3		18.0	16.3
			LE			17.0	13.1
LSA	51.6	293	+P	02 17 21.0	−0.2		
			LE	Ms=5.9		18.0	6.47
WMQ	55.1	311	P	02 17 47.0	0.1		
			PMZ			1.5	0.58
			pP	02 17 55.0	0.6		
			sP	02 18 01.0	3.4		
			S	02 25 30.0	4.1		
			LN	Ms=6.5		16.0	20.9
KSH	63.8	305	+iP	02 18 47.0	0.3		
			ePP	02 21 06.0	−1.6		
			S	02 27 22.0	4.4		
			eScS	02 28 34.0	0.0		
			LE	Ms=6.6		16.0	21.4

1987 4 14
O=02 25 23.4 ± 0.05s
LAT=19.00 N ± 1.03km
LONG=147.07 E ± 1.51km
DEPTH= 35 km ± 0.18km
STATIONS USED = 26, STAND DEV= 1.03s

MDJ	29.4	334	eP	02 31 27.5	1.3
SNY	30.3	324	eP	02 31 33.8	−0.1
TIA	31.4	309	eP	02 31 43.7	−0.3
BJI	33.8	315	eP	02 32 05.0	0.0
WMQ	55.1	311	P	02 34 55.0	0.0

1987 4 14
O=03 04 11.8 ± 0.14s
LAT=18.85 N ± 1.39km
LONG=146.98 E ± 2.46km
DEPTH= 50 km ± 0.61km
STATIONS USED = 58, STAND DEV= 1.48s

SSE	26.3	303	eP	03 09 45.0	0.1
			sP	03 10 05.0	2.7
MDJ	29.5	334	eP	03 10 14.0	0.0
DL2	29.7	318	eP	03 10 18.0	2.3
SNY	30.4	324	eP	03 10 20.8	−0.7
CN2	30.8	329	eP	03 10 25.0	−0.1
TIA	31.4	309	eP	03 10 30.8	−0.4
BJI	33.9	315	eP	03 10 52.0	−0.2
XAN	37.0	302	eP	03 11 19.0	−0.3
HHC	37.4	314	eP	03 11 22.3	0.2
GYA	37.8	289	P	03 11 26.8	0.7
BTO	38.3	312	eP	03 11 30.6	0.5
LZH	41.6	303	P	03 11 58.0	1.0
GTA	45.4	307	P	03 12 28.8	0.6
WMQ	55.1	311	P	03 13 42.4	0.4

1987 4 14
O=03 11 20.4 ± 0.14s
LAT=18.84 N ± 1.92km
LONG=146.98 E ± 2.70km
DEPTH= 39 km ± 0.58km
STATIONS USED = 74, STAND DEV= 1.78s
Ms=5.0/ 5,

SSE	26.3	303	eP	03 16 51.5	−3.0
NJ2	28.5	303	eP	03 17 15.8	1.2
MDJ	29.5	334	eP	03 17 24.0	0.3
DL2	29.7	318	eP	03 17 25.0	−0.3
SNY	30.4	324	+P	03 17 29.9	−1.2
CN2	30.8	329	P	03 17 35.0	0.3
TIA	31.4	310	P	03 17 40.9	0.1
WHN	31.7	298	eP	03 17 40.5	−2.8
BJI	33.9	315	eP	03 18 02.0	0.1
			eS	03 23 24.0	1.4
TIY	35.5	309	+P	03 18 16.2	0.4
			pP	03 18 22.5	−3.6
			S	03 23 48.5	1.8
			LE	Ms=4.9	15.0 0.96
XAN	37.0	302	P	03 18 28.1	−0.8
HHC	37.4	314	eP	03 18 32.0	0.3
GYA	37.8	289	P	03 18 36.4	0.7
BTO	38.3	312	−P	03 18 40.0	0.2
CD2	40.8	296	eP	03 19 01.0	1.1
KMI	41.4	287	eP	03 19 06.0	1.1
LZH	41.6	303	P	03 19 06.5	−0.2
			PMZ		2.0 0.13
GTA	45.4	307	−iP	03 19 39.0	1.2
			LE	Ms=5.2	14.0 1.14
WMQ	55.1	311	−P	03 20 52.0	0.3
			PMZ		1.5 0.13
			pP	03 21 00.0	−2.3
			SME		2.5 0.13

1987 4 14
O=03 51 09.8 ± 0.16s
LAT=18.79 N ± 1.65km
LONG=146.81 E ± 2.88km
DEPTH= 34 km ± 0.38km
STATIONS USED = 30, STAND DEV= 1.42s
Ms=4.4/ 1,

MDJ	29.5	335	eP	03 57 12.7	−0.7
SNY	30.3	324	eP	03 57 19.4	−1.1
BJI	33.8	315	eP	03 57 51.0	−0.1
TIY	35.4	309	eP	03 58 05.4	0.5
XAN	36.9	302	eP	03 58 20.0	2.1
HHC	37.3	314	eP	03 58 20.6	−0.4
BTO	38.3	313	P	03 58 29.0	−0.1
GTA	45.3	307	P	03 59 26.0	−1.0

1987 4 14
O=03 53 57.2 ± 0.10s
LAT=18.83 N ± 1.33km
LONG=147.00 E ± 1.98km
DEPTH= 33 km ± 0.08km
STATIONS USED = 36, STAND DEV= 1.08s
Ms=4.6/ 1,

SSE	26.3	303	eP	03 59 32.0	−0.2
MDJ	29.5	334	eP	04 00 01.8	0.5
DL2	29.7	318	eP	04 00 03.5	0.6
SNY	30.4	324	eP	04 00 08.2	−0.5
TIA	31.5	309	−P	04 00 18.1	−0.4
BJI	33.9	315	eP	04 00 40.0	0.5
TIY	35.5	309	eP	04 00 53.8	0.3

			LE	Ms=4.6		16.0	0.51
HHC	37.4	314	eP	04 01 09.0	−0.4		
GYA	37.9	289	P	04 01 13.4	0.0		
BTO	38.4	312	P	04 01 17.5	0.0		
GTA	45.4	307	P	04 02 16.4	0.9		

1987 4 14
O=04 35 20.0 ± 0.10s
LAT=18.92 N ± 1.51km
LONG=147.17 E ± 2.95km
DEPTH= 36 km ± 0.70km
STATIONS USED = 22, STAND DEV= 1.95s

SSE	26.4	302	eP	04 40 54.5	−1.0		
TIA	31.5	309	eP	04 41 41.1	−0.4		
BJI	34.0	315	eP	04 42 03.0	0.6		
TIY	35.6	309	eP	04 42 12.0	−4.5		
GTA	45.5	307	P	04 43 39.4	0.9		

1987 4 14
O=05 21 04.8 ± 0.13s
LAT=18.85 N ± 1.69km
LONG=147.17 E ± 2.25km
DEPTH= 59 km ± 0.61km
STATIONS USED = 53, STAND DEV= 1.46s
Ms=4.8/ 5,

SSE	26.4	302	eP	05 26 36.0	−2.4		
			eS	05 31 04.0	−1.4		
			LE	Ms=4.7		14.0	0.93
MDJ	29.6	334	eP	05 27 07.5	0.7		
DL2	29.8	317	eP	05 27 12.5	3.7		
SNY	30.5	324	+P	05 27 14.0	−0.4		
CN2	30.8	328	eP	05 27 18.0	0.1		
TIA	31.6	309	−P	05 27 23.8	−0.6		
			LN	Ms=4.7		19.0	1.02
BJI	34.0	315	eP	05 27 45.5	0.2		
			eS	05 33 07.0	2.0		
TIY	35.6	309	eP	05 27 59.2	−0.1		
			LN	Ms=4.8		17.0	0.92
XAN	37.2	302	P	05 28 11.4	−1.2		
HHC	37.5	313	eP	05 28 15.0	−0.2		
GYA	38.0	289	P	05 28 20.4	0.9		
BTO	38.5	312	+iP	05 28 23.4	0.2		
			PP	05 29 53.0	−1.7		
			eS	05 34 14.0	0.2		
			LN	Ms=5.0		19.0	1.10
			LE			19.0	1.10
LZH	41.7	303	P	05 28 50.5	0.3		
GTA	45.6	307	+P	05 29 20.4	−0.9		
LSA	51.8	293	P	05 30 08.3	−1.3		
WMQ	55.3	311	P	05 30 35.2	0.2		

1987 4 14
O=06 10 47.5 ± 0.12s
LAT=18.90 N ± 1.60km
LONG=147.21 E ± 2.62km
DEPTH= 23 km ± 0.32km
STATIONS USED = 91, STAND DEV= 1.55s
Ms=5.5/37, m_B=5.8/11

SSE	26.5	302	+P	06 16 24.0	−1.0		
			PMZ	m_B=5.9		10.0	2.71
			sP	06 16 38.0	2.1		
			PP	06 17 06.0	−1.6		
			LN	Ms=5.4		15.0	3.26
			LE			15.0	4.29
QZH	27.2	288	eP	06 16 34.0	2.3		
			S	06 21 06.0	−0.8		
			LE	Ms=5.3		16.0	3.84
NJ2	28.7	303	+P	06 16 43.0	−2.0		
			PP	06 17 43.5	6.6		
			S	06 21 27.0	−3.4		
			LN	Ms=5.7		13.0	7.30
MDJ	29.6	334	eP	06 16 53.0	−0.2		
			eS	06 21 42.0	−3.8		
DL2	29.8	317	eP	06 16 55.0	−0.3		
			epP	06 17 01.0	−1.9		
			eS	06 21 46.0	−3.6		
			LN	Ms=5.4		13.0	3.06
			LE			13.0	1.57
SNY	30.4	324	+P	06 17 00.0	−0.9		
			sP	06 17 09.0	−2.9		
			S	06 21 59.0	0.3		
			LN	Ms=5.6		14.0	4.21
			LE			17.0	5.28
CN2	30.8	328	+P	06 17 00.0	−4.4		
			PMZ	m_B=5.7		6.0	0.80
			sP	06 17 11.0	−4.3		
			S	06 22 06.0	1.2		
TIA	31.6	309	cP	06 17 10.0	−1.1		
			pP	06 17 17.5	−1.0		
			eS	06 22 16.7	−0.8		
			SMN	m_B=5.5		11.0	0.75
			SME			11.0	0.98
			LN	Ms=5.4		14.0	3.77
GZH	31.8	283	eP	06 17 13.5	0.2		
			PP	06 18 20.0	1.5		
			S	06 22 25.0	4.2		
			LN	Ms=5.4		16.0	1.35
			LE			16.0	4.32
WHN	31.9	298	eP	06 17 14.0	0.1		
			S	06 22 19.0	−2.7		

			SME			20.0	2.32
			sS	06 22 30.0	−5.2		
			LE	Ms=5.3		18.0	3.64
BJI	34.0	315	eP	06 17 32.0	0.0		
			PMZ	m_B=5.8		3.5	0.53
			epP	06 17 39.0	−0.6		
			SMN	m_B=5.8		6.0	0.97
			SME			7.0	0.57
			esS	06 23 05.0	−2.6		
			LN	Ms=5.2		14.0	1.94
QZN	35.3	276	eP	06 17 43.0	−0.2		
			ePP	06 18 58.0	−4.2		
			LN	Ms=5.6		18.0	3.70
			LE			18.0	5.30
TIY	35.6	309	+P	06 17 46.0	−0.1		
			sP	06 17 54.0	−2.9		
			eS	06 23 15.5	−5.0		
			LN	Ms=5.6		16.0	4.92
			LE			17.0	2.71
XAN	37.2	302	P	06 17 59.0	−0.4		
			pP	06 18 06.0	−0.9		
			S	06 23 43.0	−0.7		
			LN	Ms=5.4		14.0	1.70
			LE			15.0	2.00
HHC	37.5	313	eP	06 18 01.0	−0.9		
			PP	06 19 30.0	0.3		
			S	06 23 53.0	4.9		
			LN	Ms=5.7		17.0	3.80
			LE			20.0	5.60
GYA	38.0	289	P	06 18 07.0	0.6		
			pP	06 18 13.0	−1.0		
			S	06 24 01.0	4.6		
			LN	Ms=5.6		17.0	3.70
			LE			17.0	2.70
BTO	38.5	312	+iP	06 18 10.0	0.0		
			sP	06 18 18.0	−2.9		
			ePP	06 19 39.0	−2.2		
			S	06 24 00.0	−2.9		
			LN	Ms=5.9		16.0	8.30
			LE			16.0	3.90
CD2	40.9	296	eP	06 18 32.5	2.0		
			S	06 24 36.0	−4.2		
			LN	Ms=5.6		16.0	4.18
KMI	41.5	287	+P	06 18 35.0	−0.7		
			pP	06 18 42.0	−1.0		
			eS	06 24 45.0	−5.5		
			LN	Ms=5.2		16.0	1.80
LZH	41.7	303	+P	06 18 37.0	−0.1		
			PMZ	m_B=6.0		4.5	1.15
			pP	06 18 44.0	−0.5		
			LN	Ms=5.6		16.0	4.27
GTA	45.6	307	P	06 19 08.2	0.1		
			PMZ	m_B=5.7		10.0	1.02
			pP	06 19 16.0	0.3		
			eS	06 25 46.0	−2.8		
			SS	06 29 03.7	0.3		
			LN	Ms=5.4		15.0	2.21
WMQ	55.3	311	P	06 20 22.0	0.1		
			pP	06 20 30.0	0.4		
			S	06 28 06.0	4.4		
			sS	06 28 16.5	0.9		
			LN	Ms=6.0		16.0	6.08
KSH	63.9	305	+iP	06 21 21.0	−0.7		
			ePP	06 23 46.0	3.0		
			eS	06 30 00.0	5.0		
			LE	Ms=5.9		14.0	3.70

1987 4 14
O=12 22 04.5 ± 0.06s
LAT=42.33 N ± 0.55km
LONG= 79.57 E ± 0.71km
DEPTH= 20 km ± 0.52km
STATIONS USED = 7, STAND DEV= 1.61s
M_L=3.6 / 5,

KSH	4.0	225	ePg	12 23 14.5	−0.1		
WMQ	6.1	73	Pg	12 23 53.6	0.4		
			Sn	12 24 48.8	2.3		
			Sg	12 25 16.2	−0.7		
			SMN	M_L=3.6		0.4	0.050
			SME			0.4	0.040

1987 4 14
O=13 12 20.6 ± 0.09s
LAT=48.09 N ± 2.11km
LONG=147.09 E ± 1.73km
DEPTH=445 km ± 0.57km
STATIONS USED = 82, STAND DEV= 1.32s
m_B=4.9 / 5

MDJ	12.6	260	−P	13 15 06.7	−1.3		
			ScP	13 22 58.0	−0.4		
			S	13 17 23.0	1.2		
			SME			3.0	1.92
CN2	15.6	262	−iP	13 15 38.5	−1.4		
			PMZ			2.0	1.30
			esP	13 17 24.0	−0.2		
			eS	13 18 18.0	−3.0		
			SMN			3.0	0.80
			SME			3.0	0.50
SNY	17.7	258	−iP	13 16 01.2	0.2		
			S	13 19 00.0	1.1		

			SMN	$m_B = 4.9$		6.0	0.62
			SME			5.0	0.40
DL2	20.5	253	P	13 16 28.0	−0.2		
			sP	13 18 28.0	0.3		
			eS	13 19 48.0	0.0		
			SMN	$m_B = 5.1$		6.0	1.10
BJI	23.5	261	eP	13 16 56.0	0.4		
			ScP	13 23 21.0	−0.6		
SSE	26.0	239	P	13 17 17.5	−0.7		
			PMZ			1.0	0.030
			eS	13 21 15.0	−2.2		
			eScP	13 23 24.0	−4.6		
HHC	26.2	267	−iP	13 17 20.0	0.1		
NJ2	26.7	243	−P	13 17 23.7	−0.5		
TIY	27.2	260	−iP	13 17 29.6	0.7		
			PMZ			1.0	0.040
			S	13 21 39.0	3.8		
BTO	27.3	268	P	13 17 30.0	−0.1		
WHN	30.5	247	−iP	13 17 56.8	−0.6		
XAN	31.7	258	−iP	13 18 07.3	−0.2		
			S	13 22 43.8	−0.7		
			ScP	13 23 47.0	0.5		
LZH	33.8	265	−iP	13 18 27.5	1.5		
			PMZ			1.0	0.25
			S	13 23 18.0	0.2		
			SME			2.0	0.19
GTA	34.8	273	−iP	13 18 34.3	0.5		
			PMZ			0.8	0.030
			PP	13 20 05.6	−3.9		
			S	13 23 32.1	0.2		
			ScP	13 23 57.8	0.5		
			ScS	13 28 02.7	1.5		
CD2	37.0	258	eP	13 18 52.4	−0.1		
			PMZ			0.8	0.10
GYA	38.2	250	−P	13 19 01.8	−0.1		
			S	13 24 20.0	−2.8		
			ScS	13 28 21.0	0.6		
WMQ	40.6	287	P	13 19 23.2	1.2		
			S	13 25 00.0	1.1		
			sS	13 27 32.0	3.9		
KMI	41.6	253	−iP	13 19 30.0	0.0		
			PMZ			1.5	0.060
			PcP	13 21 17.0	−0.1		
			S	13 25 12.0	−1.0		
QZN	41.8	239	+P	13 19 32.5	1.0		
LSA	46.2	268	P	13 20 06.0	−0.3		
			S	13 26 21.0	3.2		

1987 4 14
O = 17 20 38.9 ± 0.22s
LAT = 58.34 S ± 6.10km
LONG = 25.14 W ± 7.10km
DEPTH = 34 km ± 0.66km
STATIONS USED = 72, STAND DEV = 2.40s
Ms = 5.5 / 10,

KSH	128.1	75	ePKP	17 39 44.0	1.1		
			PP	17 41 50.0	0.9		
LSA	128.5	95	−PKP	17 39 43.4	−0.6		
KMI	130.7	109	ePKP	17 39 49.0	1.0		
			ePP	17 42 07.0	0.2		
			PKS	17 43 26.0			
GYA	133.8	112	PKP	17 39 55.0	1.3		
GZH	134.0	122	ePKP	17 39 57.0	2.9		
CD2	136.0	106	ePKP	17 39 58.4	0.7		
WMQ	137.3	79	PKP	17 40 00.7	0.5		
			PKS	17 43 35.0			
LZH	140.1	101	ePKP	17 40 03.0	−2.4		
GTA	140.5	94	ePKP	17 40 03.0	−3.0		
			PKS	17 43 38.0			
			LZ	Ms = 5.5		28.0	0.74
WHN	140.9	117	ePKP	17 40 07.5	1.0		
			LZ	Ms = 5.7		24.0	1.01
XAN	141.1	108	ePKP	17 40 08.0	1.0		
NJ2	144.2	121	+PKP	17 40 12.5	0.3		
			pPKP	17 40 24.4	2.3		
			LZ	Ms = 5.4		20.0	0.40
SSE	144.4	125	+iPKP	17 40 12.0	−0.6		
			pPKP	17 40 23.7	1.2		
			PP	17 43 36.0	4.9		
			eSS	18 02 10.0	−1.9		
TIY	145.7	108	+PKP	17 40 16.5	1.5		
			LN	Ms = 5.7		18.0	0.72
BTO	146.7	102	ePKP	17 40 17.0	0.3		
TIA	146.8	115	ePKP	17 40 17.4	0.5		
			PKP_2	17 40 29.1			
			LN	Ms = 5.4		28.0	0.62
			LZ	Ms = 5.4		28.0	0.63
HHC	147.6	104	ePKP	17 40 19.8	1.5		
BJI	149.4	110	ePKP	17 40 22.0	1.1		
			PKP_2	17 40 37.5			
			eSS	18 03 12.0	4.5		
DL2	151.1	118	PKP	17 40 31.0	7.4		
			PKP_2	17 40 42.5			
SNY	154.3	116	ePKP	17 40 31.5	3.3		
			PP	17 44 28.0	−0.4		
			LN	Ms = 5.5		29.0	0.79
			LZ	Ms = 5.5		24.0	0.64
CN2	156.7	116	PKP	17 40 31.0	−0.4		
			PKP_2	17 40 52.0			
			ePP	17 44 38.0	−3.2		

			eSKKS	17 51 24.0			
			LZ	Ms=5.3	27.0	0.50	
MDJ	159.3	120	ePKP	17 40 33.6	−1.0		

1987 4 14
O=19 10 15.7 ± 0.05s
LAT=18.99 N ± 0.68km
LONG=147.12 E ± 1.25km
DEPTH= 33 km ± 0.27km
STATIONS USED = 14, STAND DEV= 1.02s

TIA	31.5	309	eP	19 16 36.7	−0.2		
GTA	45.4	307	eP	19 18 33.0	−1.0		
WMQ	55.1	311	P	19 19 48.0	0.2		

1987 4 14
O=21 25 48.9 ± 0.14s
LAT=11.83 N ± 4.16km
LONG=142.38 E ± 1.70km
DEPTH= 33 km ± 1.07km
STATIONS USED = 31, STAND DEV= 1.29s
Ms=4.1/ 1,

SSE	27.4	318	eP	21 31 37.0	3.1		
			LZ	Ms=4.1	20.0	0.34	
BJI	36.4	325	eP	21 32 52.0	−0.6		
GYA	36.6	299	P	21 32 58.4	4.0		
TIY	37.2	319	P	21 32 59.6	0.4		
XAN	37.7	311	P	21 33 02.8	−0.4		
BTO	40.4	321	eP	21 33 26.0	0.0		
CD2	40.4	304	eP	21 33 26.0	−0.1		
GTA	46.6	314	+P	21 34 16.0	−0.2		
WMQ	56.6	315	P	21 35 31.8	0.1		

1987 4 14
O=22 33 56.5 ± 0.12s
LAT= 1.08 N ± 1.68km
LONG=128.77 E ± 2.96km
DEPTH= 35 km ± 0.48km
STATIONS USED = 65, STAND DEV= 1.57s
Ms=4.6/ 2,

QZN	25.7	315	eP	22 39 25.0	−0.8		
			S	22 43 55.0	5.6		
SSE	30.7	347	eP	22 40 11.0	0.3		
NJ2	32.2	344	eP	22 40 26.5	2.6		
WHN	32.3	336	P	22 40 25.5	0.4		
			eS	22 45 40.0	4.3		
			LE	MS=4.4	28.0	0.67	
GYA	33.0	322	P	22 40 31.2	0.2		
KMI	34.7	316	+P	22 40 46.0	0.4		
XAN	37.7	333	P	22 41 10.0	−0.8		
CD2	38.0	324	eP	22 41 12.7	−0.5		
DL2	38.2	351	eP	22 41 12.5	−2.6		
TIY	39.4	339	P	22 41 24.6	−0.8		
BJI	40.4	345	eP	22 41 32.5	−1.1		
SNY	40.8	354	eP	22 41 36.8	−0.1		
LZH	41.8	329	−iP	22 41 46.0	0.9		
HHC	42.5	341	eP	22 41 51.0	−0.1		
CN2	42.6	356	eP	22 41 53.0	1.2		
BTO	42.9	339	eP	22 41 53.6	−0.1		
MDJ	43.4	1	eP	22 42 01.0	3.4		
LSA	45.7	312	+P	22 42 16.1	−0.9		
GTA	46.4	329	P	22 42 21.6	−0.5		
WMQ	56.0	325	P	22 43 34.6	−0.3		

1987 4 15
O=02 43 44.0 ± 0.09s
LAT=40.91 N ± 1.30km
LONG=141.29 E ± 1.48km
DEPTH=114 km ± 1.22km
STATIONS USED = 55, STAND DEV= 1.46s

MDJ	9.4	297	+P	02 45 59.0	1.5		
CN2	12.1	289	+P	02 46 34.0	0.4		
SNY	13.3	280	+iP	02 46 51.8	1.7		
DL2	15.2	269	P	02 47 16.0	1.8		
SSE	18.9	245	eP	02 47 59.5	0.6		
BJI	19.1	276	eP	02 47 58.5	−2.2		
TIA	19.5	264	+P	02 48 03.2	−1.1		
NJ2	20.0	251	eP	02 48 09.5	−1.1		
TIY	22.5	271	eP	02 48 33.8	−1.4		
BTO	23.6	280	eP	02 48 45.5	−0.5		
WHN	24.1	253	eP	02 48 49.0	−1.4		
XAN	26.5	265	P	02 49 12.0	−0.9		
LZH	29.5	273	eP	02 49 40.0	−0.6		
GTA	31.5	281	P	02 49 57.3	−0.7		
GYA	32.0	254	P	02 50 01.6	−0.4		
WMQ	39.1	293	eP	02 51 03.0	0.6		

1987 4 15
O=04 53 49.5 ± 0.18s
LAT=20.60 N ± 2.24km
LONG=120.13 E ± 2.41km
DEPTH= 27 km ± 0.47km
STATIONS USED = 54, STAND DEV= 2.57s
Ms=4.2/15, M_L=3.7/ 6,

QZH	4.5	342	cPn	04 54 54.5	−2.6		
			SMN	M_L=3.6	0.8	0.10	
			SME		0.4	0.080	
			LE	Ms=3.4	11.0	0.75	
GZH	6.8	293	eP	04 55 25.0	−4.8		
			LN	Ms=4.0	11.0	0.90	
			LE		10.0	1.01	

QZN	9.8	263	eP	04 56 07.6	−4.5		
			LN	Ms=4.1		12.0	1.20
WHN	11.2	333	eP	04 56 37.0	6.0		
			LN	Ms=4.1		10.0	0.71
GYA	13.7	298	P	04 57 05.8	1.6		
TIA	15.8	351	eP	04 57 36.5	4.8		
			LN	Ms=4.0		13.0	0.44
XAN	16.7	326	eP	04 57 47.0	3.9		
			LN	Ms=4.3		10.0	0.43
			LE			10.0	0.42
CD2	17.9	308	P	04 58 02.4	3.2		
			LE	Ms=4.4		12.0	0.85
DL2	18.3	4	eP	04 58 05.0	1.7		
			eS	05 01 28.0	4.5		
			LE	Ms=4.3		11.0	0.61
TIY	18.3	340	eP	04 58 05.0	1.3		
			LN	Ms=4.3		15.0	0.66
			LE			12.0	0.27
BJI	19.7	351	eP	04 58 19.0	−0.5		
LZH	21.0	321	eP	04 58 38.0	4.1		
SNY	21.4	7	−P	04 58 37.2	0.0		
			eS	05 02 34.0	5.9		
			LE	Ms=4.3		11.0	0.44
HHC	21.5	342	eP	04 58 40.0	1.7		
			LN	Ms=4.4		13.0	0.64
BTO	21.7	339	eP	04 58 43.0	2.1		
CN2	23.6	10	eP	04 58 58.0	−0.9		
			eS	05 03 07.0	−1.0		
			LN	Ms=4.3		13.0	0.40
MDJ	25.2	16	+P	04 59 14.5	−0.3		
			LE	Ms=4.2		20.0	0.44
GTA	25.6	322	eP	04 59 22.6	3.8		
			LE	Ms=4.2		9.0	0.22

1987 4 15
O=18 32 07.8 ± 0.09s
LAT=31.00 N ± 0.84km
LONG=130.44 E ± 1.28km
DEPTH=193 km ± 1.36km
STATIONS USED = 55, STAND DEV= 1.52s
m_B=4.9/ 1

SSE	7.9	273	eP	18 34 01.5	0.3		
			csP	18 34 46.5	1.8		
			eS	18 35 30.0	0.3		
TIA	12.3	299	eP	18 35 01.0	3.9		
CN2	13.4	344	+P	18 35 15.0	3.7		
			eS	18 37 40.0	3.9		
MDJ	13.6	357	eP	18 35 16.0	1.7		
WHN	13.8	272	eP	18 35 13.6	−3.6		
BJI	14.7	312	eP	18 35 30.0	2.2		
TIY	16.3	299	eP	18 35 48.0	0.5		
HHC	18.1	308	eP	18 36 07.2	−1.2		
XAN	18.4	285	P	18 36 10.0	−1.0		
BTO	19.1	306	eP	18 36 17.2	−1.1		
			eS	18 39 40.5	0.3		
GYA	21.3	264	−P	18 36 41.0	0.3		
LZH	22.7	290	eP	18 36 55.0	0.8		
			PMZ			1.5	0.12
CD2	22.9	277	eP	18 36 55.3	−0.3		
KMI	25.1	263	+P	18 37 18.5	1.6		
GTA	26.3	297	−iP	18 37 26.9	−1.0		
WMQ	35.9	303	P	18 38 51.1	−0.5		

1987 4 15
O=20 45 56.9 ± 0.20s
LAT= 1.13 S ± 2.89km
LONG=127.52 E ± 3.04km
DEPTH= 32 km ± 0.34km
STATIONS USED = 82, STAND DEV= 2.13s
Ms=4.8/23, m_B=5.4/ 2

QZN	26.5	320	eP	20 51 35.0	1.3		
			eS	20 56 06.0	2.0		
			LN	Ms=4.7		14.0	0.86
GZH	27.7	331	eP	20 51 46.5	1.5		
			S	20 56 21.5	−1.7		
			LN	Ms=5.0		12.0	0.82
			LE			13.0	1.37
SSE	32.6	350	eP	20 52 30.0	1.9		
			sP	20 52 46.5	5.5		
			SMN	m_B=5.6		8.0	0.94
WHN	33.9	339	eP	20 52 39.5	0.2		
			S	20 58 07.0	6.8		
			LE	Ms=4.5		12.0	0.33
NJ2	34.0	347	eP	20 52 45.0	4.8		
			LE	Ms=4.6		10.0	0.40
GYA	34.0	325	P	20 52 40.0	−0.4		
KMI	35.4	319	+P	20 52 53.0	0.1		
			S	20 58 28.0	3.9		
TIA	38.4	346	eP	20 53 19.5	2.1		
			eS	20 59 03.2	−6.9		
			LN	Ms=5.0		15.0	0.87
			LE			15.0	0.60
CD2	39.1	327	eP	20 53 21.6	−1.4		
			eS	20 59 18.0	−2.3		
			LE	Ms=4.7		24.0	0.94
XAN	39.1	335	P	20 53 21.8	−1.6		
			pP	20 53 29.0	−3.5		
			S	20 59 16.0	−4.0		
DL2	40.2	353	eP	20 53 33.0	0.6		
			LE	Ms=4.9		16.0	0.86

TIY	41.1	342	eP	20 53 39.0	−0.9		
			pP	20 53 45.5	−3.4		
			PcP	20 55 38.0	−1.1		
			eS	20 59 55.0	4.3		
			LE	Ms=4.7		13.0	0.47
BJI	42.3	347	P	20 53 50.0	0.6		
			LN	Ms=4.9		15.0	0.73
SNY	42.9	356	eP	20 53 53.9	−0.7		
			eS	21 00 24.0	0.7		
			LN	Ms=5.2		24.0	0.96
			LE			24.0	2.14
LZH	43.1	332	eP	20 53 56.5	0.1		
			PMZ			2.0	0.23
			eS	21 00 20.0	−0.4		
			LN	Ms=5.2		15.0	0.69
			LE			16.0	1.20
HHC	44.2	343	eP,	20 54 05.2	−0.4		
BTO	44.5	341	eP	20 54 11.6	4.0		
			ePP	20 55 56.0	3.5		
			LN	Ms=4.7		13.0	0.30
			LE			13.0	0.30
CN2	44.8	358	eP	20 54 08.0	−1.7		
			PP	20 55 59.0	3.7		
			eS	21 00 46.0	1.6		
			SS	21 03 58.0	1.1		
MDJ	45.6	2	eP	20 54 16.5	0.3		
			eS	21 01 00.0	4.0		
			SS	21 04 15.0	3.8		
			LE	Ms=5.1		25.0	1.80
LSA	46.3	314	+P	20 54 21.8	−0.6		
GTA	47.7	331	P	20 54 30.5	−2.3		
			pP	20 54 39.0	−2.9		
			eS	21 01 21.0	−5.1		
			LE	Ms=4.8		12.0	0.35
WMQ	57.1	327	P	20 55 42.5	−1.1		
			pP	20 55 50.5	−2.3		
			LN	Ms=5.2		24.0	1.60
KSH	62.0	317	eP	20 56 18.0	0.8		
			eS	21 04 42.0	3.5		
			LN	Ms=5.4		6.0	0.50

1987 4 15
O=21 51 54.0 ± 0.71s
LAT=35.98 N ± 5.92km
LONG= 77.47 E ± 2.74km
DEPTH= 20 km
STATIONS USED = 7, STAND DEV= 3.76s
M_L=4.2/ 4,

KSH	3.7	342	cPn	21 52 53.0	2.7		
			Sg	21 53 43.0	−5.9		
			SMN	M_L=4.2		0.5	0.60
			SME			0.6	0.60
WMQ	11.1	42	P	21 54 32.8	−2.2		

1987 4 15
O=21 56 40.2 ± 0.10s
LAT=19.00 N ± 1.48km
LONG=146.95 E ± 2.33km
DEPTH= 36 km ± 0.41km
STATIONS USED = 43, STAND DEV= 1.38s

SSE	26.2	302	eP	22 02 13.0	−0.7
			eS	22 06 41.0	−0.2
MDJ	29.4	334	eP	22 02 42.0	−0.4
TIA	31.3	309	eP	22 03 00.0	0.2
BJI	33.7	315	eP	22 03 21.5	0.6
QZN	35.0	276	eP	22 03 32.8	0.8
TIY	35.4	309	eP	22 03 35.4	0.5
HHC	37.2	313	−P	22 03 51.4	0.6
BTO	38.2	312	eP	22 03 59.0	0.1
LZH	41.5	303	eP	22 04 26.0	0.1
GTA	45.3	307	P	22 04 57.0	−0.1
LSA	51.5	293	P	22 05 45.0	−0.5
WMQ	55.0	311	P	22 06 11.0	0.0

1987 4 15
O=23 19 39.7 ± 0.08s
LAT=18.88 N ± 1.47km
LONG=147.19 E ± 1.68km
DEPTH= 35 km ± 0.23km
STATIONS USED = 19, STAND DEV= 1.22s

TIA	31.6	309	eP	23 26 01.0	−0.7
BJI	34.0	315	eP	23 26 22.0	−0.6
TIY	35.6	309	eP	23 26 36.8	0.1
GTA	45.6	307	eP	23 27 59.0	0.3
WMQ	55.3	311	P	23 29 12.6	0.2

1987 4 16
O=01 10 22.0 ± 0.06s
LAT=54.98 N ± 1.48km
LONG=157.99 E ± 1.01km
DEPTH=339 km ± 0.06km
STATIONS USED = 75, STAND DEV= 0.74s
m_B=5.0/ 1

MDJ	20.9	252	−P	01 14 39.5	−0.5		
			sP	01 16 15.0	−1.4		
			S	01 18 10.0	2.4		
			SME			15.0	2.29
			PcP	01 18 35.3	0.7		
CN2	23.7	255	−P	01 15 05.0	−1.5		
			S	01 18 53.0	−1.8		

SNY	26.1	254	−P	01 15 26.9	−0.7	
DL2	29.2	252	eP	01 15 54.5	−0.7	
BJI	31.4	259	eP	01 16 14.5	−0.2	
			pP	01 17 19.0	0.0	
			PcP	01 19 00.0	1.0	
HHC	33.5	265	+P	01 16 33.4	0.6	
TIA	33.6	253	−P	01 16 32.8	−0.4	
BTO	34.6	266	−iP	01 16 42.0	0.3	
			epP	01 17 47.0	0.1	
			eS	01 21 46.5	0.3	
TIY	35.1	260	−P	01 16 46.7	0.3	
			PMZ		1.0	0.050
			eS	01 21 53.0	−1.8	
SSE	35.3	243	eP	01 16 48.2	0.3	
			PcP	01 19 11.5	1.4	
			eS	01 21 58.0	0.4	
NJ2	35.8	246	+P	01 16 51.8	0.0	
WHN	39.4	250	P	01 17 21.0	−0.5	
			PcP	01 19 24.0	1.5	
XAN	39.7	259	−P	01 17 23.6	−1.1	
LZH	41.2	266	−iP	01 17 37.0	0.6	
			PMZ		1.0	0.13
			PcP	01 19 30.0	1.6	
GTA	41.2	273	−iP	01 17 37.3	0.5	
			PcP	01 19 29.7	1.1	
CD2	45.0	261	−iP	01 18 06.8	0.0	
			PMZ		0.9	0.15
WMQ	45.2	286	iP	01 18 09.6	1.0	
			PMZ		1.5	0.12
			PcP	01 19 46.5	4.4	
			PcS	01 23 37.5	3.4	
			S	01 24 26.5	4.8	
GYA	46.8	254	P	01 18 20.8	0.1	
			pP	01 19 24.0	−5.2	
			PcP	01 19 48.6	1.0	
			S	01 24 45.2	1.7	
KMI	50.0	257	−P	01 18 45.0	−0.4	
QZN	51.0	245	eP	01 18 54.2	1.3	

1987 4 16
O = 04 06 21.5 ± 0.03s
LAT = 36.59 N ± 0.37km
LONG = 105.64 E ± 0.32km
DEPTH = 13 km ± 0.10km
STATIONS USED = 6, STAND DEV = 1.64s
M_L = 2.8 / 5,

LZH	1.5	252	Pg	04 06 48.0	−0.9	
			Sg	04 07 06.0	−3.8	
			SMN	M_L = 2.9	0.5	0.18
			SME		0.5	0.13
XAN	3.7	133	ePg	04 07 26.6	−0.3	
			Sn	04 08 11.0	6.8	
			Sg	04 08 16.5	−0.8	
			SMN	M_L = 2.4	0.6	0.010
GTA	5.4	303	ePg	04 07 57.3	0.2	
			Sg	04 09 08.2	−2.4	
			SMN	M_L = 2.8	0.7	0.010
			SME		0.6	0.010

1987 4 16
O = 06 38 37.6 ± 0.14s
LAT = 20.02 N ± 2.34km
LONG = 145.83 E ± 3.22km
DEPTH = 73 km ± 0.56km
STATIONS USED = 63, STAND DEV = 1.72s

SSE	24.8	301	P	06 43 53.7	−0.3	
			PMZ		0.8	0.020
			pP	06 44 09.8	−0.7	
			eS	06 48 10.0	1.6	
MDJ	28.0	335	eP	06 44 24.5	0.5	
DL2	28.1	317	eP	06 44 26.6	1.6	
SNY	28.8	324	−P	06 44 30.0	−0.9	
CN2	29.2	329	eP	06 44 34.0	−0.7	
TIA	29.9	309	−P	06 44 40.7	0.0	
BJI	32.3	315	eP	06 44 56.0	−5.9	
QZN	33.9	275	eP	06 45 16.6	0.8	
TIY	33.9	309	−iP	06 45 17.0	0.9	
XAN	35.5	301	P	06 45 29.5	−0.2	
HHC	35.8	313	+P	06 45 32.0	−0.1	
GYA	36.4	288	P	06 45 38.6	0.9	
BTO	36.8	312	eP	06 45 40.0	−0.2	
			epP	06 45 59.0	1.4	
			ePP	06 47 09.5	3.6	
			eS	06 51 20.0	1.5	
CD2	39.3	295	eP	06 46 02.0	0.6	
LZH	40.0	303	eP	06 46 07.5	−0.1	
GTA	43.9	306	+P	06 46 39.0	0.1	
			PcP	06 48 24.1	0.3	
			ScP	06 52 05.7	−1.7	
LSA	50.1	292	+iP	06 47 29.5	0.9	
WMQ	53.5	310	P	06 47 55.0	1.3	
KSH	62.2	305	P	06 48 55.0	0.4	

1987 4 16
O = 07 01 51.1 ± 0.17s
LAT = 1.87 N ± 1.45km
LONG = 127.15 E ± 2.55km
DEPTH = 123 km ± 1.74km
STATIONS USED = 43, STAND DEV = 2.26s

QZN	24.0	316	P	07 06 55.6	−0.5	

GZH	25.0	329	eP	07 07 04.5	−0.6
TIA	35.4	346	eP	07 08 36.0	−1.4
XAN	36.3	334	P	07 08 43.3	−1.3
CD2	36.4	325	eP	07 08 44.4	−1.3
TIY	38.1	341	+P	07 09 00.3	−0.1
BJI	39.3	347	eP	07 09 09.0	−0.7
HHC	41.3	342	eP	07 09 25.2	−1.2
LSA	44.0	313	−P	07 09 47.8	−0.9
GTA	44.9	330	−P	07 09 54.6	−1.1
WMQ	54.5	326	P	07 11 08.0	−0.7
KSH	59.6	316	−P	07 11 46.0	0.9

1987 4 16
O = 08 46 58.8 ± 0.06s
LAT = 18.88 N ± 0.68km
LONG = 147.21 E ± 1.51km
DEPTH = 35 km ± 0.30km
STATIONS USED = 21, STAND DEV = 1.02s

TIA	31.6	309	eP	08 53 20.1	−0.8
BJI	34.0	315	eP	08 53 41.5	−0.3
BTO	38.5	312	eP	08 54 18.0	−1.8
WMQ	55.3	311	eP	08 56 31.0	−0.6

1987 4 16
O = 12 14 53.8 ± 0.11s
LAT = 10.67 N ± 1.50km
LONG = 125.90 E ± 1.90km
DEPTH = 86 km ± 0.65km
STATIONS USED = 63, STAND DEV = 1.50s
m_B = 5.0 / 3

QZN	17.6	300	eP	12 18 57.0	2.1	
SSE	20.8	349	P	12 19 30.5	0.3	
			PMZ		0.8	0.020
			SME		14.0	0.87
NJ2	22.3	344	+P	12 19 47.1	2.4	
			SME	m_B = 4.8	12.0	0.30
WHN	22.5	333	P	12 19 48.5	1.3	
			SMN	m_B = 5.5	9.0	1.07
GYA	24.0	313	P	12 20 03.0	1.1	
TIA	26.6	344	eP	12 20 25.6	−1.0	
XAN	28.0	329	P	12 20 37.5	−1.3	
DL2	28.4	353	eP	12 20 43.0	0.7	
TIY	29.5	338	eP	12 20 51.8	−0.9	
BJI	30.5	345	eP	12 21 00.0	−1.2	
SNY	31.1	357	−P	12 21 06.4	−0.1	
HHC	32.6	340	+P	12 21 20.6	0.7	
BTO	32.9	337	eP	12 21 22.0	−0.8	
CN2	33.0	359	eP	12 21 25.0	1.8	
MDJ	34.0	5	−P	12 21 31.4	−0.1	
GTA	36.8	325	P	12 21 55.9	−0.1	
LSA	37.5	305	eP	12 22 01.4	−0.3	
WMQ	46.7	322	P	12 23 16.6	0.5	

1987 4 16
O = 13 23 38.0 ± 0.10s
LAT = 22.27 S ± 1.77km
LONG = 171.86 E ± 2.88km
DEPTH = 26 km ± 0.50km
STATIONS USED = 79, STAND DEV = 1.27s
Ms = 5.6 / 27, m_B = 5.7 / 6

QZH	69.8	309	eP	13 34 49.0	0.0	
			cS	13 44 00.0	4.0	
			SMN	m_B = 5.6	8.0	0.47
			LN	Ms = 5.2	14.0	0.65
SSE	71.9	316	P	13 35 01.0	−0.8	
			sP	13 35 12.0	−1.5	
			eS	13 44 20.0	−0.6	
			sS	13 44 31.0	−3.3	
			eSKS	13 44 54.0	−4.5	
			eSS	13 48 56.0	−1.7	
			LN	Ms = 5.7	18.0	1.17
			LE		20.0	2.31
GZH	72.6	305	+P	13 35 06.0	0.1	
QZN	73.2	299	eP	13 35 07.0	−2.3	
			ePP	13 37 53.0	−0.6	
			eS	13 44 32.0	−3.0	
			eSS	13 49 18.0	0.4	
			LN	Ms = 5.8	23.0	3.40
NJ2	74.1	315	+P	13 35 13.5	−0.9	
			eS	13 44 49.0	4.2	
			LE	Ms = 5.4	16.0	0.90
WHN	76.2	311	P	13 35 26.0	−0.5	
			pP	13 35 32.0	−2.7	
			S	13 45 08.0	1.3	
			SS	13 50 05.0	1.5	
			LE	Ms = 5.7	24.0	3.13
DL2	76.9	322	P	13 35 30.0	−0.6	
			epP	13 35 36.0	−2.7	
			eS	13 45 18.0	2.0	
			SMN	m_B = 5.7	9.0	0.55
			LN	Ms = 5.8	22.0	3.63
MDJ	76.9	330	eP	13 35 30.6	−0.3	
			eS	13 45 23.0	6.4	
TIA	77.8	318	+P	13 35 34.9	−0.8	
			eS	13 45 28.0	1.9	
			SMN	m_B = 5.6	12.0	0.61
			LN	Ms = 5.6	17.0	1.59
SNY	77.9	325	−P	13 35 35.0	−0.9	
			eS	13 45 32.0	5.6	
			sS	13 45 47.0	7.0	

			SS	13 50 34.0	5.6		
			LN	Ms=5.7		24.0	1.93
			LE			24.0	2.39
CN2	78.3	328	P	13 35 37.0	−1.4		
			pP	13 35 43.5	−3.1		
			PP	13 38 33.0	−3.5		
			S	13 45 26.0	−3.7		
			SMN	m_B=5.9		12.0	1.20
GYA	79.6	304	P	13 35 45.4	0.1		
			pP	13 35 53.4	0.1		
			S	13 45 44.0	1.2		
			LN	Ms=5.4		22.0	0.70
			LE			22.0	1.00
BJI	80.8	320	eP	13 35 51.5	−0.5		
			esP	13 36 04.0	0.4		
			eS	13 46 01.0	3.3		
			SMN	m_B=6.0		10.0	1.11
			SME			9.0	0.29
			eSS	13 51 19.0	6.1		
			LN	Ms=5.7		19.0	1.82
			LE			19.0	1.29
TIY	81.7	316	+P	13 35 56.2	−0.5		
			sS	13 46 15.5	−5.0		
			LE	Ms=5.8		21.0	2.81
KMI	81.9	301	−P	13 35 59.5	1.4		
			LE	Ms=5.5		20.0	1.30
XAN	82.0	312	P	13 35 58.0	0.1		
			S	13 46 10.0	2.3		
CD2	84.0	307	eP	13 36 09.7	1.2		
HHC	84.1	319	−P	13 36 09.4	0.4		
BTO	84.9	318	P	13 36 13.0	−0.1		
			sP	13 36 25.0	0.4		
			ePP	13 39 34.0	3.7		
			eSKS	13 46 32.0	1.0		
			S	13 46 39.0	1.6		
			LN	Ms=5.6		17.0	0.70
			LE			17.0	1.00
LZH	86.6	311	+P	13 36 21.0	−0.3		
			PMZ			2.0	0.14
GTA	91.0	313	−P	13 36 42.3	0.1		
			PP	13 40 19.0	0.2		
			SKS	13 47 12.0	2.8		
			S	13 47 36.5	2.4		
			eSS	13 53 38.0	−3.2		
			LE	Ms=5.6		17.0	1.18
WMQ	101.1	313	P	13 37 32.6	4.5		
			PP	13 41 38.4	0.1		
			eSKS	13 48 03.0	0.2		

1987 4 16

O = 19 23 24.0 ± 0.07s
LAT = 37.06 N ± 1.63km
LONG = 141.39 E ± 1.42km
DEPTH = 49 km ± 0.91km
STATIONS USED = 97, STAND DEV = 1.45s
Ms = 5.8 / 50, m_B = 6.0 / 32

MDJ	11.7	314	+P	19 26 12.0	1.1		
			pP	19 26 19.0	−0.1		
			sP	19 26 26.0	0.0		
			PP	19 26 22.0	1.5		
CN2	13.9	304	+iP	19 26 40.5	0.6		
			PMZ	m_B=6.7		5.0	5.80
			S	19 29 13.6	1.5		
			SMN	m_B=6.0		7.0	6.50
			LE	Ms=5.7		17.0	36.4
SNY	14.6	295	+iP	19 26 50.0	1.2		
			PMZ			18.0	9.77
			pP	19 27 00.0	2.2		
			SMN			17.0	7.00
			SME			28.0	6.88
			LN	Ms=5.8		12.0	5.63
			LE			13.0	31.0
DL2	15.7	283	+iP	19 27 05.0	1.5		
			PMZ	m_B=6.0		6.0	3.78
			pP	19 27 15.0	2.4		
			S	19 30 00.0	5.2		
			LE	Ms=5.4		16.0	14.3
SSE	17.8	256	+P	19 27 29.5	0.1		
			PMZ			1.4	0.12
			pP	19 27 40.0	1.0		
			sP	19 27 46.0	0.9		
			cS	19 30 46.0	3.5		
			sS	19 30 58.0	−0.3		
			SS	19 31 10.0	4.9		
			LN	Ms=5.6		14.0	4.14
			LE			13.0	15.2
NJ2	19.2	262	+P	19 27 45.5	−1.3		
			pP	19 27 54.2	−2.6		
			LE	Ms=5.7		14.0	15.2
TIA	19.5	275	+P	19 27 48.1	−1.7		
			PMZ	m_B=5.5		10.0	2.53
			S	19 31 25.0	4.4		
			LN	Ms=5.8		13.0	13.0
			LE			15.0	16.5
BJI	19.9	286	eP	19 27 52.5	−2.1		
			PMZ	m_B=5.5		5.0	1.14
			eS	19 31 32.0	1.1		
			SMN			19.0	2.28
			SME			20.0	4.60
			eScS	19 39 22.5	1.9		

			LN		Ms=5.6	13.0	10.9
			LE			14.0	6.10
QZH	22.9	245	+iP	19 28 22.5	−2.3		
			PMZ			3.0	0.89
			pP	19 28 38.0	1.7		
			S	19 32 25.0	−0.9		
			sS	19 32 49.5	3.2		
			SS	19 33 13.0	1.3		
			LN		Ms=5.4	15.0	7.24
TIY	23.0	280	+iP	19 28 24.0	−1.6		
			PMZ			1.0	0.080
			pP	19 28 36.0	−1.1		
			SME		m_B=6.2	10.0	6.21
			sS	19 32 53.5	5.9		
			LN		Ms=6.1	13.5	12.8
			LE			14.0	24.0
WHN	23.3	262	+iP	19 28 28.0	−1.0		
			PMZ		m_B=6.0	6.0	4.00
			S	19 32 36.0	2.4		
			SMN		m_B=6.1	8.0	4.14
			sS	19 32 54.0	−0.1		
			LE		Ms=5.8	16.0	16.9
HHC	23.4	288	−P	19 28 29.2	−0.9		
			PP	19 28 58.0	−3.9		
			S	19 32 39.0	3.7		
			LN		Ms=5.7	10.0	2.63
			LE			12.5	8.99
BTO	24.6	288	+P	19 28 39.5	−2.0		
			sP	19 28 56.0	−2.5		
			PP	19 29 16.0	−1.7		
			S	19 32 52.0	−3.6		
			sS	19 33 12.0	−4.2		
			LN		Ms=5.9	13.0	13.7
			LE			15.0	11.2
XAN	26.5	273	cP	19 28 58.0	−1.3		
			pP	19 29 10.0	−1.0		
			sP	19 29 15.0	−1.4		
			PP	19 29 45.0	1.9		
			S	19 33 32.0	5.1		
			LN		Ms=5.4	16.0	1.43
			LE			12.0	4.29
GZH	27.9	248	+iP	19 29 12.0	0.6		
			PMZ		m_B=6.3	5.0	3.05
			sP	19 29 33.0	4.3		
			iS	19 33 54.0	4.6		
			SMN		m_B=6.1	8.0	2.29
			SME			9.0	3.72
			LN		Ms=5.7	12.0	3.72
			LE			13.0	6.62
LZH	30.0	280	+iP	19 29 31.0	−0.1		
			PMZ			1.0	0.31
			PP	19 30 33.0	3.8		
			S	19 34 23.0	−0.4		
			SME		m_B=5.9	7.0	2.24
			LN		Ms=6.2	17.5	12.9
			LE			15.0	21.8
GYA	31.2	260	+P	19 29 41.0	−0.4		
			PMZ			1.4	0.60
			pP	19 29 53.0	−0.2		
			S	19 34 41.0	−0.6		
			SMN		m_B=6.2	5.0	1.70
			SME			5.0	2.30
			sS	19 35 08.0	4.6		
			PcS	19 36 20.0	2.8		
			LN		Ms=5.8	14.0	4.70
			LE			14.0	8.50
CD2	31.7	270	P	19 29 44.6	−0.7		
			pP	19 29 56.0	−1.1		
			S	19 34 50.5	1.8		
			LE		Ms=5.1	15.0	2.11
GTA	32.5	287	+P	19 29 52.4	−0.7		
			PMZ		m_B=6.0	6.0	1.55
			pP	19 30 04.0	−0.9		
			PP	19 31 05.0	3.4		
			S	19 35 08.0	5.5		
			SMN		m_B=5.8	8.0	0.98
			SME			7.0	1.29
			sS	19 35 31.0	6.8		
			SS	19 37 00.0	−1.1		
			LE		Ms=5.8	16.0	9.77
QZN	32.9	246	+P	19 29 57.5	1.2		
			PMZ		m_B=6.0	6.0	1.60
			sP	19 30 17.0	3.4		
			PP	19 31 10.5	4.0		
			S	19 35 11.0	2.5		
			SMN		m_B=5.8	10.0	1.20
			SME			10.0	2.00
			sS	19 35 36.0	5.7		
			ScS	19 40 13.0	−3.2		
			LN		Ms=5.8	15.0	4.50
			LE			18.0	9.80
KMI	34.9	261	+iP	19 30 14.0	0.1		
			pP	19 30 24.0	−1.9		
			S	19 35 35.0	−4.9		
			LE		Ms=5.9	16.0	10.8
WMQ	40.8	297	+iP	19 31 04.6	1.8		
			PMZ		m_B=6.6	4.0	3.67
			pP	19 31 16.0	1.0		
			PP	19 32 46.0	5.9		
			S	19 37 15.0	6.2		

			SME		$m_B = 6.4$	7.0	4.30
			sS	19 37 37.0	6.2		
			SS	19 40 12.0	4.8		
LSA	42.2	275	+P	19 31 15.5	1.0		
			PP	19 32 54.0	−0.9		
			S	19 37 36.0	6.8		
			SME	$m_B = 5.8$	9.0	1.32	
			LE	Ms = 5.7	16.0	4.62	
KSH	50.4	294	+iP	19 32 21.0	1.9		
			pP	19 32 33.0	1.7		
			sP	19 32 40.0	3.4		
			iS	19 39 34.0	6.6		
			SME	$m_B = 6.2$	8.0	2.30	
			sS	19 39 52.0	3.4		
			LE	Ms = 6.3	12.0	12.2	

1987 4 16

O = 22 03 09.9 ± 0.10s
LAT = 22.15 N ± 1.33km
LONG = 144.34 E ± 1.80km
DEPTH = 66 km ± 0.16km
STATIONS USED = 80, STAND DEV = 1.07s
Ms = 4.5 / 6,

SSE	22.5	298	P	22 08 05.0	−0.2		
			PMZ			1.0	0.10
			pP	22 08 20.0	−0.1		
			sP	22 08 27.0	−1.5		
			S	22 12 06.0	3.6		
			sS	22 12 29.0	0.8		
			SS	22 12 52.0	4.1		
			LZ	Ms = 4.7	24.0	2.29	
NJ2	24.7	299	eP	22 08 26.2	−0.2		
			pP	22 08 40.8	−0.7		
MDJ	25.5	335	eP	22 08 34.5	0.5		
			eS	22 13 00.0	5.7		
DL2	25.6	316	−iP	22 08 36.6	1.4		
			PMZ			3.0	0.77
			S	22 13 00.0	4.3		
CN2	26.7	329	P	22 08 44.0	−0.9		
			pP	22 09 01.0	0.8		
			eS	22 13 10.0	−3.7		
TIA	27.5	307	+P	22 08 51.8	−0.5		
WHN	28.1	294	P	22 08 57.0	−0.8		
			pP	22 09 12.0	−1.2		
			eS	22 13 35.0	−1.6		
BJI	29.8	313	eP	22 09 12.0	−1.2		
TIY	31.5	307	eP	22 09 28.0	−0.4		
			S	22 14 31.0	0.9		
			LN	Ms = 4.5	14.0	0.46	
QZN	32.4	271	eP	22 09 36.2	0.2		
XAN	33.3	299	+P	22 09 42.4	−1.1		
BTO	34.3	310	P	22 09 52.0	−0.6		
			epP	22 10 10.0	1.7		
			ePP	22 11 09.0	0.3		
			eS	22 15 11.5	−3.2		
GYA	34.5	285	P	22 09 54.4	−0.1		
CD2	37.2	292	+iP	22 10 16.4	−0.5		
			PMZ			1.0	0.14
LZH	37.7	301	+iP	22 10 22.0	0.4		
			PMZ			1.5	0.090
KMI	38.1	283	eP	22 10 25.0	0.1		
GTA	41.5	305	+iP	22 10 52.2	−0.5		
			PMZ			1.4	0.060
			ScP	22 16 34.8	2.8		
			S	22 17 04.8	2.5		
LSA	48.1	291	+P	22 11 45.6	−0.3		
WMQ	51.1	309	eP	22 12 09.2	0.4		
KSH	59.9	304	eP	22 13 13.0	1.1		

1987 4 17

O = 00 12 24.7 ± 0.10s
LAT = 8.98 N ± 1.40km
LONG = 124.07 E ± 1.51km
DEPTH = 558 km ± 0.34km
STATIONS USED = 91, STAND DEV = 1.07s
$m_B = 4.8$ / 4

QZH	16.7	342	eP	00 15 51.0	0.5		
			S	00 18 40.0	3.9		
QZN	17.0	307	P	00 15 53.8	0.3		
			sP	00 18 02.0	−0.3		
			S	00 18 45.0	3.5		
GZH	17.4	325	−iP	00 15 58.1	1.1		
SSE	22.2	353	+P	00 16 41.7	0.1		
			PMZ			1.5	0.090
			eS	00 20 09.0	1.1		
WHN	23.3	338	−P	00 16 52.0	0.3		
			PMZ			1.0	0.74
			sP	00 19 20.0	−1.0		
			S	00 20 24.0	−1.2		
NJ2	23.5	349	−P	00 16 53.0	−0.2		
GYA	24.0	319	−P	00 16 58.0	0.1		
			sP	00 19 26.0	−1.8		
			PcP	00 20 20.6	0.1		
			S	00 20 37.0	1.1		
KMI	25.9	311	−P	00 17 15.0	0.0		
TIA	27.8	348	−P	00 17 31.0	−0.8		
XAN	28.6	333	−iP	00 17 37.5	−0.7		
			S	00 21 47.0	−1.0		
CD2	28.9	322	−iP	00 17 40.3	−0.7		
			S	00 21 51.0	−1.9		

DL2	29.9	356	−P	00 17 49.2	−0.2		
TIY	30.5	342	P	00 17 54.6	0.0		
			PMZ			0.6	0.050
			S	00 22 19.0	1.5		
BJI	31.7	348	−iP	00 18 05.0	0.0		
			PcP	00 20 39.5	−0.2		
			eS	00 22 36.0	−1.5		
			ScP	00 23 31.0	1.4		
LZH	32.7	329	−iP	00 18 14.5	1.3		
			PMZ			0.5	0.29
			iS	00 22 52.5	0.1		
			SMN			2.0	0.21
SNY	32.7	359	−iP	00 18 13.4	−0.1		
HHC	33.6	343	−P	00 18 21.4	0.2		
BTO	33.9	341	P	00 18 22.0	−1.3		
CN2	34.7	2	−iP	00 18 29.0	−1.1		
			pP	00 20 03.0	−2.0		
			eS	00 23 21.0	−2.1		
MDJ	35.8	7	−P	00 18 39.4	0.0		
LSA	37.1	308	−P	00 18 49.0	−1.0		
GTA	37.3	328	−iP	00 18 51.4	0.1		
			PcP	00 20 56.2	0.2		
			ScP	00 23 50.0	0.5		
			PcS	00 24 43.0	0.7		
WMQ	46.9	324	P	00 20 07.0	−0.6		
KSH	52.5	313	−P	00 20 49.5	0.9		

1987 4 17
O = 00 33 48.1 ± 0.14s
LAT = 15.36 N ± 1.82km
LONG = 145.97 E ± 2.78km
DEPTH = 108 km ± 0.99km
STATIONS USED = 79, STAND DEV = 1.59s
$m_B = 5.7 / 15$

QZH	27.4	295	eP	00 39 22.0	−3.4		
			pP	00 39 43.0	−5.7		
			iS	00 43 55.0	−0.9		
			LN			12.0	0.68
SSE	27.5	309	P	00 39 26.4	−0.6		
			pP	00 39 50.0	−0.3		
			PP	00 40 16.0	−3.2		
			S	00 43 58.0	0.0		
			SS	00 45 27.0	1.9		
			LN			11.0	0.52
			LE			11.0	0.60
NJ2	29.7	309	+P	00 39 44.0	−2.7		
			S	00 44 29.0	−4.1		
			LE			13.0	0.50
GZH	31.7	289	eP	00 40 04.8	0.9		
			eS	00 45 05.0	0.5		
DL2	31.7	322	P	00 40 05.0	0.8		
			epP	00 40 27.0	−1.0		
			cPP	00 41 13.0	0.5		
			eS	00 45 05.0	−0.2		
			esS	00 45 45.0	−2.0		
			SMN	$m_B = 5.3$		8.0	0.81
			LN			13.0	0.76
WHN	32.7	303	eP	00 40 12.0	−0.3		
			eS	00 45 18.0	−1.6		
			sS	00 45 56.0	−5.5		
			LN			14.0	0.83
			LE			36.0	1.62
SNY	32.7	328	eP	00 40 12.2	−0.3		
			eS	00 45 18.0	−2.1		
			SMN			23.0	0.82
			LN			38.0	2.42
			LE			35.0	1.93
TIA	33.0	314	eP	00 40 15.1	−0.5		
			SMN	$m_B = 5.1$		11.0	0.60
			SME			11.0	0.39
			LN			13.0	0.89
			LE			13.0	0.49
CN2	33.3	332	eP	00 40 18.0	0.2		
QZN	34.7	281	eP	00 40 31.0	1.5		
			sP	00 41 03.0	−3.6		
			cPP	00 41 51.0	2.2		
			S	00 45 54.0	4.3		
			SME	$m_B = 5.3$		10.0	0.90
			sS	00 46 32.0	−0.5		
			eSS	00 48 13.0	4.1		
			LE			12.0	0.70
BJI	35.8	319	eP	00 40 38.0	−0.8		
			PP	00 42 01.0	−0.1		
			eS	00 46 07.0	−0.5		
			esS	00 46 46.0	−3.7		
			SMN	$m_B = 5.5$		7.0	0.74
			LN			14.0	0.79
			LE			14.0	0.47
TIY	37.0	313	P	00 40 49.9	0.2		
			PMZ	$m_B = 5.8$		5.0	0.89
			pP	00 41 10.5	−3.5		
			PP	00 42 19.0	1.7		
			S	00 46 28.0	1.8		
			SMN	$m_B = 5.4$		9.0	0.73
			SME			10.5	0.53
			sS	00 47 07.0	−2.6		
			LN			17.0	1.69
			LE			18.0	1.60
XAN	38.2	306	P	00 40 58.8	−0.3		
			S	00 46 14.0	0.7		

			SMN	$m_B = 5.5$	11.0	0.46	
			SME		10.0	0.85	
			sS	00 47 25.0	−1.8		
			LN		10.0	0.43	
GYA	38.2	293	P	00 41 00.8	1.5		
			sP	00 41 35.0	−1.6		
			S	00 46 47.0	3.3		
			ScP	00 46 51.0	3.1		
			PcS	00 47 02.0	2.8		
			ScS	00 51 00.2	3.8		
HHC	39.2	317	−P	00 41 08.2	0.9		
			iS	00 47 02.0	2.7		
			LN		14.0	1.18	
			LE		16.0	0.95	
BTO	40.1	316	+iP	00 41 15.0	0.2		
			pP	00 41 37.0	−2.2		
			PP	00 42 50.0	−1.7		
			S	00 47 13.0	1.4		
			LN		13.0	0.40	
			LE		13.0	0.30	
CD2	41.5	299	−iP	00 41 26.9	0.2		
			S	00 47 33.0	−0.2		
			sS	00 48 18.0	0.9		
KMI	41.6	291	−P	00 41 29.5	2.4		
			PMZ	$m_B = 5.8$	4.0	0.57	
			pP	00 41 52.0	0.5		
			iS	00 47 39.0	3.9		
LZH	42.8	307	+iP	00 41 38.5	1.4		
			PMZ		2.0	0.23	
			pP	00 42 00.5	−1.1		
			PP	00 43 18.0	−1.5		
			S	00 47 54.0	2.3		
			SME		2.0	0.27	
			sS	00 48 31.0	−4.7		
GTA	46.8	310	+P	00 42 09.8	0.4		
			PMZ	$m_B = 5.7$	4.0	0.45	
			pP	00 42 31.0	−3.2		
			PP	00 44 02.0	1.5		
			ScP	00 47 25.4	3.0		
			S	00 48 51.0	1.2		
			SMN	$m_B = 5.7$	7.0	0.54	
			SME		7.0	0.43	
			sS	00 49 30.0	−4.6		
			ScS	00 51 51.0	1.7		
			LE		22.0	1.29	
LSA	52.2	296	+P	00 42 50.2	−0.4		
WMQ	56.7	313	P	00 43 23.5	0.2		
			pP	00 43 45.5	−3.4		
			PP	00 45 32.7	1.2		
			S	00 51 08.2	3.6		
			SME		2.0	0.22	
			ScS	00 53 00.0	2.8		
KSH	65.0	307	eP	00 44 20.0	0.3		
			pP	00 44 44.0	−1.9		
			sP	00 44 56.0	−2.2		
			S	00 52 56.0	5.5		
			SME	$m_B = 5.8$	6.0	1.00	
			sS	00 53 34.0	−3.5		

1987 4 17

O = 01 03 07.3 ± 0.07s

LAT = 49.87 N ± 0.94km

LONG = 78.65 E ± 0.99km

DEPTH = 24 km ± 0.20km

STATIONS USED = 94, STAND DEV = 1.06s

Ms = 4.9 / 17, M_L = 5.9 / 1, m_B = 5.5 / 2

WMQ	8.7	131	+iP	01 05 13.5	−1.0		
			LE	Ms = 5.0	9.0	8.27	
KSH	10.6	191	eP	01 05 42.0	0.9		
			eS	01 07 41.0	0.9		
			LN		3.0	7.70	
GTA	18.3	117	−iP	01 07 20.3	−1.2		
			LE	Ms = 4.9	6.0	1.12	
LSA	22.3	150	+P	01 08 05.0	0.1		
LZH	22.9	117	+iP	01 08 11.5	0.8		
			PMZ		1.5	0.75	
			eS	01 12 20.0	5.2		
			LN	Ms = 4.9	9.0	1.23	
			LE		10.0	0.41	
BTO	23.8	101	+iP	01 08 20.4	0.7		
			pP	01 08 27.5	0.5		
			eS	01 12 28.0	−3.1		
			LN	Ms = 5.0	9.0	0.80	
			LE		9.0	1.20	
HHC	24.7	99	+P	01 08 28.8	0.8		
			eS	01 12 47.0	1.3		
			LN	Ms = 5.3	9.0	1.48	
			LE		10.0	2.98	
CD2	26.7	126	+iP	01 08 48.0	0.8		
			PMZ		1.0	0.47	
			eS	01 13 25.0	5.4		
TIY	27.0	104	+iP	01 08 50.6	0.6		
			PMZ		0.9	0.080	
			S	01 13 20.0	−3.6		
			sS	01 13 38.0	1.0		
			LN	Ms = 4.9	11.0	1.00	
			LE		12.0	0.82	
XAN	27.3	114	+iP	01 08 52.0	−0.3		
			eS	01 13 28.0	−0.8		
			LN	Ms = 4.9	10.0	0.43	

			LE			7.0	0.73
BJI	28.0	96	+iP	01 09 00.0	0.6		
			LN	Ms=5.0		12.0	0.99
			LE			10.0	1.07
TIA	30.9	101	+P	01 09 25.2	0.5		
			PcP	01 12 20.4	−0.2		
KMI	31.0	134	+P	01 09 25.5	−0.2		
GYA	31.8	127	P	01 09 33.4	0.6		
			PcP	01 12 23.8	0.8		
			S	01 14 40.0	0.4		
SNY	31.9	87	+iP	01 09 32.8	−0.8		
			PcP	01 12 23.2	−0.1		
CN2	32.2	83	+iP	01 09 34.6	−1.2		
			PMZ			2.0	0.40
DL2	32.2	93	eP	01 09 36.0	−0.1		
			eS	01 14 48.0	1.2		
			LN	Ms=4.8		10.0	0.56
WHN	33.0	112	P	01 09 43.0	0.0		
			PMZ			0.8	0.27
			PcP	01 12 26.5	0.3		
			eS	01 15 03.0	4.0		
			LN	Ms=4.8		10.0	0.54
MDJ	34.4	79	+iP	01 09 55.0	−0.5		
			PcP	01 12 30.2	−0.1		
NJ2	34.7	106	+P	01 09 59.2	1.5		
			PcP	01 12 31.2	0.2		
SSE	36.8	104	+P	01 10 16.0	0.4		
			PMZ			1.0	0.19
			S	01 15 59.0	1.9		
			LN	Ms=4.5		13.0	0.30
GZH	38.1	122	+iP	01 10 27.0	0.6		
QZN	39.6	130	+iP	01 10 40.0	1.1		
			PcP	01 12 46.9	1.0		
			eS	01 16 37.0	−3.4		
			LE	Ms=4.7		11.0	0.40
QZH	39.6	114	eP	01 10 39.8	0.5		

1987 4 17
O=05 10 47.9 ± 0.21s
LAT=24.27 N ± 2.01km
LONG=122.13 E ± 1.97km
DEPTH= 15 km
STATIONS USED = 72, STAND DEV= 1.94s
Ms=4.4/20, M_L=4.6/ 8,

QZH	3.3	282	+Pn	05 11 40.3	0.9		
			Pg	05 11 49.2	3.2		
			Sn	05 12 15.2	−5.0		
			SMN	M_L=4.6		1.0	2.26
			SME			0.9	1.34
			LN	Ms=4.0		8.0	2.53
			LE			8.0	2.76
SSE	6.9	353	+P	05 12 29.8	−0.8		
			LN	Ms=4.0		15.0	1.74
GZH	8.1	263	eP	05 12 49.0	0.4		
			eS	05 14 15.5	−5.7		
			LN	Ms=4.7		5.0	2.17
			LE			4.0	0.89
NJ2	8.3	340	+P	05 12 48.2	−2.3		
			S	05 14 20.0	−4.4		
			LE	Ms=4.6		4.0	1.60
WHN	9.3	314	eP	05 13 00.0	−5.0		
			LN	Ms=4.8		6.0	2.76
QZN	12.6	248	eP	05 13 50.6	1.4		
			eS	05 16 10.4	0.4		
TIA	12.7	341	eP	05 13 54.4	3.7		
			LN	Ms=4.1		14.0	0.89
GYA	14.2	282	P	05 14 10.4	−0.1		
			pP	05 14 13.8	−1.6		
			S	05 16 41.8	−5.9		
			LN	Ms=5.0		5.0	2.00
XAN	15.1	313	eP	05 14 21.6	−1.0		
			LN	Ms=5.0		6.0	1.80
			LE			6.0	1.03
TIY	15.8	331	eP	05 14 33.8	2.4		
			LN	Ms=4.2		12.0	0.69
BJI	16.5	344	eP	05 14 44.0	3.2		
			eS	05 17 45.0	1.5		
			LE	Ms=4.0		12.0	0.35
CD2	17.6	296	eP	05 14 54.4	0.1		
KMI	17.6	277	−P	05 14 59.5	4.1		
HHC	18.8	334	eP	05 15 10.0	1.0		
BTO	19.2	331	P	05 15 14.0	−0.3		
			pP	05 15 19.0	−0.3		
			PP	05 15 30.5	0.0		
			eS	05 18 43.0	−1.8		
			LN	Ms=4.5		13.0	0.80
			LE			12.0	0.40
CN2	19.7	7	eP	05 15 19.5	0.0		
			sP	05 15 27.0	−1.5		
			eS	05 18 52.0	−3.5		
			LN	Ms=4.3		12.0	0.50
LZH	19.7	311	eP	05 15 20.0	0.2		
			LN	Ms=5.1		4.0	1.05
MDJ	21.2	15	eP	05 15 35.5	−0.1		
GTA	24.1	314	P	05 16 05.1	0.2		
LSA	28.1	288	P	05 16 41.2	−0.8		
WMQ	34.2	313	P	05 17 36.0	0.3		

1987 4 17
O=05 14 31.3 ± 0.17s

LAT=20.36 S ± 3.00km
LONG=174.28 W ± 1.61km
DEPTH= 92 km ± 2.11km
STATIONS USED = 23, STAND DEV= 1.88s

BJI	88.3	314	eP	05 27 13.0	−1.4	
TIY	89.8	311	eP	05 27 22.8	1.1	
XAN	90.8	306	eP	05 27 26.5	−0.1	

1987 4 17
O=07 33 39.1 ± 0.07s
LAT=35.68 N ± 1.55km
LONG=140.11 E ± 1.41km
DEPTH= 78 km ± 1.05km
STATIONS USED = 87, STAND DEV= 1.52s
Ms=4.2/ 12, m_B=5.0/ 1

MDJ	12.0	321	−P	07 36 29.8	0.6		
CN2	13.9	310	eP	07 36 54.0	0.2		
			pP	07 37 03.0	−3.9		
			eS	07 39 25.0	−1.5		
			LE	Ms=4.0		12.0	0.50
SNY	14.3	300	−iP	07 37 00.6	1.7		
			eS	07 39 41.0	5.1		
			LN	Ms=4.2		17.0	0.64
			LE			17.0	0.81
DL2	15.1	288	P	07 37 13.0	4.0		
			epP	07 37 25.0	2.3		
			eS	07 40 00.0	5.7		
			LE	Ms=4.2		13.0	0.76
SSE	16.4	259	eP	07 37 28.3	1.8		
			PMZ			1.5	0.070
			sP	07 37 50.0	−0.4		
			LN	Ms=4.4		12.0	0.84
NJ2	18.0	265	+P	07 37 46.7	0.7		
			LN	Ms=4.4		11.0	0.70
TIA	18.6	278	−P	07 37 51.8	−1.2		
			LN	Ms=4.4		10.0	0.56
BJI	19.4	290	eP	07 37 59.0	−2.4		
			epP	07 38 15.0	−0.7		
			eS	07 41 31.0	−0.2		
			SME	m_B=5.0		7.0	0.29
			esS	07 41 52.0	−3.5		
QZH	21.4	246	eP	07 38 21.0	−1.3		
			LN	Ms=4.0		26.0	0.56
WHN	22.1	264	P	07 38 30.5	0.7		
			sP	07 38 52.0	−4.6		
			S	07 42 26.0	2.7		
			LE	Ms=4.2		14.0	0.45
TIY	22.3	283	eP	07 38 29.5	−1.5		
			sP	07 38 55.0	−2.7		
			LE	Ms=4.4		18.0	0.89
HHC	22.9	292	eP	07 38 35.8	−2.0		
BTO	24.1	291	eP	07 38 46.0	−3.0		
			epP	07 39 03.5	−2.7		
			ePP	07 39 21.0	−5.3		
			eS	07 42 52.0	−6.5		
			LN	Ms=4.3		12.0	0.20
			LE			12.0	0.30
XAN	25.6	275	−P	07 39 02.6	−0.5		
GZH	26.4	249	+P	07 39 10.4	0.0		
LZH	29.3	282	eP	07 39 36.0	−0.7		
GYA	30.0	262	P	07 39 41.8	−1.0		
			pP	07 39 58.4	−2.1		
			S	07 44 34.6	1.7		
CD2	30.6	272	eP	07 39 47.2	−1.5		
QZN	31.4	246	P	07 39 55.6	0.2		
GTA	32.0	289	+P	07 39 59.8	−0.7		
			PcP	07 42 50.0	1.8		
			PcS	07 46 33.4	1.8		
KMI	33.7	262	+P	07 40 14.5	−1.2		
WMQ	40.5	298	P	07 41 14.0	1.4		
			PMZ			2.0	0.090
LSA	41.3	276	+P	07 41 19.4	0.0		
KSH	50.0	295	eP	07 42 30.0	1.7		
			pP	07 42 44.0	−3.1		
			PP	07 44 19.0	−5.8		

1987 4 17
O=08 33 35.3 ± 0.11s
LAT=17.23 S ± 2.44km
LONG=173.10 W ± 2.51km
DEPTH= 37 km ± 0.37km
STATIONS USED = 41, STAND DEV= 1.33s

MDJ	80.6	322	eP	08 45 45.0	−1.7
NJ2	81.5	307	eP	08 45 51.0	−0.1
CN2	82.7	320	eP	08 45 56.0	−1.2
SNY	82.8	318	eP	08 45 56.9	−1.0
TIA	84.6	310	eP	08 46 07.1	0.1
TIY	88.6	310	−iP	08 46 27.6	0.8
GYA	89.1	298	P	08 46 30.2	1.0
XAN	89.9	306	P	08 46 33.5	0.7
HHC	90.5	313	+P	08 46 36.0	0.5
KMI	92.1	296	+P	08 46 44.5	1.5
GTA	98.5	309	P	08 47 12.0	−0.3

1987 4 17
O=13 13 08.3 ± 0.05s
LAT=29.57 N ± 0.46km
LONG=101.96 E ± 0.36km
DEPTH= 10 km
STATIONS USED = 5, STAND DEV= 1.83s

M_L=2.8/ 3,

CD2	2.1	49	Pn	13 13 43.8	0.4		
			Pg	13 13 44.6	0.0		
			Sg	13 14 09.4	−3.4		
			SMN	M_L=2.7		0.5	0.070
			SME			0.4	0.040

1987 4 17
O=15 37 06.2 ± 0.11s
LAT=39.33 N ± 1.87km
LONG= 72.72 E ± 1.87km
DEPTH= 25 km ± 0.54km
STATIONS USED = 23, STAND DEV = 2.70s
Ms=4.5/ 1, M_L=4.1/ 2,

KSH	2.5	86	Pn	15 37 48.0	1.7		
			Sn	15 38 20.0	2.2		
			LN			4.0	22.7
WMQ	12.1	63	P	15 39 56.0	−4.1		
GTA	20.9	81	eP	15 41 48.0	−1.9		

1987 4 17
O=15 47 18.6 ± 0.03s
LAT=37.08 N ± 0.35km
LONG=104.41 E ± 0.31km
DEPTH= 20 km
STATIONS USED = 7, STAND DEV= 1.34s
M_L=2.8/ 3,

GTA	4.3	304	Pn	15 48 23.4	−0.3		
			Pg	15 48 37.7	3.1		
			Sn	15 49 15.6	0.5		
			Sg	15 49 32.0	−1.4		
XAN	4.8	128	ePg	15 48 42.0	−0.9		
			Sg	15 49 42.6	−5.4		

1987 4 17
O=19 39 48.6 ± 0.19s
LAT= 4.08 S ± 1.50km
LONG=152.54 E ± 0.88km
DEPTH=145 km ± 2.05km
STATIONS USED = 35, STAND DEV= 1.94s

MDJ	52.7	339	eP	19 48 49.5	−1.0
CN2	53.5	336	P	19 48 56.0	−1.0
BJI	55.1	326	eP	19 49 07.0	−1.7
TIY	55.8	322	eP	19 49 13.5	0.0
CD2	58.1	310	eP	19 49 30.2	0.7
LZH	60.5	316	eP	19 49 47.0	0.5
GTA	65.0	317	−P	19 50 16.3	0.6
WMQ	75.0	317	P	19 51 17.8	1.1

1987 4 17
O=20 10 52.8 ± 0.12s
LAT=23.46 N ± 1.29km
LONG=114.68 E ± 0.89km
DEPTH= 10 km
STATIONS USED = 12, STAND DEV= 2.36s
M_L=3.4/ 11,

G/H	1.3	254	+iPg	20 11 17.2	1.8		
			Sn	20 11 33.7	−2.5		
			Sg	20 11 35.6	2.6		
			SMN	M_L=3.3		0.4	0.97
			SME			0.4	0.11
QZN	6.3	227	ePn	20 12 27.8	1.6		
			Sn	20 13 40.6	0.0		
			SMN	M_L=3.0		0.7	0.010
			SME			0.7	0.010

1987 4 17
O=21 24 03.0 ± 0.08s
LAT= 2.59 S ± 0.94km
LONG=138.98 E ± 1.70km
DEPTH= 81 km ± 0.28km
STATIONS USED = 28, STAND DEV= 1.25s

GYA	42.5	315	P	21 31 54.4	1.6
XAN	46.1	325	eP	21 32 21.0	−0.6
CD2	47.3	318	eP	21 32 31.1	0.5
BJI	47.3	336	eP	21 32 30.0	−0.7
LZH	50.5	323	eP	21 32 56.5	0.5
GTA	55.1	323	−P	21 33 29.6	−0.4
WMQ	65.1	321	P	21 34 37.5	−0.4

1987 4 17
O=23 57 53.6 ± 0.08s
LAT=42.47 N ± 0.68km
LONG= 80.19 E ± 0.73km
DEPTH= 26 km ± 0.26km
STATIONS USED = 6, STAND DEV= 2.81s
M_L=3.5/ 5,

1987 4 18
O=00 03 12.9 ± 0.16s
LAT=33.57 N ± 1.41km
LONG=132.02 E ± 1.77km
DEPTH= 99 km ± 0.66km
STATIONS USED = 41, STAND DEV= 1.90s

SSE	9.5	258	eP	00 05 29.5	1.1		
			PMZ			1.2	0.010
DL2	9.9	305	eP	00 05 32.0	−2.4		
SNY	10.6	323	−P	00 05 44.2	0.7		
NJ2	11.2	266	eP	00 05 53.0	1.9		
MDJ	11.2	351	eP	00 05 53.0	1.7		

CN2	11.4	335	eP	00 05 54.6	0.2	
			PP	00 06 03.6	−2.6	
TIA	12.5	286	eP	00 06 09.2	0.4	
BJI	14.2	302	eP	00 06 33.0	1.9	
WHN	15.3	263	eP	00 06 48.5	3.9	
TIY	16.4	290	eP	00 07 02.0	2.7	
HHC	17.8	300	−P	00 07 17.2	1.0	
BTO	18.9	298	eP	00 07 27.0	−1.4	
XAN	19.2	278	P	00 07 30.0	−1.8	
GYA	23.0	259	P	00 08 09.6	−0.9	
LZH	23.2	284	eP	00 08 12.0	−0.5	
CD2	24.0	271	P	00 08 19.0	−0.9	
GTA	26.5	292	eP	00 08 41.7	−1.3	
WMQ	35.7	300	P	00 10 03.0	−1.1	

1987 4 18
O=01 08 15.4 ± 0.09s
LAT=37.36 N ± 2.34km
LONG=142.76 E ± 2.71km
DEPTH= 27 km ± 1.18km
STATIONS USED = 79, STAND DEV= 1.79s
Ms=4.6/ 16,

MDJ	12.3	310	eP	01 11 17.2	5.3		
			eS	01 13 30.0	0.9		
			LE	Ms=4.2		15.0	1.08
CN2	14.6	301	eP	01 11 38.0	−4.7		
			LN	Ms=4.4		13.0	1.30
SNY	15.4	293	eP	01 11 51.0	−2.2		
			LE	Ms=4.6		15.0	1.97
DL2	16.7	282	eP	01 12 12.0	2.8		
			LE	Ms=4.3		12.0	0.68
SSE	18.9	257	eP	01 12 36.0	−0.4		
			sS	01 16 13.0	−0.8		
			LN	Ms=4.7		12.0	0.57
			LE			14.0	1.45
NJ2	20.3	262	eP	01 12 52.5	0.1		
TIA	20.5	275	eP	01 12 52.6	−2.1		
			eS	01 16 38.5	0.0		
			LN	Ms=4.6		13.0	0.76
			LE			13.0	0.93
BJI	20.9	286	eP	01 12 56.5	−1.8		
			LE	Ms=4.2		12.0	0.35
TIY	24.0	280	eP	01 13 27.5	−1.7		
			sP	01 13 42.0	1.2		
			S	01 17 35.0	−5.8		
			sS	01 17 54.0	−0.7		
			LE	Ms=4.7		13.0	0.94
QZH	24.0	246	eP	01 13 28.8	−0.5		
WHN	24.5	262	P	01 13 34.5	0.9		
			eS	01 17 50.0	0.5		
			LN	Ms=4.8		12.0	0.83
			LE			13.0	0.77
BTO	25.6	287	P	01 13 44.0	−0.3		
			ePP	01 14 20.0	−3.2		
			eS	01 18 05.0	−3.3		
			LN	Ms=4.6		12.0	0.20
			LE			14.0	0.70
XAN	27.6	273	P	01 14 02.5	−0.3		
GZH	29.0	249	−P	01 14 16.5	1.2		
LZH	31.1	280	+iP	01 14 34.0	0.0		
GYA	32.3	261	P	01 14 44.4	−0.7		
CD2	32.7	270	P	01 14 48.0	−0.6		
GTA	33.5	287	+P	01 14 55.2	0.0		
QZN	34.0	247	eP	01 15 01.2	1.5		
KMI	36.1	262	−P	01 15 17.5	0.2		
WMQ	41.6	297	P	01 16 05.0	1.4		
LSA	43.2	276	eP	01 16 19.5	2.4		
KSH	51.3	294	eP	01 17 21.5	1.8		

1987 4 18
O=02 01 36.1 ± 0.06s
LAT=61.58 N ± 2.00km
LONG=150.93 W ± 0.79km
DEPTH= 60 km
STATIONS USED = 96, STAND DEV= 0.72s
Ms=5.0/ 8,

MDJ	47.4	287	+P	02 10 06.5	−0.3		
CN2	49.9	290	+iP	02 10 25.0	−1.2		
			PMZ			2.0	0.80
			sP	02 10 48.0	1.1		
			PP	02 12 20.0	−1.3		
			eS	02 17 26.0	−4.4		
SNY	52.3	290	+iP	02 10 44.0	−0.3		
			sP	02 11 05.0	−0.2		
			eS	02 18 04.0	0.6		
			LN	Ms=4.6		30.0	0.59
DL2	55.5	289	+iP	02 11 08.0	−0.1		
BJI	57.0	294	+iP	02 11 19.0	0.1		
HHC	58.4	298	+iP	02 11 28.0	−0.2		
BTO	59.2	299	+P	02 11 33.5	−0.7		
			sP	02 11 57.0	1.9		
			eS	02 19 35.0	−0.7		
			LN	Ms=5.3		19.0	1.00
			LE			19.0	0.80
TIA	59.8	291	+P	02 11 37.9	−0.1		
TIY	60.6	295	+iP	02 11 43.0	−0.6		
			PMZ			1.0	0.12
			eS	02 19 49.0	−4.4		
			LN	Ms=4.8		14.0	0.28
SSE	62.2	284	P	02 11 54.5	0.2		

			PMZ			1.0	0.090
			sP	02 12 16.0	0.5		
			eS	02 20 12.0	−1.6		
NJ2	62.5	287	+iP	02 11 55.5	−0.6		
			sP	02 12 17.0	−0.3		
GTA	64.3	306	+iP	02 12 08.8	0.2		
			pP	02 12 23.1	−0.4		
			sP	02 12 32.0	2.3		
			LE	$M_S \simeq 5.1$		8.0	0.32
WMQ	64.8	317	+P	02 12 12.1	0.4		
			PMZ			2.0	0.070
			sP	02 12 37.3	4.5		
			PP	02 14 35.0	−0.3		
			S	02 20 47.0	2.1		
XAN	65.2	296	+P	02 12 13.3	−0.9		
LZH	65.6	301	+iP	02 12 17.0	0.2		
			pP	02 12 35.0	3.4		
			sP	02 12 40.0	2.1		
WHN	65.8	289	+iP	02 12 17.5	−0.3		
			PMZ			1.0	0.42
			sP	02 12 40.0	0.9		
			iScS	02 22 04.0	0.8		
QZH	68.6	283	eP	02 12 35.0	−0.5		
CD2	70.1	298	−iP	02 12 44.6	−0.2		
			PMZ			1.0	0.17
KSH	72.4	324	+P	02 12 59.0	0.5		
			pP	02 13 16.0	2.6		
			ePP	02 15 42.0	1.7		
GZH	72.6	286	−iP	02 13 00.6	0.7		
GYA	72.7	294	P	02 13 00.6	0.1		
KMI	75.6	296	+P	02 13 17.0	−0.3		
LSA	76.2	308	−P	02 13 21.6	0.4		
QZN	77.8	287	eP	02 13 29.7	0.5		

1987 4 18
O = 05 36 28.8 ± 0.20s
LAT = 6.69 S ± 1.81km
LONG = 154.54 E ± 2.19km
DEPTH = 24 km ± 0.51km
STANDS USED = 65, STAND DEV = 1.29s
$m_B = 5.5$ / 5

QZH	47.0	313	eP	05 45 02.5	1.7		
			S	05 51 54.0	4.4		
SSE	49.3	322	eP	05 45 18.0	−0.3		
			cS	05 52 24.0	1.8		
QZN	50.9	301	eP	05 45 34.2	3.4		
NJ2	51.4	321	−P	05 45 35.0	0.7		
WHN	53.4	316	P	05 45 50.0	0.6		
			sP	05 46 01.0	0.2		
			S	05 53 24.0	6.2		
			SMN	$m_B = 5.5$		9.0	0.52
TIA	55.3	323	eP	05 46 01.8	−1.2		
			eS	05 53 47.5	3.7		
			SMN	$m_B = 5.2$		10.0	0.23
			SME			9.0	0.22
MDJ	55.8	339	eP	05 46 05.0	−1.8		
			pP	05 46 15.5	0.7		
CN2	56.7	335	+P	05 46 11.6	−2.0		
			pP	05 46 20.0	−1.5		
GYA	56.9	307	P	05 46 15.8	0.8		
TIY	59.1	322	eP	05 46 29.6	−0.6		
			S	05 54 39.0	6.0		
XAN	59.2	316	+iP	05 46 30.0	−0.8		
KMI	59.5	304	eP	05 46 34.0	0.9		
CD2	61.3	311	P	05 46 44.8	−0.4		
HHC	61.6	324	eP	05 46 47.2	−0.1		
BTO	62.3	323	eP	05 46 52.2	−0.2		
LZH	63.8	316	+iP	05 47 02.0	0.0		
			pP	05 47 13.0	3.1		
GTA	68.2	317	+iP	05 47 30.3	0.0		
LSA	70.7	305	P	05 47 46.0	−0.1		
WMQ	78.3	317	P	05 48 30.0	0.6		
			PMZ			1.4	0.040
			pP	05 48 41.0	3.7		
			S	05 58 26.5	5.9		
KSH	85.5	310	+P	05 49 08.0	1.2		
			pP	05 49 19.0	4.4		
			ePP	05 52 24.0	−1.6		
			S	05 59 38.0	4.2		
			SMN	$m_B = 5.8$		6.0	0.50
			sS	05 59 50.0	1.2		

1987 4 18
O = 12 49 36.2 ± 0.12s
LAT = 23.97 N ± 1.54km
LONG = 121.82 E ± 1.58km
DEPTH = 28 km ± 0.42km
STATIONS USED = 76, STAND DEV = 1.72s
Ms = 4.5 / 28, M_L = 4.8 / 5,

QZH	3.1	289	+iPn	12 50 24.2	0.6		
			iSn	12 50 57.2	−4.1		
			SMN	$M_L = 4.7$		1.0	2.62
			SME			1.2	2.37
			LN			3.0	7.11
SSE	7.1	356	P	12 51 20.5	−0.7		
			SMN	$M_L = 4.8$		1.2	0.31
			SME			1.1	0.41
GZH	7.8	265	P	12 51 30.8	−0.3		
			SMN	$M_L = 5.2$		1.0	1.03
			SME			1.0	0.27

NJ2	8.5	343	+P	12 51 37.5	−2.5		
			LE	Ms=4.8		5.0	2.60
WHN	9.3	316	eP	12 51 50.5	−1.4		
			S	12 53 30.5	−6.2		
			LN	Ms=5.1		4.0	3.75
QZN	12.2	248	eP	12 52 31.0	0.0		
			eS	12 54 40.0	−6.9		
			LN	Ms=4.4		15.0	1.70
TIA	12.9	343	eP	12 52 41.3	1.3		
			LN	Ms=4.1		13.0	0.76
GYA	13.9	283	P	12 52 53.6	−0.8		
			LN	Ms=5.0		5.0	2.20
DL2	14.9	359	eP	12 53 10.0	3.3		
			LE	Ms=4.3		14.0	0.91
XAN	15.1	315	eP	12 53 09.2	−0.1		
			LN	Ms=5.1		4.0	1.37
			LE			4.0	0.93
TIY	15.9	332	eP	12 53 23.2	3.6		
			LN	Ms=4.5		14.0	1.20
			LE			12.0	0.82
BJI	16.7	345	+iP	12 53 32.5	2.4		
			eS	12 56 36.0	1.9		
			LE	Ms=4.1		8.0	0.28
KMI	17.4	278	eP	12 53 42.0	3.0		
			eS	12 56 55.0	4.7		
			sS	12 57 04.0	3.2		
			LN	Ms=4.9		7.0	1.50
CD2	17.4	297	eP	12 53 39.9	0.5		
			eS	12 56 46.0	−5.1		
			LN	Ms=5.0		6.0	1.73
SNY	17.9	4	eP	12 53 46.5	1.9		
			LN	Ms=4.4		14.0	0.99
HHC	18.9	335	eP	12 53 59.4	1.9		
BTO	19.3	332	eP	12 54 03.0	0.8		
			ePP	12 54 20.5	1.5		
			eS	12 57 33.0	−0.3		
			LN	Ms=4.6		9.0	0.30
			LE			9.0	0.70
LZH	19.7	312	+iP	12 54 06.5	0.4		
			LN	Ms=5.0		5.0	0.80
			LE			6.0	0.91
CN2	20.0	8	+P	12 54 08.5	−1.2		
			eS	12 57 52.0	3.7		
			SS	12 58 21.0	5.2		
			LE	Ms=4.3		10.0	0.40
MDJ	21.5	15	eP	12 54 24.0	−1.6		
			eS	12 58 20.0	1.8		
			LE	Ms=4.5		20.0	1.31
GTA	24.1	315	−P	12 54 52.1	0.8		
			eS	12 59 06.5	1.6		
			LE	Ms=4.4		16.0	0.72
LSA	27.9	289	+P	12 55 26.6	−0.2		
WMQ	34.2	314	P	12 56 22.5	0.6		

1987 4 18
O=13 39 59.9 ± 0.09s
LAT=37.23 N ± 1.69km
LONG=116.53 W ± 1.61km
DEPTH= 10 km ± 0.05km
STATIONS USED = 59, STAND DEV= 1.46s

MDJ	79.0	318	eP	13 52 06.0	−0.5		
CN2	81.7	320	+P	13 52 20.0	−1.0		
			PP	13 55 26.0	−3.0		
SNY	84.1	319	+P	13 52 34.0	0.8		
DL2	87.2	318	eP	13 52 48.2	−0.6		
BJI	89.2	322	eP	13 52 58.5	0.5		
HHC	90.7	326	P	13 53 05.8	0.5		
BTO	91.6	326	eP	13 53 10.0	0.6		
TIA	91.6	319	eP	13 53 09.9	0.4		
TIY	92.8	323	P	13 53 15.8	0.9		
SSE	93.2	313	+iP	13 53 17.7	0.9		
			PMZ			1.2	0.060
NJ2	93.8	316	−P	13 53 20.0	0.4		
WMQ	96.4	343	P	13 53 31.6	0.2		
GTA	96.7	332	−P	13 53 33.3	0.3		
XAN	97.4	323	P	13 53 36.0	−0.1		
GYA	104.8	321	P	13 54 07.0	−2.0		

1987 4 18
O=13 41 35.2 ± 0.15s
LAT=44.05 N ± 1.25km
LONG=114.14 E ± 0.82km
DEPTH= 7 km
STATIONS USED = 6, STAND DEV= 2.60s
M_L=3.2 / 6,

BJI	4.3	159	cPg	13 42 51.5	0.6		
			cSg	13 43 45.5	−3.9		
			SMN	M_L=3.0		0.5	0.030
			SME			0.5	0.030
BTO	4.6	223	cPg	13 42 57.2	0.4		
			cSg	13 43 58.6	−1.0		
			SMN	M_L=3.1		0.4	0.030
			SME			0.4	0.030

1987 4 18
O=15 48 42.8 ± 0.12s
LAT=23.51 N ± 1.42km
LONG=114.64 E ± 0.67km
DEPTH= 10 km
STATIONS USED = 9, STAND DEV= 2.68s

M_L=3.2/ 8,

GZH	1.3	251	+iPg	15 49 06.2	1.1		
			Sg	15 49 24.4	2.1		
			SMN	M_L=3.3		0.7	0.56
			SME			0.7	0.37
QZH	3.9	68	ePg	15 49 49.5	−1.9		
			SMN	M_L=3.1		0.4	0.050
			SME			0.7	0.040

1987 4 18

O=16 59 48.6 ± 0.12s
LAT=22.43 N ± 1.78km
LONG= 79.26 E ± 1.43km
DEPTH= 32 km ± 0.09km
STATIONS USED = 48, STAND DEV= 1.44s

LSA	12.9	53	−P	17 02 49.1	−3.9		
KSH	17.2	351	eP	17 03 50.0	1.7		
			eS	17 06 58.0	0.7		
			esS	17 07 07.0	−1.7		
WMQ	22.4	16	P	17 04 47.0	0.6		
			PMZ			2.0	0.18
			eS	17 08 50.2	3.9		
CD2	23.4	64	eP	17 04 56.4	0.4		
GTA	24.3	41	−P	17 05 05.0	−0.1		
			pP	17 05 13.6	−0.1		
GYA	25.2	75	P	17 05 14.2	0.5		
LZH	25.3	52	eP	17 05 15.0	0.6		
XAN	28.5	60	eP	17 05 42.5	−0.8		
BTO	31.6	48	eP	17 06 10.4	−1.1		
TIY	32.3	54	eP	17 06 16.4	−0.8		
TIA	35.5	59	eP	17 06 45.1	0.2		
NJ2	36.3	66	eP	17 06 52.0	0.5		
CN2	43.5	49	P	17 07 50.4	−0.7		
MDJ	46.6	49	eP	17 08 16.0	0.3		

1987 4 18

O=17 42 18.0 ± 0.07s
LAT=23.46 N ± 0.79km
LONG=114.65 E ± 0.61km
DEPTH= 11 km ± 0.50km
STATIONS USED = 8, STAND DEV= 3.19s

M_L=3.3/ 6,

GZH	1.3	253	+iPg	17 42 40.0	−0.3		
			Sg	17 42 58.0	0.5		
			SMN	M_L=3.5		0.8	0.90
			SME			0.8	0.77
QZN	6.3	226	ePn	17 43 52.0	0.9		
			eSn	17 45 08.0	2.8		

1987 4 18

O=19 31 02.7 ± 0.10s
LAT=23.70 N ± 1.24km
LONG=114.51 E ± 0.85km
DEPTH= 10 km
STATIONS USED = 7, STAND DEV= 3.29s

M_L=3.1/ 5,

GZH	1.2	241	+Pg	19 31 24.1	−0.5		
			Sg	19 31 42.1	0.5		
			SMN	M_L=3.4		0.8	0.70
			SME			0.8	0.54
QZN	6.4	224	ePn	19 32 37.6	0.6		
			eSn	19 33 53.0	0.9		

1987 4 18

O=20 48 27.1 ± 0.12s
LAT=34.54 N ± 1.45km
LONG= 80.17 E. ± 1.46km
DEPTH= 32 km ± 0.07km
STATIONS USED = 50, STAND DEV= 2.11s
Ms=4.8/16, M_L=4.7/ 1,

KSH	5.9	327	Pn	20 50 00.0	6.5		
			LE	Ms=5.5		4.0	22.6
LSA	10.5	114	+P	20 50 58.0	−0.9		
			LN	Ms=5.0		8.0	4.70
WMQ	10.9	30	+iP	20 51 04.0	−0.8		
			LE	Ms=4.8		15.0	5.36
GTA	16.4	67	eP	20 52 16.0	−1.1		
			eS	20 55 16.0	−2.1		
			LN	Ms=4.7		19.0	2.78
LZH	19.4	79	eP	20 52 52.0	−1.3		
			eS	20 56 18.0	−7.0		
			LN	Ms=4.8		10.0	0.92
			LE			12.0	1.33
CD2	20.2	94	eP	20 53 00.8	−1.0		
			eS	20 56 41.0	−0.9		
			LN	Ms=4.8		10.0	1.45
KMI	21.7	110	eP	20 53 16.0	−1.5		
			eS	20 57 07.0	−4.0		
			sS	20 57 20.0	−4.3		
			LN	Ms=4.5		10.0	0.60
XAN	23.7	83	P	20 53 38.4	0.9		
			LN	Ms=4.8		10.0	0.86
			LE			12.0	0.76
GYA	24.2	102	P	20 53 42.6	0.8		
			S	20 58 00.8	6.6		
			LE	Ms=4.6		18.0	1.10
BTO	24.3	67	eP	20 53 44.5	0.9		
			eS	20 57 59.0	0.6		
			LN	Ms=4.7		11.0	0.60
			LE			11.0	0.60

TIY	26.2	74	cP	20 54 03.0	2.0		
			eS	20 58 34.0	5.1		
			LN	Ms=5.1	15.0	2.84	
QZN	30.5	113	cP	20 54 40.4	0.4		
			eS	20 59 40.0	1.6		

1987 4 18
O=20 53 41.5 ± 0.11s
LAT=13.50 N ± 1.22km
LONG=146.01 E ± 1.40km
DEPTH= 62 km ± 1.26km
STATIONS USED = 71, STAND DEV= 1.14s
Ms=5.0/19,

QZH	28.2	298	eP	20 59 30.0	−1.0		
			eS	21 04 16.0	5.7		
			LN	Ms=4.8	12.0	0.58	
			LE		16.0	1.07	
SSE	28.8	312	eP	20 59 35.5	−0.3		
			PP	21 00 30.0	0.6		
			eS	21 04 20.0	1.0		
			sS	21 04 42.0	−2.3		
			PcS	21 06 26.0	0.9		
			LN	Ms=4.9	12.0	1.09	
NJ2	31.0	311	eP	20 59 53.0	−2.4		
			LN	Ms=5.0	13.0	1.30	
GZH	32.4	292	eP	21 00 05.0	−2.8		
			S	21 05 16.0	0.8		
			LE	Ms=4.7	13.0	0.68	
DL2	33.2	324	+P	21 00 15.0	−0.2		
			LE	Ms=4.6	12.0	0.43	
MDJ	34.0	339	eP	21 00 21.5	−0.5		
			pP	21 00 35.3	−1.4		
			PcP	21 03 00.5	2.6		
			LE	Ms=5.0	15.0	1.51	
SNY	34.3	330	eP	21 00 24.4	0.1		
			pP	21 00 38.2	−0.8		
			eS	21 05 52.0	6.3		
			LN	Ms=5.2	14.0	1.40	
			LE		16.0	1.39	
TIA	34.4	316	eP	21 00 22.5	−2.6		
			LN	Ms=5.0	15.0	1.22	
			LE		15.0	0.68	
CN2	35.0	334	P	21 00 28.5	−1.6		
			pP	21 00 42.5	−2.3		
			cPP	21 01 46.0	−2.5		
			eS	21 05 54.0	−2.1		
			LE	Ms=5.1	15.0	1.60	
BJI	37.2	321	eP	21 00 49.5	0.6		
			PcP	21 03 09.0	1.8		
TIY	38.4	315	eP	21 00 59.0	0.2		
			sP	21 01 22.0	1.8		
			S	21 06 52.0	4.8		
			LN	Ms=5.2	14.0	0.65	
			LE		17.0	1.80	
GYA	39.0	295	P	21 01 05.6	1.5		
XAN	39.3	308	P	21 01 06.6	0.0		
HHC	40.6	319	eP	21 01 18.0	1.0		
			pP	21 01 33.0	1.3		
			S	21 07 22.0	1.8		
			LN	Ms=5.2	20.0	1.77	
			LE		18.0	1.03	
BTO	41.4	317	+P	21 01 25.5	1.3		
			sP	21 01 47.0	1.3		
			eS	21 07 39.0	4.6		
			LN	Ms=4.9	14.0	0.60	
			LE		15.0	0.50	
KMI	42.3	293	eP	21 01 32.5	1.3		
CD2	42.5	301	eP	21 01 34.8	2.0		
LZH	43.9	308	eP	21 01 45.0	0.3		
GTA	48.1	311	P	21 02 17.5	0.2		
			LE	Ms=4.8	13.0	0.46	
LSA	53.0	297	−iP	21 02 55.2	−0.2		
WMQ	58.0	313	P	21 03 31.5	0.7		
			PMZ		2.0	0.10	
			PcP	21 04 21.2	0.4		

1987 4 18
O=21 22 45.3 ± 0.13s
LAT=23.96 N ± 1.84km
LONG=121.80 E ± 1.91km
DEPTH= 26 km ± 0.55km
STATIONS USED = 28, STAND DEV= 2.34s
M_L=3.9/12,

QZH	3.1	289	+Pn	21 23 33.1	0.3		
			Sn	21 24 05.6	−4.9		
			SMN	M_L=3.6	0.3	0.23	
			SME		0.3	0.24	
SSE	7.1	356	eP	21 24 31.3	0.6		
			SMN	M_L=3.9	1.2	0.020	
			SME		1.2	0.070	
GZH	7.8	265	eP	21 24 40.0	−0.2		
			SME	M_L=4.5	1.0	0.14	
WHN	9.3	316	P	21 25 01.7	0.5		
GYA	13.9	283	P	21 26 03.0	−0.6		
			S	21 28 31.0	−6.8		
XAN	15.1	315	eP	21 26 23.0	4.3		
TIY	15.9	332	eP	21 26 34.7	5.6		
CD2	17.4	297	eP	21 26 53.0	4.3		

1987 4 19

O=03 10 21.7 ± 0.10s
LAT=29.92 N ± 1.82km
LONG=141.82 E ± 2.50km
DEPTH= 41 km ± 0.56km
STATIONS USED = 16, STAND DEV= 2.46s

CN2	19.0	321	eP	03 14 44.0	0.9		

1987 4 19
O=14 52 41.5 ± 0.11s
LAT= 2.96 S ± 1.50km
LONG=129.56 E ± 2.41km
DEPTH= 47 km ± 0.26km
STATIONS USED = 36, STAND DEV= 1.71s
Ms=4.4/ 2,

QZN	29.2	319	eP	14 58 40.2	−1.1		
			eS	15 03 28.0	−1.0		
GYA	36.7	324	P	14 59 47.4	1.2		
KMI	38.2	319	eP	15 00 00.0	1.3		
CD2	41.7	326	eP	15 00 27.9	0.0		
TIY	43.5	340	eP	15 00 42.8	0.4		
			LN	Ms=4.4		15.0	0.22
BJI	44.5	345	P	15 00 51.5	0.8		
LZH	45.7	331	eP	15 01 00.5	0.4		
CN2	46.7	356	eP	15 01 13.0	5.0		
			sP	15 01 23.0	−2.1		
			LN	Ms=4.4		20.0	0.30
MDJ	47.4	0	eP	15 01 17.0	3.8		
WMQ	59.8	326	P	15 02 44.2	−0.7		

1987 4 20
O=08 21 52.1 ± 0.08s
LAT=42.02 N ± 1.64km
LONG=142.69 E ± 1.15km
DEPTH= 80 km ± 0.75km
STATIONS USED = 22, STAND DEV= 1.64s

MDJ	9.9	290	−P	08 24 17.7	4.0		
BJI	20.1	273	eP	08 26 19.0	−2.8		
XAN	27.6	264	eP	08 27 32.4	−2.3		

1987 4 20
O=09 31 38.7 ± 0.15s
LAT=21.85 S ± 1.96km
LONG=179.02 W ± 2.91km
DEPTH=594 km ± 0.83km
STATIONS USED = 75, STAND DEV= 1.46s
m_B=5.4/11

QZH	76.4	304	−iP	09 42 30.0	0.2		
			iS	09 51 27.0	−1.5		
			SMN	m_B=5.4		7.0	0.59
			ScS	09 51 47.5	−0.9		
SSE	77.8	311	eP	09 42 36.0	−1.7		
			PMZ			0.8	0.030
			S	09 51 42.0	−0.3		
			SKS	09 51 54.0	3.0		
GZH	79.6	300	−iP	09 42 48.0	1.2		
			iS	09 52 04.0	2.4		
NJ2	80.0	310	−P	09 42 49.0	−0.2		
			S	09 52 05.5	0.9		
			SMN	m_B=5.6		8.0	0.90
QZN	80.5	295	P	09 42 52.0	0.1		
			cS	09 52 12.0	0.3		
MDJ	81.1	326	−iP	09 42 54.5	−0.2		
			epP	09 44 55.0	−4.5		
			S	09 52 14.0	−1.3		
			SMN	m_B=5.7		8.0	1.10
DL2	82.1	317	eP	09 42 59.0	−0.7		
WHN	82.5	307	−iP	09 43 02.2	0.4		
			SKS	09 52 24.0	0.5		
			S	09 52 26.0	−3.1		
			SMN	m_B=5.2		10.0	0.50
SNY	82.6	321	−iP	09 43 02.0	−0.5		
			SKS	09 52 23.0	−1.6		
			S	09 52 35.0	4.4		
CN2	82.8	323	−iP	09 43 02.0	−1.3		
			PMZ	m_B=5.5		4.0	0.70
			pP	09 45 07.0	−1.8		
			cS	09 52 32.0	−1.8		
			SMN	m_B=5.6		7.0	0.70
			SME			7.0	0.40
TIA	83.5	313	−P	09 43 06.9	0.1		
			csP	09 46 10.0	−0.7		
			SKS	09 52 30.0	−0.4		
			SMN	m_B=5.4		11.0	0.60
			SME			11.0	0.49
BJI	86.2	316	eP	09 43 19.5	−0.3		
			eSKS	09 52 48.0	−0.1		
			eS	09 53 08.0	2.1		
			SME	m_B=5.3		7.5	0.28
GYA	86.5	300	−P	09 43 21.0	−0.4		
			SKS	09 52 51.0	0.9		
			S	09 53 12.0	5.0		
TIY	87.5	312	−iP	09 43 26.0	0.0		
XAN	88.2	308	−iP	09 43 30.9	1.5		
			SKS	09 53 03.4	2.7		
			S	09 53 28.9	6.3		
BTO	90.5	314	−P	09 43 40.0	−0.2		
			SKS	09 53 15.0	0.6		
			S	09 53 45.0	1.8		
CD2	90.7	303	eP	09 43 41.6	0.5		
			SKS	09 53 14.7	−0.8		

LZH	92.8	308	−iP	09 43 51.5	0.6	
			PMZ		1.0	0.080
			eSKS	09 53 25.0	−2.2	
GTA	97.1	310	−P	09 44 09.2	−0.8	

1987 4 20
O = 09 31 58.3 ± 0.10s
LAT = 6.97 S ± 2.35km
LONG = 120.39 E ± 2.67km
DEPTH = 471 km ± 1.33km
STATIONS USED = 12, STAND DEV = 2.47s

QZN	27.8	338	eP	09 37 12.2	1.7	
XAN	42.2	346	P	09 39 11.9	1.4	
BJI	46.9	356	eP	09 39 42.5	−4.9	

1987 4 20
O = 10 09 09.0 ± 0.08s
LAT = 37.47 N ± 1.73km
LONG = 141.60 E ± 1.66km
DEPTH = 57 km ± 1.68km
STATIONS USED = 78, STAND DEV = 1.66s
Ms = 4.1 / 6,

MDJ	11.5	312	−P	10 11 55.6	2.0	
CN2	13.8	302	eP	10 12 23.0	−0.6	
			epP	10 12 30.0	−3.2	
			eS	10 14 53.0	−2.0	
			LN	Ms = 4.0	12.0	0.40
			LE		12.0	0.30
SNY	14.6	293	+P	10 12 34.0	0.6	
DL2	15.8	281	eP	10 12 51.0	1.8	
SSE	18.0	255	eP	10 13 17.5	0.3	
			PMZ		1.0	0.040
			sP	10 13 33.0	−2.0	
			PP	10 13 26.0	−6.0	
			eS	10 16 31.0	−1.5	
			eSS	10 16 58.0	1.8	
			LN	Ms = 4.1	20.0	0.60
NJ2	19.4	261	+P	10 13 32.5	−1.2	
			pP	10 13 46.5	1.4	
TIA	19.6	274	P	10 13 34.1	−1.7	
BJI	20.0	285	eP	10 13 37.0	−2.6	
TIY	23.1	280	eP	10 14 09.7	−1.1	
			eS	10 18 06.5	−6.9	
			LE	Ms = 4.4	16.0	0.76
WHN	23.6	261	eP	10 14 16.0	0.5	
BTO	24.7	287	eP	10 14 24.0	−2.2	
			epP	10 14 36.0	−3.3	
			eS	10 18 40.0	−0.9	
XAN	26.7	273	+P	10 14 44.3	−0.6	
GZH	28.2	247	iP	10 14 59.8	1.3	
LZH	30.1	279	eP	10 15 16.0	−0.3	
			PMZ		1.0	0.070
GYA	31.4	260	P	10 15 26.2	−1.6	
CD2	31.8	270	eP	10 15 30.2	−0.8	
GTA	32.6	287	P	10 15 36.4	−1.3	
QZN	33.2	245	eP	10 15 45.2	1.9	
WMQ	40.8	296	−iP	10 16 48.6	1.8	
LSA	42.3	275	P	10 17 01.0	1.1	
KSH	50.4	294	P	10 18 05.0	1.8	

1987 4 20
O = 12 43 12.2 ± 0.10s
LAT = 4.80 N ± 1.78km
LONG = 94.47 E ± 1.21km
DEPTH = 64 km ± 0.23km
STATIONS USED = 23, STAND DEV = 1.11s

QZN	20.6	45	eP	12 47 49.5	0.8	
GYA	24.5	27	P	12 48 27.0	0.0	
LSA	25.0	353	−P	12 48 31.5	−0.4	
CD2	27.4	18	P	12 48 52.8	−1.3	
XAN	32.0	23	−P	12 49 33.9	−1.4	
GTA	34.8	7	−iP	12 49 58.5	−0.7	
NJ2	35.4	37	eP	12 50 05.2	0.6	
BJI	40.2	26	eP	12 50 45.5	1.4	
CN2	47.5	30	P	12 51 42.0	−1.0	

1987 4 20
O = 17 17 14.6 ± 0.11s
LAT = 21.74 N ± 1.21km
LONG = 120.32 E ± 1.57km
DEPTH = 45 km ± 0.81km
STATIONS USED = 28, STAND DEV = 2.05s
M_L = 3.7 / 10,

QZH	3.6	334	eP	17 18 07.7	−1.3	
			S	17 18 45.3	−4.0	
			SMN	M_L = 3.3	0.2	0.090
			SME		0.2	0.090
GZH	6.6	283	+P	17 18 51.1	−0.5	
			S	17 20 01.2	−4.3	
			SMN	M_L = 4.1	0.9	0.14
			SME		0.9	0.080
QZN	10.2	257	eP	17 19 41.5	0.0	
			eS	17 21 31.8	−3.1	
GYA	13.3	293	P	17 20 23.6	−0.2	
			S	17 22 48.6	−1.7	
CD2	17.4	305	eP	17 21 19.2	3.0	
BJI	18.6	350	eP	17 21 32.0	1.6	

1987 4 21
O = 01 52 37.9 ± 0.04s

LAT= 2.63 N ± 0.89km
LONG=126.89 E ± 1.82km
DEPTH= 33 km ± 0.04km
STATIONS USED = 12, STAND DEV= 1.04s

BJI	38.5	347	eP	02 00 00.0	0.9

1987 4 21
O=03 37 36.9 ± 0.06s
LAT=10.20 S ± 1.28km
LONG=161.26 E ± 1.73km
DEPTH=101 km ± 0.96km
STATIONS USED = 52, STAND DEV= 1.01s

NJ2	58.4	318	+P	03 47 24.4	−0.1
QZN	58.4	300	eP	03 47 20.6	−4.2
MDJ	61.6	335	−P	03 47 46.4	−0.3
CN2	62.8	332	−P	03 47 54.0	−0.8
			pP	03 48 17.5	−2.0
GYA	64.3	306	P	03 48 04.4	−0.3
BJI	65.1	323	eP	03 48 09.5	−0.1
XAN	66.3	314	−P	03 48 17.0	−0.5
			pP	03 48 40.0	−2.4
KMI	66.9	303	eP	03 48 22.0	0.5
CD2	68.6	309	eP	03 48 31.2	−0.6
BTO	69.2	321	eP	03 48 35.0	−0.4
LZH	71.0	314	eP	03 48 45.0	−1.2
GTA	75.3	315	−P	03 49 12.4	0.7
			pP	03 49 35.9	−1.0
WMQ	85.4	316	P	03 50 06.0	0.9
			pP	03 50 29.8	−1.0

1987 4 21
O=12 55 07.9 ± 0.13s
LAT= 1.25 S ± 1.87km
LONG=149.85 E ± 3.32km
DEPTH= 34 km ± 0.84km
STATIONS USED = 11, STAND DEV= 3.47s

XAN	52.0	316	eP	13 04 12.3	−4.5
CD2	54.2	310	eP	13 04 36.8	3.8

1987 4 21
O=14 12 02.4 ± 0.04s
LAT= 8.22 S ± 0.69km
LONG=116.40 E ± 0.98km
DEPTH=179 km ± 0.19km
STATIONS USED = 20, STAND DEV= 0.90s

NJ2	40.1	3	+P	14 19 23.4	1.0
CD2	40.8	343	P	14 19 27.8	0.0
XAN	42.6	351	eP	14 19 42.0	−1.0
BJI	48.0	360	eP	14 20 24.0	−1.6

1987 4 21
O=14 17 13.6 ± 0.13s
LAT=40.62 N ± 0.47km
LONG= 87.24 E ± 0.56km
DEPTH= 25 km ± 1.09km
STATIONS USED = 8, STAND DEV= 2.59s
M_L=3.7/ 8,

WMQ	3.2	6	Pn	14 18 04.9	1.8		
			Pg	14 18 09.8	−0.6		
			Sn	14 18 38.6	−3.5		
			SMN	M_L=3.6		0.8	0.23
			SME			0.6	0.14

1987 4 21
O=14 58 19.5 ± 0.09s
LAT=36.28 N ± 1.35km
LONG= 71.05 E ± 1.35km
DEPTH= 36 km ± 0.20km
STATIONS USED = 32, STAND DEV= 2.07s
M_L=4.8/ 1,

WMQ	14.8	54	eP	15 01 48.9	0.7
LSA	18.1	106	P	15 02 29.1	−1.2
GTA	22.9	73	P	15 03 22.1	0.6
GYA	31.8	98	P	15 04 40.8	−2.6

1987 4 21
O=15 28 43.5 ± 0.09s
LAT=22.75 S ± 1.66km
LONG=170.26 E ± 2.41km
DEPTH= 43 km ± 0.98km
STATIONS USED = 94, STAND DEV= 1.08s
Ms=5.8/ 34, m_B=6.3/ 51

QZH	69.0	310	−iP	15 39 47.5	0.4		
			PMZ	m_B=6.3		6.0	2.54
			sP	15 40 05.0	1.6		
			iS	15 48 50.0	2.6		
			SME	m_B=6.5		9.0	4.72
			ScS	15 49 46.0	6.8		
			LN	Ms=5.4		12.0	0.78
SSE	71.3	317	P	15 40 00.0	−0.9		
			PMZ			1.4	0.32
			PcP	15 40 20.0	0.2		
			SS	15 53 49.0	−0.3		
			LN	Ms=5.9		17.0	1.14
			LE			19.0	3.44
GZH	71.7	306	−iP	15 40 04.8	1.3		
			PMZ	m_B=6.2		9.0	2.86
			LE	Ms=5.6		20.0	2.25
QZN	72.1	300	−P	15 40 07.5	1.3		
			PMZ	m_B=6.2		8.5	2.70

			sP	15 40 25.0	2.5		
			SME	$m_B = 6.2$		10.0	2.50
			LE	Ms = 5.7		17.0	2.20
NJ2	73.4	316	−P	15 40 13.8	0.3		
			PMZ	$m_B = 6.4$		5.0	2.70
			S	15 49 43.0	6.1		
			SME	$m_B = 6.1$		9.0	1.60
WHN	75.4	312	−iP	15 40 24.5	−0.7		
			PMZ			1.2	0.23
			sP	15 40 42.0	0.5		
			cPP	15 43 14.0	−1.5		
			iS	15 50 04.0	3.0		
			LE	Ms = 5.5		14.0	0.97
DL2	76.4	323	−iP	15 40 31.0	0.2		
			PMZ	$m_B = 6.3$		8.0	3.39
			pP	15 40 41.0	−1.2		
			cS	15 50 13.0	1.4		
			SME	$m_B = 6.4$		10.0	2.95
			LN	Ms = 5.8		16.0	2.57
MDJ	76.6	331	−iP	15 40 32.0	−0.3		
			pP	15 40 46.0	2.3		
			sP	15 40 50.3	1.8		
			SME	$m_B = 6.4$		12.0	4.10
TIA	77.2	318	eP	15 40 34.4	−1.0		
			PMZ	$m_B = 6.3$		8.5	3.52
			S	15 50 22.0	3.1		
			SMN	$m_B = 6.2$		11.0	0.80
			SME			9.0	1.49
			LN	Ms = 6.1		17.0	3.67
			LE			15.0	2.55
SNY	77.4	326	−iP	15 40 36.0	−0.6		
			PMZ	$m_B = 6.2$		9.0	2.70
			SMN	$m_B = 6.6$		11.0	1.78
			SME			11.0	4.68
			SS	15 55 28.0	4.6		
			LN	Ms = 5.9		32.0	5.00
			LE			32.0	2.99
CN2	77.9	329	−iP	15 40 38.8	−0.7		
			PMZ	$m_B = 6.2$		5.0	1.80
			pP	15 40 51.0	0.0		
			S	15 50 29.0	2.0		
			SME	$m_B = 6.4$		8.0	2.50
			SS	15 55 35.0	3.8		
GYA	78.6	305	−P	15 40 42.8	−0.5		
			PMZ	$m_B = 6.4$		5.0	2.60
			pP	15 40 56.0	1.3		
			PP	15 43 48.0	6.1		
			S	15 50 40.0	5.9		
			SME	$m_B = 6.2$		10.0	1.70
			sS	15 50 50.0	−5.2		
			ScS	15 50 59.0	3.0		
			LE	Ms = 5.7		20.0	2.50
BJI	80.2	321	−P	15 40 52.0	−0.1		
			PMZ	$m_B = 6.2$		5.0	1.55
			SME	$m_B = 6.6$		8.0	4.12
			LN	Ms = 5.6		18.0	1.72
KMI	80.9	302	−iP	15 40 58.0	2.0		
			PMZ			3.0	2.80
			SKS	15 51 06.0	1.2		
			LE	Ms = 5.9		20.0	3.30
TIY	81.0	317	−iP	15 40 56.0	−0.4		
			PMZ			1.4	0.28
			pP	15 41 03.0	−4.8		
			SKS	15 51 10.5	4.9		
			SME	$m_B = 6.6$		9.0	3.89
			LE	Ms = 5.7		16.0	1.79
XAN	81.2	312	−P	15 40 56.9	−0.2		
			PMZ	$m_B = 6.4$		8.0	3.57
			PP	15 44 02.9	−0.7		
			S	15 51 06.9	5.9		
			SMN	$m_B = 6.7$		6.0	0.84
			SME			8.0	4.16
			LN	Ms = 5.9		15.0	1.20
			LE			16.0	2.57
CD2	83.1	307	−iP	15 41 07.9	0.8		
			S	15 51 27.0	6.3		
			LE	Ms = 5.9		17.0	2.49
HHC	83.5	319	−iP	15 41 10.0	0.9		
			PMZ	$m_B = 6.4$		4.0	1.75
			PP	15 44 22.0	0.0		
			LN	Ms = 5.5		10.0	0.60
BTO	84.3	318	−iP	15 41 14.0	1.0		
			sP	15 41 32.0	2.8		
			ePP	15 44 33.0	4.7		
			SKS	15 51 32.0	4.1		
			S	15 51 37.0	4.7		
			SMN	$m_B = 6.3$		10.0	0.90
			SME			10.0	2.10
			LN	Ms = 5.7		19.0	1.70
			LE			19.0	1.20
LZH	85.8	312	−iP	15 41 21.5	1.0		
			PMZ			1.5	0.86
			S	15 51 48.0	1.0		
			SME	$m_B = 6.5$		8.0	4.24
			LE	Ms = 5.6		20.0	1.60
GTA	90.2	313	−iP	15 41 43.0	1.2		
			PMZ	$m_B = 6.4$		5.0	1.20
			pP	15 41 49.5	−3.8		
			PP	15 45 15.0	−1.6		
			SKS	15 52 12.0	6.2		

			S	15 52 34.0	5.4		
			SME	m_B=5.7		12.0	0.90
			SS	15 58 35.0	2.8		
			LE	Ms=5.8		17.0	1.75
LSA	92.2	301	P	15 41 50.5	−0.7		
			SKS	15 52 24.0	6.9		
			SME	m_B=6.0		6.0	0.89
WMQ	100.3	313	−iP	15 42 28.2	0.4		
			eSKS	15 53 05.0	4.8		
			S	15 53 49.0	−5.9		
			sS	15 54 11.0	−5.6		
			LN	Ms=6.1		16.0	3.16

1987 4 21
O=17 20 39.4 ± 0.16s
LAT=39.57 N ± 1.73km
LONG=118.51 E ± 0.94km
DEPTH= 17 km
STATIONS USED = 16, STAND DEV= 2.68s
M_L=3.4 / 15,

BJI	1.9	285	ePg	17 21 10.5	−1.8		
			Sg	17 21 35.5	−2.2		
			SMN	M_L=2.9		0.5	0.11
			SME			0.5	0.13
DL2	2.5	104	ePn	17 21 18.8	−1.2		
			Pg	17 21 25.2	1.4		
			eSg	17 22 00.0	1.8		
			SMN	M_L=3.1		0.6	0.15
			SME			0.6	0.080
TIA	3.5	198	ePg	17 21 41.7	−0.1		
			Sg	17 22 30.3	0.4		
			SMN	M_L=3.0		0.4	0.040
			SME			0.4	0.040
TIY	5.1	251	ePn	17 21 59.5	3.8		
			Pg	17 22 11.4	1.9		
			Sg	17 23 17.9	−1.3		
			SMN	M_L=3.4		0.6	0.030
			SME			0.7	0.050
BTO	6.6	282	ePg	17 22 37.1	1.1		
			eSg	17 24 01.4	−4.4		
			SMN	M_L=3.3		0.6	0.020
			SME			0.6	0.010
CN2	6.7	49	cPg	17 22 43.6	5.9		
			eSn	17 23 40.0	4.2		
			eSg	17 24 03.0	−6.2		
			SMN	M_L=3.7		1.0	0.030
			SME			1.0	0.040

1987 4 22
O=02 11 10.5 ± 0.07s
LAT=36.89 N ± 2.04km
LONG=141.72 E ± 1.15km
DEPTH= 61 km ± 0.67km
STATIONS USED = 21, STAND DEV= 1.57s

MDJ	12.0	314	eP	02 14 04.5	3.4
BJI	20.2	287	eP	02 15 44.0	0.7
XAN	26.8	274	eP	02 16 47.3	0.1

1987 4 22
O=09 02 32.0 ± 0.11s
LAT=40.40 N ± 1.25km
LONG=122.19 E ± 1.09km
DEPTH= 25 km
STATIONS USED = 5, STAND DEV= 4.91s
M_L=3.0 / 5,

DL2	1.6	196	cPg	09 03 00.0	0.2		
			cSg	09 03 22.3	1.1		
			SMN	M_L=3.1		0.5	0.13
			SME			0.5	0.31
SNY	1.8	36	+iPg	09 03 03.4	−0.2		
			Sg	09 03 25.6	−2.3		
			SMN	M_L=2.9		0.4	0.16
			SME			0.4	0.090

1987 4 22
O=14 26 52.3 ± 0.05s
LAT= 3.82 S ± 0.63km
LONG=135.58 E ± 1.26km
DEPTH= 32 km ± 0.11km
STATIONS USED = 19, STAND DEV= 1.19s

XAN	45.3	328	eP	14 35 08.4	−0.9
TIY	46.6	335	eP	14 35 20.1	0.5
BJI	47.1	340	eP	14 35 23.0	−1.0
GTA	54.2	326	P	14 36 17.0	−0.6
WMQ	64.0	323	eP	14 37 27.5	2.1

1987 4 22
O=16 06 47.2 ± 0.05s
LAT=50.57 N ± 1.75km
LONG=172.62 W ± 0.71km
DEPTH= 33 km ± 0.20km
STATIONS USED = 38, STAND DEV= 0.75s

MDJ	38.6	284	eP	16 14 10.0	1.0
CN2	41.5	286	P	16 14 33.6	−0.1
			epP	16 14 43.6	0.7
SNY	43.8	284	+P	16 14 52.7	0.8
BJI	49.4	287	eP	16 15 36.0	0.0
TIA	51.2	282	eP	16 15 49.7	0.0
BTO	52.7	291	eP	16 16 02.2	0.5
TIY	53.1	287	−P	16 16 06.1	1.8

WHN	56.6	279	eP	16 16 30.0	0.0				
XAN	57.7	286	eP	16 16 36.3	−1.0				
GTA	59.5	296	P	16 16 49.4	−0.7				
CD2	63.0	286	eP	16 17 13.4	−0.2				
WMQ	63.0	307	P	16 17 14.0	0.0				
GYA	64.3	281	P	16 17 21.0	−1.4				
LSA	71.4	294	P	16 18 07.5	0.5				

1987 4 22

O = 16 20 12.8 ± 0.13s
LAT = 23.78 S ± 0.81km
LONG = 179.42 E ± 2.33km
DEPTH = 604 km ± 0.55km
STATIONS USED = 14, STAND DEV = 1.01s

CN2	83.5	324	−P	16 31 39.6	−0.4				
TIA	83.8	314	eP	16 31 42.1	0.7				
TIY	87.7	313	+P	16 32 02.0	1.5				
CD2	90.6	304	eP	16 32 15.0	1.3				

1987 4 22

O = 17 23 05.5 ± 0.14s
LAT = 50.60 S ± 3.51km
LONG = 138.71 E ± 3.18km
DEPTH = 5 km ± 0.62km
STATIONS USED = 9, STAND DEV = 1.16s

GYA	81.8	331	P	17 35 27.0	−0.9				
KMI	81.8	327	eP	17 35 30.0	1.8				
CD2	86.8	330	eP	17 35 53.2	−0.1				
XAN	88.3	336	eP	17 35 59.3	−1.0				

1987 4 22

O = 20 13 23.4 ± 0.09s
LAT = 37.11 N ± 1.43km
LONG = 141.35 E ± 1.51km
DEPTH = 42 km ± 0.61km
STATIONS USED = 101, STAND DEV = 1.40s
Ms = 6.6 / 55, m_B = 6.5 / 42

MDJ	11.6	314	+iP	20 16 11.5	1.7				
CN2	13.8	304	+iP	20 16 40.0	1.1				
			PMZ		m_B = 7.1		4.0	13.5	
			pP	20 16 51.0	4.0				
			S	20 19 13.0	1.9				
			SMN		m_B = 6.3		7.0	15.3	
SNY	14.5	294	+iP	20 16 50.0	2.1				
			PMZ		m_B = 6.5		10.0	7.73	
			pP	20 17 00.0	3.9				
			SME				29.0	49.3	
			LN		Ms = 6.5		15.0	135	
			LE				18.0	116	
DL2	15.6	283	+iP	20 17 05.0	2.3				
			PMZ		m_B = 6.3		8.0	9.86	
			sP	20 17 22.0	5.4				
			eS	20 19 58.0	3.4				
			LN		Ms = 6.4		13.0	41.2	
			LE				12.0	92.5	
SSE	17.7	256	+iP	20 17 29.0	0.1				
			PMZ		m_B = 6.2		8.0	9.43	
			pP	20 17 38.0	0.4				
			sP	20 17 45.0	2.0				
			iS	20 20 45.0	2.7				
			SMN		m_B = 6.2		10.0	7.67	
			SME				8.0	5.45	
			sS	20 20 58.0	1.5				
			SS	20 21 08.0	3.4				
			PcP	20 22 05.0	−0.6				
			LE		Ms = 6.4		19.0	139	
NJ2	19.2	261	+P	20 17 45.0	−1.4				
			PMZ		m_B = 6.0		8.5	7.40	
			SMN				17.0	33.3	
			LE		Ms = 6.4		16.0	95.6	
TIA	19.4	275	+P	20 17 48.0	−1.4				
			PMZ				15.0	34.5	
			pP	20 17 57.5	−1.0				
			sP	20 18 03.5	−0.3				
			S	20 21 19.0	−1.2				
			SMN		m_B = 6.3		10.0	4.90	
			SME				10.0	9.38	
			SS	20 21 48.5	1.1				
			LN		Ms = 6.6		15.0	112	
			LE				15.0	92.0	
BJI	19.9	286	eP	20 17 51.5	−2.6				
			PMZ		m_B = 5.9		10.0	5.66	
			eS	20 21 30.0	−0.4				
			SMN		m_B = 6.3		12.0	7.59	
			SME				12.0	11.5	
			LN		Ms = 6.6		13.0	123	
			LE				18.0	43.1	
QZH	22.9	244	+iP	20 18 23.0	−1.7				
			PMZ		m_B = 5.8		10.0	4.46	
			iS	20 22 28.0	0.9				
			SME				13.0	11.1	
			LN		Ms = 6.2		14.0	30.5	
			LE				14.0	21.8	
TIY	22.9	280	+iP	20 18 24.0	−1.2				
			PMZ				1.2	0.38	
			SMN		m_B = 6.8		8.0	7.04	
			SME				12.0	29.9	
			PcS	20 25 53.5	0.6				
			LN		Ms = 6.4		14.0	60.2	
WHN	23.3	262	+iP	20 18 28.0	−0.8				

			PMZ		$m_B=6.3$		8.0	11.0
			sP	20 18 44.0		0.0		
			iS	20 22 33.0		−1.5		
			SME				14.0	17.3
			LE		Ms=6.5		24.0	134
HHC	23.4	288	+iP	20 18 28.6		−1.1		
			PMZ		$m_B=6.7$		8.0	27.9
			SMN		$m_B=6.6$		11.0	4.25
			SME				10.0	17.9
			LN		Ms=6.3		10.0	11.4
			LE				12.0	37.0
BTO	24.6	288	+iP	20 18 39.0		−2.1		
			pP	20 18 51.0		−0.5		
			PP	20 19 14.0		−3.0		
			S	20 22 50.0		−5.6		
			LN		Ms=6.5		13.0	24.8
			LE				13.0	55.3
XAN	26.5	273	+P	20 18 58.4		−0.6		
			PMZ		$m_B=6.4$		8.0	8.12
			S	20 23 28.0		0.9		
			sS	20 23 47.8		1.8		
			SS	20 24 43.8		5.1		
			LN		Ms=6.5		15.0	63.2
GZH	27.8	248	+P	20 19 12.5		1.1		
			PMZ				18.0	10.4
			S	20 23 54.0		4.9		
			SMN		$m_B=6.5$		10.0	7.74
			SME				10.0	11.0
			LN		Ms=6.4		28.0	58.6
			LE				32.0	88.8
LZH	30.0	280	+iP	20 19 30.5		−0.3		
			PMZ				1.5	0.86
			PP	20 20 29.0		0.5		
			S	20 24 17.0		−6.5		
			SME		$m_B=6.4$		9.0	8.58
			eSS	20 26 04.0		1.9		
			LE		Ms=7.0		17.0	193
GYA	31.2	260	+P	20 19 39.8		−1.4		
			PMZ		$m_B=6.6$		5.0	5.10
			sP	20 19 57.0		0.5		
			PP	20 20 49.0		5.2		
			S	20 24 36.0		−6.0		
			ScS	20 30 10.0		1.5		
			LN		Ms=6.8		20.0	79.7
			LE				20.0	104
CD2	31.6	270	cP	20 19 44.0		−1.0		
			S	20 24 50.6		1.7		
			LE		Ms=6.7		14.5	80.2
GTA	32.5	287	+iP	20 19 52.0		−0.7		
			PMZ		$m_B=6.4$		9.0	5.42
			PcP	20 22 42.0		3.8		
			iS	20 25 00.0		−3.7		
			SME				16.0	22.5
			ScS	20 30 17.5		2.4		
			LE		Ms=6.6		15.0	55.0
QZN	32.9	245	+iP	20 19 57.5		1.3		
			PMZ		$m_B=6.4$		8.0	4.60
			sP	20 20 16.0		4.4		
			S	20 25 14.5		5.4		
			SMN				13.5	4.90
			SME				12.5	8.20
			LN		Ms=6.4		15.0	12.4
			LE				17.0	39.9
KMI	34.9	261	+iP	20 20 14.0		0.2		
			PMZ		$m_B=6.6$		6.0	5.10
			PP	20 21 35.0		3.6		
			S	20 25 42.5		2.3		
			LE		Ms=6.7		17.0	74.0
WMQ	40.8	297	+iP	20 21 04.0		1.5		
			PMZ		$m_B=6.6$		12.0	11.1
			PP	20 22 41.0		1.3		
			ScP	20 26 51.8		4.3		
			SME		$m_B=6.8$		10.0	15.5
			SS	20 30 13.0		6.4		
			LN		Ms=6.6		13.0	38.6
LSA	42.1	275	+iP	20 21 15.6		1.3		
			PP	20 22 49.0		−5.7		
			S	20 27 34.0		4.5		
			SME		$m_B=6.3$		10.0	5.68
KSH	50.3	294	P	20 22 21.0		2.2		
			pP	20 22 33.0		3.3		
			PcP	20 23 38.0		1.8		
			PP	20 24 18.0		3.6		
			iS	20 29 34.0		6.4		
			SME		$m_B=7.0$		7.0	14.4
			LE		Ms=7.1		17.0	112

1987 4 22

O=20 40 10.0 ± 0.08s
LAT=24.25 N ± 0.96km
LONG=116.33 E ± 0.56km
DEPTH= 19 km ± 0.28km
STATIONS USED = 8, STAND DEV= 2.21s
M_L=3.0 / 8,

QZH	2.2	71	cPn	20 40 46.0		0.2		
			Sn	20 41 15.5		1.4		
			SMN		$M_L=2.9$		0.1	0.13
			SME				0.1	0.050
GZH	3.0	248	Pg	20 41 02.0		−0.6		
			Sg	20 41 40.4		−2.8		

			SMN	M_L=3.3		0.6	0.15
			SME			0.6	0.070

1987 4 22
O=22 42 58.9 ± 0.11s
LAT=20.50 N ± 1.21km
LONG=121.30 E ± 1.34km
DEPTH= 33 km ± 1.22km
STATIONS USED = 25, STAND DEV= 2.26s

				M_L=3.5/ 3,				
QZH	5.1	331	cPn		22 44 15.2	2.0		
			Sn		22 45 10.2	−2.2		
			SMN		M_L=2.9		0.2	0.010
			SME				0.2	0.020
GZH	7.8	291	eP		22 44 51.4	−1.9		
QZN	10.9	264	eP		22 45 33.8	−1.9		
			eS		22 47 32.8	−4.7		
XAN	17.4	323	eP		22 47 02.4	1.6		
CD2	18.9	307	eP		22 47 19.8	0.5		
BJI	20.0	348	eP		22 47 32.0	0.6		
BTO	22.2	337	eP		22 47 56.0	1.4		

1987 4 23
O=03 45 24.3 ± 0.07s
LAT=37.33 N ± 1.07km
LONG= 71.35 E ± 0.44km
DEPTH= 19 km ± 1.92km
STATIONS USED = 5, STAND DEV= 5.04s

				M_L=4.3/ 3,				
KSH	4.2	58	ePg		03 46 36.5	−2.4		
			eSn		03 47 23.5	4.8		
			SMN		M_L=4.3		0.2	0.60
			SME				0.2	0.50

1987 4 23
O=05 54 53.1 ± 0.15s
LAT= 5.52 N ± 1.91km
LONG=126.37 E ± 2.67km
DEPTH= 93 km ± 0.78km
STATIONS USED = 80, STAND DEV= 1.54s

				m_B=5.2/ 5				
QZH	20.7	340	cP		05 59 28.5	0.5		
			pP		05 59 48.0	1.1		
			sP		05 59 56.0	−2.8		
			S		06 03 12.0	3.5		
			SMN		m_B=5.5		6.0	0.71
			sS		06 03 43.0	4.8		
QZN	21.0	311	P		05 59 32.3	1.5		
			cS		06 03 08.0	−6.2		
GZH	21.5	326	cP		05 59 38.6	2.4		
			cS		06 03 29.0	4.8		
SSE	25.9	350	cP		06 00 18.0	−0.4		
			cpP		06 00 38.0	−0.6		
			cS		06 04 42.0	2.3		
			SMN				14.0	0.58
			sS		06 05 18.0	2.7		
			LN				20.0	0.36
NJ2	27.3	346	+P		06 00 34.8	3.4		
			pP		06 00 56.0	4.1		
			S		06 05 07.0	5.0		
			SMN		m_B=5.0		8.0	0.40
WHN	27.3	337	eP		06 00 34.0	2.3		
			sP		06 00 59.0	−4.5		
			S		06 05 09.0	6.6		
GYA	28.1	320	P		06 00 39.4	1.0		
KMI	29.9	313	+P		06 00 55.0	0.3		
TIA	31.7	346	eP		06 01 10.6	0.2		
			epP		06 01 30.8	−0.4		
			eS		06 06 14.0	1.6		
			SMN		m_B=5.0		10.0	0.47
			LN				10.0	0.23
XAN	32.7	333	−iP		06 01 17.3	−1.6		
			eS		06 06 27.3	−0.2		
CD2	33.0	323	eP		06 01 20.6	−1.2		
DL2	33.5	353	eP		06 01 26.5	0.4		
TIY	34.5	340	eP		06 01 35.0	0.6		
			pP		06 01 58.0	2.6		
			S		06 06 56.0	1.6		
			sS		06 07 26.0	−5.8		
			LN				11.0	0.25
			LE				16.0	0.51
BJI	35.6	346	eP		06 01 43.0	−0.7		
			epP		06 02 03.0	−2.0		
			eS		06 07 13.0	0.7		
SNY	36.2	356	−iP		06 01 50.2	0.9		
			pP		06 02 10.0	−0.6		
			eS		06 07 25.0	2.5		
			LE				20.0	0.83
LZH	36.8	329	eP		06 01 55.0	0.8		
			PMZ				2.0	0.23
			eS		06 07 32.0	0.7		
HHC	37.6	341	eP		06 02 02.0	1.2		
BTO	37.9	340	P		06 02 04.0	0.8		
			pP		06 02 27.0	2.5		
			eS		06 07 50.5	2.7		
CN2	38.1	359	eP		06 02 09.0	3.8		
MDJ	39.0	4	eP		06 02 12.0	−0.7		
LSA	41.0	310	P		06 02 29.8	0.4		
GTA	41.4	328	+iP		06 02 32.0	−0.2		
			PcP		06 04 30.5	1.8		

WMQ	51.1	324	P	06 03 48.0	−0.6			
KSH	56.5	314	eP	06 04 28.5	−0.2			

1987 4 23
O=07 56 21.3 ± 0.21s
LAT= 8.23 S ± 3.57km
LONG= 75.37 W ± 3.83km
DEPTH= 16 km ± 2.01km
STATIONS USED = 20, STAND DEV= 3.06s
Ms=5.5/ 3,

BJI	146.7	344	ePKP	08 16 01.0	−0.8			
TIY	149.8	348	ePKP	08 16 09.8	2.9			
			LN	Ms=5.6		17.0	0.60	
SSE	152.5	328	cPKP	08 16 15.6	4.8			
			LE	Ms=5.5		20.0	0.54	

1987 4 23
O=08 10 17.2 ± 0.08s
LAT=43.71 N ± 0.84km
LONG= 82.71 E ± 0.66km
DEPTH= 27 km ± 0.22km
STATIONS USED = 6, STAND DEV= 3.73s
M_L=2.9/ 5,

1987 4 23
O=08 22 00.2 ± 0.13s
LAT=18.85 N ± 1.51km
LONG=147.09 E ± 3.50km
DEPTH= 35 km ± 0.67km
STATIONS USED = 25, STAND DEV= 2.20s
Ms=4.5/ 1,

TIA	31.5	309	eP	08 28 20.5	−1.3			
			LN	Ms=4.5		17.0	0.61	
BJI	33.9	315	eP	08 28 42.5	−0.3			
HHC	37.4	314	−P	08 29 12.4	−0.2			
BTO	38.4	312	P	08 29 19.5	−1.2			
WMQ	55.2	311	P	08 31 32.4	−0.2			

1987 4 23
O=09 05 55.1 ± 0.10s
LAT=27.88 N ± 1.50km
LONG= 87.10 E ± 1.11km
DEPTH= 46 km ± 0.13km
STATIONS USED = 40, STAND DEV= 1.66s
Ms=4.7/ 1,

LSA	4.0	62	P	09 06 57.1	1.1			
KSH	14.8	324	P	09 09 21.0	−2.3			
			eS	09 12 04.0	−2.0			
WMQ	15.9	2	P	09 09 40.0	2.3			
GYA	17.5	90	P	09 09 56.0	−1.3			
XAN	19.7	66	+P	09 10 21.6	−1.8			
QZN	22.6	108	eP	09 10 54.8	1.4			
BTO	22.7	50	eP	09 10 56.3	1.8			
TIY	23.4	59	eP	09 11 02.0	1.1			
			eS	09 15 07.5	0.6			
			sS	09 15 21.0	−4.3			
			LN	Ms=4.7		21.0	1.71	
WHN	23.9	77	P	09 11 09.5	3.6			

1987 4 23
O=12 14 28.2 ± 0.06s
LAT=43.56 N ± 0.77km
LONG= 83.13 E ± 0.54km
DEPTH= 13 km ± 0.22km
STATIONS USED = 9, STAND DEV= 3.31s
M_L=3.6/ 6,

WMQ	3.3	84	cPn	12 15 22.2	1.7			
			Pg	12 15 29.0	2.0			
			Sn	12 16 04.0	2.3			
			Sg	12 16 11.0	−1.4			
			SMN	M_L=3.5		0.5	0.16	
			SME			0.5	0.12	
KSH	6.8	235	Pg	12 16 34.4	6.6			

1987 4 23
O=12 25 12.8 ± 0.11s
LAT=23.29 S ± 2.71km
LONG=115.07 W ± 3.01km
DEPTH= 9 km ± 0.41km
STATIONS USED = 15, STAND DEV= 2.28s

LZH	144.1	300	ePKP	12 44 47.0	−3.2			
CD2	144.7	291	ePKP	12 44 49.8	−1.5			
GTA	146.4	307	+PKP	12 44 54.0	−0.2			

1987 4 23
O=16 39 24.7 ± 0.16s
LAT= 5.84 N ± 2.15km
LONG=125.87 E ± 2.59km
DEPTH=152 km ± 0.20km
STATIONS USED = 88, STAND DEV= 1.59s
m_B=5.4/ 12

QZH	20.2	341	eP	16 43 51.6	1.7			
			pP	16 44 18.0	−0.1			
			S	16 47 29.0	6.2			
			SMN	m_B=5.3		8.0	0.78	
QZN	20.4	311	eP	16 43 53.4	1.9			
			pP	16 44 19.0	−1.0			
GZH	21.0	326	eP	16 43 57.8	0.5			
			pP	16 44 26.0	−1.3			
			eS	16 47 40.0	2.7			

			SS	16 48 23.0	1.1		
			LN			10.0	1.40
			LE			12.0	1.50
SSE	25.5	351	eP	16 44 40.5	−0.4		
			pP	16 45 12.5	0.8		
			S	16 48 54.0	−0.3		
			SMN	$m_B = 5.4$		10.0	1.59
			SME			8.0	0.79
			sS	16 49 45.0	−4.4		
			eSS	16 50 06.0	−5.5		
			LE			12.0	0.46
WHN	26.9	338	eP	16 44 54.5	1.2		
			pP	16 45 26.0	1.5		
			eS	16 49 21.0	3.9		
			SMN	$m_B = 5.3$		8.0	1.40
NJ2	26.9	347	eP	16 44 53.0	−0.6		
			pP	16 45 25.0	0.2		
GYA	27.5	320	P	16 45 00.2	0.9		
			pP	16 45 32.0	1.5		
			S	16 49 28.0	1.3		
			ScP	16 51 40.2	2.2		
			ScS	16 55 31.6	2.9		
KMI	29.3	313	−iP	16 45 17.0	1.4		
			pP	16 45 48.5	1.6		
			eS	16 50 03.0	6.3		
TIA	31.3	346	eP	16 45 31.4	−1.3		
			eS	16 50 33.2	6.0		
			SMN	$m_B = 4.9$		10.0	0.56
			ScP	16 51 53.1	3.0		
			esS	16 51 18.5	−4.9		
			ScS	16 55 51.8	5.4		
			LN			15.0	0.44
			LE			12.0	0.32
XAN	32.2	333	+iP	16 45 37.9	−2.6		
			epP	16 46 08.0	−4.3		
			esP	16 46 27.0	−3.2		
			eS	16 50 37.0	−4.1		
			LN			9.0	0.41
CD2	32.4	323	eP	16 45 41.8	−1.2		
			eS	16 50 42.0	−3.7		
DL2	33.1	354	eP	16 45 48.7	−0.1		
			eS	16 50 58.0	1.7		
			LE			14.0	1.09
TIY	34.0	341	eP	16 45 55.4	−0.9		
			PP	16 47 18.0	3.7		
			S	16 51 09.0	0.3		
			sS	16 52 05.0	−1.2		
			ScS	16 56 06.5	6.0		
			LN			14.0	0.74
BJI	35.1	347	eP	16 46 05.0	−0.9		
			eS	16 51 28.0	0.8		
			SMN	$m_B = 4.9$		8.0	0.27
			ScP	16 52 06.0	2.5		
			ScS	16 56 12.0	5.4		
SNY	35.9	357	+iP	16 46 12.6	0.4		
			pP	16 46 46.0	1.1		
			eS	16 51 39.5	0.9		
			LN			18.0	0.65
			LE			16.0	0.81
LZH	36.3	329	+P	16 46 15.5	0.0		
			pP	16 46 49.5	1.4		
			LN			10.0	0.87
			LE			10.0	0.75
HHC	37.1	342	eP	16 46 23.2	0.4		
BTO	37.4	340	P	16 46 24.0	−1.1		
			pP	16 46 55.0	−2.8		
			PP	16 47 55.0	−0.2		
			S	16 52 00.0	−0.9		
CN2	37.8	360	+P	16 46 28.0	−0.3		
			sP	16 47 15.0	−3.6		
			eS	16 52 07.0	−0.8		
MDJ	38.8	4	+P	16 46 37.0	0.8		
			pP	16 47 10.0	0.8		
			S	16 52 22.0	0.8		
LSA	40.4	310	P	16 46 51.0	0.6		
GTA	40.9	329	+iP	16 46 53.5	−0.2		
WMQ	50.5	325	P	16 48 09.5	−0.3		
			pP	16 48 39.5	−4.4		
			PP	16 50 06.4	−1.5		
			ScP	16 53 07.0	2.1		
			eS	16 55 12.0	1.0		
			LN			24.0	2.01
KSH	55.9	314	P	16 48 51.0	1.2		
			pP	16 49 24.0	−0.5		
			eS	16 56 28.0	3.6		
			SMN	$m_B = 5.4$		4.0	0.30
			sS	16 57 24.0	−0.8		

1987 4 23
O = 16 50 03.2 ± 0.12s
LAT = 25.48 S ± 1.06km
LONG = 179.53 E ± 1.19km
DEPTH = 494 km ± 0.99km
STATIONS USED = 72, STAND DEV = 0.77s
$m_B = 5.5 / 3$

QZH	77.3	306	eP	17 01 09.0	0.8		
			S	17 10 18.0	1.1		
			ScS	17 10 38.0	0.6		
SSE	79.2	312	+P	17 01 17.5	−0.7		
			PMZ			1.0	0.020

			eS	17 10 38.0	0.1		
GZH	80.3	301	P	17 01 24.5	0.9		
QZN	80.9	296	eP	17 01 27.0	0.0		
			eS	17 10 55.0	−0.1		
NJ2	81.4	312	−P	17 01 29.6	0.2		
MDJ	83.3	327	−iP	17 01 39.4	0.0		
			S	17 11 11.0	−6.6		
WHN	83.6	308	P	17 01 41.5	0.7		
DL2	83.9	318	eP	17 01 40.0	−1.9		
			eS	17 11 21.0	−3.3		
SNY	84.6	322	−iP	17 01 45.2	−0.4		
CN2	84.9	324	−iP	17 01 46.8	−0.3		
			PMZ			3.0	0.50
			pP	17 03 34.0	−1.7		
			S	17 11 34.0	1.3		
			SMN	m_B = 5.7		5.0	0.60
TIA	85.0	314	−P	17 01 47.8	0.2		
GYA	87.2	301	P	17 01 58.0	−0.1		
			pP	17 03 46.8	−0.3		
			SKS	17 11 39.0	2.7		
BJI	87.9	317	eP	17 02 01.0	−0.2		
			eS	17 12 04.0	1.9		
			SMN	m_B = 5.4		10.0	0.56
TIY	88.9	313	−iP	17 02 07.0	0.6		
			PMZ			1.0	0.090
			PP	17 05 52.0	6.2		
			SKS	17 11 47.0	0.0		
XAN	89.4	308	−P	17 02 08.7	0.4		
KMI	89.6	298	−P	17 02 10.5	0.9		
HHC	91.2	315	+P	17 02 17.8	0.9		
CD2	91.6	304	eP	17 02 19.2	0.7		
			PMZ			1.2	0.080
BTO	92.1	314	eP	17 02 20.6	−0.3		
			epP	17 04 11.0	0.3		
			eSKS	17 12 06.0	0.9		
			eS	17 12 39.0	−0.5		
LZH	94.0	308	−iP	17 02 30.0	0.2		
GTA	98.4	310	P	17 02 49.0	−0.5		

1987 4 23
O = 17 06 03.3 ± 0.07s
LAT = 24.06 N ± 1.45km
LONG = 123.61 E ± 1.06km
DEPTH = 51 km ± 1.05km
STATIONS USED = 26, STAND DEV = 1.72s
Ms = 3.7 / 2, M_L = 3.4 / 6,

QZH	4.7	282	cP	17 07 11.2	−1.8		
			SMN	M_L = 3.4		1.2	0.060
			SME			1.2	0.050
			LN	Ms = 3.4		7.0	0.39
SSE	7.3	343	+P	17 07 49.8	−0.7		
			SMN	M_L = 4.1		1.0	0.080
			SME			1.0	0.080
NJ2	9.0	333	+P	17 08 13.4	−0.1		
			LN	Ms = 4.1		6.0	0.60
QZN	13.7	251	eP	17 09 21.2	3.7		
TIY	16.6	328	eP	17 09 58.4	3.7		
BJI	17.1	340	eP	17 10 04.5	3.7		
CD2	18.9	296	eP	17 10 22.0	−0.3		
BTO	20.1	329	eP	17 10 34.6	−0.7		
GTA	25.3	313	eP	17 11 25.6	−1.3		
LSA	29.4	288	P	17 12 05.1	−0.1		

1987 4 23
O = 18 45 21.8 ± 0.10s
LAT = 23.28 N ± 1.39km
LONG = 93.89 E ± 1.11km
DEPTH = 32 km ± 0.09km
STATIONS USED = 6, STAND DEV = 2.54s

LSA	6.8	340	Pn	18 47 01.6	0.7
KMI	8.3	75	eP	18 47 24.5	1.6
WMQ	21.1	347	eP	18 50 04.2	−2.1

1987 4 23
O = 19 26 39.3 ± 0.20s
LAT = 21.57 S ± 3.17km
LONG = 174.05 W ± 2.30km
DEPTH = 42 km ± 2.17km
STATIONS USED = 22, STAND DEV = 1.61s

MDJ	83.5	323	eP	19 39 04.7	−0.5
CN2	85.4	321	eP	19 39 14.0	−0.6
TIA	86.7	311	eP	19 39 21.0	0.0
BJI	89.3	314	eP	19 39 32.5	−0.6
GYA	90.4	298	P	19 39 39.0	0.4
TIY	90.7	310	eP	19 39 40.4	0.2
XAN	91.7	306	P	19 39 44.7	0.0

1987 4 23
O = 20 40 44.1 ± 0.12s
LAT = 24.04 N ± 1.68km
LONG = 121.80 E ± 1.43km
DEPTH = 31 km ± 1.05km
STATIONS USED = 49, STAND DEV = 2.07s
Ms = 4.1 / 7, M_L = 4.2 / 13,

QZH	3.1	288	+iPn	20 41 31.5	0.8		
			Sn	20 42 05.1	−2.7		
			SMN	M_L = 3.9		0.3	0.47
			SME			0.5	0.53
			LE	Ms = 3.3		12.0	1.18
SSE	7.0	356	eP	20 42 26.7	−1.1		

			SMN		M_L=4.0	1.0	0.050
			SME			1.0	0.090
GZH	7.8	265	eP	20 42 38.1	−0.4		
			SMN		M_L=4.3	1.0	0.13
			SME			1.0	0.070
NJ2	8.4	343	−P	20 42 44.8	−1.8		
			eS	20 44 15.4	−5.8		
			LN		Ms=3.8	10.0	0.60
WHN	9.3	316	eP	20 42 53.5	−5.1		
			LN		Ms=4.5	4.0	0.89
QZN	12.2	248	eP	20 43 43.6	4.9		
			eS	20 45 54.6	0.0		
GYA	13.9	283	P	20 44 01.0	−0.6		
			S	20 46 29.0	−6.4		
			LE		Ms=4.3	10.0	0.80
XAN	15.0	314	eP	20 44 16.1	0.0		
			LN		Ms=4.4	6.0	0.42
			LE			6.0	0.25
TIY	15.8	332	eP	20 44 31.0	4.7		
			LN		Ms=4.1	15.0	0.66
CD2	17.4	297	eP	20 44 45.4	−1.0		
BTO	19.2	332	eP	20 45 07.4	−1.6		
LZH	19.6	312	eP	20 45 14.0	1.0		
CN2	19.9	8	eP	20 45 16.0	−0.5		
MDJ	21.5	15	eP	20 45 32.0	−0.5		
GTA	24.1	315	eP	20 45 59.4	1.2		

1987 4 24
O=04 32 11.3 ± 0.08s
LAT=37.25 N ± 1.59km
LONG=141.36 E ± 1.59km
DEPTH= 62 km ± 0.93km
STATIONS USED = 52, STAND DEV= 1.50s
Ms=3.9/ 1,

MDJ	11.5	313	eP	04 35 00.3	4.5		
CN2	13.8	303	eP	04 35 23.0	−2.0		
TIA	19.4	274	eP	04 36 34.7	−1.0		
BJI	19.9	286	eP	04 36 39.0	−1.1		
WHN	23.3	261	P	04 37 18.0	2.9		
BTO	24.5	288	eP	04 37 27.6	0.7		
XAN	26.5	273	P	04 37 44.4	−0.7		
GYA	31.2	260	P	04 38 26.4	−1.1		
GTA	32.5	287	P	04 38 38.1	−0.4		
KMI	35.0	261	eP	04 39 00.0	0.0		
WMQ	40.7	297	P	04 39 50.0	2.1		

1987 4 24
O=05 47 08.9 ± 0.37s
LAT=47.21 N ± 3.45km
LONG= 83.67 E ± 1.82km
DEPTH= 15 km
STATIONS USED = 11, STAND DEV= 2.98s
M_L=4.4/ 5,

WMQ	4.4	139	Pn	05 48 17.8	1.7		
			Pg	05 48 26.6	−0.4		
			Sn	05 49 07.8	−1.5		
			Sg	05 49 21.5	−6.0		

1987 4 24
O=08 52 05.4 ± 0.12s
LAT=27.35 N ± 1.89km
LONG=129.56 E ± 1.84km
DEPTH= 32 km ± 0.37km
STATIONS USED = 19, STAND DEV= 2.34s
Ms=4.6/ 6,

BJI	16.8	322	eP	08 56 03.5	3.1		
TIY	17.7	310	eP	08 56 11.2	−0.5		
			LN		Ms=4.6	12.0	1.04
			LE			11.5	0.77
XAN	18.9	296	eP	08 56 20.5	−6.2		
CD2	22.8	285	eP	08 57 07.6	0.8		
GTA	27.5	304	P	08 57 49.6	−1.6		
			LE		Ms=4.5	13.0	0.58

1987 4 24
O=09 19 18.1 ± 0.14s
LAT=11.11 N ± 1.99km
LONG= 93.43 E ± 2.20km
DEPTH=124 km ± 0.42km
STATIONS USED = 19, STAND DEV= 2.68s

LSA	18.6	354	eP	09 23 25.1	−4.0		
CD2	21.9	24	eP	09 24 05.0	2.6		
LZH	26.6	19	eP	09 24 47.0	−0.1		
GTA	28.8	10	P	09 25 06.1	−0.5		
			PMZ			1.0	0.32

1987 4 24
O=10 21 09.7 ± 0.05s
LAT=46.60 N ± 0.51km
LONG= 83.49 E ± 0.61km
DEPTH= 19 km ± 0.65km
STATIONS USED = 6, STAND DEV= 2.89s
M_L=2.9/ 6,

WMQ	4.1	132	cPn	10 22 11.2	−0.5		
			Sg	10 23 16.0	−1.5		
			SMN		M_L=2.8	0.6	0.020

1987 4 24
O=12 41 03.9 ± 0.07s
LAT= 5.77 S ± 1.13km

LONG = 127.69 E ± 1.69km
DEPTH = 388 km ± 0.15km
STATIONS USED = 94, STAND DEV = 0.86s
m_B = 5.4 / 15

QZN	30.3	325	eP	12 46 43.0	0.1		
			S	12 51 10.0	−3.8		
			SMN	m_B = 4.9		10.0	0.60
QZH	31.8	344	−iP	12 46 55.5	−0.4		
			S	12 51 32.0	−5.3		
			SMN			3.0	0.33
			SS	12 54 11.0	2.2		
GZH	31.9	334	−iP	12 46 57.6	0.5		
SSE	37.2	351	+iP	12 47 42.0	0.6		
			PMZ			1.2	0.20
			PcP	12 49 52.8	0.6		
GYA	38.0	328	−P	12 47 48.8	0.7		
			PMZ			1.2	0.30
			PcP	12 49 56.0	1.3		
			ScP	12 53 04.8	1.2		
			S	12 53 08.0	−3.2		
			ScS	12 57 14.0	0.6		
WHN	38.3	341	−iP	12 47 52.5	1.9		
			PMZ			1.0	4.20
			PcP	12 49 57.0	1.3		
			ScP	12 53 06.5	1.7		
			iS	12 53 16.0	−1.0		
			SMN	m_B = 5.3		6.0	0.69
NJ2	38.5	348	−iP	12 47 53.1	0.5		
			sP	12 49 52.0	1.8		
			PcP	12 49 57.0	0.5		
			ScP	12 53 07.0	1.3		
			S	12 53 19.5	−0.2		
			SMN	m_B = 4.9		10.0	0.50
TIA	42.9	347	−P	12 48 26.9	−1.2		
			PcP	12 50 11.4	0.6		
			ScP	12 53 24.4	1.4		
			S	12 54 20.8	−2.6		
			SMN	m_B = 5.4		7.0	0.71
			ScS	12 57 45.0	1.9		
CD2	43.1	329	−iP	12 48 28.8	−0.5		
			PMZ			1.0	0.28
			S	12 54 21.4	−4.0		
XAN	43.4	337	−iP	12 48 31.1	−0.8		
			pP	12 49 51.0	3.3		
			PcP	12 50 11.4	−1.1		
			ScP	12 53 26.2	1.3		
			S	12 54 26.0	−4.2		
			SMN	m_B = 5.4		5.0	0.42
			SME			6.0	0.33
			ScS	12 57 45.0	−1.1		
DL2	44.8	353	−P	12 48 42.0	−1.0		
			PcP	12 50 17.0	−0.3		
			cS	12 54 46.0	−5.2		
TIY	45.5	343	−iP	12 48 48.4	−0.5		
			PcP	12 50 20.5	0.6		
			S	12 54 57.0	−3.5		
BJI	46.8	348	−iP	12 48 58.0	−0.6		
			PMZ			2.0	0.54
			PcP	12 50 25.0	0.6		
			ScP	12 53 40.0	1.0		
			ScS	12 58 07.0	−1.1		
LZH	47.3	334	−iP	12 49 03.0	0.7		
			PMZ			1.0	0.46
			PcP	12 50 27.5	1.4		
			ScP	12 53 43.0	2.0		
			PcS	12 54 22.5	3.3		
			S	12 55 24.5	−0.3		
			SMN			2.0	0.17
			ScS	12 58 12.0	0.8		
SNY	47.5	356	−iP	12 49 03.5	−0.5		
			PMZ			3.0	0.94
			sP	12 51 07.0	3.4		
			SMN	m_B = 5.5		7.0	0.41
HHC	48.7	344	−iP	12 49 13.0	−0.2		
BTO	48.9	342	P	12 49 13.5	−1.4		
			pP	12 50 33.0	0.6		
			PP	12 51 13.0	−0.1		
			cS	12 55 43.0	−5.8		
CN2	49.4	358	−iP	12 49 17.0	−1.2		
			PMZ			2.0	0.30
			PcP	12 50 32.0	−1.8		
			sP	12 51 16.0	−2.2		
			ScP	12 53 49.0	−0.9		
			cS	12 55 52.0	−3.0		
			sS	12 58 08.0	−5.0		
LSA	49.7	317	−iP	12 49 20.9	−0.5		
MDJ	50.2	2	−iP	12 49 24.4	0.2		
			PMZ			1.2	0.70
			PcP	12 50 35.5	−1.2		
			ScP	12 53 54.0	0.7		
			iS	12 56 06.3	0.3		
GTA	51.8	333	−iP	12 49 36.5	0.0		
			PcP	12 50 43.8	1.0		
			ScP	12 54 01.8	1.5		
			S	12 56 26.0	−0.9		
			ScS	12 58 42.8	0.8		
WMQ	61.1	328	−iP	12 50 41.5	0.4		
			PMZ			1.8	0.50
			PcP	12 51 20.0	0.8		
			pP	12 52 07.0	3.6		

			iS	12 58 28.0	−1.4		
			SMN			2.5	0.21
			ScS	12 59 50.0	0.6		
KSH	65.5	318	−P	12 51 11.0	1.3		
			PcP	12 51 40.0	2.6		
			S	12 59 25.0	2.9		
			SMN	m_B = 5.3		5.0	0.50
			ScS	13 00 29.0	5.8		

1987 4 24

O = 22 25 31.0 ± 0.04s
LAT = 36.52 N ± 0.59km
LONG = 70.40 E ± 0.66km
DEPTH = 207 km ± 0.38km
STATIONS USED = 22, STAND DEV = 0.98s

KSH	5.3	55	+P	22 26 52.0	1.7		
			S	22 27 53.0	1.7		
WMQ	15.1	56	P	22 28 55.6	0.2		
			S	22 31 39.4	2.8		
			SMN			2.0	0.070
LSA	18.6	105	+P	22 29 36.5	0.4		
GTA	23.3	74	−iP	22 30 23.8	1.7		

1987 4 25

O = 04 02 08.4 ± 0.19s
LAT = 8.42 S ± 6.45km
LONG = 77.10 W ± 5.88km
DEPTH = 75 km
STATIONS USED = 14, STAND DEV = 2.22s

BJI	146.4	341	cPKP	04 21 39.0	−1.5		
GTA	149.0	5	PKP	04 21 47.5	2.5		
TIY	149.6	345	+iPKP	04 21 48.0	2.2		

1987 4 25

O = 08 08 59.2 ± 0.20s
LAT = 6.77 N ± 1.78km
LONG = 126.11 E ± 1.93km
DEPTH = 75 km ± 1.69km
STATIONS USED = 80, STAND DEV = 1.87s
Ms = 4.6 / 12, m_B = 5.3 / 3

QZH	19.5	339	eP	08 13 23.0	0.4		
			S	08 16 52.0	−0.6		
			SMN			16.0	1.80
			SME			16.0	2.20
			LN	Ms = 4.5		24.0	1.62
QZN	20.0	309	eP	08 13 28.4	0.2		
			eS	08 17 07.0	3.1		
			eSS	08 17 35.0	−0.3		
			LN	Ms = 4.6		14.0	0.70
			LE			14.0	0.90
GZH	20.4	324	−P	08 13 32.4	0.3		
			eS	08 17 12.0	0.6		
			LE	Ms = 4.6		16.0	1.44
SSE	24.6	350	eP	08 14 16.8	2.5		
			epP	08 14 33.0	1.9		
			esP	08 14 42.5	2.0		
			ePP	08 14 55.0	1.7		
			S	08 18 28.0	1.0		
			SMN	m_B = 5.6		10.0	0.64
			SME			10.0	1.29
			SS	08 19 22.0	−6.5		
NJ2	26.1	346	+P	08 14 28.0	0.3		
WHN	26.1	336	P	08 14 29.2	1.1		
			S	08 18 54.0	2.6		
			SMN	m_B = 5.2		7.0	0.51
			LE	Ms = 4.4		14.0	0.45
GYA	27.0	319	P	08 14 39.8	3.7		
KMI	28.9	312	eP	08 14 54.0	0.6		
			S	08 19 42.0	6.2		
			LN	Ms = 4.4		13.0	0.42
TIA	30.4	346	eP	08 15 05.4	−1.8		
XAN	31.5	332	+P	08 15 14.2	−2.0		
			S	08 20 11.9	−4.8		
CD2	31.9	322	eP	08 15 18.2	−1.6		
DL2	32.3	353	eP	08 15 27.0	3.9		
TIY	33.2	340	eP	08 15 32.0	0.4		
			S	08 20 45.0	0.8		
			LN	Ms = 4.5		14.0	0.46
BJI	34.3	346	eP	08 15 38.5	−2.3		
			eS	08 21 00.0	−2.0		
			SMN	m_B = 5.3		7.0	0.37
			SME			7.0	0.29
SNY	35.0	357	+P	08 15 45.4	−1.2		
			eS	08 21 13.0	0.5		
			LN	Ms = 4.8		24.0	0.64
			LE			20.0	0.95
LZH	35.6	328	+iP	08 15 53.0	1.0		
HHC	36.3	341	P	08 16 00.0	1.7		
BTO	36.6	339	P	08 16 01.5	0.8		
			ePP	08 17 22.0	−3.9		
			S	08 21 39.0	2.1		
CN2	36.9	359	P	08 16 01.6	−1.2		
MDJ	37.8	4	eP	08 16 10.3	−0.3		
LSA	40.0	309	P	08 16 29.3	0.1		
GTA	40.2	328	P	08 16 30.6	0.2		
WMQ	49.9	324	eP	08 17 51.0	3.2		

1987 4 25

O = 08 19 13.4 ± 0.12s
LAT = 19.94 N ± 1.45km

LONG=121.39 E ± 1.92km
DEPTH= 34 km ± 0.62km
STATIONS USED = 29, STAND DEV= 1.97s
M_L=3.8/ 5,

QZH	5.6	333	eP	08 20 36.5	−0.2		
			S	08 21 35.5	−5.2		
			SMN	M_L=3.4		1.0	0.060
			SME			0.7	0.010
QZN	10.9	267	eP	08 21 48.3	−2.4		
			eS	08 23 49.0	−3.8		
GYA	15.0	298	P	08 22 49.4	4.3		
TIA	16.6	348	eP	08 23 09.9	4.1		
CD2	19.3	308	eP	08 23 38.4	0.1		
TIY	19.3	338	eP	08 23 40.5	1.4		
BJI	20.5	349	eP	08 23 51.5	−0.1		
SNY	21.9	4	eP	08 24 06.5	1.0		
BTO	22.8	337	P	08 24 10.8	−3.6		

1987 4 25
O=09 33 20.4 ± 0.04s
LAT=58.41 N ±, 1.13km
LONG=164.11 E ± 0.69km
DEPTH= 32 km ± 0.08km
STATIONS USED = 16, STAND DEV= 0.85s

TIY	39.0	261	eP	09 40 47.0	0.7		
KMI	54.0	260	+P	09 42 44.5	0.0		

1987 4 25
O=12 16 47.8 ± 0.07s
LAT=15.93 N ± 1.12km
LONG=120.43 E ± 1.45km
DEPTH=103 km ± 0.45km
STATIONS USED =106, STAND DEV= 1.27s
m_B=6.8/40

QZH	9.1	349	+P	12 18 58.0	−0.3		
			PMZ	m_B=7.2		12.0	70.8
			S	12 20 38.0	−1.9		
			LN			16.0	142
GZH	9.8	318	P	12 19 06.0	−0.8		
			S	12 21 00.0	5.0		
			LN			14.0	407
QZN	10.6	289	eP	12 19 16.0	−1.5		
			sP	12 19 41.0	−4.3		
			S	12 21 12.3	−1.8		
			SS	12 21 27.0	−4.0		
			ScP	12 28 33.0	−1.6		
			PcS	12 28 46.0	0.6		
			ScS	12 32 03.5	−4.9		
			LE			15.5	159
SSE	15.1	2	+P	12 20 18.0	0.9		
			PMZ	m_B=7.3		5.0	56.8
			pP	12 20 31.0	0.9		
			S	12 23 02.0	0.3		
			SMN	m_B=6.9		8.0	23.2
			SME			8.0	37.0
			sS	12 23 25.0	3.4		
			LN			10.0	39.4
			LE			10.0	41.3
WHN	15.6	340	eP	12 20 25.5	2.5		
			PMZ	m_B=6.6		6.0	15.0
			sP	12 20 53.0	0.4		
			iS	12 23 10.0	−2.8		
			SME	m_B=6.7		11.0	29.7
			LE			14.0	333
NJ2	16.1	355	+P	12 20 30.0	0.3		
			PMZ	m_B=6.7		4.5	15.0
GYA	16.6	312	P	12 20 36.4	1.1		
			PMZ	m_B=7.2		6.0	62.0
			sP	12 21 05.0	−0.2		
			S	12 23 38.0	3.6		
			LN			12.0	91.6
			LE			12.0	32.1
KMI	18.9	302	−P	12 21 04.5	1.2		
			pP	12 21 22.0	1.7		
			S	12 24 28.0	1.6		
			SME	m_B=7.2		10.0	62.6
			LE			12.0	97.2
TIA	20.4	352	+P	12 21 19.2	0.2		
			PMZ	m_B=6.6		7.0	20.3
			pP	12 21 38.5	−0.4		
			S	12 25 03.0	6.6		
			ScS	12 32 38.0	3.4		
			LN			14.5	5.21
			LE			10.0	37.2
XAN	20.8	332	−iP	12 21 22.5	−0.4		
			pP	12 21 41.0	−2.5		
			sP	12 21 56.0	−0.7		
			S	12 25 07.9	4.3		
			ScS	12 32 40.3	4.4		
			LN			13.0	93.0
			LE			13.0	76.3
CD2	21.3	317	−iP	12 21 28.2	0.1		
			iS	12 25 20.0	6.0		
			LN			15.0	359
TIY	22.8	343	−iP	12 21 43.5	0.6		
			PMZ	m_B=7.0		6.0	39.1
			sP	12 22 21.5	4.3		
			S	12 25 43.5	3.6		
			SME	m_B=7.1		11.0	55.5
			SS	12 26 34.0	2.4		

			LE			12.0	59.9
DL2	22.9	2	−iP	12 21 46.0	2.3		
			PMZ	$m_B = 6.5$		6.0	14.4
			pP	12 22 09.0	3.7		
			sP	12 22 22.0	3.8		
			PcP	12 25 36.0	3.8		
			S	12 25 46.0	4.5		
			LN			12.0	206
			LE			15.0	79.1
BJI	24.3	352	eP	12 21 57.0	−0.1		
			PMZ	$m_B = 6.7$		7.0	21.9
			sP	12 22 27.0	−4.7		
			PcP	12 25 34.0	−1.1		
			eS	12 26 09.0	2.9		
			SMN	$m_B = 7.0$		6.5	17.9
			SME			8.0	17.1
			ScS	12 32 52.5	3.5		
			LN			12.0	40.0
LZH	24.9	327	−iP	12 22 03.5	0.2		
			PMZ			1.5	3.86
			S	12 26 18.0	2.2		
SNY	26.0	5	+iP	12 22 11.2	−1.4		
			PMZ	$m_B = 6.5$		6.0	7.99
			pP	12 22 33.0	−1.8		
			iS	12 26 30.0	−3.5		
			SMN	$m_B = 6.7$		12.0	22.3
			SME			8.0	9.15
			ScS	12 32 59.4	3.7		
			LN			13.0	30.1
			LE			15.0	86.2
HHC	26.0	345	−P	12 22 12.6	−0.6		
			S	12 26 32.0	−1.5		
			LN			12.0	38.0
			LE			12.0	27.5
BTO	26.2	342	P	12 22 13.6	−1.4		
			pP	12 22 34.0	−3.0		
			PP	12 22 58.0	−3.1		
			iS	12 26 35.0	−2.7		
			sS	12 27 15.0	−1.5		
			LN			12.0	54.0
			LE			12.0	41.4
CN2	28.1	8	−iP	12 22 32.0	−0.4		
			PMZ	$m_B = 6.3$		5.0	3.40
			pP	12 22 54.0	−0.7		
			S	12 27 06.0	−1.8		
			SMN	$m_B = 6.6$		8.0	11.7
			SME			8.0	10.1
			LE			15.0	84.5
GTA	29.5	326	−iP	12 22 44.1	−1.1		
			PcP	12 25 51.5	4.1		
			iS	12 27 31.0	−0.5		
			SME	$m_B = 6.4$		11.0	12.2
			ScS	12 33 13.3	1.5		
			LN			17.0	208
			LE			16.0	229
MDJ	29.6	13	+iP	12 22 45.4	−0.5		
			pP	12 23 10.0	1.5		
			sP	12 23 20.5	−0.6		
			PcP	12 25 52.5	4.9		
			iS	12 27 34.0	1.3		
			SMN	$m_B = 6.8$		9.0	25.1
			ScS	12 33 17.0	4.8		
WMQ	39.3	322	−P	12 24 08.5	0.0		
			PMZ	$m_B = 7.1$		6.0	21.1
			pP	12 24 33.0	1.2		
			PP	12 25 46.2	2.7		
			PcP	12 26 20.0	4.7		
			S	12 29 57.0	−3.6		
			sS	12 30 40.0	−2.3		
			ScS	12 34 06.0	2.4		
			LN			14.0	358
KSH	45.2	310	−iP	12 24 58.0	1.0		
			pP	12 25 24.0	3.5		
			S	12 31 26.0	−1.6		
			LE			12.0	78.0

1987 4 25
O = 17 02 38.1 ± 0.13s
LAT = 34.21 N ± 1.16km
LONG = 103.27 E ± 1.30km
DEPTH = 20 km ± 0.09km
STATIONS USED = 15, STAND DEV = 2.46s
M_L = 3.6 / 8,

LZH	1.9	14	Pn	17 03 10.9	0.3		
			Pg	17 03 12.0	−0.4		
			Sn	17 03 36.0	0.2		
			Sg	17 03 37.0	−1.9		
			SMN	$M_L = 3.6$		1.0	0.54
			SME			1.5	0.51
CD2	3.3	173	cPg	17 03 40.1	3.4		
XAN	4.7	90	+Pn	17 03 46.6	−1.7		
			Pg	17 04 01.1	0.2		
			Sn	17 04 40.2	−3.8		
			Sg	17 05 02.1	−2.9		
			SMN	$M_L = 3.6$		1.0	0.070
			SME			1.3	0.12

1987 4 25
O = 18 34 55.9 ± 0.07s
LAT = 37.24 N ± 1.95km

LONG = 141.66 E ± 1.62km
DEPTH = 62 km ± 0.77km
STATIONS USED = 21, STAND DEV = 1.55s

BJI	20.1	286	eP	18 39 25.0	−2.1			
XAN	26.7	273	eP	18 40 31.2	−0.6			
GYA	31.5	260	P	18 41 13.8	−0.4			
WMQ	40.9	297	eP	18 42 37.6	3.3			

1987 4 25
O = 19 09 40.7 ± 0.12s
LAT = 19.13 S ± 1.35km
LONG = 169.48 E ± 0.67km
DEPTH = 260 km ± 1.30km
STATIONS USED = 22, STAND DEV = 1.42s

CN2	74.5	329	+iP	19 20 53.2	0.1			
GYA	75.9	305	P	19 21 02.0	0.5			
BJI	77.0	321	eP	19 21 08.0	0.9			
XAN	78.2	312	+P	19 21 14.6	0.7			
KMI	78.4	302	eP	19 21 13.5	−1.6			

1987 4 25
O = 19 22 06.3 ± 0.12s
LAT = 2.21 N ± 2.16km
LONG = 98.80 E ± 2.32km
DEPTH = 12 km ± 0.36km
STATIONS USED = 97, STAND DEV = 1.65s
Ms = 7.1 / 44, m_B = 6.2 / 20

QZN	19.9	32	−P	19 26 41.0	0.1			
			sP	19 26 49.5	0.0			
			PP	19 27 01.0	1.8			
			S	19 30 17.0	−1.8			
			LN	Ms = 7.0		17.0	229	
			LE			17.0	248	
KMI	23.1	9	−P	19 27 15.0	1.5			
			PMZ	m_B = 6.3		4.0	4.50	
			sP	19 27 24.0	2.1			
			eS	19 31 18.0	−2.5			
			SMN	m_B = 6.8		10.0	33.0	
			LE	Ms = 6.9		14.0	193	
GZH	25.1	33	eP	19 27 32.0	−0.6			
			SMN			13.0	39.7	
			SME			14.0	56.9	
			LN	Ms = 7.1		13.0	230	
GYA	25.3	17	−P	19 27 34.0	−0.4			
			sP	19 27 41.0	−1.9			
			LN	Ms = 6.9		12.0	128	
			LE			12.0	32.2	
CD2	28.9	9	eP	19 28 05.7	−2.2			
			iS	19 33 00.0	2.9			
			LN	Ms = 6.8		14.0	95.5	
QZH	29.6	39	eP	19 28 14.0	0.3			
			S	19 33 06.0	−0.7			
			SME			15.0	8.80	
			LE	Ms = 6.7		12.0	61.8	
WHN	31.8	26	eP	19 28 30.0	−3.3			
			sP	19 28 40.0	−1.9			
			PP	19 29 42.0	4.1			
			S	19 33 44.0	2.5			
			SME	m_B = 6.3		12.0	7.00	
XAN	33.0	16	eP	19 28 41.0	−3.3			
			pP	19 28 46.0	−3.9			
			sP	19 28 48.0	−4.8			
			PP	19 29 55.0	0.8			
			S	19 34 04.0	3.0			
			SMN			16.0	15.7	
			SME			14.0	6.08	
			LE	Ms = 7.0		8.0	73.1	
LZH	34.0	7	eP	19 28 51.0	−1.9			
			PMZ			1.0	0.29	
			pP	19 28 55.0	−3.5			
			sP	19 28 58.0	−3.4			
			PP	19 30 07.0	1.0			
			S	19 34 16.0	−0.2			
			LE	Ms = 6.2		15.0	21.2	
NJ2	35.2	30	+P	19 29 04.0	1.4			
			PP	19 30 24.0	3.1			
			S	19 34 38.5	4.4			
			SME			16.0	7.90	
			ScP	19 35 20.0	2.5			
			LE	Ms = 6.9		17.0	106	
SSE	35.7	34	+P	19 29 08.5	1.7			
			PMZ			2.0	0.90	
			PP	19 30 28.0	1.3			
			S	19 34 42.0	0.2			
			isS	19 34 49.0	−3.3			
			SS	19 37 05.0	3.4			
			ScS	19 39 28.0	5.2			
			LN	Ms = 7.5		12.0	147	
			LE			12.0	261	
GTA	37.0	1	−P	19 29 16.5	−2.0			
			PP	19 30 48.5	4.3			
			S	19 35 02.0	−0.7			
TIY	37.5	18	−iP	19 29 22.0	−0.2			
			PP	19 30 55.5	5.8			
			S	19 35 07.5	−2.0			
			sS	19 35 17.0	−3.0			
			LE	Ms = 7.2		18.5	203	
TIA	37.8	24	eP	19 29 25.5	0.4			
			sP	19 29 32.0	−1.7			
			PP	19 31 00.0	6.2			

			S	19 35 16.0	1.1			
			LN	Ms=7.4		15.0	135	
			LE			16.0	266	
BTO	39.5	13	cP	19 29 38.4	−1.0			
			sP	19 29 47.0	−0.9			
			PP	19 31 12.0	−1.7			
			S	19 35 37.0	−3.6			
			LN	Ms=7.1		10.0	69.5	
			LE			10.0	44.3	
HHC	40.2	15	−P	19 29 44.0	−0.5			
			pP	19 29 48.0	−2.2			
			S	19 35 49.0	−0.9			
			SME			16.0	13.6	
			LN	Ms=7.1		16.0	64.7	
			LE			15.0	103	
BJI	40.8	21	cP	19 29 49.0	−0.9			
			PMZ	m_B=5.9		7.0	1.52	
			cPP	19 31 30.0	3.2			
			ScP	19 35 41.0	2.2			
			S	19 36 04.0	4.1			
			SMN	m_B=6.4		12.0	4.62	
			SME			12.0	5.65	
			LN	Ms=7.5		14.0	231	
			LE			13.0	131	
DL2	42.0	27	cP	19 30 02.0	2.1			
			PMZ	m_B=6.0		7.0	1.85	
			pP	19 30 09.0	3.3			
			PP	19 31 47.0	6.8			
			S	19 36 20.0	2.0			
			SME	m_B=6.5		12.0	8.80	
			LN	Ms=7.2		14.0	98.9	
			LE			12.0	80.2	
KSH	42.5	334	+P	19 30 06.0	2.2			
			sP	19 30 13.0	0.8			
			PP	19 31 46.0	1.3			
			S	19 36 24.0	−0.5			
			LN	Ms=6.7		13.0	39.7	
WMQ	42.6	348	P	19 30 03.8	−0.6			
			pP	19 30 08.5	−1.6			
			PP	19 31 50.0	4.6			
			PcP	19 32 00.0	3.5			
			ScP	19 35 51.5	5.7			
			S	19 36 25.0	−0.8			
			SME	m_B=6.4		12.0	8.27	
			LN	Ms=6.5		12.0	25.9	
SNY	45.3	26	eP	19 30 24.5	−1.7			
			sP	19 30 33.0	−1.8			
			PP	19 32 16.0	3.8			
			iS	19 37 08.0	1.9			
			SMN			36.0	19.9	
			SME			34.0	19.8	
			LN	Ms=7.4		15.0	90.7	
			LE			14.0	207	
CN2	47.7	26	cP	19 30 43.0	−2.2			
			PMZ	m_B=6.0		6.0	1.30	
			pP	19 30 47.0	−4.0			
			PP	19 32 33.0	−2.4			
			S	19 37 34.0	−5.3			
			SME	m_B=6.1		10.0	2.60	
			LE	Ms=7.2		17.0	146	
MDJ	50.2	28	cP	19 31 07.6	2.9			
			iS	19 38 12.0	−3.7			

1987 4 25
O=21 45 11.5 ± 0.08s
LAT=46.94 N ± 2.58km
LONG=153.83 E ± 1.43km
DEPTH= 21 km ± 1.28km
STATIONS USED = 68, STAND DEV= 1.32s
Ms=4.9/10, m_B=5.3/1

MDJ	17.0	271	+iP	21 49 10.8	0.1			
CN2	20.1	271	eP	21 49 43.0	−4.5			
SNY	22.1	268	+P	21 50 06.0	−1.8			
DL2	24.8	263	eP	21 50 34.0	0.4			
			eS	21 54 48.0	−4.3			
			LE	Ms=4.6		11.0	0.61	
BJI	28.0	270	eP	21 51 01.5	−1.8			
			eS	21 55 44.0	−0.8			
			LN	Ms=4.8		13.0	0.38	
			LE			13.0	0.97	
NJ2	30.5	253	+P	21 51 25.0	−1.1			
HHC	30.8	274	−P	21 51 28.0	−0.4			
TIY	31.6	268	+P	21 51 35.8	−0.3			
			PMZ			0.8	0.030	
			eS	21 56 40.0	−3.3			
			LE	Ms=4.9		14.0	1.18	
BTO	31.9	275	eP	21 51 37.5	−1.2			
			eS	21 56 41.0	−6.9			
			LN	Ms=4.9		15.0	1.00	
			LE			15.0	0.80	
WHN	34.5	256	eP	21 52 00.0	−0.3			
LZH	38.4	272	+iP	21 52 34.5	0.8			
GTA	39.4	279	+P	21 52 42.8	0.4			
CD2	41.4	266	eP	21 52 58.4	−0.1			
GYA	42.2	258	+P	21 53 05.2	−0.4			
WMQ	45.3	291	+P	21 53 30.0	−0.5			
KMI	45.8	260	+P	21 53 33.0	−1.2			
KSH	55.1	293	eP	21 54 46.0	1.0			

1987 4 25

O = 22 29 56.2 ± 0.06s
LAT = 47.48 N ± 2.36km
LONG = 153.28 E ± 2.07km
DEPTH = 55 km ± 0.89km
STATIONS USED = 22, STAND DEV = 1.84s

MDJ	16.7	269	eP	22 33 50.0	2.1	
SNY	21.8	266	eP	22 34 43.0	−2.5	
XAN	35.7	264	eP	22 36 50.2	−1.6	
GTA	39.0	278	eP	22 37 18.6	−0.7	
CD2	41.1	264	P	22 37 34.8	−1.7	
GYA	42.0	257	P	22 37 41.8	−2.4	

1987 4 26
O = 06 21 27.2 ± 0.11s
LAT = 12.32 S ± 2.09km
LONG = 166.64 E ± 1.94km
DEPTH = 80 km ± 1.67km
STATIONS USED = 48, STAND DEV = 1.25s

SSE	61.4	316	+P	06 31 37.0	−0.6	
			PMZ		1.0	0.050
GZH	62.9	304	iP	06 31 48.5	0.5	
NJ2	63.5	315	+P	06 31 51.6	−0.4	
QZN	64.1	298	−P	06 31 56.0	0.6	
MDJ	65.9	332	eP	06 32 06.0	−1.2	
WHN	65.9	312	P	06 32 07.5	0.2	
DL2	66.0	323	eP	06 32 08.0	−0.1	
CN2	67.3	329	eP	06 32 15.4	−0.6	
GYA	69.9	304	+P	06 32 32.0	−0.1	
BJI	70.0	321	eP	06 32 32.5	−0.5	
TIY	71.1	317	P	06 32 40.1	0.6	
XAN	71.6	312	+iP	06 32 42.7	0.0	
KMI	72.5	301	+P	06 32 49.0	0.7	
LZH	76.3	312	+iP	06 33 10.5	0.8	
GTA	80.6	314	+P	06 33 33.6	0.2	
WMQ	90.6	315	−P	06 34 23.0	0.2	

1987 4 26
O = 07 50 53.4 ± 0.21s
LAT = 17.27 S ± 2.74km
LONG = 174.81 W ± 2.69km
DEPTH = 279 km ± 0.89km
STATIONS USED = 75, STAND DEV = 1.47s
m_B = 5.5 / 13

QZH	77.2	301	+P	08 02 20.0	0.9	
			S	08 11 50.0	6.5	
SSE	78.0	308	eP	08 02 22.1	−1.3	
			S	08 11 52.0	0.4	
MDJ	79.7	323	−P	08 02 32.0	−0.3	
			pP	08 03 34 0	−3.1	
			sP	08 04 02.0	−4.2	
			S	08 12 16.0	6.9	
			SME	m_B = 5.6	6.0	0.94
NJ2	80.2	308	−iP	08 02 34.5	−0.6	
			PMZ	m_B = 5.7	5.0	0.70
			eSKS	08 12 22.0	1.7	
GZH	80.8	298	−P	08 02 39.0	0.7	
DL2	81.5	315	−P	08 02 42.0	0.1	
			eS	08 12 34.0	4.5	
CN2	81.7	321	−iP	08 02 42.0	−0.6	
			PMZ	m_B = 6.0	4.0	1.00
			pP	08 03 49.0	1.4	
			S	08 12 33.0	3.8	
			SME	m_B = 5.5	7.0	0.80
			sS	08 14 30.0	5.7	
SNY	81.7	318	−iP	08 02 42.8	−0.3	
			PMZ		3.0	1.02
			iS	08 12 38.0	6.2	
			SMN	m_B = 5.7	8.0	0.45
			SME		6.0	1.11
QZN	82.4	293	P	08 02 47.0	0.8	
			sP	08 04 23.5	3.2	
			eS	08 12 40.0	2.1	
WHN	83.0	305	P	08 02 50.5	0.9	
			PMZ	m_B = 5.9	4.0	1.00
			epP	08 03 56.0	1.2	
			SKS	08 12 43.0	3.1	
			S	08 12 48.0	5.0	
			SME	m_B = 5.2	7.0	0.41
TIA	83.4	311	eP	08 02 51.4	−0.1	
			pP	08 03 56.0	−0.7	
			S	08 12 52.0	5.5	
			SME	m_B = 5.3	8.0	0.53
BJI	85.8	314	eP	08 03 03.0	−0.3	
			PMZ	m_B = 5.5	4.0	0.63
			pP	08 04 11.0	2.1	
			eS	08 13 12.0	0.7	
TIY	87.4	311	−iP	08 03 12.0	0.7	
			PMZ		1.2	0.12
			LN		36.0	0.99
GYA	87.7	298	+P	08 03 14.4	1.6	
			pP	08 04 20.0	1.5	
XAN	88.6	306	−P	08 03 17.4	0.5	
			sP	08 04 50.0	−1.6	
HHC	89.3	313	−P	08 03 20.8	0.6	
BTO	90.3	313	−iP	08 03 25.0	0.2	
			pP	08 04 31.5	0.7	
			eSKS	08 13 28.0	1.7	
			S	08 13 57.0	5.8	
KMI	90.6	296	−iP	08 03 27.5	1.1	
			PMZ		3.0	0.70

CD2	91.6	302	+P	08 03 32.2	1.2	
LZH	93.2	307	−P	08 03 39.0	0.5	
GTA	97.3	309	+iP	08 03 57.1	0.2	

1987 4 26
O = 09 05 52.6 ± 0.07s
LAT = 38.03 N ± 0.68km
LONG = 99.49 E ± 0.71km
DEPTH = 15 km ± 0.31km
STATIONS USED = 6, STAND DEV = 3.19s
M_L = 2.8 / 2,

GTA	1.4	10	−iPg	09 06 15.2	−2.5	
			Sg	09 06 34.5	−2.3	
			LN		6.0	0.25

1987 4 26
O = 11 57 31.1 ± 0.07s
LAT = 40.60 N ± 0.71km
LONG = 122.77 E ± 0.55km
DEPTH = 15 km ± 0.01km
STATIONS USED = 7, STAND DEV = 2.08s
M_L = 2.9 / 7,

SNY	1.4	26	ePg	11 57 53.4	−2.0	
			Sg	11 58 10.2	−4.0	
			SMN	M_L = 2.9	0.4	0.22
			SME		0.4	0.16
DL2	1.9	208	ePg	11 58 05.0	0.1	
			eSg	11 58 31.0	0.0	
			SMN	M_L = 3.5	0.5	0.70
			SME		0.5	0.18
CN2	3.8	31	ePg	11 58 40.4	2.7	
			eSg	11 59 24.4	−4.7	
			SMN	M_L = 2.9	0.6	0.030
			SME		0.6	0.030

1987 4 26
O = 15 47 40.4 ± 0.13s
LAT = 57.32 S ± 4.02km
LONG = 24.42 W ± 6.08km
DEPTH = 32 km ± 1.07km
STATIONS USED = 45, STAND DEV = 2.50s
Ms = 5.9 / 10,

KSH	127.4	73	PKP	16 06 44.0	0.6	
			PKS	16 10 20.0		
			SKS	16 13 54.0	5.4	
			cSKKS	16 15 30.0		
			LN	Ms = 6.0	13.0	1.20
QZN	129.1	119	cPKP	16 06 50.0	3.6	
			cPP	16 08 57.0	−0.9	
			PKS	16 10 25.0		
			SS	16 26 07.0	−5.5	
			LN	Ms = 6.1	21.0	1.50
			LE		20.0	2.20
GTA	140.1	92	cPKP	16 07 05.7	−1.4	
			PP	16 10 03.5	−3.7	
			PKS	16 10 43.0		
			LE	Ms = 6.0	17.0	1.65
WHN	141.0	115	cPKP	16 07 04.5	−3.9	
			PP	16 10 08.0	−4.2	
			LE	Ms = 5.5	20.0	0.61
XAN	141.0	106	cPKP	16 07 08.0	−0.6	
			LE	Ms = 5.8	16.0	0.95
NJ2	144.4	119	+PKP	16 07 13.0	−1.3	
			LZ	Ms = 5.7	18.0	0.90
SSE	144.7	123	PKP	16 07 12.0	−2.8	
			cSS	16 29 20.0	3.5	
			LN	Ms = 5.9	12.0	0.52
			LE		12.0	0.55
TIY	145.6	106	+PKP	16 07 17.2	0.6	
			SKS	16 14 18.0	−1.0	
			SKKS	16 16 21.0		
			LN	Ms = 6.1	17.0	1.23
			LE		17.0	1.20
BTO	146.5	100	PKP	16 07 19.4	1.3	
			pPKP	16 07 31.0	3.6	
			LN	Ms = 5.9	17.0	0.70
			LE		17.0	0.80
TIA	146.9	113	PKP	16 07 21.3	2.6	
BJI	149.3	107	cPKP	16 07 23.0	0.4	
			$cPKP_2$	16 07 27.0		
DL2	151.2	115	cPKP	16 07 30.5	5.0	
SNY	154.4	113	cPKP	16 07 23.0	−7.0	
			LN	Ms = 5.8	20.0	0.90
			LE		19.0	0.70
CN2	156.8	113	cPKP	16 07 33.0	−0.2	
			pPKP	16 07 40.5	−2.2	
			ePP	16 11 43.0	−0.3	
			SS	16 31 25.0	−5.3	
MDJ	159.4	117	cPKP	16 07 37.0	0.5	
			PKP_2	16 08 13.0		
			PP	16 12 00.0	2.5	

1987 4 26
O = 20 02 06.5 ± 0.09s
LAT = 31.96 N ± 1.29km
LONG = 139.76 E ± 1.62km
DEPTH = 159 km ± 0.48km
STATIONS USED = 86, STAND DEV = 1.26s
m_B = 5.1 / 4

MDJ	14.9	331	eP	20 05 30.2	−0.6	

			sP	20 06 13.0	0.1		
			S	20 08 16.0	4.3		
			LE			12.0	0.88
SSE	15.9	272	P	20 05 44.0	1.6		
			PMZ			1.0	0.080
			esP	20 06 30.5	5.4		
			S	20 08 36.0	3.1		
			PcP	20 10 34.0	2.4		
			LN			10.0	0.66
			LE			10.0	0.48
SNY	16.2	312	−iP	20 05 47.0	0.0		
			PMZ	$m_B = 5.0$		10.0	0.64
			S	20 08 46.0	4.7		
			LN			17.0	1.81
			LE			13.0	1.00
DL2	16.3	300	−P	20 05 51.0	3.1		
			PMZ			3.0	1.54
			sP	20 06 34.0	3.1		
			PcP	20 10 33.0	0.8		
			ScS	20 17 29.0	0.7		
			LN			12.0	1.67
CN2	16.3	320	eP	20 05 48.0	−0.1		
			sP	20 06 30.5	−0.6		
			eS	20 08 47.0	3.2		
NJ2	17.7	276	eP	20 06 04.4	−0.5		
			ScP	20 13 55.3	2.1		
TIA	19.2	289	eP	20 06 20.2	−0.5		
			sP	20 07 07.0	−0.6		
			eS	20 09 47.6	2.2		
			LN			12.0	1.00
BJI	20.7	300	+P	20 06 35.0	−0.5		
			eS	20 10 16.0	3.4		
			ScP	20 14 02.0	2.2		
			LN			16.0	1.54
WHN	21.8	273	eP	20 06 47.8	1.5		
			pP	20 07 21.0	4.5		
			LN			13.0	0.57
TIY	23.1	292	−P	20 07 00.8	1.3		
			PMZ			0.6	0.020
			pP	20 07 34.0	3.6		
			S	20 11 01.0	6.2		
			sS	20 11 54.0	4.2		
			LN			14.0	2.04
HHC	24.3	299	eP	20 07 10.2	−0.6		
BTO	25.4	298	P	20 07 21.0	−0.1		
			cpP	20 07 54.0	1.2		
			sP	20 08 10.0	−1.7		
			S	20 11 37.0	4.0		
			LN			12.0	0.30
			LE			13.0	0.70
XAN	25.9	283	eP	20 07 24.9	−0.9		
			pP	20 08 03.0	5.2		
GYA	29.3	268	P	20 07 55.0	−1.9		
QZN	29.8	252	eP	20 08 02.4	1.4		
LZH	29.9	288	eP	20 08 00.5	−1.9		
CD2	30.6	278	eP	20 08 07.8	−0.7		
GTA	33.1	294	P	20 08 28.8	−0.9		
			ScP	20 14 38.2	1.6		
			LN			12.0	0.25
KMI	33.1	268	eP	20 08 31.0	1.0		
LSA	41.5	280	+P	20 09 40.4	−0.2		
WMQ	42.1	302	−P	20 09 45.1	0.1		
			S	20 15 53.0	1.5		
			sS	20 16 56.0	3.2		
			LE			18.0	0.88

1987 4 26
O = 20 07 35.9 ± 0.93s
LAT = 39.83 N ± 3.45km
LONG = 73.71 E ± 7.17km
DEPTH = 10 km
STATIONS USED = 7, STAND DEV = 5.08s
M_L = 4.0 / 2,

KSH	1.8	101	−Pg	20 08 11.5	3.8		
			SMN	$M_L = 4.3$		0.8	3.40
			SME			0.8	3.10

1987 4 26
O = 20 35 27.6 ± 0.12s
LAT = 23.38 N ± 1.54km
LONG = 121.66 E ± 1.88km
DEPTH = 18 km ± 0.60km
STATIONS USED = 41, STAND DEV = 2.09s
Ms = 4.4 / 5, M_L = 4.3 / 10,

QZH	3.2	300	−iPn	20 36 18.0	0.5		
			Sn	20 36 51.5	−5.7		
			SMN	$M_L = 4.2$		0.2	1.04
			SME			0.2	0.67
			LN			3.0	1.95
GZH	7.7	269	+P	20 37 20.4	−0.7		
SSE	7.7	357	eP	20 37 25.0	3.2		
			SMN	$M_L = 4.0$		1.0	0.030
			SME			1.0	0.060
NJ2	9.0	345	eP	20 37 36.5	−3.2		
			LN	Ms = 4.1		14.0	0.70
			LE			9.0	0.80
WHN	9.7	319	P	20 37 47.5	−1.5		
			S	20 39 33.0	−5.0		
			LN	Ms = 4.5		6.0	1.21
			LE			6.0	0.83

QZN	11.8	251	eP	20 38 19.6	0.8		
GYA	13.9	286	P	20 38 46.0	−1.1		
BJI	17.2	346	eP	20 39 32.5	3.1		
KMI	17.3	280	eP	20 39 35.5	4.6		
CD2	17.6	299	eP	20 39 34.2	0.3		
BTO	19.8	333	eP	20 40 02.5	2.5		
			eS	20 43 35.0	−1.9		
			LN	Ms=4.4		14.0	0.60
			LE			14.0	0.50
LZH	20.0	313	eP	20 40 05.0	2.9		
GTA	24.5	316	eP	20 40 46.7	−0.5		

1987 4 26
O=21 15 24.7 ± 0.09s
LAT=38.21 N ± 0.82km
LONG= 94.19 E ± 0.78km
DEPTH= 16 km ± 0.34km
STATIONS USED = 13, STAND DEV= 2.13s
M_L=4.2/ 6,

GTA	4.6	73	Pn	21 16 34.0	0.4		
			Sn	21 17 23.4	−4.7		
WMQ	7.4	321	Pn	21 17 16.5	3.3		
			Pg	21 17 41.4	5.4		
			Sn	21 18 42.0	2.5		
			Sg	21 19 16.1	−1.7		
			SMN	M_L=4.2		1.0	0.080

1987 4 27
O=04 38 36.6 ± 0.17s
LAT= 3.08 S ± 2.72km
LONG=101.47 E ± 2.66km
DEPTH= 54 km ± 0.34km
STATIONS USED = 70, STAND DEV= 1.85s
Ms=4.8/ 7, m_B=5.5/ 3

QZN	23.5	20	eP	04 43 44.4	2.1		
			eS	04 47 53.0	4.8		
KMI	28.1	2	eP	04 44 27.5	1.8		
			eS	04 49 03.0	−1.8		
GYA	29.8	9	P	04 44 40.2	−0.8		
CD2	33.9	4	eP	04 45 15.2	−1.4		
			LN	Ms=4.8		20.0	1.24
LSA	34.1	344	eP	04 45 18.5	−0.2		
WHN	35.6	19	eP	04 45 25.5	−6.1		
			LN	Ms=4.6		8.0	0.28
XAN	37.6	10	+iP	04 45 47.3	−0.8		
NJ2	38.6	24	−P	04 46 00.6	3.7		
			ScP	04 51 50.0	0.2		
SSE	38.8	27	eP	04 46 00.2	1.7		
			eS	04 51 52.0	0.1		
LZH	39.0	3	eP	04 45 55.0	−5.3		
TIA	41.7	19	eP	04 46 22.8	0.3		
TIY	41.8	13	eP	04 46 24.5	1.0		
			LN	Ms=4.8		13.0	0.56
GTA	42.3	358	P	04 46 26.9	−0.5		
			ScP	04 52 03.9	−0.3		
			ScS	04 56 20.0	−0.7		
			LE	Ms=4.7		16.0	0.50
BTO	44.2	9	eP	04 46 42.0	−0.4		
			sP	04 47 04.0	2.7		
			eS	04 53 09.5	−1.5		
HHC	44.7	11	eP	04 46 47.0	0.4		
BJI	45.0	16	eP	04 46 49.0	0.2		
WMQ	48.3	347	P	04 47 15.9	0.9		
			PMZ			1.5	0.080
			ScP	04 52 30.5	1.7		
			S	04 54 08.8	0.3		
			SMN	m_B=5.6		4.0	0.33
			ScS	04 57 01.0	2.3		
KSH	48.4	334	eP	04 47 18.0	2.2		
			pP	04 47 31.0	2.0		
			eS	04 54 12.0	0.8		
			SME	m_B=5.4		6.0	0.30
			sS	04 54 35.0	1.1		
SNY	49.0	22	eP	04 47 15.4	−5.0		
CN2	51.4	22	+P	04 47 36.0	−2.7		
			pP	04 47 53.5	1.4		
MDJ	53.7	25	eP	04 47 55.5	−0.6		

1987 4 27
O=04 53 48.2 ± 0.07s
LAT=44.48 N ± 2.12km
LONG=149.60 E ± 1.59km
DEPTH= 36 km ± 0.45km
STATIONS USED = 31, STAND DEV= 1.25s

SNY	19.1	271	eP	04 58 11.6	0.3
BJI	25.0	272	eP	04 59 10.0	−0.7
TIA	26.0	263	eP	04 59 19.3	−0.2
NJ2	27.0	253	eP	04 59 32.0	3.2
BTO	29.2	276	eP	04 59 52.8	3.6
LZH	35.5	272	eP	05 00 44.5	0.3
GTA	36.9	280	+P	05 00 55.4	−0.6
CD2	38.2	265	eP	05 01 06.2	−0.7
GYA	38.8	257	P	05 01 10.0	−1.8
KMI	42.4	259	eP	05 01 42.0	0.5

1987 4 27
O=05 23 35.5 ± 0.06s
LAT=27.63 N ± 1.33km
LONG=139.97 E ± 1.47km
DEPTH=483 km ± 0.97km

STATIONS USED = 70, STAND DEV = 0.99s

SSE	16.7	286	eP	05 27 02.0	−2.2	
NJ2	18.8	289	+P	05 27 25.4	0.6	
			ScP	05 34 18.8	1.0	
MDJ	18.9	337	eP	05 27 24.0	−1.3	
DL2	19.0	311	eP	05 27 25.0	−1.2	
SNY	19.5	321	−iP	05 27 31.8	0.7	
CN2	19.9	328	+P	05 27 36.0	0.7	
			ScP	05 34 20.0	−0.3	
TIA	21.2	300	eP	05 27 46.9	0.1	
WHN	22.6	284	eP	05 28 00.0	0.2	
BJI	23.2	308	eP	05 28 05.0	−0.9	
TIY	25.2	300	+P	05 28 23.6	0.1	
XAN	27.3	291	−P	05 28 42.3	−0.3	
BTO	27.8	305	eP	05 28 45.8	−1.0	
GYA	29.6	276	−P	05 29 01.6	−1.1	
CD2	31.7	285	−iP	05 29 20.0	0.0	
			PMZ			0.8 0.080
LZH	31.7	295	−iP	05 29 19.5	−0.7	
			PMZ			1.5 0.070
KMI	33.4	274	−P	05 29 35.5	1.0	
GTA	35.2	300	−iP	05 29 49.0	−0.9	
LSA	42.6	285	P	05 30 51.0	0.3	
WMQ	44.7	305	−P	05 31 06.6	0.4	
KSH	53.6	300	eP	05 32 14.5	1.3	
			eS	05 39 07.0	−3.1	

1987 4 27
O = 06 20 46.1 ± 0.07s
LAT = 6.03 S ± 0.88km
LONG = 130.49 E ± 1.09km
DEPTH = 149 km ± 0.21km
STATIONS USED = 74, STAND DEV = 0.80s
m_B = 5.5 / 1

QZN	32.1	321	eP	06 27 02.0	−0.1	
			eS	06 32 05.0	2.2	
			eSS	06 34 12.0	5.0	
SSE	38.0	347	+P	06 27 52.0	0.6	
			PMZ			1.0 0.030
NJ2	39.5	344	−P	06 28 04.5	0.8	
WHN	39.5	338	P	06 28 06.2	2.0	
GYA	39.7	325	+P	06 28 05.0	−0.9	
KMI	41.1	320	+P	06 28 18.5	1.2	
TIA	43.8	344	eP	06 28 39.0	−0.5	
CD2	44.8	327	+P	06 28 46.4	−0.4	
XAN	44.8	334	+iP	06 28 46.7	−0.3	
TIY	46.7	340	+P	06 29 01.6	−0.3	
BJI	47.7	345	eP	06 29 09.5	−0.4	
SNY	48.0	353	−iP	06 29 12.2	−0.4	
LZH	48.8	331	+iP	06 29 18.5	0.0	
			PMZ			1.0 0.070
CN2	49.8	355	P	06 29 25.2	−0.9	
MDJ	50.4	359	+P	06 29 30.2	−0.6	
LSA	51.8	315	+P	06 29 41.5	−0.5	
GTA	53.4	330	+iP	06 29 53.0	0.0	
WMQ	62.8	326	P	06 30 59.0	0.0	
KSH	67.6	317	eP	06 31 31.0	1.4	

1987 4 27
O = 07 45 44.0 ± 0.12s
LAT = 4.80 S ± 0.86km
LONG = 153.72 E ± 1.64km
DEPTH = 100 km ± 0.53km
STATIONS USED = 51, STAND DEV = 1.11s

WHN	51.5	316	eP	07 54 42.5	0.6	
TIA	53.3	323	eP	07 54 54.1	−1.1	
GYA	55.1	307	P	07 55 09.4	0.5	
BJI	56.4	326	eP	07 55 16.0	−1.9	
XAN	57.3	316	+iP	07 55 23.4	−0.6	
CD2	59.4	310	+iP	07 55 39.2	0.1	
			PMZ			0.8 0.090
LZH	61.9	315	+iP	07 55 56.5	0.7	
			PMZ			1.0 0.080
GTA	66.3	317	+iP	07 56 24.9	0.3	
LSA	69.0	304	+P	07 56 41.6	−0.2	
WMQ	76.4	317	P	07 57 25.0	0.3	
KSH	83.6	310	eP	07 58 06.0	2.4	

1987 4 27
O = 10 09 54.7 ± 0.10s
LAT = 45.66 N ± 0.75km
LONG = 130.03 E ± 0.98km
DEPTH = 13 km ± 0.41km
STATIONS USED = 7, STAND DEV = 4.06s
M_L = 2.9 / 6,

MDJ	1.1	197	+Pg	10 10 13.0	−1.1	
			Sg	10 10 27.5	−1.5	
			SME	M_L = 3.0		0.4 0.34
CN2	3.8	242	ePg	10 11 04.0	2.8	
			eSg	10 11 49.0	−3.5	

1987 4 27
O = 11 47 35.8 ± 0.16s
LAT = 40.58 N ± 1.46km
LONG = 79.77 E ± 1.79km
DEPTH = 22 km ± 0.51km
STATIONS USED = 9, STAND DEV = 4.14s
M_L = 3.8 / 4,

KSH	3.1	250	Pn	11 48 24.8	0.4
			Sn	11 49 04.8	2.1

		SMN	M_L=4.0	0.2	0.50
		SME		0.2	0.70
WMQ	6.7	59	ePn	11 49 17.0	3.2	
GYA	26.4	114	P	11 53 19.4	6.6	

1987 4 27
O=11 35 50.0 ± 0.09s
LAT= 9.43 S ± 1.44km
LONG=125.15 E ± 1.87km
DEPTH= 33 km ± 0.17km
STATIONS USED = 28, STAND DEV= 1.77s

GYA	39.9	334	P	11 43 24.0	0.7	
LZH	49.5	337	eP	11 44 41.0	0.9	
BJI	49.9	351	eP	11 44 40.5	−2.4	
LSA	50.8	321	−P	11 44 50.0	−0.5	
CN2	53.0	0	eP	11 45 04.6	−1.5	
MDJ	53.9	4	−P	11 45 13.0	−0.2	
GTA	54.0	336	−P	11 45 08.8	−4.9	
WMQ	62.9	330	eP	11 46 15.2	−1.0	

1987 4 27
O=12 13 38.4 ± 0.14s
LAT=13.43 N ± 1.52km
LONG=124.18 E ± 1.79km
DEPTH=143 km ± 0.93km
STATIONS USED = 12, STAND DEV= 1.44s

BJI	27.4	347	eP	12 19 12.0	−1.0	

1987 4 27
O=12 39 58.4 ± 0.18s
LAT=52.07 N ± 3.57km
LONG=159.79 E ± 2.84km
DEPTH= 31 km ± 0.19km
STATIONS USED = 55, STAND DEV= 1.53s
Ms=5.4/19,

MDJ	21.3	262	eP	12 44 43.5	−1.4		
			S	12 48 30.0	−4.3		
CN2	24.3	264	eP	12 45 12.0	−2.1		
			eS	12 49 24.0	−4.2		
			LN	Ms=5.1		20.0	3.70
SNY	26.5	262	−P	12 45 37.0	1.8		
			LN	Ms=5.3		14.0	3.04
			LE			15.0	2.32
BJI	32.1	265	eP	12 46 29.0	3.8		
TIA	33.9	259	eP	12 46 40.4	−0.7		
			eS	12 52 07.5	4.4		
			LN	Ms=5.3		12.5	1.89
			LE			12.0	0.87
NJ2	35.8	252	eP	12 46 58.0	1.1		
			LN	Ms=5.3		14.0	2.30
TIY	35.8	265	eP	12 46 58.5	1.0		
			LN	Ms=5.4		18.0	2.89
			LE			20.0	2.66
WHN	39.5	255	eP	12 47 29.0	0.7		
			eS	12 53 34.0	5.3		
			LE	Ms=5.1		12.0	1.08
XAN	40.4	264	eP	12 47 36.4	0.9		
LZH	42.2	270	eP	12 47 51.0	0.7		
			LN	Ms=5.5		16.0	2.03
			LE			16.0	2.06
GTA	42.5	277	P	12 47 53.6	0.1		
			LN	Ms=5.5		15.0	2.66
CD2	45.7	265	eP	12 48 20.2	1.4		
			LE	Ms=5.1		12.0	0.94
GYA	47.1	258	P	12 48 30.0	0.1		
			S	12 55 22.0	3.7		
			LN	Ms=5.5		16.0	2.50
			LE			16.0	1.50
WMQ	47.1	290	P	12 48 30.3	0.1		
			eS	12 55 20.0	−0.1		
			LE	Ms=5.8		12.0	3.94
KMI	50.5	261	eP	12 48 55.5	−0.6		
			eS	12 56 13.0	6.0		
QZN	50.9	249	eP	12 48 57.0	−2.1		
			eS	12 56 09.0	−3.4		
			LN	Ms=5.2		18.0	0.90
			LE			17.0	1.00
LSA	54.3	274	P	12 49 29.5	4.4		

1987 4 27
O=13 56 22.9 ± 0.08s
LAT=33.25 N ± 0.82km
LONG=103.63 E ± 0.35km
DEPTH= 14 km ± 1.26km
STATIONS USED = 5, STAND DEV= 3.62s
M_L=2.7/ 3,

CD2	2.3	177	ePn	13 57 04.4	2.9		
			Pg	13 57 05.5	1.2		
			eSn	13 57 37.0	5.1		
			Sg	13 57 38.4	2.1		
			SME	M_L=2.3		1.0	0.020

1987 4 27
O=16 58 57.0 ± 0.09s
LAT=37.80 N ± 1.70km
LONG=142.57 E ± 1.83km
DEPTH= 25 km ± 0.60km
STATIONS USED = 94, STAND DEV= 1.40s
Ms=5.1/37, m_B=5.2/ 2

MDJ	11.9	309	eP	17 01 50.8	2.4

			sP	17 02 00.2	1.4		
			S	17 03 56.0	−5.0		
CN2	14.3	300	+P	17 02 17.0	−2.9		
			sP	17 02 26.0	−4.5		
SNY	15.1	291	−P	17 02 31.6	0.5		
			sP	17 02 40.0	−1.7		
			SS	17 05 29.0	−6.8		
			LN	Ms=5.3		15.0	5.95
			LE			17.0	8.70
DL2	16.5	280	eP	17 02 49.0	0.8		
			pP	17 02 55.0	0.3		
			PP	17 03 03.0	1.6		
			S	17 05 49.0	−0.2		
			LE	Ms=4.7		15.0	2.18
SSE	18.8	256	+P	17 03 18.5	0.7		
			PMZ			1.0	0.080
			PP	17 03 35.5	2.0		
			S	17 06 44.0	0.8		
			LN	Ms=4.9		14.0	1.38
			LE			14.0	2.53
NJ2	20.3	261	+P	17 03 32.0	−1.5		
			LN	Ms=5.0		14.0	2.60
			LE			16.0	2.30
TIA	20.4	273	eP	17 03 33.1	−1.7		
			eS	17 07 17.0	−0.2		
			LN	Ms=5.0		10.0	0.93
			LE			14.0	2.74
BJI	20.6	284	eP	17 03 35.0	−2.5		
			LE	Ms=4.5		14.0	0.94
TIY	23.8	279	P	17 04 07.6	−1.4		
			S	17 08 23.0	3.9		
			sS	17 08 38.0	5.6		
			LN	Ms=4.9		16.0	1.61
			LE			18.0	1.61
QZH	24.1	245	eP	17 04 12.2	0.5		
			LE	Ms=4.6		12.0	0.83
HHC	24.1	287	eP	17 04 11.2	−1.1		
			S	17 08 21.0	−3.9		
			LN	Ms=5.1		13.0	0.47
			LE			13.0	2.70
WHN	24.4	261	P	17 04 15.0	0.3		
			sP	17 04 25.0	−1.0		
			eS	17 08 30.0	−0.2		
			sS	17 08 42.0	−0.8		
			LE	Ms=4.9		14.0	1.80
BTO	25.3	287	P	17 04 23.0	−0.7		
			csP	17 04 34.0	−0.8		
			cPP	17 05 00.0	−1.7		
			eS	17 08 41.0	−5.0		
			LN	Ms=5.2		17.0	1.00
			LE			13.0	2.80
XAN	27.4	272	+P	17 04 42.7	−0.5		
GZH	29.0	248	P	17 05 01.5	4.1		
			eS	17 09 47.0	1.1		
			LN	Ms=5.3		20.0	3.51
			LE			16.0	2.21
LZH	30.9	279	eP	17 05 13.5	−0.6		
			PMZ			1.5	0.090
			eS	17 10 17.0	1.5		
			LE	Ms=5.2		14.0	2.17
GYA	32.3	260	−P	17 05 26.0	−0.4		
			sP	17 05 36.0	−1.5		
			S	17 10 39.6	3.3		
			LN	Ms=5.3		18.0	2.50
			LE			18.0	2.10
CD2	32.6	270	eP	17 05 28.5	−0.7		
			S	17 10 44.2	2.6		
			LE	Ms=5.1		14.0	1.80
GTA	33.2	286	+P	17 05 34.6	−0.2		
			PMZ	m_B=5.4		5.0	0.32
			pP	17 05 41.6	−0.9		
			cPP	17 06 45.0	−0.6		
			eS	17 10 56.0	3.5		
			LE	Ms=5.2		16.5	2.44
QZN	34.1	246	eP	17 05 43.0	1.0		
			LN	Ms=5.0		15.0	1.10
			LE			16.0	1.10
KMI	36.0	261	+P	17 05 59.0	0.4		
			sP	17 06 11.5	1.8		
			LN	Ms=5.1		16.0	1.70
WMQ	41.3	296	P	17 06 44.4	1.5		
			PMZ			1.7	0.18
			sP	17 06 56.0	1.7		
			eS	17 12 57.0	1.2		
			sS	17 13 05.0	−3.9		
			LE	Ms=5.6		12.0	3.15
LSA	43.1	275	−P	17 06 58.0	0.5		
KSH	51.0	294	P	17 08 01.5	2.3		
			sP	17 08 14.0	3.5		
			S	17 15 12.0	−0.2		
			sS	17 15 28.0	1.3		
			LE	Ms=5.7		14.0	3.10

1987 4 27

O=21 47 45.1 ± 0.22s
LAT=16.38 S ± 3.32km
LONG=174.09 W ± 3.48km
DEPTH= 10 km ± 0.52km
STATIONS USED = 27, STAND DEV= 2.13s

MDJ	79.4	323	eP	21 59 53.0	−0.8		

CN2	81.4	320	eP	22 00 05.0	0.4
SNY	81.5	318	eP	22 00 06.9	1.6
BJI	85.7	314	eP	22 00 27.0	0.8
TIY	87.4	310	eP	22 00 33.1	−1.6
GYA	87.9	298	P	22 00 38.4	1.1
XAN	88.7	306	eP	22 00 39.2	−1.7
HHC	89.2	313	eP	22 00 45.2	1.7
BTO	90.2	312	eP	22 00 48.3	0.1
GTA	97.3	309	eP	22 01 21.4	0.8

1987 4 28

O = 00 01 16.8 ± 0.11s
LAT = 38.72 S ± 1.76km
LONG = 47.38 E ± 1.46km
DEPTH = 10 km ± 0.21km
STATIONS USED = 21, STAND DEV = 0.81s

LSA	79.4	38	−P	00 13 25.7	−0.3
KMI	81.9	49	eP	00 13 40.0	0.6
			S	00 23 52.0	1.3
KSH	82.1	22	eP	00 13 41.0	0.9
			eS	00 23 52.0	−2.2
GYA	85.3	51	P	00 13 57.0	0.7
CD2	86.9	46	eP	00 14 04.2	0.0

1987 4 28

O = 02 11 06.0 ± 0.15s
LAT = 5.20 S ± 3.93km
LONG = 68.89 E ± 3.12km
DEPTH = 6 km ± 0.51km
STATIONS USED = 48, STAND DEV = 1.75s
Ms = 4.7 / 2,

LSA	40.7	30	−P	02 18 51.3	1.0	
GYA	48.3	47	P	02 19 50.0	−0.4	
CD2	49.0	41	−iP	02 19 55.8	−0.1	
WMQ	51.7	17	P	02 20 16.4	0.0	
LZH	52.5	36	eP	02 20 22.5	−0.5	
GTA	52.8	30	+P	02 20 24.0	−0.8	
XAN	54.3	41	+P	02 20 34.8	−1.4	
WHN	56.1	48	eP	02 20 50.0	0.7	
TIY	58.8	40	eP	02 21 08.0	−0.4	
			LE	Ms = 4.8	15.0	0.32
NJ2	60.2	49	−P	02 21 17.5	−0.5	
SSE	61.6	51	P	02 21 26.6	−0.4	
			sP	02 21 34.0	−0.5	
BJI	62.5	39	eP	02 21 31.0	−2.6	
SNY	68.3	41	eP	02 22 09.4	−1.0	
CN2	70.4	40	eP	02 22 26.0	2.3	
MDJ	73.4	41	eP	02 22 41.5	−0.3	

1987 4 28

O = 13 27 10.1 ± 0.07s
LAT = 3.38 S ± 1.00km
LONG = 134.49 E ± 1.06km
DEPTH = 34 km ± 0.15km
STATIONS USED = 33, STAND DEV = 0.95s

WHN	38.8	332	eP	13 34 35.0	1.0
GYA	40.1	319	P	13 34 43.0	−1.2
KMI	41.9	314	eP	13 35 00.5	1.2
XAN	44.3	329	eP	13 35 19.0	−0.3
CD2	45.0	322	eP	13 35 24.2	−0.1
TIY	45.7	335	eP	13 35 30.9	0.5
BJI	46.4	341	eP	13 35 35.0	−0.4
LZH	48.6	327	eP	13 35 53.5	0.5
LSA	52.9	312	eP	13 36 26.2	0.0
GTA	53.2	327	P	13 36 28.0	0.1
WMQ	63.0	324	P	13 37 37.0	0.6

1987 4 28

O = 15 32 30.6 ± 0.12s
LAT = 2.05 N ± 2.24km
LONG = 99.06 E ± 2.18km
DEPTH = 25 km ± 0.39km
STATIONS USED = 94, STAND DEV = 1.62s
Ms = 6.1 / 47, m_B = 5.6 / 8

QZN	19.9	31	−P	15 37 05.0	1.5	
			eS	15 40 43.0	1.7	
			sS	15 40 58.0	6.3	
			LN	Ms = 6.1	10.0	14.6
			LE		12.0	26.7
KMI	23.2	8	−P	15 37 39.0	1.8	
			PMZ	m_B = 5.7	4.0	1.30
			PP	15 38 14.0	6.8	
			LN	Ms = 5.9	12.0	16.7
GZH	25.1	32	eP	15 37 58.0	2.9	
			S	15 42 19.0	4.1	
			SMN		14.0	6.78
			SME		12.0	4.58
			LN	Ms = 6.0	11.0	10.1
			LE		12.0	16.5
GYA	25.3	16	−P	15 37 58.0	0.3	
			S	15 42 19.8	0.5	
LSA	28.5	345	−P	15 38 25.0,	−2.0	
			ePP	15 39 18.0	0.1	
			SS	15 44 32.0	−4.3	
			LE	Ms = 5.4	17.0	5.47
CD2	29.0	8	eP	15 38 29.8	−1.6	
			S	15 43 20.0	0.7	
QZH	29.6	38	eP	15 38 35.4	−0.4	
			eS	15 43 22.5	−5.6	
			LN	Ms = 6.3	15.0	12.8

			LE			16.0	31.9
WHN	31.8	26	eP	15 38 58.0	2.0		
			PP	15 40 01.0	−0.1		
			S	15 44 04.0	0.8		
			PcS	15 45 36.0	6.5		
XAN	33.1	15	eP	15 39 05.4	−2.1		
			S	15 44 29.0	5.5		
LZH	34.2	7	−iP	15 39 15.0	−1.4		
			PMZ			1.5	0.14
			ePP	15 40 36.0	5.6		
			eS	15 44 40.0	−0.7		
			PcS	15 45 43.0	5.4		
			LN	Ms=6.1		10.0	6.12
			LE			10.0	11.0
NJ2	35.2	30	−P	15 39 23.0	−2.1		
			LN	Ms=6.5		13.5	34.4
SSE	35.7	34	P	15 39 31.0	1.8		
			PcP	15 41 59.0	2.1		
			eS	15 45 06.0	2.4		
			sS	15 45 20.0	3.2		
			LN	Ms=6.2		13.0	10.7
			LE			13.0	14.2
GTA	37.2	1	P	15 39 39.8	−2.4		
			ScP	15 45 49.8	4.2		
			S	15 45 26.0	−0.2		
			SME	m_B=5.2		8.0	0.39
			LE	Ms=5.8		12.0	6.43
TIY	37.6	18	eP	15 39 43.5	−1.7		
			pP	15 39 50.5	−2.6		
			PP	15 41 17.5	4.3		
			S	15 45 30.0	−1.8		
			sS	15 45 50.5	4.6		
			LN	Ms=6.2		12.0	6.94
			LE			13.0	12.5
TIA	37.9	24	eP	15 39 47.8	0.0		
			ePP	15 41 14.6	−2.5		
			SMN	m_B=5.6		12.0	0.83
			SME			12.0	0.92
			LN	Ms=6.2		13.0	12.6
			LE			12.0	8.23
BTO	39.6	13	P	15 40 02.0	−0.6		
			cPP	15 41 37.5	−0.1		
			S	15 46 04.0	0.8		
			ScS	15 50 10.0	4.1		
			LN	Ms=6.2		12.0	10.6
			LE			12.0	6.70
HHC	40.2	15	eP	15 40 07.5	−0.1		
			PP	15 41 41.0	−3.0		
			S	15 46 13.5	1.1		
			LN	Ms=6.1		16.0	13.5
			LE			11.0	4.10
BJI	40.9	20	eP	15 40 14.5	1.7		
			PcS	15 46 07.5	4.8		
			eS	15 46 28.0	5.2		
			SME			13.0	1.21
			SS	15 49 22.0	2.6		
			LN	Ms=6.0		15.0	10.4
DL2	42.1	27	eP	15 40 22.0	−0.6		
			eS	15 46 40.0	−0.5		
			LN	Ms=6.1		15.0	6.15
			LE			12.0	9.94
KSH	42.8	333	P	15 40 29.0	0.7		
			S	15 46 52.0	2.6		
			LE	Ms=5.8		15.0	5.60
WMQ	42.8	348	P	15 40 27.3	−1.3		
			PMZ			1.6	0.10
			S	15 46 49.0	−1.0		
			SME			18.0	2.43
			LE	Ms=5.7		12.0	3.94
SNY	45.3	26	+P	15 40 47.2	−1.6		
			pP	15 40 53.2	−3.6		
			PP	15 42 33.0	−2.1		
			S	15 47 29.0	2.4		
			sS	15 47 39.0	−1.9		
			LN	Ms=6.1		14.5	6.30
			LE			15.0	8.73
CN2	47.7	26	−P	15 41 05.8	−2.0		
			pP	15 41 15.0	−0.8		
			PcP	15 42 37.0	0.5		
			PP	15 42 58.0	−0.1		
			eS	15 47 57.0	−4.9		
			LE	Ms=6.2		14.0	10.9
MDJ	50.2	28	eP	15 41 26.0	−1.2		
			S	15 48 40.0	4.1		
			SS	15 52 08.0	1.8		

1987 4 28
O=18 55 20.2 ± 0.08s
LAT=57.88 N ± 1.56km
LONG= 32.62 W ± 0.90km
DEPTH= 10 km ± 0.06km
STATIONS USED = 13, STAND DEV= 0.93s

GTA	75.2	36	P	19 07 04.8	−0.9
TIY	80.4	27	eP	19 07 34.2	0.1
GYA	89.3	36	P	19 08 18.0	−1.1

1987 4 28
O=22 41 33.2 ± 0.08s
LAT=27.65 N ± 2.53km
LONG= 56.02 E ± 1.25km

DEPTH= 29 km ± 1.45km
STATIONS USED = 12, STAND DEV= 2.06s
Ms=5.1/ 1,

WMQ	30.1	49	P	22 47 44.2	1.1		
KMI	41.7	82	-P	22 49 22.5	0.4		
			LE	Ms=5.1		12.0	0.90

1987 4 28
O=22 44 32.5 ± 0.12s
LAT= 1.98 N ± 2.26km
LONG= 99.05 E ± 1.92km
DEPTH= 32 km ± 0.64km
STATIONS USED = 28, STAND DEV= 1.68s
Ms=4.9/ 5,

QZN	20.0	31	P	22 49 07.2	2.2		
			LN	Ms=4.7		11.0	0.60
			LE			13.0	1.10
GYA	25.4	16	P	22 50 01.2	2.1		
			LN	Ms=4.9		14.0	1.20
			LE			14.0	1.10
CD2	29.1	8	eP	22 50 31.3	-1.5		
			LE	Ms=4.8		11.0	0.78
XAN	33.2	15	eP	22 51 07.6	-1.3		
LZH	34.2	7	eP	22 51 16.5	-1.3		
GTA	37.3	1	P	22 51 42.6	-1.0		
BTO	39.7	13	eP	22 52 03.8	-0.1		
			LN	Ms=4.9		14.0	0.60
			LE			12.0	0.30
BJI	41.0	20	eP	22 52 15.5	1.4		
WMQ	42.9	348	P	22 52 30.5	0.6		
CN2	47.8	26	eP	22 53 06.0	-3.1		
MDJ	50.3	28	eP	22 53 29.5	1.0		

1987 4 28
O=23 03 11.2 ± 0.04s
LAT= 2.84 N ± 1.43km
LONG= 65.83 E ± 2.13km
DEPTH= 7 km ± 0.70km
STATIONS USED = 22, STAND DEV= 1.04s

KMI	41.9	55	eP	23 11 05.0	0.7
WMQ	45.2	22	P	23 11 31.2	0.1
GYA	45.6	55	P	23 11 33.4	-1.3
GTA	47.7	36	eP	23 11 51.9	0.6
XAN	50.7	47	eP	23 12 13.7	-0.5
WHN	53.4	54	eP	23 12 35.5	0.9
TIA	57.7	48	eP	23 13 05.0	-0.6

1987 4 29
O=01 45 22.8 ± 0.09s
LAT=27.60 N ± 1.88km
LONG= 56.03 E ± 1.91km
DEPTH= 15 km ± 0.44km
STATIONS USED = 94, STAND DEV= 0.87s
Ms=5.6/45, m_B=5.9/27

KSH	20.4	49	P	01 50 01.0	-1.0		
			cS	01 53 38.0	-7.0		
			LN	Ms=6.2		8.0	27.3
WMQ	30.2	49	+iP	01 51 35.6	0.6		
			PMZ			1.7	0.57
			sP	01 51 43.0	-1.2		
			S	01 56 35.0	3.6		
			SME	m_B=5.9		12.0	3.46
			LN	Ms=5.8		28.0	19.8
LSA	30.8	78	+P	01 51 41.5	0.2		
			sP	01 51 54.0	3.9		
			PP	01 52 41.0	-0.4		
			S	01 56 46.0	4.0		
			SMN	m_B=5.6		7.0	0.93
			LN	Ms=5.2		11.0	1.71
GTA	38.0	60	+iP	01 52 43.3	0.4		
			PMZ	m_B=5.8		6.5	1.14
			PP	01 54 16.5	4.3		
			S	01 58 39.0	5.6		
			SMN	m_B=5.6		9.0	0.78
			SME			8.0	0.54
			LE	Ms=5.5		12.0	2.95
LZH	41.2	66	+iP	01 53 09.5	0.6		
			PMZ			2.0	0.32
			ScP	01 58 51.0	-4.7		
			S	01 59 26.0	5.6		
			LN	Ms=5.6		14.0	4.02
CD2	41.5	74	eP	01 53 11.3	-0.5		
			S	01 59 29.0	3.0		
			LN	Ms=5.7		14.0	4.50
KMI	41.7	82	+iP	01 53 14.5	0.8		
			PP	01 54 52.0	-1.0		
			S	01 59 32.0	2.8		
			SMN	m_B=6.2		8.0	3.00
GYA	44.9	79	+P	01 53 37.6	-1.4		
			PMZ			1.4	0.30
			sP	01 53 44.8	-3.4		
			PcP	01 55 20.0	-0.2		
			ScP	01 59 13.0	2.4		
			S	02 00 13.0	-1.7		
			LN	Ms=5.6		18.0	3.70
			LE			19.0	2.30
XAN	45.5	68	+P	01 53 43.4	-0.3		
			S	02 00 21.0	-2.3		
BTO	45.9	59	+iP	01 53 45.7	-1.5		
			pP	01 53 51.5	-1.9		

			PP	01 55 35.0	0.7		
			S	02 00 29.0	−0.4		
			eSS	02 03 43.0	−3.2		
			LN	Ms = 5.8		20.0	7.30
			LE			20.0	2.50
HHC	47.1	59	+iP	01 53 58.0	1.6		
			pP	01 54 02.5	−0.1		
			PP	01 55 45.0	−0.9		
			S	02 00 51.0	5.0		
			SMN	m_B = 5.7		10.0	0.39
			SME			8.0	0.83
			LN	Ms = 5.5		11.0	1.53
			LE			11.0	0.60
TIY	47.9	63	+iP	01 54 03.0	−0.2		
			PMZ			1.4	0.22
			PcP	01 55 35.0	4.0		
			ScP	01 59 26.5	3.1		
			S	02 01 00.0	1.8		
			LN	Ms = 5.7		12.5	3.33
			LE			13.0	1.41
QZN	49.8	88	+iP	01 54 18.0	0.1		
			PP	01 56 15.0	2.3		
			S	02 01 29.5	4.5		
			SME	m_B = 5.7		8.0	0.90
			sS	02 01 35.5	−1.3		
			LN	Ms = 5.4		17.0	1.70
			LE			18.0	1.20
WHN	50.6	72	P	01 54 24.0	0.5		
			PMZ	m_B = 6.1		6.0	1.50
			sP	01 54 31.0	−1.7		
			PcP	01 55 41.0	0.4		
			PP	01 56 19.0	−0.4		
			LN	Ms = 5.5		14.0	2.22
BJI	50.6	59	eP	01 54 24.0	0.2		
			PMZ	m_B = 5.8		5.0	0.62
			PcP	01 55 41.5	0.7		
			eS	02 01 40.0	3.1		
			SMN	m_B = 5.4		8.0	0.24
			SME			8.0	0.28
			ScS	02 04 13.0	2.7		
			LN	Ms = 6.0		16.0	4.30
			LE			22.0	8.17
GZH	51.6	81	+P	01 54 32.1	0.8		
			S	02 01 53.0	3.4		
			SMN	m_B = 5.9		9.0	0.97
			SME			10.0	1.37
TIA	51.8	64	+P	01 54 32.6	−0.4		
			PMZ	m_B = 6.0		6.0	1.33
			PcP	01 55 45.4	0.1		
			cS	02 01 54.0	0.3		
			SMN	m_B = 5.7		8.0	0.62
			SME			8.0	0.61
			LN	Ms = 5.7		13.0	2.66
			LE			13.0	0.87
NJ2	54.0	69	+P	01 54 48.6	−0.7		
			PMZ	m_B = 6.1		4.0	1.10
			S	02 02 22.0	−0.3		
			LN	Ms = 5.8		14.0	3.80
DL2	54.9	60	+iP	01 54 56.0	−0.1		
			PMZ	m_B = 6.0		5.0	1.14
			PcP	01 55 56.0	−1.0		
			S	02 02 35.0	0.2		
			ScS	02 04 46.0	5.5		
			LN	Ms = 6.0		20.0	7.20
			LE			16.0	3.23
QZH	55.6	77	+P	01 54 59.0	−2.1		
			eS	02 02 44.0	−1.2		
			LN	Ms = 5.4		15.0	1.68
SNY	56.0	56	+iP	01 55 02.0	−1.6		
			PMZ	m_B = 5.9		6.0	1.04
			PcP	01 56 01.0	0.0		
			eS	02 02 48.0	−1.8		
			LN	Ms = 5.8		25.0	4.06
			LE			20.0	3.32
SSE	56.2	70	P	01 55 04.5	−0.5		
			PMZ			1.5	0.18
			eS	02 02 48.0	−4.4		
			sS	02 03 06.0	3.0		
			LN	Ms = 5.5		14.0	1.73
CN2	57.1	54	+iP	01 55 10.3	−1.1		
			PMZ	m_B = 6.3		4.0	1.50
			pP	01 55 14.0	−3.8		
			S	02 03 02.0	−0.9		
			SMN	m_B = 5.9		6.0	1.00
			LN	Ms = 6.2		22.0	12.0
MDJ	59.9	52	+P	01 55 29.3	−1.7		
			PP	01 57 42.0	−2.1		
			S	02 03 36.0	−3.6		

1987 4 29

O = 05 15 34.5 ± 0.11s
LAT = 24.11 N ± 1.63km
LONG = 94.57 E ± 1.25km
DEPTH = 105 km ± 0.49km
STATIONS USED = 76, STAND DEV = 1.78s
m_B = 5.3 / 6

LSA	6.4	332	−iP	05 17 08.0	0.3		
			S	05 18 18.0	−0.8		
			SMN			1.1	0.59
KMI	7.5	81	−P	05 17 26.0	2.8		

			S	05 18 49.0	2.1	
CD2	10.6	48	eP	05 18 03.8	−1.0	
			S	05 20 04.5	2.9	
GYA	11.2	75	P	05 18 11.4	−1.3	
			sP	05 18 37.4	−3.6	
			S	05 20 12.0	−3.8	
			ScP	05 27 21.6	−0.1	
			ScS	05 30 55.0	−0.9	
LZH	14.4	32	eP	05 18 52.5	−1.9	
QZN	15.1	107	−P	05 19 07.8	4.5	
GTA	15.9	15	P	05 19 11.9	−1.8	
			S	05 22 03.0	−2.8	
			PcP	05 24 06.4	0.2	
			ScP	05 27 29.6	0.2	
			ScS	05 31 07.8	0.8	
XAN	16.0	48	cP	05 19 11.6	−2.9	
			S	05 22 10.0	2.5	
GZH	17.2	90	eP	05 19 31.0	0.8	
WHN	18.7	66	P	05 19 48.0	0.7	
			S	05 23 14.0	5.6	
			SMN	m_B = 5.4	4.0	0.43
			sS	05 23 34.0	2.7	
TIY	20.4	44	eP	05 20 03.8	−1.8	
			S	05 23 45.5	2.7	
WMQ	20.4	346	−iP	05 20 07.1	1.2	
			PMZ		1.7	0.12
			PP	05 20 31.0	−0.6	
			SMN		3.0	0.30
			ScS	05 31 22.0	1.1	
BTO	20.9	35	cP	05 20 07.1	−3.8	
			pP	05 20 27.0	−4.9	
KSH	21.9	319	eP	05 20 24.0	3.2	
			pP	05 20 45.0	2.7	
			eS	05 24 16.0	4.4	
HHC	21.9	36	eP	05 20 20.0	−0.9	
NJ2	22.8	64	−P	05 20 29.4	0.2	
			pP	05 20 54.5	3.3	
			ScP	05 27 45.0	0.0	
TIA	22.9	53	eP	05 20 29.6	−0.2	
BJI	24.1	44	P	05 20 42.0	0.0	
SSE	24.6	68	P	05 20 46.5	0.5	
			pP	05 21 05.7	−2.6	
CN2	32.0	45	cP	05 21 54.0	0.7	
			cpP	05 22 16.0	−0.5	

1987 4 29

O = 14 27 35.9 ± 0.14s

LAT = 19.00 S ± 2.18km

LONG = 177.70 W ± 1.12km

DEPTH = 391 km ± 1.74km

STATIONS USED = 81, STAND DEV = 1.02s

m_B = 6.3 / 51

QZH	75.8	303	−iP	14 38 42.0	−0.4	
			PMZ		3.0	2.19
			pP	14 40 12.0	2.7	
			PP	14 41 37.0	−2.8	
			iS	14 47 54.0	1.8	
			SME	m_B = 6.1	12.0	7.97
			ScS	14 48 20.0	3.6	
SSE	77.0	310	−P	14 38 48.0	−0.6	
			PMZ		1.0	0.15
			pP	14 40 16.0	0.4	
			iS	14 48 04.0	−0.1	
			SMN	m_B = 6.0	8.0	1.26
			SME		8.0	3.79
			SKS	14 48 18.0	0.2	
			ScS	14 48 27.0	1.6	
			SS	14 53 14.0	1.9	
NJ2	79.1	309	−P	14 39 00.7	0.3	
			PMZ	m_B = 6.1	5.0	2.00
			pP	14 40 30.0	2.1	
			iS	14 48 30.0	2.7	
			SME	m_B = 6.1	9.0	5.30
GZH	79.2	299	−iP	14 39 02.0	1.1	
			PMZ	m_B = 6.3	4.0	2.09
			pP	14 40 28.0	−0.4	
			iS	14 48 30.5	2.3	
			SMN	m_B = 6.2	10.0	3.08
			SME		13.0	8.74
MDJ	79.5	325	−P	14 39 02.0	−0.1	
			PMZ		3.0	4.77
			pP	14 40 30.0	0.4	
			sP	14 41 10.0	0.4	
			PP	14 42 06.0	−3.5	
			S	14 48 34.0	5.1	
			SME	m_B = 6.5	9.0	16.0
			sS	14 51 08.0	4.2	
QZN	80.5	294	−iP	14 39 08.0	0.4	
			pP	14 40 39.0	3.7	
			PP	14 42 23.0	4.6	
			S	14 48 43.5	3.8	
			SMN		15.0	2.40
			SME		11.5	5.10
DL2	80.8	316	−P	14 39 09.0	−0.3	
			PMZ	m_B = 6.3	4.0	2.28
			pP	14 40 38.0	0.9	
			PP	14 42 19.0	−2.3	
			S	14 48 45.0	2.0	
			SMN	m_B = 6.2	8.0	4.57
			SME		8.0	4.94

SNY	81.2	320	+P	14 39 10.8	−0.6		
			PMZ			3.0	2.51
			pP	14 40 39.0	−0.3		
			S	14 48 48.0	0.8		
			SMN	$m_B = 6.4$		8.0	5.93
			SME			8.0	7.12
CN2	81.3	322	−iP	14 39 11.0	−0.6		
			PMZ	$m_B = 6.4$		6.0	4.00
			pP	14 40 38.0	−1.5		
			PP	14 42 20.0	−5.0		
			S	14 48 45.0	−2.6		
			SME	$m_B = 6.4$		8.0	10.5
WHN	81.8	306	−iP	14 39 15.0	0.8		
			PMZ	$m_B = 6.4$		4.0	2.58
			pP	14 40 44.0	1.7		
			PP	14 42 22.0	−6.9		
			iS	14 48 58.0	3.8		
			SME	$m_B = 5.9$		10.0	4.17
TIA	82.5	312	+P	14 39 17.1	−0.6		
			PMZ	$m_B = 6.3$		4.0	2.15
			pP	14 40 45.5	−0.4		
			sP	14 41 23.6	−2.1		
			PP	14 42 28.0	−6.3		
			iS	14 49 00.0	−1.2		
			SMN	$m_B = 6.5$		9.0	5.84
			SME			9.0	11.8
			sS	14 51 38.0	2.4		
			SS	14 54 30.0	−4.2		
BJI	85.0	315	eP	14 39 30.0	−0.4		
			PMZ	$m_B = 6.2$		4.0	2.10
			pP	14 41 00.0	0.8		
			sP	14 41 34.0	−4.8		
			PP	14 42 49.0	−5.4		
			SKS	14 49 14.0	0.1		
			eS	14 49 25.0	−1.0		
GYA	86.2	299	−P	14 39 36.0	0.0		
			PMZ			3.0	1.40
			pP	14 41 08.0	3.2		
			PP	14 43 02.0	−1.5		
			SMN	$m_B = 6.5$		6.0	3.20
			SME			6.0	6.60
TIY	86.5	312	−iP	14 39 38.0	0.4		
			PMZ			1.2	0.34
			pP	14 41 07.0	0.5		
			SMN	$m_B = 6.3$		8.0	3.13
			SME			8.0	4.59
			eSS	14 55 35.0	2.3		
XAN	87.5	307	−iP	14 39 42.5	0.4		
HHC	88.5	314	−P	14 39 48.0	0.8		
			PMZ			3.0	1.41
			pP	14 41 17.0	0.5		
			SKS	14 49 37.0	0.9		
			S	14 49 58.5	1.7		
			SMN	$m_B = 6.2$		8.0	2.58
			SME			8.0	3.95
KMI	88.9	297	+P	14 39 50.0	0.8		
			pP	14 41 23.5	5.0		
			SKS	14 49 42.0	3.3		
			iS	14 50 08.0	5.3		
			SME			16.0	11.8
BTO	89.5	313	−iP	14 39 52.0	0.4		
			PMZ	$m_B = 6.0$		4.0	1.10
			pP	14 41 24.0	2.9		
			ePP	14 43 29.0	−1.4		
			iSKS	14 49 43.0	1.2		
			iS	14 50 06.0	−1.3		
			SMN	$m_B = 6.5$		8.0	2.10
			SME			9.0	9.00
CD2	90.2	303	P	14 39 55.6	0.6		
			pP	14 41 26.0	1.2		
			SKS	14 49 47.0	0.6		
			SME	$m_B = 6.8$		10.0	21.5
LZH	92.1	307	+iP	14 40 04.5	0.6		
			PMZ			1.5	0.37
			pP	14 41 38.5	5.0		
			PP	14 43 55.0	3.7		
			SKS	14 49 57.0	0.1		
			S	14 50 33.0	4.6		
GTA	96.2	309	−P	14 40 22.4	−0.4		
			pP	14 41 52.5	−0.1		
			PP	14 44 18.5	−4.8		
			SKS	14 50 19.5	0.2		
			iS	14 51 12.0	6.1		
			SME	$m_B = 5.9$		10.5	3.16
LSA	100.1	298	cP	14 40 41.0	0.3		
			PP	14 44 52.0	−1.1		
			SKS	14 50 39.0	0.1		
			iS	14 51 46.0	6.8		
			SMN			15.0	2.39
			SME			12.0	1.36
			SS	14 58 41.0	−3.5		
WMQ	106.1	311	eP	14 41 07.8	1.0		
KSH	114.2	305	PKP	14 45 32.5	1.7		
			sPKP	14 47 55.0			
			SKKS	14 52 57.0			

1987 4 29
O = 19 43 26.2 ± 0.41s
LAT = 35.46 N ± 3.36km
LONG = 77.73 E ± 2.26km

DEPTH= 15 km
STATIONS USED = 9, STAND DEV= 2.78s
M_L=3.9/ 3,

KSH	4.2	341	ePn	19 44 34.5	3.8		
			Sg	19 45 34.0	−4.6		
			SMN	M_L=3.7		0.2	0.10
			SME			0.5	0.20
WMQ	11.3	40	eP	19 46 10.0	−1.1		

1987 4 29
O=21 41 35.8 ± 0.14s
LAT= 1.76 N ± 1.34km
LONG= 99.47 E ± 1.61km
DEPTH=184 km ± 1.64km
STATIONS USED = 12, STAND DEV= 2.86s

LSA	28.9	345	P	21 47 19.0	−1.3		
WMQ	43.2	348	P	21 49 20.2	−0.1		

1987 4 30
O=01 10 31.5 ± 0.13s
LAT=28.34 N ± 1.67km
LONG=129.56 E ± 1.74km
DEPTH= 30 km ± 0.41km
STATIONS USED = 65, STAND DEV= 2.05s
Ms=4.6/25, m_B=5.0/ 2

SSE	7.8	293	eP	01 12 24.0	−1.5		
QZH	10.4	253	eP	01 12 57.0	−4.5		
			eS	01 14 56.0	−1.9		
			LN	Ms=4.7		12.0	2.52
			LE			12.0	3.43
TIA	13.1	310	eP	01 13 39.7	1.1		
			LN	Ms=4.6		12.0	1.77
			LE			12.0	0.65
WHN	13.4	283	eP	01 13 46.5	3.8		
			LN	Ms=4.7		10.0	1.25
			LE			9.0	1.55
SNY	14.3	342	+P	01 13 55.4	1.2		
			PP	01 14 06.5	0.8		
			eS	01 16 38.0	5.1		
			LN	Ms=4.7		11.0	1.50
			LE			11.0	1.80
CN2	15.8	349	+P	01 14 15.0	1.7		
			pP	01 14 20.0	−0.3		
			eS	01 17 13.0	5.6		
BJI	16.1	320	eP	01 14 18.0	1.0		
			SMN	m_B=5.1		7.0	0.64
			SME			7.0	0.29
			LN	Ms=4.5		12.0	1.12
			LE			12.0	0.35
MDJ	16.2	0	eP	01 14 21.5	2.3		
TIY	17.1	307	eP	01 14 33.0	2.7		
			sP	01 14 42.5	0.7		
			LN	Ms=4.7		14.0	1.67
			LE			15.0	1.07
XAN	18.5	293	+P	01 14 47.6	−0.4		
HHC	19.3	315	eP	01 14 56.0	−1.3		
			LN	Ms=4.5		10.0	0.54
			LE			10.0	0.42
BTO	20.2	312	eP	01 15 06.5	−0.1		
			pP	01 15 12.0	−2.5		
			PP	01 15 28.0	1.9		
			eS	01 18 50.0	3.1		
			LN	Ms=4.5		14.0	0.70
			LE			14.0	0.60
GYA	20.4	270	P	01 15 10.0	0.9		
			pP	01 15 17.0	−0.1		
			LN	Ms=5.1		12.0	3.30
			LE			12.0	1.00
CD2	22.6	283	eP	01 15 30.2	−0.5		
			S	01 19 32.0	1.2		
			LN	Ms=5.2		12.0	2.41
			LE			12.0	1.89
LZH	23.0	296	eP	01 15 35.0	−0.6		
KMI	24.1	269	+P	01 15 52.0	5.6		
			eS	01 19 56.0	−4.0		
			LN	Ms=4.8		15.0	1.60
GTA	26.9	302	P	01 16 10.0	−2.6		
			pP	01 16 17.5	−3.5		
			LN	Ms=4.9		14.5	1.41
WMQ	36.8	306	eP	01 17 38.0	−0.7		

1987 4 30
O=01 34 04.4 ± 0.09s
LAT=43.18 N ± 0.63km
LONG= 86.68 E ± 0.76km
DEPTH= 31 km ± 0.35km
STATIONS USED = 5, STAND DEV= 3.56s
M_L=3.1/ 5,

1987 4 30
O=02 40 03.6 ± 0.09s
LAT= 3.18 S ± 1.02km
LONG=138.75 E ± 1.22km
DEPTH= 44 km ± 0.47km
STATIONS USED = 78, STAND DEV= 1.04s
Ms=5.0/21, m_B=5.3/ 6

QZH	34.1	326	eP	02 46 47.0	0.2		
			sP	02 47 05.5	2.7		
			iS	02 52 08.0	−0.8		
			SME	m_B=5.4		7.0	0.52

			sS	02 52 34.0	6.2		
			LN	Ms=5.0		18.0	0.88
			LE			26.0	1.69
QZN	36.0	309	P	02 47 03.0	0.2		
			sP	02 47 20.0	1.2		
			S	02 52 38.0	1.2		
			eSS	02 54 58.0	−3.2		
			LN	Ms=4.8		14.0	0.70
SSE	38.0	335	P	02 47 20.7	1.3		
			eS	02 53 06.0	−1.9		
			LN	Ms=5.0		20.0	1.39
NJ2	39.8	333	eP	02 47 35.0	0.4		
			S	02 53 36.0	1.3		
			SME	m_B=5.2		10.0	0.40
			LN	Ms=5.2		20.0	2.00
WHN	40.8	327	eP	02 47 43.0	−0.1		
			sP	02 48 04.0	4.7		
			S	02 53 52.0	2.0		
			SME	m_B=5.2		10.0	0.42
			LE	Ms=4.8		28.0	1.10
GYA	42.8	315	P	02 47 59.0	−0.3		
DL2	44.8	341	eP	02 48 15.0	−0.1		
			pP	02 48 28.0	1.5		
			cS	02 54 47.0	−1.4		
			LE	Ms=5.1		14.0	0.91
KMI	44.9	311	eP	02 48 20.0	3.8		
			S	02 54 52.0	3.2		
XAN	46.5	325	eP	02 48 28.6	−0.3		
			S	02 55 11.5	−0.5		
SNY	46.9	344	eP	02 48 29.6	−2.2		
			sP	02 48 46.5	−1.5		
			S	02 55 18.5	1.0		
			SME	m_B=5.6		11.0	0.86
			sS	02 55 40.0	2.1		
			LN	Ms=5.0		28.0	1.12
			LE			26.0	0.85
TIY	47.4	331	eP	02 48 37.4	0.9		
			S	02 55 29.0	3.3		
			LN	Ms=5.3		25.0	2.43
			LE			20.0	0.48
CD2	47.6	318	eP	02 48 37.6	0.3		
			S	02 55 28.0	0.7		
			LE	Ms=5.1		18.0	1.24
BJI	47.7	337	eP	02 48 37.5	−1.2		
			eS	02 55 30.0	−0.9		
			SME	m_B=5.1		8.0	0.23
			csS	02 55 52.0	1.8		
			LN	Ms=5.1		14.0	0.88
CN2	48.3	347	+P	02 48 41.0	−1.9		
			pP	02 48 55.0	0.8		
			eS	02 55 35.0	−3.4		
MDJ	48.3	351	eP	02 48 43.0	0.1		
HHC	50.4	333	eP	02 48 59.4	0.3		
BTO	50.9	332	eP	02 49 02.6	−0.4		
			sP	02 49 20.0	1.0		
			ePP	02 51 00.0	0.8		
			eS	02 56 15.0	0.1		
			LN	Ms=5.1		18.0	0.80
			LE			18.0	0.80
LZH	50.9	323	eP	02 49 03.5	0.4		
GTA	55.5	324	P	02 49 36.9	−0.1		
			pP	02 49 50.4	2.0		
			S	02 57 18.0	2.1		
			SME	m_B=5.3		7.0	0.32
			LE	Ms=5.0		23.0	0.92
WMQ	65.4	322	eP	02 50 44.2	−0.4		
KSH	71.4	313	eP	02 51 24.0	1.9		
			pP	02 51 36.0	2.4		
			ePP	02 54 06.0	4.4		
			eS	03 00 40.0	4.0		

1987 4 30

O=03 42 34.1 ± 0.22s

LAT=39.45 N ± 1.93km

LONG=124.18 E ± 1.69km

DEPTH= 13 km

STATIONS USED = 16, STAND DEV= 2.73s

M_L=4.0 / 13,

DL2	2.1	256	Pg	03 43 09.7	−0.8		
			Sg	03 43 35.6	−3.0		
			SMN	M_L=4.1		0.5	1.56
			SME			0.5	1.15
SNY	2.4	349	cPn	03 43 13.2	−0.7		
			Pg	03 43 17.8	0.9		
			Sg	03 43 48.3	−1.8		
			SMN	M_L=3.9		0.6	0.76
			SME			0.6	0.69
CN2	4.5	12	ePn	03 43 40.6	−1.2		
			Pg	03 43 56.2	3.4		
			Sg	03 44 52.6	−1.1		
			SMN	M_L=4.0		0.6	0.20
			SME			0.6	0.30
TIA	6.5	242	ePn	03 44 15.4	6.1		
			Sg	03 45 51.6	−4.6		
MDJ	6.5	36	ePg	03 44 34.0	4.1		
			eSg	03 46 00.0	0.7		
			SME	M_L=4.5		0.8	0.27

1987 4 30

O=05 17 38.9 ± 0.07s

LAT=39.78 N ± 1.41km
LONG= 74.53 E ± 1.27km
DEPTH= 26 km ± 0.36km
STATIONS USED = 92, STAND DEV= 1.30s
Ms=5.8/ 50, M_L=6.0/ 2, m_B=5.8/ 14

KSH	1.2	106	+iPg	05 17 59.0	−1.1			
WMQ	10.6	63	+P	05 20 11.5	−1.5			
			S	05 22 09.0	−2.8			
			LE	Ms=6.2		8.0	71.1	
LSA	16.9	121	eP	05 21 35.6	−0.9			
			pP	05 21 45.0	2.4			
			sP	05 21 50.5	3.7			
			SMN	m_B=5.6		6.0	1.88	
			SS	05 25 07.0	4.5			
			LN	Ms=5.6		9.0	10.6	
			LE			11.0	4.14	
GTA	19.5	83	+iP	05 22 06.9	−0.2			
			PMZ	m_B=6.0		6.0	4.66	
			S	05 25 37.5	−1.6			
			SME	m_B=5.9		6.0	2.87	
			sS	05 25 47.0	−3.5			
			LE	Ms=5.7		11.0	12.1	
LZH	23.4	90	+iP	05 22 48.0	1.2			
			PMZ			1.5	1.14	
			LN	Ms=6.0		12.0	18.8	
			LE			12.0	6.89	
CD2	25.3	101	+P	05 23 06.9	1.1			
			S	05 27 32.0	4.6			
			sS	05 27 47.0	6.1			
			LN	Ms=5.7		12.0	9.42	
BTO	27.0	77	+P	05 23 21.0	−0.4			
			S	05 27 52.5	−2.3			
			LN	Ms=5.7		12.0	6.70	
			LE			14.0	6.00	
KMI	27.8	113	+P	05 23 28.0	−0.6			
			eS	05 28 03.0	−5.6			
			LE	Ms=5.4		12.0	4.20	
HHC	28.1	76	eP	05 23 31.2	−0.3			
			PP	05 24 18.0	−3.2			
			S	05 28 12.4	−0.3			
			LN	Ms=5.9		11.0	7.58	
			LE			11.0	8.73	
TIY	29.5	82	+P	05 23 43.5	−0.2			
			PP	05 24 33.5	−5.5			
			ScS	05 34 23.0	2.8			
			LN	Ms=5.8		14.0	5.74	
			LE			11.0	6.01	
GYA	29.8	107	+P	05 23 46.5	−0.3			
			PMZ			3.0	1.50	
			pP	05 23 53.0	−1.7			
			PcP	05 26 50.0	0.9			
			S	05 28 43.0	2.9			
			LN	Ms=5.7		12.0	6.30	
			LE			12.0	3.10	
BJI	31.7	76	eP	05 24 03.0	−0.4			
			eS	05 29 10.0	−0.7			
			LN	Ms=5.9		12.0	10.6	
TIA	33.5	82	−P	05 24 19.5	0.5			
			S	05 29 40.0	2.2			
			LN	Ms=6.0		13.0	11.8	
			LE			12.0	3.14	
WHN	33.6	93	+iP	05 24 20.0	0.3			
			PMZ	m_B=6.4		4.0	2.58	
			S	05 29 42.0	3.0			
			sS	05 29 52.0	−1.1			
			LN	Ms=5.9		12.0	8.13	
DL2	36.1	76	+P	05 24 42.0	0.9			
			PP	05 26 10.0	6.9			
			eS	05 30 20.0	1.4			
			LN	Ms=5.8		14.0	4.48	
			LE			11.0	4.32	
NJ2	36.4	88	+P	05 24 44.0	0.3			
			PMZ			3.0	1.10	
			PP	05 26 14.0	6.9			
			LE	Ms=6.1		16.0	15.8	
QZN	36.7	114	+P	05 24 46.5	0.1			
			ePP	05 26 14.5	3.1			
			eS	05 30 30.0	1.7			
			LN	Ms=5.7		14.5	3.90	
			LE			16.0	5.50	
GZH	36.7	105	P	05 24 42.6	−3.8			
			eS	05 30 30.0	1.7			
			LN	Ms=5.8		15.0	6.23	
			LE			17.0	5.76	
SNY	36.8	71	+P	05 24 45.5	−1.3			
			PMZ	m_B=5.6		6.0	0.67	
			pP	05 24 53.0	−1.8			
			PP	05 26 10.0	−2.0			
			S	05 30 29.0	0.9			
			LN	Ms=6.0		16.0	7.67	
			LE			15.0	8.35	
CN2	37.7	67	+P	05 24 53.0	−1.4			
			pP	05 25 02.5	0.0			
			PP	05 26 17.0	−6.0			
			PcP	05 27 17.0	5.7			
			cScP	05 31 01.0	5.5			
SSE	38.6	88	+iP	05 25 02.0	−0.2			
			PMZ			1.1	0.20	
			sP	05 25 13.5	−0.4			
			PP	05 26 38.0	3.7			

			S	05 31 00.0	3.8		
			SS	05 33 36.0	−1.9		
			LN	Ms=6.1		16.0	7.10
			LE			16.0	12.1
QZH	39.6	98	+iP	05 25 11.0	0.3		
			PMZ	m_B=6.0		4.0	0.95
			PP	05 26 47.5	1.6		
			S	05 31 07.5	−4.1		
			sS	05 31 22.0	−3.9		
			SS	05 33 54.0	−6.3		
			LE	Ms=5.7		12.0	4.19
MDJ	40.4	65	+P	05 25 17.0	−0.2		
			pP	05 25 26.0	0.7		
			PP	05 26 56.0	2.0		
			S	05 31 25.0	1.8		
			sS	05 31 40.0	2.5		
			SS	05 34 20.0	2.7		

1987 4 30
O=06 27 39.5 ± 0.11s
LAT=39.77 N ± 1.71km
LONG= 74.15 E ± 0.61km
DEPTH= 12 km ± 1.75km
STATIONS USED = 10, STAND DEV= 3.36s
M_L=4.3/ 3,

KSH	1.4	102	ePg	06 28 04.4	−1.0		
			Sg	06 28 23.0	−2.0		
			SMN	M_L=4.3		0.5	4.70
			SME			0.5	3.90
WMQ	10.9	64	P	06 30 17.9	−0.8		
			eS	06 32 19.0	−2.6		
			LN			2.0	0.11
GTA	19.8	83	P	06 32 12.2	−0.5		

1987 4 30
O=06 54 57.3 ± 0.07s
LAT=39.76 N ± 1.23km
LONG= 74.47 E ± 1.05km
DEPTH= 16 km ± 0.62km
STATIONS USED = 24, STAND DEV= 2.12s
Ms=4.3/ 1, M_L=4.3/ 2,

KSH	1.2	104	−iPg	06 55 18.0	−0.9		
			Sg	06 55 39.0	3.7		
			SME			3.0	27.7
WMQ	10.7	63	eP	06 57 33.0	−0.1		
			S	06 59 33.0	0.0		
			LN	Ms=4.3		4.0	0.47
LSA	17.0	121	eP	06 58 55.0	−1.4		
GTA	19.5	83	P	06 59 26.8	−0.5		

1987 4 30
O=10 35 56.3 ± 0.14s
LAT=34.41 N ± 0.95km
LONG=100.32 E ± 1.55km
DEPTH= 20 km ± 0.37km
STATIONS USED = 14, STAND DEV= 3.01s
Ms=3.4/ 1, M_L=3.6/ 7,

LZH	3.3	59	cPn	10 36 49.0	1.1		
			Pg	10 36 55.5	0.4		
			Sn	10 37 31.0	2.4		
			Sg	10 37 39.5	−1.2		
			SMN	M_L=3.9		1.0	0.41
			SME			1.0	0.43
CD2	4.5	139	cPn	10 37 09.0	4.6		
			Pg	10 37 16.0	−0.4		
			eSg	10 38 20.4	1.8		
GTA	5.0	355	Pn	10 37 12.4	1.5		
			Pg	10 37 26.9	2.3		
			Sg	10 38 35.0	1.9		
			SMN	M_L=3.3		0.9	0.030
			SME			0.9	0.040
			LE	Ms=3.4		8.0	0.43
XAN	7.1	91	cPn	10 37 38.0	−2.1		

1987 4 30
O=10 53 35.1 ± 0.14s
LAT=34.40 N ± 1.09km
LONG=100.43 E ± 1.22km
DEPTH= 19 km ± 0.40km
STATIONS USED = 19, STAND DEV= 2.97s
Ms=3.8/ 4, M_L=3.8/ 6,

LZH	3.3	58	cPn	10 54 29.5	3.6		
			Pg	10 54 35.5	2.8		
			Sn	10 55 12.0	6.1		
			Sg	10 55 20.0	2.7		
			SMN	M_L=4.1		1.0	0.73
			SME			1.0	0.67
CD2	4.5	140	cPn	10 54 45.6	3.1		
			Pg	10 54 56.0	2.0		
			SMN	M_L=3.4		1.0	0.070
			SME			1.0	0.040
			LE	Ms=4.1		8.0	2.41
GTA	5.0	355	Pn	10 54 52.9	2.7		
			Pg	10 55 07.5	3.7		
			Sg	10 56 15.2	2.7		
			SME			2.0	0.27
			LE	Ms=3.6		8.0	0.71
XAN	7.0	91	cPn	10 55 19.0	1.2		
GYA	9.6	144	P	10 55 53.0	−2.3		
BTO	9.8	48	eP	10 55 56.4	−2.2		

			LN	Ms=3.8	10.0	0.40	
			LE		10.0	0.30	
WMQ	13.6	317	P	10 56 44.1	−6.1		

1987 4 30
O=13 01 20.4 ± 0.12s
LAT=32.41 N ± 1.51km
LONG=132.34 E ± 1.78km
DEPTH= 56 km ± 0.98km
STATIONS USED = 56, STAND DEV= 1.72s
Ms=4.4 / 18,

DL2	10.9	310	eP	13 03 55.0	−0.7		
			LN			3.0	2.87
			LE			7.0	0.83
NJ2	11.4	272	+P	13 04 04.0	0.5		
			LN	Ms=4.3		12.0	0.90
			LE			13.0	0.90
SNY	11.7	326	+P	13 04 08.0	0.7		
			sP	13 04 23.0	−0.8		
			eS	13 06 20.5	4.2		
			LN	Ms=4.4		16.0	1.45
			LE			15.0	1.39
MDJ	12.4	351	eP	13 04 13.0	−3.2		
CN2	12.6	337	eP	13 04 19.0	−0.2		
TIA	13.1	291	eP	13 04 26.7	0.3		
			LN	Ms=4.4		11.0	1.05
			LE			11.0	0.83
BJI	15.1	305	eP	13 04 53.5	1.7		
WHN	15.5	268	eP	13 05 01.0	4.4		
			LE	Ms=4.3		12.0	0.83
TIY	17.1	294	eP	13 05 19.0	1.3		
			LE	Ms=4.5		15.0	1.39
HHC	18.6	303	eP	13 05 36.0	−0.4		
			S	13 09 04.5	6.8		
			LN	Ms=4.4		12.0	0.40
			LE			14.0	0.74
XAN	19.7	281	eP	13 05 46.0	−1.6		
BTO	19.7	301	eP	13 05 45.0	−2.9		
			eS	13 09 23.0	1.6		
			LN	Ms=4.4		14.0	0.50
			LE			14.0	0.60
GYA	23.1	262	P	13 06 21.0	−1.6		
LZH	23.8	287	eP	13 06 28.3	−1.1		
CD2	24.3	274	+P	13 06 33.6	−0.9		
			LE	Ms=4.8		11.0	1.09
GTA	27.1	294	−P	13 07 01.1	0.2		
			LE	Ms=4.4		11.0	0.36
WMQ	36.5	301	P	13 08 20.0	−2.8		

1987 4 30
O=13 29 59.5 ± 0.06s
LAT=37.28 N ± 1.62km
LONG=116.32 W ± 1.03km
DEPTH= 8 km ± 0.15km
STATIONS USED = 44, STAND DEV= 0.85s

MDJ	79.1	318	eP	13 42 06.0	−0.7		
CN2	81.8	320	eP	13 42 20.4	−0.8		
SNY	84.2	319	eP	13 42 34.0	0.6		
DL2	87.3	319	eP	13 42 49.0	0.1		
BJI	89.2	322	eP	13 42 58.5	0.4		
HHC	90.7	326	eP	13 43 05.6	0.3		
BTO	91.6	327	eP	13 43 09.8	0.4		
TIY	92.9	323	eP	13 43 15.6	0.6		
SSE	93.3	314	P	13 43 17.5	0.5		
			PMZ			1.0	0.030
			eS	13 54 16.0	−6.4		
NJ2	93.9	316	−P	13 43 20.0	0.2		
GTA	96.8	333	eP	13 43 33.3	0.3		

1987 4 30
O=13 46 05.8 ± 0.10s
LAT=37.10 N ± 1.64km
LONG=141.51 E ± 2.22km
DEPTH= 33 km ± 0.82km
STATIONS USED = 69, STAND DEV= 1.49s
Ms=4.3 / 12,

MDJ	11.7	313	−P	13 48 58.0	4.0		
			pP	13 49 06.0	5.1		
			S	13 51 04.0	−0.4		
CN2	13.9	304	eP	13 49 23.5	0.2		
			sP	13 49 34.0	−1.2		
			eS	13 51 55.0	−2.8		
SNY	14.6	294	+P	13 49 34.2	1.8		
			pP	13 49 42.3	2.7		
			PP	13 49 49.3	5.1		
			SS	13 52 27.0	−4.1		
			LE	Ms=4.3		18.0	1.46
DL2	15.8	283	eP	13 49 50.0	2.7		
			pP	13 49 58.0	3.4		
			eS	13 52 43.0	1.7		
			LE	Ms=3.9		12.0	0.34
SSE	17.9	256	eP	13 50 12.5	−1.0		
			sP	13 50 25.0	−0.7		
			PP	13 50 34.5	6.6		
			eS	13 53 24.0	−4.9		
			LE	Ms=4.4		20.0	1.41
NJ2	19.3	262	−P	13 50 30.0	−1.0		
			pP	13 50 37.0	−1.8		
			LN	Ms=4.2		10.0	0.40
TIA	19.6	275	eP	13 50 32.4	−1.6		

			LN	Ms=4.3		10.0	0.47
BJI	20.0	286	eP	13 50 37.0	−1.7		
TIY	23.1	280	iP	13 51 08.6	−1.1		
			PP	13 51 39.0	−0.6		
			S	13 55 08.0	−5.7		
			sS	13 55 22.0	−7.0		
			LN	Ms=4.5		14.0	0.37
			LE			14.0	0.73
HHC	23.5	288	eP	13 51 13.6	−0.6		
BTO	24.7	288	eP	13 51 25.0	−0.6		
			pP	13 51 34.0	−0.5		
			eS	13 55 40.0	−3.0		
XAN	26.6	273	−P	13 51 43.4	−0.1		
GZH	28.0	248	eP	13 51 57.0	1.3		
LZH	30.1	280	eP	13 52 15.0	−0.3		
			PMZ			1.5	0.070
GYA	31.3	260	+P	13 52 24.0	−1.7		
			pP	13 52 31.0	−3.6		
			S	13 57 26.4	−2.0		
GTA	32.6	287	P	13 52 36.5	−0.7		
			PcP	13 55 23.8	1.5		
QZN	33.0	246	eP	13 52 41.9	1.3		
KMI	35.0	261	+P	13 52 58.0	−0.2		
WMQ	40.9	297	P	13 53 48.0	1.2		
LSA	42.3	275	−P	13 53 59.0	0.2		

1987 4 30
O=19 30 31.6 ± 0.08s
LAT= 6.37 S ± 1.17km
LONG=131.03 E ± 1.16km
DEPTH= 82 km ± 0.23km
STATIONS USED = 61, STAND DEV= 0.93s

QZN	32.8	321	eP	19 36 58.6	−0.6
NJ2	39.9	344	eP	19 38 01.0	1.3
WHN	40.0	337	eP	19 38 02.5	1.9
GYA	40.3	325	+P	19 38 02.0	−0.8
KMI	41.7	320	+P	19 38 15.5	1.1
XAN	45.3	334	+P	19 38 43.1	−0.5
CD2	45.3	326	+P	19 38 43.0	−0.8
TIY	47.2	340	eP	19 38 58.0	−0.2
BJI	48.2	345	eP	19 39 06.0	0.0
SNY	48.4	353	−P	19 39 08.0	−0.1
LZH	49.3	331	eP	19 39 15.0	−0.3
CN2	50.2	355	eP	19 39 20.6	−1.0
HHC	50.3	341	eP	19 39 22.6	0.2
BTO	50.6	339	eP	19 39 22.2	−2.4
MDJ	50.8	359	eP	19 39 25.0	−1.0
LSA	52.5	315	+iP	19 39 38.0	−1.2
GTA	53.9	330	+iP	19 39 49.1	−0.6
WMQ	63.4	326	P	19 40 55.5	−0.1

1987 4 30
O=21 20 07.8 ± 0.13s
LAT= 2.13 N ± 1.76km
LONG= 99.02 E ± 1.40km
DEPTH= 54 km ± 1.18km
STATIONS USED = 33, STAND DEV= 1.85s
Ms=4.9/ 5,

QZN	19.9	32	eP	21 24 39.8	2.5		
			LN	Ms=4.2		12.0	0.43
KMI	23.1	9	eP	21 25 12.5	1.9		
			eS	21 29 16.0	2.0		
GYA	25.3	16	P	21 25 31.8	0.7		
			S	21 29 47.0	−2.4		
			LN	Ms=5.0		14.0	1.20
			LE			14.0	1.60
LSA	28.4	345	eP	21 25 58.0	−2.3		
CD2	29.0	8	eP	21 26 05.9	1.1		
XAN	33.1	15	eP	21 26 39.4	−1.5		
GTA	37.1	1	eP	21 27 15.0	−0.4		
			LE	Ms=4.9		14.0	0.89
WMQ	42.7	348	eP	21 28 04.0	2.3		
CN2	47.7	26	eP	21 28 44.0	2.8		