

MONTHLY BULLETIN of REGIONAL and TELESEISMIC EVENTS RECORDED with GRF- and GRSN-STATIONS in GERMANY

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(produced by SZGRF/BGR - ERLANGEN and partly by CLL - Observatory)

NOVEMBER 2004 UPDATED 17.JUNE.2005

Please note that local events recorded in Germany are part of the "LOCAL BULLETIN".

(Format description at the end of the bulletin)

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2004/11/01	02:18: 4.5	46.237N	13.653E	10.0G			2.4	SZGRF	
Austria									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pg	Z 02:18:16.5	0.7	246.6					2.6
	e Sg	N 02:18:26.5							
KBA	e Pg	Z 02:18:18.4	0.9	165.8					1.9
ARSA	e Pn	Z 02:18:33.5	1.6	232.3					2.2
	e Sn	N 02:18:53.7							
MOA	e Sn	E 02:18:57.1	1.7	194.7					
WTTA	e Pn	Z 02:18:34.4	1.7	125.9					
GEC2	e Pn	Z 02:18:46.9	2.6	180.7					2.8
DAVA	e Pn	Z 02:18:51.8	2.8	110.7					
WET	e Pn	Z 02:18:51.5	3.0	169.5					
	e Sn	N 02:19:26.4							
GRA1	e Sn	Z 02:19:45.8	3.8	153.9					
GUNZ	e Pn	Z 02:19:09.1	4.2	167.5					
TANN	e Pn	Z 02:19:09.7	4.3	168.8					
WERD	e Pn	Z 02:19:10.1	4.3	167.5					
CLL	e Pn	Z 02:19:20.0	5.1	174.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2004/11/01	10:36:18.7	31.900S	179.400W	100.0N				GSRC-M	
Kermadec Islands region									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 10:56:49.8	160.5	28.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/01	11:38:11.0	33.100S	179.200W	100.0N				GSRC-M
South of Kermadec Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z 11:58:28.1	158.1	21.8					
CLL	e PKP	Z 11:58:35.3	159.7	30.7					
IBBN	e PKP	Z 11:58:37.2	160.1	17.4					
WERD	e PKP	Z 11:58:40.0	160.7	30.4					
GRA1	e PKP	Z 11:58:44.9	161.7	28.9					
FUR	e PKP	Z 11:58:50.0	163.0	31.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/01	14:02:52.0	33.100S	179.200W	100.0N				GSRC-M
South of Kermadec Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 14:23:25.0	161.7	28.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/01	20:10:58.7	65.736N	19.990W	33.0N	3.8			SZGRF
Iceland								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:15:57.9	22.7	326.5	0.8	2	3.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/01								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 21:03:26.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/02								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 06:17:19.2							
	e	06:17:24.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/02	08:45:58.4	28.470N	143.160E	33.0N	5.5	5.3		SZGRF

Bonin Islands, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	08:58:46.1	87.8	42.8					
BSEG	e P	Z	08:58:47.6	88.1	40.2	1.2	56	5.8		
BRG	e P	Z	08:58:51.2	88.9	42.9	1.0	20	5.3		
	e PP	Z	09:02:19.7							
CLL	e P	Z	08:58:51.3	89.0	42.2	1.0	26	5.4		
	e PP	Z	09:02:20.0							
NRDL	e P	Z	08:58:52.9	89.3	40.0	1.4	25	5.3		
CLZ	e P	Z	08:58:54.9	89.7	40.2	1.1	54	5.7		
WERD	e P	Z	08:58:55.8	89.9	41.7	1.2	18	5.2		
	e PP	Z	09:02:28.7							
GUNZ	e P	Z	08:58:56.4	90.0	41.7	0.8	12	5.2		
MOX	e P	Z	08:58:56.5	90.1	41.1	1.2	25	5.3		
IBBN	e P	Z	08:58:58.0	90.3	38.1	0.8	46	5.8		
GEC2	e P	Z	08:58:58.6	90.5	42.7	0.9	11	5.2		
UBBA	e P	Z	08:58:58.6	90.6	39.9					
WET	e P	Z	08:58:59.5	90.6	42.1					
	e PP	Z	09:02:35.6							
GRA1	e P	Z	08:59:01.1	90.9	40.8	1.2	66	5.8		
	e PP	Z	09:02:38.2							
	e L	Z	09:46:58.9			19.4	1146		5.3	
BUG	e P	Z	08:59:01.8	91.2	37.7	1.1	25	5.5		
FUR	e P	Z	08:59:06.4	92.1	40.9	0.9	42	5.8		
STU	e P	Z	08:59:07.6	92.5	39.3	1.1	37	5.7		
WLF	e P	Z	08:59:11.0	93.0	36.9	1.5	65	5.9		
BFO	e P	Z	08:59:11.2	93.2	38.6	0.9	24	5.6		
	e PP	Z	09:02:53.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/02	10:02:10.0	48.430N	129.790W	33.0N	5.9	6.8		SZGRF

Vancouver Island, Canada, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:13:34.6	72.2	333.5	1.5	247	6.1		
IBBN	e P	Z	10:13:38.3	73.0	332.1	1.5	337	6.2		
NRDL	e P	Z	10:13:41.7	73.5	333.5	1.5	181	5.9		
CLZ	e P	Z	10:13:46.1	74.1	333.8	1.6	283	6.0		
	e S	T	10:23:19.9							
WLF	e S	T	10:23:28.5	74.8	331.4					
CLL	e P	Z	10:13:52.3	75.3	335.5	1.5	142	5.9		
	e S	T	10:23:32.5							

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MOX	e P	Z	10:13:53.7	75.5	334.7	1.3	110	5.8		
	e S	T	10:23:35.8							
WERD	e P	Z	10:13:55.7	75.9	335.1	1.6	91	5.6		
BRG	e P	Z	10:13:56.0	75.9	336.1	1.5	217	6.1		
	e S	T	10:23:40.4							
TANN	e S	T	10:23:41.7	76.0	335.2					
GUNZ	e P	Z	10:13:56.1	76.0	335.2	1.5	85	5.7		
GRA1	e P	Z	10:13:58.5	76.3	334.6	1.5	218	6.1		
	e PP	Z	10:16:51.1							
	e S	T	10:23:45.8							
	e SS	T	10:28:37.4							
	e PKPPKP	Z	10:41:18.3							
	e L	Z	10:48:01.3			19.0	47874		6.8	
STU	e S	T	10:23:46.5	76.5	333.4					
BFO	e P	Z	10:13:59.8	76.7	332.9	1.4	129	5.9		
	e S	T	10:23:47.5							
WET	e P	Z	10:14:03.6	77.2	335.6	1.5	97	5.7		
	e S	T	10:23:55.8							
FUR	e S	T	10:24:00.2	77.7	334.7					
	e SS	T	10:29:01.4							
GEC2	e P	Z	10:14:06.4	77.7	336.2	1.5	116	5.8		
	e S	T	10:23:59.5							
	e SS	T	10:28:59.5							

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/02 10:32:51.2 30.946S 178.854W 18.0D 5.3
 Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 10:53:20.6	157.8	27.9					
	e pPKPab	Z 10:53:26.2							
GRA1	e PKP	Z 10:53:34.1	159.8	25.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/02 13:04:25.5 39.625N 143.214E 0.0G 5.2 5.1
 Off east coast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 13:16:32.2	79.5	36.9	0.8	18	5.0		
	e pP	Z 13:16:39.2							
	e L	Z 13:56:12.5			18.0	955		5.2	
GRA1	e P	Z 13:16:43.2	81.2	35.4	1.1	21	5.2		
	e L	Z 13:56:56.1			18.4	733		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/02	17:23:41.6	50.270N	132.356W	10.0G	4.7	4.7		neic-m

West of Vancouver Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:35:32.8	75.3	336.9	1.3	7	4.7		
	e L	Z 18:05:32.9			21.9	413		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/03								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:20:14.3			0.9	8			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/03	08:31:43.8	14.452N	146.842E	10.0G	5.6	5.8		neic-m

Rota region, Northern Mariana Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z 08:45:44.1	103.2	45.9	1.5	20			
	e PP	Z 08:49:54.2							
	e SKSac	R 08:56:28.1							
	e Sdiff	T 08:57:28.9							
	e PS	Z 08:59:07.6							
	e SS	T 09:04:48.4							
	e LQ	T 09:18:26.4							
	e LR	Z 09:24:22.5							
	e L	Z 09:35:35.5			18.0	9277		6.4	
GRA1	e PP	Z 08:50:15.5	105.1	44.6					
	e L	Z 09:38:10.6			18.3	12009			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/03	20:28:27.5	29.642N	132.229E	33.0N	5.2			SZGRF

Southeast of Shikoku, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:40:59.9	85.0	48.4	1.2	19	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/03	23:57:30.0	37.880N	140.290E	19.5	5.5			SZGRF

Eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	00:09:29.6	78.4	40.4					
BSEG	e P	Z	00:09:30.7	78.6	38.1	1.6	67	5.4		
BRG	e P	Z	00:09:35.6	79.6	40.3	1.7	41	5.1		
CLL	i P	+ Z	00:09:35.7	79.6	39.7	1.5	53	5.2		
	e S	E	00:19:41.0							
	e PS	Z	00:20:24.1							
	e SS	Z	00:25:32.4							
	e LR	Z	00:35:56.0							
	e L	Z	00:49:07.5			18.0	452		4.9	
NRDL	e P	Z	00:09:37.1	79.8	37.8					
CLZ	e P	Z	00:09:39.6	80.2	37.9	1.6	71	5.4		
WERD	e P	Z	00:09:41.1	80.6	39.1					
GUNZ	e P	Z	00:09:41.5	80.6	39.1					
MOX	e P	Z	00:09:41.8	80.7	38.6	1.8	54	5.3		
IBBN	e P	Z	00:09:42.5	80.8	36.1					
UBBA	e P	Z	00:09:44.1	81.2	37.5					
GEC2	e P	Z	00:09:44.3	81.2	39.9	2.0	46	5.3		
WET	e P	Z	00:09:45.4	81.3	39.4	1.7	49	5.4		
GRA1	e P	Z	00:09:47.0	81.6	38.3	1.6	133	5.8		
	e pP	Z	00:09:52.6							
BUG	e P	Z	00:09:46.8	81.7	35.7	1.4	42	5.4		
FUR	e P	Z	00:09:52.8	82.8	38.2	1.6	113	5.8		
STU	e P	Z	00:09:54.4	83.1	36.8	1.6	75	5.7		
WLF	e P	Z	00:09:57.2	83.6	34.8					
BFO	e P	Z	00:09:57.9	83.8	36.2	1.4	74	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/04	06:22:32.5	35.195N	22.761E	33.0G	5.3	4.1		SZGRF

Central Mediterranean Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
FUR	e P	Z	06:26:05.7	15.5	142.5					
	e S	N	06:28:42.8							
WET	e P	Z	06:26:07.8	15.7	148.8					
	e S	N	06:28:49.5							
GRA1	e P	Z	06:26:21.4	16.8	145.5	1.4	357	5.3		
	e S	N	06:29:10.5							
	e L	Z	06:34:06.0			20.9	1211		4.1	
STU	e P	Z	06:26:24.6	16.9	138.6					
	e S	N	06:29:14.4							
BFO	e P	Z	06:26:26.1	16.9	135.6					
GUNZ	e P	Z	06:26:25.1	17.0	149.5					
WERD	e P	Z	06:26:26.7	17.0	149.6					
MOX	e P	Z	06:26:31.9	17.4	148.2					

	e S	N	06:29:29.3						
CLL	e P	Z	06:26:32.9	17.6	152.7				
WLF	e P	Z	06:26:51.4	18.9	133.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/04	14:03:17.6	45.418N	147.478E	33.0N	6.1	5.4		SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	14:14:51.8	74.2	29.7	1.6	453	6.3		
RUE	e P	Z	14:14:52.6	74.4	31.8	1.1	324	6.3		
NRDL	e P	Z	14:14:58.9	75.5	29.4					
CLL	i P	+ Z	14:14:59.1	75.6	31.1	0.8	239	6.4		
	e pP	Z	14:15:16.8							
	e PP	Z	14:17:53.7							
	e pPP	Z	14:18:12.1							
	e S	E	14:24:40.3							
	e PS	Z	14:25:29.2							
	e SS	N	14:29:47.3							
	e LR	Z	14:40:29.4							
	e L	Z	14:55:18.4			20.0	2217		5.5	
BRG	e P	Z	14:14:59.6	75.7	31.7	0.9	82	5.8		
CLZ	e P	Z	14:15:02.0	76.0	29.5	1.9	696	6.5		
IBBN	e P	Z	14:15:03.8	76.3	27.8	1.4	316	6.3		
WERD	e P	Z	14:15:04.8	76.6	30.6	0.8	66	5.8		
MOX	e P	Z	14:15:05.1	76.6	30.2	1.8	275	6.1		
GUNZ	e P	Z	14:15:05.2	76.6	30.6	0.7	91	6.0		
UBBA	e P	Z	14:15:06.8	77.0	29.1					
BUG	e P	Z	14:15:08.7	77.2	27.4	0.8	146	6.2		
GEC2	e P	Z	14:15:09.6	77.5	31.3	0.9	54	5.7		
WET	e P	Z	14:15:10.3	77.5	30.8	0.9	109	6.0		
GRA1	i P	Z	14:15:10.8	77.6	29.8	0.8	288	6.5		
	e PP	Z	14:18:12.0							
	e S	N	14:25:04.6							
	e L	Z	14:56:23.8			20.3	1987		5.4	
FUR	e P	Z	14:15:17.6	78.9	29.7	0.8	194	6.2		
STU	e P	Z	14:15:18.2	79.0	28.4	0.8	163	6.1		
BFO	e P	Z	14:15:21.6	79.7	27.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/04	19:30:15.2	51.064N	32.634W	33.0N	4.7			SZGRF

Northern Mid-Atlantic Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	19:35:31.6	24.5	288.3					

BUG	e P	Z	19:35:33.0	24.7	285.0				
IBBN	e P	Z	19:35:33.2	24.7	283.4				
NRDL	e P	Z	19:35:45.9	26.1	284.1				
BFO	e P	Z	19:35:50.3	26.3	291.5	1.1	12	4.4	
CLZ	e P	Z	19:35:49.3	26.4	285.5	1.4	41	5.0	
UBBA	e P	Z	19:35:50.4	26.5	287.4				
MOX	e P	Z	19:35:58.2	27.5	288.3	0.8	6	4.5	
GRA1	e P	Z	19:35:59.8	27.6	289.9	1.6	31	4.9	
CLL	e P	Z	19:36:04.3	28.1	287.7	1.1	16	4.8	
BRG	e P	Z	19:36:10.5	28.8	288.8	1.5	14	4.6	
GEC2	e P	Z	19:36:16.3	29.4	292.2	1.4	8	4.4	

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/05 05:18:35.2 5.780S 142.550E 130.6
 New Guinea, Papua New Guinea SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z 05:37:06.4	118.0	61.7					
CLL	e Pdiff	Z 05:33:26.9	118.3	60.6					
	e PKPdf	Z 05:37:06.8			0.8	17			
	e pPKPdf	Z 05:37:41.8							
	e sPKPdf	Z 05:37:55.4							
	e PP	Z 05:38:21.8							
	e (pPP)	Z 05:38:58.8							
	e sPP	Z 05:39:07.6							
	e PPP	Z 05:40:52.2							
	e sPPP	Z 05:41:33.4							
	e PKKPbc	Z 05:47:26.3							
	e PKKPdf	Z 05:47:53.1							
	e pPKKPab	Z 05:48:01.4							
	e PS	E 05:48:12.2							
	e sPS	E 05:48:54.4							
	e sPPS	E 05:50:05.2							
	e SS	N 05:54:31.3							
	e sSS	N 05:55:23.2							
	e SSS	N 05:59:05.7							
	e LR	Z 06:15:57.6							
	e L	Z 06:27:31.1			20.0	923		5.4	
BSEG	e PKPdf	Z 05:37:07.2	118.4	56.8					
GEC2	e PKPdf	Z 05:37:08.6	119.1	62.5					
NRDL	e PKPdf	Z 05:37:08.9	119.3	57.3					
	e pPKPdf	Z 05:37:44.1							
MOX	e PKPdf	Z 05:37:08.8	119.4	59.6					
	e pPKPdf	Z 05:37:43.8							
WET	e PKPdf	Z 05:37:09.4	119.4	61.6					
	e pPKPdf	Z 05:37:44.6							
	e PP	Z 05:38:32.9							

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CLZ	e PKPdf	Z	05:37:09.4	119.5	57.9
GRA1	e Pdiff	Z	05:33:36.7	120.1	59.7
	e PKPdf	Z	05:37:10.6		
	e pPKPdf	Z	05:37:45.7		
	e PP	Z	05:38:37.8		
	e PS	E	05:48:32.3		
UBBA	e PKPdf	Z	05:37:10.4	120.2	58.0
IBBN	e PKPdf	Z	05:37:11.1	120.5	55.1
	e pPKPdf	Z	05:37:46.4		
FUR	e PKPdf	Z	05:37:12.2	120.9	60.6
STU	e PKPdf	Z	05:37:13.4	121.7	58.3
BFO	e PKPdf	Z	05:37:15.9	122.4	57.7
	e pPKPdf	Z	05:37:49.8		
WLF	e PKPdf	Z	05:37:16.7	122.9	54.8
	e pPKPdf	Z	05:37:51.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/05	05:35:30.0	5.000S	152.400E	86.0N				neic-m
New Britain, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:54:20.2	124.6	49.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/05	17:30:22.0	39.214N	27.720E	8.0G	4.0			kan-m
Turkey								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WET	e P	Z 17:33:56.3	14.5	127.6	1.2	18			
BRG	e P	Z 17:34:03.0	15.1	135.0					
WERD	e P	Z 17:34:08.5	15.6	130.1					
GRA1	e P	Z 17:34:09.8	15.7	125.6	1.1	11	3.9		
CLL	e P	Z 17:34:11.2	15.9	133.9	1.0	12	4.0		
CLZ	e P	Z 17:34:29.0	17.4	129.6	1.3	26	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/05	17:31: 9.8	19.804S	170.877E	33.0G				SZGRF
Vanuatu Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPpre	Z 17:50:38.2	144.1	37.2					
	e PKPdf	Z 17:50:43.0			0.9	12			
	e SKPbc	Z 17:54:01.1							

	e	SKSP	Z	18:03:42.3						
	e	L	Z	18:43:17.9		20.0	229	4.9		
IBBN	e	PKPbc	Z	17:50:42.4	144.9	28.4				
WERD	e	PKPbc	Z	17:50:41.7	145.0	36.8				
GUNZ	e	PKPbc	Z	17:50:42.1	145.0	36.9				
MOX	e	PKPbc	Z	17:50:42.0	145.1	35.6				
UBBA	e	PKPbc	Z	17:50:43.6	145.5	33.0				
GEC2	e	PKPbc	Z	17:50:43.8	145.7	40.3				
	e	PP	Z	17:54:05.1						
WET	e	PKPbc	Z	17:50:44.5	145.8	38.8				
BUG	e	PKPbc	Z	17:50:44.8	145.8	28.2				
GRA1	e	PKPbc	Z	17:50:45.7	146.0	35.8				
GRFO	e	PKPbc	Z	17:50:45.6	146.0	35.8				
FUR	e	PKPbc	Z	17:50:49.3	147.2	37.3				
STU	e	PKPbc	Z	17:50:50.3	147.5	33.4				
WLF	e	PKPbc	Z	17:50:51.6	147.7	27.7				
BFO	e	PKPbc	Z	17:50:51.9	148.2	32.4				

Date 2004/11/05 Origin Time 17:53:34.7 Lat 38.740N Long 137.270E Depth 33.0N mb 5.2 Ms ML Source SZGRF
Eastern Sea of Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:05:29.1	77.6	41.9	1.3	16	5.0		
CLL	e P	Z 18:05:29.4	77.6	41.3	1.4	38	5.3		
CLZ	e P	Z 18:05:33.5	78.3	39.6	1.4	44	5.3		
WERD	e P	Z 18:05:34.6	78.6	40.7	1.3	16	4.9		
GUNZ	e P	Z 18:05:35.2	78.6	40.7	1.1	17	5.0		
MOX	e P	Z 18:05:35.5	78.7	40.3	1.3	22	5.0		
IBBN	e P	Z 18:05:36.7	78.9	37.8	1.4	42	5.3		
GEC2	e P	Z 18:05:38.1	79.2	41.4	1.2	10	4.6		
UBBA	e P	Z 18:05:38.0	79.2	39.2	1.6	30	5.0		
WET	e P	Z 18:05:39.0	79.3	40.9	1.4	22	4.9		
GRA1	e P	Z 18:05:40.8	79.6	39.9	1.5	87	5.5		
FUR	e P	Z 18:05:46.6	80.8	39.7	1.1	33	5.3		
STU	e P	Z 18:05:48.5	81.2	38.4	1.0	41	5.4		
WLF	e P	Z 18:05:51.9	81.7	36.4	1.6	41	5.3		
BFO	e P	Z 18:05:51.9	81.9	37.8	1.4	56	5.5		

Date 2004/11/05 Origin Time 20:42:24.0 Lat 22.000S Long 177.550W Depth 33.0N mb Ms ML Source SZGRF
South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z 21:02:04.8	147.5	13.7					

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RUE	e	PKP	Z	21:02:06.7	148.3	20.3		
NRDL	e	PKPbc	Z	21:02:08.7	148.9	13.9		
	e	PKPab	Z	21:02:12.7				
CLZ	e	PKPbc	Z	21:02:10.2	149.5	14.6		
CLL	i	PKPbc	Z	21:02:10.2	149.6	19.6	0.9	34
	i	PKPab	Z	21:02:14.8			0.7	16
BRG	e	PKPbc	Z	21:02:10.8	149.8	21.5		
	e	PKPab	Z	21:02:16.0				
MOX	e	PKPbc	Z	21:02:12.4	150.5	17.4		
WERD	e	PKPbc	Z	21:02:12.5	150.5	18.8		
GUNZ	e	PKPbc	Z	21:02:12.8	150.6	18.9		
	e	PKPab	Z	21:02:19.6				
GRA1	e	PKPab	Z	21:02:23.5	151.5	17.2		
WET	e	PKPab	Z	21:02:24.0	151.6	20.7		
GEC2	e	PKPbc	Z	21:02:15.2	151.7	22.4		
WLF	e	PKPbc	Z	21:02:17.3	152.2	7.4		
STU	e	PKPbc	Z	21:02:18.1	152.7	13.7		
FUR	e	PKPbc	Z	21:02:18.3	152.9	18.2		
	e	PKPab	Z	21:02:29.3				
BFO	e	PKPbc	Z	21:02:18.6	153.3	12.2		
	e	PKPab	Z	21:02:30.4				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/06	00:00:41.0	44.953N	15.043E	10.0G			3.1	SZGRF
Northwestern Balkan Peninsula								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	00:01:09.4	1.6	167.3					3.4
	e Sg	N	00:01:32.2							
ARSA	e Pn	Z	00:01:18.7	2.3	188.4					2.5
MOA	e Pn	Z	00:01:28.4	2.9	169.2					2.8
WTTA	e Pn	Z	00:01:32.9	3.3	133.1					
GEC2	e Pn	Z	00:01:42.0	4.0	166.3					3.5
	e Sn	E	00:02:28.4							
DAVA	e Pn	Z	00:01:46.9	4.3	121.2					
WET	e Pn	Z	00:01:47.8	4.4	159.8					3.4
	e Sn	E	00:02:37.8							
GUNZ	e Pn	Z	00:02:04.9	5.7	160.3					
	e Sn	N	00:03:09.7							
TANN	e Sn	N	00:03:10.0	5.7	161.4					
MOX	e Pn	Z	00:02:10.7	6.1	156.7					
	e Sn	N	00:03:17.9							
CLL	e Pn	Z	00:02:16.8	6.5	167.1					
	e Sn	N	00:03:28.2							

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/06	07:04:14.3	24.900S	178.900W	300.0N				GSRC-M

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 07:23:35.1	152.1	23.5					
	e PKPab	Z 07:23:45.4							
BRG	e PKPbc	Z 07:23:35.5	152.2	25.6					
	e PKPab	Z 07:23:46.4							
TANN	e PKPab	Z 07:23:50.2	153.0	23.2					
WERD	e PKPbc	Z 07:23:37.2	153.0	22.9					
	e PKPab	Z 07:23:49.7							
GUNZ	e PKPab	Z 07:23:50.5	153.1	23.0					
GRA1	e PKPab	Z 07:23:54.5	154.0	21.3					
WET	e PKPab	Z 07:23:54.2	154.1	25.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/06	08:35:46.0	21.570S	169.410E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z 08:55:18.8	145.0	42.3					
CLL	e PKPbc	Z 08:55:18.6	145.1	40.5					
CLZ	e PKPbc	Z 08:55:21.0	145.7	36.1					
WERD	e PKPbc	Z 08:55:22.0	146.0	40.3					
GUNZ	e PKPbc	Z 08:55:21.6	146.0	40.4					
MOX	e PKPbc	Z 08:55:22.3	146.1	39.1					
IBBN	e PKPbc	Z 08:55:22.4	146.2	31.7					
GEC2	e PKPbc	Z 08:55:23.8	146.6	44.0					
WET	e PKPbc	Z 08:55:24.4	146.7	42.5					
GRA1	e PKPbc	Z 08:55:25.3	147.0	39.4					
WLF	e PKPbc	Z 08:55:30.8	148.9	31.3					
BFO	e PKPbc	Z 08:55:30.6	149.3	36.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/06	14:28:24.5	16.026S	174.634W	33.0N				SZGRF

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 14:47:55.3	144.2	12.6					
GRA1	e PKPbc	Z 14:48:00.4	146.0	10.1					
WET	e PKPbc	Z 14:48:03.3	146.3	13.1					
GEC2	e PKPbc	Z 14:48:01.9	146.5	14.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/07	02:02:23.9	47.480N	144.930E	485.8	5.6			SZGRF

Sea of Okhotsk

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	02:12:56.5	71.6	30.5	0.9	60	5.7		
	e pP	Z	02:14:39.6							
RUE	e P	Z	02:12:57.5	71.7	32.4	1.1	117	5.9		
	e pP	Z	02:14:40.5							
CLL	i P	- Z	02:13:04.6	73.0	31.7	1.0	124	6.0		
	e		02:13:21.9							
	e pP	Z	02:14:47.6							
	e PP	Z	02:15:46.1							
	e S	E	02:21:48.9							
	e ScS	N	02:22:22.1							
	e sS	E	02:24:53.9							
	e SS	E	02:26:44.4							
	e sSS	E	02:29:22.7							
	e PKPPKPdf	Z	02:40:39.9							
BRG	e P	Z	02:13:04.8	73.0	32.2	1.0	37	5.4		
	e pP	Z	02:14:48.3							
CLZ	e P	Z	02:13:07.4	73.3	30.2	1.0	82	5.7		
	e pP	Z	02:14:50.7							
IBBN	e P	Z	02:13:09.2	73.7	28.6	1.0	99	5.8		
	e pP	Z	02:14:52.6							
WERD	e P	Z	02:13:09.9	73.9	31.2	1.1	30	5.2		
	e pP	Z	02:14:54.4							
MOX	e P	Z	02:13:10.4	74.0	30.8	1.1	44	5.4		
	e pP	Z	02:14:54.1							
GUNZ	e P	Z	02:13:10.4	74.0	31.2	1.0	40	5.4		
	e pP	Z	02:14:54.8							
UBBA	e P	Z	02:13:12.5	74.3	29.8	1.1	24	5.1		
	e pP	Z	02:14:55.9							
BUG	e P	Z	02:13:14.2	74.6	28.2	1.0	64	5.6		
	e pP	Z	02:14:57.9							
GEC2	e P	Z	02:13:15.4	74.8	31.8	1.0	38	5.4		
	e pP	Z	02:14:59.4							
WET	e P	Z	02:13:16.0	74.9	31.3	1.0	64	5.6		
	e pP	Z	02:15:00.0							
GRA1	e P	Z	02:13:16.7	74.9	30.4	1.0	105	5.8		
	e pP	Z	02:15:00.3							
	e S	R	02:22:13.4							
	e ScS	R	02:22:46.5							
GRFO	e P	Z	02:13:16.7	74.9	30.4					
FUR	e P	Z	02:13:23.7	76.2	30.2	1.0	92	5.9		
	e pP	Z	02:15:07.9							
STU	e P	Z	02:13:24.1	76.4	29.0	1.0	56	5.6		
	e pP	Z	02:15:08.1							

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WLF	e P	Z	02:13:25.6	76.5	27.3	1.1	20	5.2
	e pP	Z	02:15:09.8					
BFO	e P	Z	02:13:27.8	77.1	28.5	1.0	46	5.5
	e pP	Z	02:15:12.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/07								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
DAVA	e Pn	Z 06:34:42.4							
MOA	e Pn	Z 06:34:30.1							
WERD	e Pn	Z 06:34:40.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/07								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
DAVA	e Pn	Z 06:36:04.3							
MOA	e Pn	Z 06:35:52.1							
WET	e Pn	Z 06:36:11.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/07	08:21:16.2	20.162S	177.957W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 08:40:51.4	145.6	13.8					
CLZ	e PKPbc	Z 08:40:57.6	147.7	14.7					
CLL	e PKPbc	Z 08:40:57.2	147.7	19.5					
BRG	e PKPbc	Z 08:40:57.8	147.9	21.4					
MOX	e PKPbc	Z 08:40:58.9	148.6	17.4					
WERD	e PKPbc	Z 08:40:59.8	148.6	18.8					
GUNZ	e PKPbc	Z 08:41:00.0	148.7	18.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	01:43: 7.3	18.080S	168.833W	33.0N				SZGRF
Tonga Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 02:02:38.2	144.1	358.6					
CLL	e PKPbc	Z 02:02:45.6	146.7	3.2					

BRG	e	PKPbc	Z	02:02:46.4	147.1	4.9			
GUNZ	e	PKPbc	Z	02:02:47.8	147.7	2.1			
GRA1	e	PKPbc	Z	02:02:50.0	148.4	0.1			
BFO	e	PKPbc	Z	02:02:53.5	149.7	354.7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	02:16:1.5	37.830N	139.940E	33.0N	5.7	5.5		SZGRF

Eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P		Z 02:28:00.4	78.3	40.6	1.5	137	5.8		
BSEG	e P		Z 02:28:01.8	78.5	38.4	1.5	139	5.8		
BRG	e P		Z 02:28:06.8	79.5	40.5	1.8	118	5.5		
CLL	i P	+	Z 02:28:06.7	79.5	39.9	1.5	108	5.6		
	e PP		Z 02:31:08.1							
	e S		E 02:38:09.6							
	e PS		N 02:38:53.0							
	e SS		Z 02:44:09.2							
	e LR		Z 02:54:10.0							
	e L		Z 03:06:24.6			18.0	3017		5.7	
CLZ	e P		Z 02:28:10.7	80.1	38.2	1.2	72	5.5		
WERD	e P		Z 02:28:11.8	80.5	39.4	1.6	72	5.5		
GUNZ	e P		Z 02:28:12.5	80.5	39.4	1.2	63	5.5		
MOX	e P		Z 02:28:12.7	80.6	38.9	2.8	320	5.9		
IBBN	e P		Z 02:28:13.5	80.7	36.4	1.9	312	6.0		
UBBA	e P		Z 02:28:15.0	81.1	37.8	1.7	83	5.5		
GEC2	e P		Z 02:28:15.3	81.1	40.2	1.1	31	5.2		
WET	e P		Z 02:28:16.2	81.2	39.6	1.5	71	5.6		
GRA1	e P		Z 02:28:18.1	81.5	38.5	1.8	407	6.2		
	e L		Z 03:08:45.6			19.4	1910		5.5	
BUG	e P		Z 02:28:18.0	81.6	35.9	1.5	109	5.8		
FUR	e P		Z 02:28:23.9	82.7	38.4	1.0	105	6.0		
STU	e P		Z 02:28:25.4	83.0	37.1	0.9	64	5.9		
WLF	e P		Z 02:28:28.0	83.5	35.0	2.0	199	6.0		
BFO	e P		Z 02:28:29.0	83.7	36.4	1.6	222	6.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	02:27:12.4	37.860N	140.320E	33.0N	5.2			SZGRF

Eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P		Z 02:39:12.6	78.4	40.4	1.8	81	5.4		
BSEG	e P		Z 02:39:13.3	78.6	38.1	1.5	38	5.2		
BRG	e P		Z 02:39:18.6	79.6	40.3	1.7	37	5.0		
CLL	e P		Z 02:39:17.8	79.6	39.7	1.3	23	5.0		

CLZ	e P	Z	02:39:21.9	80.2	37.9	1.4	32	5.2
GUNZ	e P	Z	02:39:24.2	80.6	39.1	1.2	12	4.8
MOX	e P	Z	02:39:23.9	80.7	38.6	1.5	22	5.0
IBBN	e P	Z	02:39:24.4	80.8	36.1	1.4	38	5.2
UBBA	e P	Z	02:39:27.1	81.2	37.5	1.3	15	5.0
GEC2	e P	Z	02:39:26.7	81.2	39.9	2.1	40	5.2
WET	e P	Z	02:39:27.8	81.4	39.3	1.2	12	4.9
GRA1	e P	Z	02:39:29.5	81.6	38.3	1.2	38	5.4
BUG	e P	Z	02:39:29.6	81.7	35.7	1.2	22	5.2
STU	e P	Z	02:39:37.4	83.1	36.8	1.0	26	5.4
WLF	e P	Z	02:39:39.8	83.6	34.7	1.4	25	5.2
BFO	e P	Z	02:39:40.6	83.8	36.2	1.3	51	5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	02:32:21.4	37.750N	138.880E	33.0N	5.2			SZGRF

Near west coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	02:44:19.9	78.2	39.2	1.2	36	5.4		
BRG	e P	Z	02:44:24.8	79.1	41.3	1.3	20	5.0		
CLL	e P	Z	02:44:24.6	79.2	40.7	1.2	32	5.2		
CLZ	e P	Z	02:44:28.5	79.8	39.0	1.2	32	5.1		
WERD	e P	Z	02:44:30.0	80.1	40.1	1.3	17	4.8		
GUNZ	e P	Z	02:44:30.4	80.1	40.1	1.2	21	4.9		
MOX	e P	Z	02:44:30.4	80.2	39.7	1.4	19	4.9		
GEC2	e P	Z	02:44:33.1	80.7	40.9	1.2	10	4.8		
UBBA	e P	Z	02:44:33.2	80.7	38.6	1.6	30	5.1		
WET	e P	Z	02:44:34.3	80.9	40.4	1.3	17	4.9		
GRA1	e P	Z	02:44:35.9	81.1	39.3	1.2	61	5.5		
BUG	e P	Z	02:44:36.1	81.3	36.7	1.0	18	5.2		
FUR	e P	Z	02:44:41.3	82.3	39.2	1.3	57	5.7		
STU	e P	Z	02:44:43.6	82.7	37.8	0.9	35	5.6		
WLF	e P	Z	02:44:46.4	83.1	35.8	1.9	53	5.5		
BFO	e P	Z	02:44:47.1	83.4	37.2	1.2	40	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	06:21:17.1	63.760N	152.730W	33.0N	5.2			SZGRF

Central Alaska, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e P	Z	06:31:47.8	63.6	351.8	1.2	23	5.3		
CLL	e P	Z	06:31:52.3	64.4	353.1	1.5	29	5.3		
UBBA	e P	Z	06:31:53.8	64.6	351.6	1.8	24	5.1		
BRG	e P	Z	06:31:55.7	64.9	353.5	1.2	14	5.1		
MOX	e P	Z	06:31:56.0	64.9	352.4	1.2	18	5.2		

WERD	e P	Z	06:31:57.1	65.2	352.8	1.6	20	5.1
GRA1	e P	Z	06:32:01.8	65.9	352.3	1.6	34	5.3
WET	e P	Z	06:32:06.4	66.5	353.1	1.4	14	5.0
GEC2	e P	Z	06:32:08.6	66.9	353.5	1.3	18	5.1
BFO	e P	Z	06:32:08.6	66.9	351.0	1.6	20	5.1

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/08 15:07:27.5 34.320N 139.570E 33.0N 5.7 5.5
 Near south coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	15:19:42.1	81.2	42.7	1.2	83	5.6		
BSEG	e P	Z	15:19:43.5	81.5	40.3	1.0	59	5.7		
BRG	e P	Z	15:19:47.4	82.3	42.6	1.0	30	5.5		
CLL	e P	Z	15:19:47.8	82.4	42.0	0.9	61	5.8		
NRDL	e P	Z	15:19:49.6	82.7	40.0	1.1	27	5.4		
CLZ	e P	Z	15:19:52.0	83.1	40.1	1.1	66	5.8		
WERD	e P	Z	15:19:52.9	83.3	41.4	1.3	59	5.6		
GUNZ	e P	Z	15:19:53.5	83.4	41.4	1.2	68	5.8		
MOX	e P	Z	15:19:53.7	83.5	41.0	1.1	53	5.7		
IBBN	e P	Z	15:19:55.0	83.7	38.3	1.0	59	5.7		
GEC2	e P	Z	15:19:55.7	83.9	42.3	0.9	51	5.7		
UBBA	e P	Z	15:19:56.1	84.0	39.8	1.0	26	5.4		
WET	e P	Z	15:19:56.8	84.1	41.7	1.1	48	5.6		
GRA1	e P	Z	15:19:58.8	84.3	40.6	0.9	154	6.2		
	e PP	Z	15:23:08.9							
	e S	N	15:30:25.8							
	e L	Z	16:00:18.6			18.0	1892		5.5	
BUG	e P	Z	15:19:59.1	84.6	37.8	1.0	77	5.9		
FUR	e P	Z	15:20:04.1	85.5	40.6	0.9	115	6.0		
STU	e P	Z	15:20:05.8	85.9	39.1	1.0	61	5.7		
WLF	e P	Z	15:20:08.9	86.4	36.9	1.1	63	5.7		
BFO	e P	Z	15:20:09.0	86.6	38.5	1.5	56	5.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/08 15:55: 5.6 24.735N 122.271E 33.0N 6.2 6.8
 Taiwan region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	16:07:17.9	81.0	60.7	1.7	246	6.1		
BRG	e P	Z	16:07:21.6	81.7	60.6	1.6	157	5.9		
CLL	e P	Z	16:07:22.9	82.0	60.0	1.3	119	6.0		
	e PP	Z	16:10:34.0							
	e PPP	Z	16:12:23.2							
	e PPPP	Z	16:13:45.9							

	e S	T	16:17:37.2								
	e SKSac	R	16:17:50.0								
	e PS	Z	16:18:38.3								
	e SS	Z	16:23:05.9								
	e SSS	T	16:26:45.3								
	e L	Z	16:48:42.5			18.0	58079		7.0		
BSEG	e P	Z	16:07:23.5	82.0	58.3	1.2	94	5.8			
WERD	e P	Z	16:07:27.4	82.8	59.4	1.5	137	6.0			
GEC2	e P	Z	16:07:26.5	82.8	60.2	1.3	134	6.0			
GUNZ	e P	Z	16:07:27.8	82.8	59.4	1.3	151	6.1			
NRDL	e P	Z	16:07:28.6	82.9	58.0	1.8	256	6.1			
MOX	e P	Z	16:07:27.9	83.1	58.9	1.2	74	5.8			
CLZ	e P	Z	16:07:29.1	83.1	58.1	1.7	294	6.2			
WET	e P	Z	16:07:28.5	83.2	59.6	1.6	179	6.1			
GRA1	e P	Z	16:07:32.0	83.8	58.5	1.9	541	6.5			
	e S	R	16:17:54.3								
	e SS	R	16:23:47.1								
	e L	Z	16:50:02.2			19.0	34576		6.8		
UBBA	e P	Z	16:07:33.1	83.9	57.7	1.7	224	6.1			
IBBN	e P	Z	16:07:34.7	84.2	56.2	1.7	468	6.4			
FUR	e P	Z	16:07:36.2	84.6	58.4	1.8	825	6.7			
BUG	e P	Z	16:07:38.1	85.0	55.7	1.5	380	6.4			
STU	e P	Z	16:07:40.4	85.4	57.0	1.6	212	6.0			
BFO	e P	Z	16:07:43.5	86.1	56.3	1.6	214	6.0			
WLF	e P	Z	16:07:45.7	86.6	54.8	1.5	402	6.3			

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/08 19:16: 5.6 37.870N 138.650E 33.0N 5.1
 Near west coast of eastern Honshu, Japan SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 19:28:02.9	78.0	39.3	1.0	16	5.1		
BRG	e P	Z 19:28:07.6	78.9	41.4	1.3	14	4.8		
CLL	e P	Z 19:28:07.6	79.0	40.8	1.2	23	5.1		
CLZ	e P	Z 19:28:11.5	79.6	39.1	1.2	21	5.0		
WERD	e P	Z 19:28:13.0	79.9	40.2	1.2	9	4.6		
GUNZ	e P	Z 19:28:12.9	80.0	40.2	1.2	13	4.7		
MOX	e P	Z 19:28:13.4	80.0	39.8	1.3	17	4.8		
IBBN	e P	Z 19:28:15.2	80.2	37.3	1.0	26	5.2		
GEC2	e P	Z 19:28:16.2	80.5	41.0	1.3	9	4.7		
WET	e P	Z 19:28:17.8	80.7	40.5	1.6	28	5.0		
GRA1	e P	Z 19:28:18.2	80.9	39.4	1.2	41	5.3		
BUG	e P	Z 19:28:19.2	81.1	36.8	1.4	33	5.2		
FUR	e P	Z 19:28:24.7	82.1	39.3	1.5	67	5.5		
STU	e P	Z 19:28:27.3	82.5	37.9	1.1	24	5.4		
BFO	e P	Z 19:28:30.2	83.2	37.3	1.3	38	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/08	19:38:10.6	23.750N	122.500E	33.0N	5.4	5.2		SZGRF

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 19:50:24.4	81.2	61.0	1.1	98	5.7		
RUE	e P	Z 19:50:27.6	81.9	61.1	1.3	38	5.4		
BRG	e P	Z 19:50:31.3	82.6	61.0	1.0	12	5.1		
CLL	i P	+ Z 19:50:31.9	82.9	60.4	1.2	22	5.3		
	i pP	Z 19:50:42.4							
	e L	Z 20:31:52.1			18.0	1331		5.4	
BSEG	e P	Z 19:50:32.8	83.0	58.6	1.1	24	5.4		
WERD	e P	Z 19:50:36.5	83.7	59.8	1.0	14	5.1		
GEC2	e P	Z 19:50:36.6	83.7	60.7	1.0	32	5.5		
GUNZ	e P	Z 19:50:37.5	83.8	59.8	1.2	32	5.4		
MOX	e P	Z 19:50:38.1	84.0	59.3	1.1	12	5.0		
CLZ	e P	Z 19:50:38.7	84.0	58.5	1.3	22	5.2		
WET	e P	Z 19:50:38.9	84.1	60.1	1.1	15	5.1		
GRA1	e P	Z 19:50:42.2	84.7	58.9	1.0	30	5.5		
	e	19:50:50.5							
	e L	Z 20:33:11.8			18.5	835		5.2	
IBBN	e P	Z 19:50:44.4	85.2	56.5	1.4	65	5.7		
FUR	e P	Z 19:50:45.8	85.5	58.9	1.2	94	5.8		
BUG	e P	Z 19:50:48.1	85.9	56.1	1.1	47	5.5		
STU	e P	Z 19:50:50.1	86.3	57.4	1.2	31	5.3		
BFO	e P	Z 19:50:52.6	87.0	56.7	1.6	30	5.2		
WLF	e P	Z 19:50:55.9	87.5	55.2	1.0	62	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:41:14.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/09	07:40:10.0	44.417N	149.272E	33.0N	5.2			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:52:11.3	79.0	29.1	0.7	16	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/09	18:43:14.5	38.290N	139.360E	33.0G	5.5	4.8		SZGRF

Near west coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	18:55:11.3	77.9	38.6	1.3	57	5.6		
BRG	e P	Z	18:55:16.3	78.8	40.7	1.5	44	5.3		
CLL	e P	Z	18:55:16.4	78.9	40.1	1.6	84	5.5		
NRDL	e P	Z	18:55:17.7	79.1	38.2					
WERD	e P	Z	18:55:21.7	79.8	39.5					
GUNZ	e P	Z	18:55:22.1	79.9	39.5					
MOX	e P	Z	18:55:22.4	80.0	39.1	1.4	44	5.2		
IBBN	e P	Z	18:55:23.4	80.1	36.6					
UBBA	e P	Z	18:55:24.8	80.5	38.0					
GEC2	e P	Z	18:55:25.0	80.5	40.3	1.2	20	5.0		
GRFO	i P	Z	18:55:27.6	80.9	38.7					
	e L	Z	19:35:45.6			18.4	350		4.7	
BUG	e P	Z	18:55:27.6	81.0	36.1					
FUR	e P	Z	18:55:33.6	82.0	38.6	1.3	84	5.7		
STU	e P	Z	18:55:35.2	82.4	37.2	1.7	132	5.9		
WLF	e P	Z	18:55:37.9	82.8	35.2					
BFO	e P	Z	18:55:38.8	83.1	36.6	1.5	127	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/09	23:58:23.7	11.185S	163.715E	10.0G		6.9		neic-m

Bougainville - Solomon Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PP	Z	00:20:01.7	130.7	39.8					
RUE	e PKPdf	Z	00:17:36.4	132.1	41.5					
	e PP	Z	00:20:10.3							
BSEG	e PKPdf	Z	00:17:36.8	132.3	36.4					
	e PP	Z	00:20:13.6							
HLG	e PP	Z	00:20:17.0	132.9	33.3					
BRG	e PKPdf	Z	00:17:38.6	133.3	42.7					
	e PP	Z	00:20:17.5							
CLL	e Pdiff	Z	00:14:48.8	133.3	41.3					
	e PKPdf	Z	00:17:39.7			2.5	600			
	e PP	Z	00:20:13.7							
	e PKSdf	Z	00:21:19.7							
	e PPP	Z	00:23:07.0							
	e SKKSac	N	00:27:10.8							
	e PS	N	00:30:29.8							
	e PPS	N	00:32:10.1							
	e SS	E	00:37:53.3							
	e PSPS	N	00:38:38.4							
	e SSS	N	00:42:56.9							

	e LR	Z	01:01:46.8								
	e L	Z	01:16:18.2			22.0	40856		7.1		
NRDL	e PKPdf	Z	00:17:39.4	133.5	37.0						
	e PP	Z	00:20:18.7								
WERD	e PKPdf	Z	00:17:40.8	134.3	41.0						
GUNZ	e PKPdf	Z	00:17:40.9	134.3	41.1						
MOX	e PKPdf	Z	00:17:40.9	134.4	40.0						
	e PP	Z	00:20:25.9								
IBBN	e PKPdf	Z	00:17:41.2	134.5	34.1						
	e PP	Z	00:20:26.9								
GEC2	e PKPdf	Z	00:17:41.8	134.8	43.8						
	e PP	Z	00:20:28.6								
UBBA	e PKPdf	Z	00:17:41.8	134.9	37.8						
	e PP	Z	00:20:29.0								
GRFO	e PKPdf	Z	00:17:42.5	135.3	40.1						
	e PP	Z	00:20:31.0								
	e SP	R	00:30:42.2								
	e SS	R	00:38:17.0								
	e L	Z	01:18:39.5			21.4	25423		6.9		
GRB1	e PKPdf	Z	00:17:43.2	135.3	40.8						
BUG	e PKPdf	Z	00:17:42.1	135.4	34.0						
	e PP	Z	00:20:30.8								
FUR	e PKPdf	Z	00:17:44.6	136.4	41.2						
	e PP	Z	00:20:36.9								
STU	e PKPdf	Z	00:17:45.6	136.8	38.1						
	e PP	Z	00:20:38.5								
WLF	e PKPdf	Z	00:17:47.2	137.3	33.5						
	e PP	Z	00:20:43.3								
BFO	e PKPdf	Z	00:17:46.5	137.5	37.3						
	e PP	Z	00:20:44.0								

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/10 02:34:18.0 20.850S 175.930W 33.0N
 Tonga Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	02:53:56.0	146.6	10.6					
RUE	e PKPbc	Z	02:53:58.6	147.5	17.1					
	e PKPab	Z	02:54:00.5							
NRDL	e PKPbc	Z	02:53:59.8	148.0	10.7					
IBBN	e PKPbc	Z	02:54:00.9	148.4	6.6					
	e PKPab	Z	02:54:04.4							
CLL	e PKPbc	Z	02:54:02.1	148.8	16.2					
BRG	e PKPbc	Z	02:54:02.8	149.0	18.1					
	e PKPab	Z	02:54:06.6							
BUG	e PKPbc	Z	02:54:03.0	149.3	5.9					
MOX	e PKPbc	Z	02:54:04.2	149.6	14.0					

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UBBA	e	PKPbc	Z	02:54:03.8	149.7	11.0
	e	PKPab	Z	02:54:10.3		
WERD	e	PKPbc	Z	02:54:04.6	149.7	15.4
GUNZ	e	PKPbc	Z	02:54:05.0	149.8	15.5
	e	PKPab	Z	02:54:10.5		
GRFO	e	PKPbc	Z	02:54:06.8	150.6	13.7
	e	PKPab	Z	02:54:13.8		
GRB1	e	PKPbc	Z	02:54:06.8	150.8	14.7
GEC2	e	PKPbc	Z	02:54:07.7	151.0	18.8
WLF	e	PKPbc	Z	02:54:08.5	151.1	4.0
STU	e	PKPbc	Z	02:54:09.5	151.8	10.2
	e	PKPab	Z	02:54:18.1		
FUR	e	PKPbc	Z	02:54:10.2	152.1	14.5
BFO	e	PKPbc	Z	02:54:10.5	152.3	8.6
	e	PKPab	Z	02:54:20.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/10	10:35:34.5	21.264S	176.008W	10.0G		5.5		neic-m

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 10:55:17.0	147.0	10.9					
RUE	e	PKPbc	Z 10:55:20.4	147.9	17.3					
NRDL	e	PKPbc	Z 10:55:21.0	148.4	10.9					
IBBN	e	PKPab	Z 10:55:28.1	148.8	6.8					
CLL	e	PKPbc	Z 10:55:20.8	149.1	16.5					
	e	PKPab	Z 10:55:29.1							
MOX	e	PKPbc	Z 10:55:24.9	150.0	14.3					
UBBA	e	PKPab	Z 10:55:31.0	150.1	11.3					
WERD	e	PKPbc	Z 10:55:25.4	150.1	15.7					
GRA1	e	PKPbc	Z 10:55:26.8	151.0	14.0					
	e	L	Z 12:03:16.6			20.7	774		5.5	
WET	e	PKPab	Z 10:55:38.9	151.2	17.4					
GEC2	e	PKPab	Z 10:55:39.1	151.4	19.1					
STU	e	PKPbc	Z 10:55:30.6	152.2	10.4					
BFO	e	PKPbc	Z 10:55:30.4	152.7	8.8					
	e	PKPab	Z 10:55:43.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/10	14:48: 8.8	24.408N	121.582E	33.0N	5.0	5.0		SZGRF

Taiwan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e	P	Z 15:00:25.1	81.6	61.3	0.6	4	4.7		
CLL	e	P	Z 15:00:25.0	81.9	60.7	1.2	14	5.0		

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BSEG	e P	Z	15:00:25.8	82.0	59.0						
GEC2	e P	Z	15:00:29.1	82.7	60.9	1.4	21	5.2			
GRA1	e P	Z	15:00:34.6	83.7	59.2	1.1	12	5.0			
	e L	Z	15:43:27.9			18.2	611			5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	02:14:20.7	35.194N	72.293E	33.0N	4.8			SZGRF

Pakistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:22:40.8	46.0	84.3	1.3	14	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	02:16:41.2	24.090N	122.360E	33.0N	5.8	5.8		SZGRF

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 02:28:56.9	81.6	61.0	2.3	289	6.0		
BRG	e P	Z 02:29:00.6	82.3	60.9	1.5	55	5.6		
CLL	e P	Z 02:29:01.7	82.6	60.3	1.6	68	5.6		
	e PP	Z 02:32:11.1							
BSEG	e P	Z 02:29:03.6	82.6	58.6	1.1	23	5.3		
	e PP	Z 02:32:12.1							
WERD	e P	Z 02:29:06.2	83.4	59.7	1.6	54	5.5		
GEC2	e P	Z 02:29:06.3	83.4	60.5	1.7	78	5.7		
GUNZ	e P	Z 02:29:06.5	83.4	59.7	1.6	81	5.7		
	e PP	Z 02:32:20.5							
NRDL	e P	Z 02:29:07.2	83.5	58.3	1.9	95	5.7		
CLZ	e P	Z 02:29:08.3	83.7	58.4	2.1	198	6.0		
	e PP	Z 02:32:22.9							
WET	e P	Z 02:29:08.3	83.7	60.0	1.7	76	5.7		
GRA1	e P	Z 02:29:11.7	84.4	58.8	1.7	150	6.0		
	e PP	Z 02:32:27.0							
	e L	Z 03:11:18.6			18.2	3520			5.8
UBBA	e P	Z 02:29:11.6	84.4	58.0	1.9	103	5.7		
IBBN	e P	Z 02:29:13.6	84.8	56.5	2.2	375	6.1		
FUR	e P	Z 02:29:15.5	85.1	58.7	1.8	341	6.2		
BUG	e P	Z 02:29:17.1	85.5	56.0	1.7	128	5.8		
STU	e P	Z 02:29:19.3	86.0	57.3	1.8	91	5.6		
	e PP	Z 02:32:39.6							
BFO	e P	Z 02:29:22.6	86.7	56.6	2.0	130	5.9		
WLF	e P	Z 02:29:25.3	87.1	55.1	1.5	127	6.0		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	09:11:39.0	14.852S	69.654W	33.0N	5.3			SZGRF

Peru-Bolivia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:25:00.9	95.5	253.5	1.5	18	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	10:02:49.1	42.500N	144.980E	45.9		6.9		SZGRF

Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 10:14:25.5	74.6	34.9	1.8	894			
	e pP	Z 10:14:38.3							
BSEG	e P	Z 10:14:33.9	76.1	32.7	1.9	592			
RUE	e P	Z 10:14:34.1	76.1	34.9	1.6	622			
	e S	E 10:24:16.3							
HLG	e P	Z 10:14:37.0	76.6	31.1	1.0	229			
NRDL	e P	Z 10:14:40.9	77.3	32.4	1.5	161			
CLL	e P	Z 10:14:40.3	77.3	34.2	0.9	279	6.4		
	e pP	Z 10:14:50.6							
	e sP	Z 10:14:54.5							
	e PP	Z 10:17:38.4							
	e PPP	Z 10:19:23.9							
	e sS	T 10:24:49.1							
	e SKSac	R 10:24:50.6							
	e PS	Z 10:25:14.5							
	e (SS)	R 10:30:00.6							
	e SSS	Z 10:33:19.7							
	e LQ	T 10:37:13.0							
	e LR	Z 10:42:12.1							
	e L	Z 10:52:32.8			20.0	52867		6.9	
BRG	e P	Z 10:14:40.9	77.4	34.7	1.2	134			
	e S	E 10:24:30.0							
CLZ	e P	Z 10:14:43.8	77.8	32.5	1.1	251			
IBBN	e P	Z 10:14:45.9	78.2	30.8	1.2	269			
WERD	e P	Z 10:14:46.2	78.3	33.6	1.2	108			
GUNZ	e P	Z 10:14:46.6	78.4	33.6	1.1	118			
UBBA	e P	Z 10:14:48.7	78.8	32.1	1.9	245			
GEC2	e P	Z 10:14:50.6	79.1	34.3	1.1	102			
BUG	e P	Z 10:14:50.6	79.1	30.3	1.0	181			
	e S	E 10:24:49.0							
WET	e P	Z 10:14:51.4	79.2	33.8	1.0	215			
GRA1	e P	Z 10:14:52.2	79.3	32.8	1.0	319			
	e pP	Z 10:15:05.8							
	e S	E 10:24:52.3							
	e L	Z 10:53:52.0			18.5	48687		6.9	

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FUR	e P	Z	10:14:58.9	80.6	32.7	0.9	350
STU	e P	Z	10:14:59.7	80.8	31.4	1.0	220
WLF	e S	E	10:25:10.6	81.0	29.4		
BFO	e P	Z	10:15:03.2	81.5	30.8	1.0	202

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	10:04:42.0	22.300S	176.300W	55.0N				NEIR-M
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z 10:24:21.4	148.0	11.6					
IBBN	e PKP	Z 10:24:26.5	149.8	7.5					
CLZ	e PKP	Z 10:24:27.2	150.0	12.4					
CLL	e PKPbc	Z 10:24:27.0	150.1	17.5	1.0	31			
	e PKPab	Z 10:24:33.3							
	e sPKPbc	Z 10:24:49.5							
BRG	e PKP	Z 10:24:28.2	150.3	19.4					
BUG	e PKP	Z 10:24:28.5	150.7	6.8					
WERD	e PKP	Z 10:24:29.5	151.1	16.6					
GUNZ	e PKP	Z 10:24:30.1	151.1	16.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	17:33:11.9	11.400S	162.000E	38.0N				neic-m
Bougainville - Solomon Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 17:52:25.3	132.9	43.6					
	e PKSbc	Z 17:55:53.3							
GRA1	e PKP	Z 17:52:29.2	134.8	42.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/11	17:34:55.0	11.200S	162.000E	29.0N		6.7		NEIR-M
Bougainville - Solomon Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e SS	T 18:13:39.1	130.1	41.8					
RUE	e SS	T 18:14:05.8	131.4	43.6					
BRG	e SS	T 18:14:10.0	132.5	44.8					
CLL	e PKPdf	Z 17:54:07.5	132.6	43.4	1.1	30			
	e PP	Z 17:56:31.7							
	e PKSbc	Z 17:57:35.5							
	e PS	N 18:06:51.8							
	e SKKPdf	Z 18:07:32.4							

	e SS	E	18:14:18.8							
	e SSS	E	18:19:08.1							
	e L	Z	18:55:02.4			20.0	31206		7.0	
NRDL	e SS	T	18:14:16.4	132.9	39.1					
MOX	e SS	T	18:14:26.9	133.7	42.1					
GEC2	e SS	T	18:14:30.1	134.1	45.8					
WET	e SS	T	18:14:30.1	134.2	44.6					
UBBA	e SS	T	18:14:28.3	134.2	40.0					
GRA1	e PKP	Z	17:54:10.8	134.6	42.3					
	e		17:56:00.2							
	e SKP	Z	17:57:46.6							
	e		18:01:56.3							
	e SS	T	18:14:34.3							
	e L	Z	18:54:21.6			20.9	16800		6.7	
BUG	e SS	T	18:14:34.3	134.8	36.2					
STU	e SS	T	18:14:53.0	136.1	40.3					
BFO	e SS	T	18:15:02.9	136.9	39.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/11 21:26:44.9 8.100S 124.800E 37.0G 7.3
 Timor, Indonesia, region neic-m

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z 21:41:14.7	109.9	77.8	1.9	54			
	e PKiKP	Z 21:45:11.2							
	e PP	Z 21:45:48.0							
	e SKSac	R 21:51:48.3							
	e Sdiff	T 21:53:23.3							
	e PS	Z 21:55:11.9							
	e PPS	Z 21:56:17.1							
	e PKKPab	Z 21:56:30.5							
	e SS	E 22:01:43.3							
	e (SSS)	E 22:06:24.1							
	e LQ	T 22:12:09.0							
	e LR	Z 22:20:22.0							
	e L	Z 22:40:10.0				22.0	91742		7.3
	e R2	Z 23:26:14.2							
GRA1	e Pdiff	Z 21:41:22.3	111.3	76.9					
	e PKKP	Z 21:56:26.5							
	e	22:04:09.8							
	e L	Z 22:39:04.1				20.2	74341		7.3

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/11 22:49:49.2 8.400S 124.600E 18.0N
 Timor, Indonesia, region neic-m

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKiKP	Z	23:08:24.2	110.0	78.2	1.4	23			
	e PP	Z	23:08:56.6							
	e PPS	N	23:19:20.5							
	e PKKP	Z	23:19:30.0							
	e L	Z	23:38:25.3			22.0	27596		6.8	
GRA1	e PP	Z	23:09:06.9	111.4	77.3					
	e PKKPdf	Z	23:19:31.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/12	06:36:25.2	25.300S	62.150W	573.6				SZGRF
Santiago del Estero Province, Argentina								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z	06:48:51.5	96.3	237.7					
	e pPdiff	Z	06:50:57.3							
BFO	e Pdiff	Z	06:48:53.5	96.8	239.1					
	e PP	Z	06:52:58.7							
STU	e Pdiff	Z	06:48:57.2	97.5	239.8					
	e pPdiff	Z	06:51:03.0							
BUG	e Pdiff	Z	06:48:58.4	97.8	238.7					
FUR	e PP	Z	06:53:10.5	98.4	241.2					
IBBN	e Pdiff	Z	06:49:01.4	98.5	239.2					
	e pPdiff	Z	06:51:07.1							
	e PP	Z	06:53:11.1							
UBBA	e Pdiff	Z	06:49:03.6	99.0	240.6					
	e PP	Z	06:53:14.5							
GRA1	e Pdiff	Z	06:49:04.6	99.1	241.3					
	e PP	Z	06:53:16.7							
CLZ	e Pdiff	Z	06:49:06.9	99.7	241.0					
	e PP	Z	06:53:19.5							
MOX	e Pdiff	Z	06:49:07.2	99.8	241.7					
	e PP	Z	06:53:20.6							
WET	e Pdiff	Z	06:49:07.1	99.8	242.4					
	e PP	Z	06:53:20.2							
NRDL	e Pdiff	Z	06:49:07.9	99.9	240.9					
	e PP	Z	06:53:21.3							
GUNZ	e PP	Z	06:53:22.5	100.1	242.2					
WERD	e PP	Z	06:53:22.7	100.1	242.2					
CLL	i Pdiff	- Z	06:49:12.3	100.9	242.9	1.6	48			
	e PP	Z	06:53:30.2			2.2	158			
	e PPP	Z	06:56:21.8							
	e Sdiff	R	07:00:09.3							
	e SP	Z	07:01:46.2							
	e PS	R	07:02:58.9							
	e		07:05:29.8							

	e SS	T	07:07:34.3									
	e SSS	T	07:11:21.9									
	e SSSS	R	07:14:50.6									
RUE	e Pdiff	Z	06:49:16.9	101.8	243.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source				
2004/11/12												

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML			
GRA1	e PKP	Z 07:32:52.1										
	e pPKP	Z 07:33:06.6										

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source				
2004/11/13	00:24:20.0	10.438S	164.394E	15.0G		5.9		neic-m				
Santa Cruz Islands region												

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML			
BRG	e PKP	Z 00:43:35.3	132.9	41.4								
CLL	e PKPdf	Z 00:43:35.3	132.9	40.0	2.3	115						
	e SS	R 01:03:53.9										
	e SSS	T 01:08:41.2										
	e LR	Z 01:27:38.7										
	e L	Z 01:40:32.7			21.8	3134		6.0				
NRDL	e PKP	Z 00:43:37.4	133.1	35.8								
CLZ	e PKP	Z 00:43:37.0	133.5	36.5								
WERD	e PKP	Z 00:43:37.5	133.9	39.7								
GUNZ	e PKP	Z 00:43:37.8	133.9	39.8								
MOX	e PKP	Z 00:43:37.3	134.0	38.7								
UBBA	e PKP	Z 00:43:39.5	134.5	36.6								
GEC2	e PKP	Z 00:43:38.9	134.5	42.4								
WET	e PKP	Z 00:43:38.6	134.6	41.2								
GRA1	e PKP	Z 00:43:39.0	134.9	38.8								
	e L	Z 01:43:00.6			21.9	2483		5.9				
BUG	e PKP	Z 00:43:38.9	134.9	32.7								
FUR	e PKP	Z 00:43:41.6	136.1	39.9								
BFO	e PKP	Z 00:43:43.8	137.1	35.9								

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source				
2004/11/13	07:33:18.8	26.526S	63.079W	576.0G				neic-m				
Santiago del Estero Province, Argentina												

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML			
GRA1	e PP	Z 07:50:18.8	100.6	241.2								

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/14								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKP	Z 03:15:09.3							
GRA1	e PKP	Z 03:15:10.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/14	17:37:50.7	42.880N	143.730E	33.0N	5.4	5.2		SZGRF
Hokkaido, Japan, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 17:49:33.4	75.3	33.4	0.9	44	5.6		
CLL	i P	+ Z 17:49:39.9	76.6	34.8	0.9	68	5.8		
	e S	T 17:59:39.2							
	e PS	Z 18:00:16.6							
	e (SS)	R 18:05:36.5							
	e LQ	T 18:14:18.8							
	e LR	Z 18:16:30.4							
	e L	Z 18:27:35.4			20.4	1298		5.2	
NRDL	e P	Z 17:49:40.3	76.6	33.0	1.0	24	5.3		
BRG	e P	Z 17:49:40.2	76.6	35.4	0.9	18	5.2		
CLZ	e P	Z 17:49:43.3	77.0	33.1	1.1	61	5.6		
IBBN	e P	Z 17:49:45.5	77.5	31.4	1.0	64	5.7		
WERD	e P	Z 17:49:45.3	77.5	34.2	1.1	25	5.3		
GUNZ	e P	Z 17:49:46.1	77.6	34.3	0.9	20	5.3		
MOX	e P	Z 17:49:46.1	77.6	33.8	1.3	37	5.4		
UBBA	e P	Z 17:49:48.0	78.0	32.8	0.9	10	5.0		
GEC2	e P	Z 17:49:50.0	78.3	35.0	1.2	28	5.2		
WET	e P	Z 17:49:50.6	78.4	34.5	1.0	42	5.4		
BUG	e P	Z 17:49:50.2	78.4	31.0	0.9	42	5.5		
GRA1	e P	Z 17:49:51.8	78.5	33.4	1.7	51	5.3		
	e L	Z 18:28:44.7			19.7	1166		5.2	
FUR	e P	Z 17:49:58.3	79.8	33.3	0.9	66	5.6		
STU	e P	Z 17:49:59.3	80.0	32.0	0.9	54	5.5		
WLF	e P	Z 17:50:02.0	80.3	30.1					
BFO	e P	Z 17:50:02.6	80.7	31.4	1.3	27	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/14	17:57:48.8	42.690N	141.970E	33.0N	5.0	5.1		SZGRF
Hokkaido, Japan, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	18:09:29.5	74.9	34.7	0.9	11	4.9		
CLL	e P	Z	18:09:35.6	76.1	36.1	0.9	24	5.4		
BRG	e P	Z	18:09:36.1	76.1	36.6	0.9	7	4.8		
CLZ	e P	Z	18:09:38.4	76.6	34.4	0.9	20	5.3		
WERD	e P	Z	18:09:41.2	77.1	35.5	0.9	5	4.6		
IBBN	e P	Z	18:09:41.7	77.1	32.7	0.9	19	5.2		
GUNZ	e P	Z	18:09:41.7	77.1	35.5	0.9	10	4.9		
MOX	e P	Z	18:09:42.0	77.1	35.1	0.8	5	4.7		
WET	e P	Z	18:09:46.2	77.9	35.7	1.0	16	5.1		
BUG	e P	Z	18:09:46.6	78.0	32.3	1.1	20	5.2		
GRA1	e P	Z	18:09:47.2	78.1	34.7	1.0	32	5.4		
	e L	Z	18:49:01.7			19.1	904		5.1	
STU	e P	Z	18:09:55.2	79.6	33.3	0.8	15	5.0		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/14 18:44:15.4 42.340N 144.860E 33.0N 5.7 5.8 ML SZGRF
 Hokkaido, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	18:56:03.5	76.2	32.9	1.0	80	5.8		
NRDL	e P	Z	18:56:10.3	77.4	32.5	1.1	53	5.6		
CLL	i P	+ Z	18:56:10.1	77.4	34.3	0.9	104	6.0		
	e pP	Z	18:56:16.5							
	e sP	Z	18:56:19.3							
	e S	T	19:06:08.4							
	e SP	R	19:06:48.2							
	e (SS)	R	19:11:40.8							
	e LQ	T	19:20:29.1							
	e LR	Z	19:23:02.3							
	e L	Z	19:34:05.8			20.0	5210		5.9	
BRG	e P	Z	18:56:10.3	77.5	34.9	1.2	57	5.6		
CLZ	e P	Z	18:56:13.3	77.9	32.6	1.5	196	6.0		
IBBN	e P	Z	18:56:15.5	78.4	30.9	1.0	100	5.8		
WERD	e P	Z	18:56:15.7	78.4	33.8	1.9	119	5.6		
GUNZ	e P	Z	18:56:16.1	78.5	33.8	1.0	53	5.5		
MOX	e P	Z	18:56:16.1	78.5	33.3	1.1	55	5.5		
UBBA	e P	Z	18:56:18.0	78.9	32.3	1.5	69	5.5		
GEC2	e P	Z	18:56:19.9	79.2	34.5	1.0	30	5.2		
BUG	e P	Z	18:56:20.3	79.3	30.5	1.0	84	5.6		
WET	e P	Z	18:56:20.8	79.3	34.0	1.1	85	5.6		
GRA1	e P	Z	18:56:21.8	79.4	33.0	1.3	202	5.9		
	e L	Z	19:35:25.1			20.1	4609		5.8	
FUR	e P	Z	18:56:28.3	80.7	32.9	1.1	139	5.9		
STU	e P	Z	18:56:29.2	80.9	31.5	1.0	91	5.8		
WLF	e P	Z	18:56:30.9	81.1	29.6	2.0	157	5.7		
BFO	e P	Z	18:56:32.4	81.6	30.9	1.6	128	5.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2004/11/15											
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
		GRA1	e P	Z 00:51:52.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2004/11/15	09:06:59.5	4.270N	76.820W	33.0N	7.6	7.3		SZGRF			
Colombia											
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
		WLF	e P	Z 09:19:18.0	82.2	267.4	3.1	17202	7.6		
			e PP	Z 09:22:25.2							
			e S	T 09:29:29.4							
		BUG	e P	Z 09:19:21.1	83.0	268.0	3.0	15578	7.7		
		IBBN	e P	Z 09:19:24.0	83.3	268.3	3.1	18177	7.8		
			e S	T 09:29:43.3							
		HLG	e P	Z 09:19:26.0	83.4	268.2	3.1	21242	7.8		
		BFO	e P	Z 09:19:24.0	83.6	269.2	3.5	10066	7.5		
			e S	T 09:29:46.8							
		STU	e P	Z 09:19:27.6	84.2	269.8	3.8	21689	7.8		
			e S	T 09:29:51.5							
		DAVA	e P	Z 09:19:30.0	84.6	270.5	3.7	13683	7.6		
		BSEG	e P	Z 09:19:30.7	84.9	270.2	2.5	7363	7.5		
		GRFO	e P	Z 09:19:35.0	85.5	271.3	3.3	12417	7.5		
			e L	Z 09:59:59.3			19.1	119877		7.3	
		GRA1	e P	Z 09:19:33.9	85.5	271.3	3.3	14415	7.5		
			e L	Z 09:55:08.1			21.4	92843		7.1	
		FUR	e P	Z 09:19:36.0	85.6	271.4	2.6	11392	7.5		
			e PP	Z 09:22:53.3							
		MOX	e P	Z 09:19:36.0	85.7	271.5	2.9	8562	7.4		
			e L	Z 09:54:43.2			22.0	128521		7.3	
		WTTA	e P	Z 09:19:36.0	85.8	271.8	3.0	7408	7.3		
		WERD	e P	Z 09:19:37.8	86.2	272.0	3.0	9968	7.4		
		CLL	i P	+ Z 09:19:39.8	86.6	272.5	9.2	67364	7.4		
			e PP	Z 09:23:01.8			9.1	25061			
			e SKSac	R 09:30:06.5							
			e S	T 09:30:16.6							
			e SP	Z 09:31:15.8							
			e SS	E 09:36:09.5							
			e SSS	E 09:39:43.5							
			e PKPPKPdf	Z 09:45:41.9							
			e L	Z 09:55:22.6			22.2	196724		7.4	
		WET	e P	Z 09:19:40.0	86.6	272.6	2.9	14631	7.6		

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	e PP	Z	09:23:02.7						
RGN	e P	Z	09:19:42.8	86.6	272.6	3.1	24845	7.8	
	e S	T	09:30:18.1						
KBA	e P	Z	09:19:43.0	87.0	273.0	3.3	8735	7.3	
MOA	e P	Z	09:19:44.0	87.6	273.7	4.9	24769	7.8	
	e PP	Z	09:23:10.5						
OBKA	e P	Z	09:19:46.0	87.8	273.9				
ARSA	e P	Z	09:19:49.0	88.5	274.6				
SUW	e P	Z	09:20:07.3	92.4	280.6				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/15	10:21:17.5	43.425N	38.336E	33.0N	4.5			SZGRF
Black Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 10:25:23.2	17.8	98.4					
WET	e P	Z 10:25:29.4	18.4	98.4					
CLL	e P	Z 10:25:31.9	18.8	104.9	1.1	53	4.7		
GUNZ	e P	Z 10:25:35.9	19.0	101.4					
WERD	e P	Z 10:25:35.5	19.0	101.6	1.1	23	4.3		
MOX	e P	Z 10:25:41.5	19.5	101.4	1.2	31	4.4		
GRA1	e P	Z 10:25:42.8	19.5	98.3	1.1	32	4.5		
CLZ	e P	Z 10:25:51.0	20.5	103.2					
STU	e P	Z 10:25:54.8	20.8	93.9	1.1	38	4.6		
NRDL	e P	Z 10:25:53.7	20.8	104.5	1.2	51	4.7		
BSEG	e P	Z 10:25:55.6	21.1	108.4					
BFO	e P	Z 10:26:01.4	21.3	92.0	1.1	36	4.6		
IBBN	e P	Z 10:26:08.8	22.1	101.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/15	11:39:43.2	33.171N	73.639E	33.0N	5.0			SZGRF
Pakistan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:48:20.0	48.1	85.5	0.9	12	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/15								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:20:30.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/15	16:44:41.5	28.908N	130.178E	33.0N				SZGRF

Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:57:11.9	84.6	50.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/15								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 23:54:02.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/16	10:06:52.8	4.190S	153.330E	33.0G		6.2		SZGRF

New Ireland, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z 10:25:44.6	121.9	45.0					
	e PP	Z 10:27:19.5							
BRG	e PKPdf	Z 10:25:45.0	122.3	50.2					
	e PP	Z 10:27:21.7							
CLL	i PKPdf	+ Z 10:25:44.9	122.5	49.0	0.9	25			
	e	10:26:09.5							
	e PP	Z 10:27:32.6							
	e PPP	Z 10:30:06.0							
	e Sdiff	T 10:35:30.2							
	e PS	R 10:37:19.0							
	e PPS	Z 10:38:58.3							
	e SS	R 10:44:22.7							
	e SSS	R 10:48:49.2							
	e L	Z 11:18:52.3			22.0	7016		6.3	
CLZ	e PKPdf	Z 10:25:47.2	123.3	46.0					
WERD	e PKPdf	Z 10:25:47.0	123.4	48.7					
GUNZ	e PKPdf	Z 10:25:47.1	123.4	48.8					
	e PP	Z 10:27:28.6							
MOX	e PKPdf	Z 10:25:47.2	123.6	47.9					
	e PP	Z 10:27:30.1							
GEC2	e PKPdf	Z 10:25:47.3	123.7	51.0					
	e PP	Z 10:27:30.6							
WET	e PKPdf	Z 10:25:47.9	123.9	49.9					
	e PP	Z 10:27:32.3							
IBBN	e PKPdf	Z 10:25:48.9	124.1	42.9					
	e PP	Z 10:27:32.9							

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UBBA	e PKPdf	Z	10:25:48.6	124.2	46.1				
	e PP	Z	10:27:32.9						
GRA1	e PKPdf	Z	10:25:49.0	124.4	47.9				
	e PP	Z	10:27:34.8						
	e L	Z	11:22:03.6			20.6	5184	6.2	
BUG	e PKPdf	Z	10:25:50.2	125.0	42.8				
	e PP	Z	10:27:39.5						
FUR	e PKPdf	Z	10:25:50.8	125.4	48.8				
	e PP	Z	10:27:41.7						
STU	e PKPdf	Z	10:25:51.8	126.0	46.2				
	e PP	Z	10:27:46.1						
BFO	e PKPdf	Z	10:25:53.1	126.7	45.5				
	e PP	Z	10:27:50.8						
WLF	e PKPdf	Z	10:25:54.0	126.7	42.4				
	e PP	Z	10:27:51.4						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/16	11:57:27.5	53.390N	160.050E	33.0N	5.9	5.0		SZGRF
Near east coast of Kamchatka Peninsula, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	12:08:37.1	69.8	18.7	1.1	150	6.0		
NRDL	e P	Z	12:08:45.3	71.2	18.4	1.0	102	5.9		
CLL	e P	Z	12:08:48.1	71.7	20.0	1.1	168	6.1		
CLZ	e P	Z	12:08:49.2	71.8	18.5	1.1	277	6.3		
IBBN	e P	Z	12:08:49.1	71.8	17.0	1.2	247	6.2		
BRG	e P	Z	12:08:49.5	71.9	20.5	1.3	79	5.7		
MOX	e P	Z	12:08:54.0	72.6	19.1	1.2	109	5.9		
WERD	i P	Z	12:08:54.4	72.7	19.5	1.1	99	5.8		
BUG	e P	Z	12:08:54.4	72.7	16.6	1.0	142	6.0		
GUNZ	e P	Z	12:08:55.0	72.8	19.5	1.5	132	5.8		
UBBA	e P	Z	12:08:55.0	72.8	18.2	1.6	143	5.9		
GRA1	e P	Z	12:09:00.3	73.6	18.8	1.1	217	6.1		
	e L	Z	12:42:03.5			21.6	894		5.0	
WET	e P	Z	12:09:01.2	73.8	19.7	1.2	110	5.8		
GEC2	e P	Z	12:09:01.4	73.9	20.1	1.4	79	5.6		
WLF	e P	Z	12:09:05.9	74.6	15.8	1.1	66	5.6		
STU	e P	Z	12:09:07.2	74.9	17.5	1.2	128	5.8		
FUR	e P	Z	12:09:08.3	75.1	18.7	1.1	148	5.9		
BFO	e P	Z	12:09:10.5	75.5	17.0	1.2	93	5.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/16								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1 e PKP Z 22:31:38.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/17	07:34:31.5	39.639N	72.426E	33.0N	5.4	4.5		SZGRF

Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:42:31.4	43.4	79.1	1.6	132	5.4		
	e L	Z 08:03:49.6			18.8	556		4.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/17	10:44:46.7	30.049S	179.685W	33.0N				SZGRF

Kermadec Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPab	Z 11:04:06.3	155.0	20.9					
NRDL	e PKPab	Z 11:04:12.1	156.4	21.6					
CLL	e PKPdf	Z 11:03:45.3	156.7	28.8					
	e PKPdif	Z 11:03:53.4							
	e PKPab	Z 11:04:13.7			0.9	43			
	e L	Z 12:13:43.3			22.0	166		4.8	
BRG	e PKPab	Z 11:04:15.0	156.8	31.2					
CLZ	e PKPab	Z 11:04:15.0	157.0	22.7					
IBBN	e PKPab	Z 11:04:14.8	157.1	16.7					
WERD	e PKPab	Z 11:04:18.8	157.7	28.3					
MOX	e PKPab	Z 11:04:18.4	157.7	26.6					
GUNZ	e PKPab	Z 11:04:19.2	157.8	28.5					
BUG	e PKPab	Z 11:04:18.4	158.0	16.2					
UBBA	e PKPab	Z 11:04:19.1	158.0	22.9					
WET	e PKPab	Z 11:04:23.5	158.7	31.2					
GRA1	e PKPab	Z 11:04:23.3	158.7	26.8					
WLF	e PKPab	Z 11:04:27.3	159.9	14.8					
FUR	e PKPab	Z 11:04:29.3	160.0	28.8					
STU	e PKPab	Z 11:04:28.4	160.1	23.1					
BFO	e PKPab	Z 11:04:30.9	160.7	21.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/17	13:26:26.0	9.430N	92.880E	99.7	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 13:38:00.9	75.7	92.6	1.4	43	5.4		
GEC2	e P	Z 13:38:01.6	75.8	91.9	0.9	47	5.6		

RUE	e P	Z	13:38:01.9	75.9	92.8				
CLL	e P	Z	13:38:04.0	76.3	91.9	1.3	30	5.3	
WET	e P	Z	13:38:04.6	76.4	91.3	1.1	33	5.4	
GUNZ	e P	Z	13:38:06.8	76.7	91.2				
WERD	e P	Z	13:38:06.4	76.7	91.2				
MOX	e P	Z	13:38:08.9	77.2	90.7	0.8	17	5.2	
FUR	e P	Z	13:38:10.0	77.4	89.9	0.6	42	5.7	
GRA1	e P	Z	13:38:11.0	77.4	90.2	0.8	38	5.6	
	e pP	Z	13:38:36.7						
CLZ	e P	Z	13:38:13.1	78.0	90.0	1.0	42	5.5	
BSEG	e P	Z	13:38:13.8	78.0	90.4	1.0	64	5.7	
NRDL	e P	Z	13:38:14.7	78.1	89.9				
UBBA	e P	Z	13:38:15.7	78.2	89.5				
STU	e P	Z	13:38:17.9	78.8	88.5				
BFO	e P	Z	13:38:20.7	79.4	87.7	0.9	20	5.1	
IBBN	e P	Z	13:38:22.3	79.6	88.0				
BUG	e P	Z	13:38:24.0	79.9	87.5				
WLF	e P	Z	13:38:28.8	80.7	86.3				

Date 2004/11/17
 Origin Time 20:58:24.0
 Kyrgyzstan
 Lat 39.400N
 Long 72.020E
 Depth 33.0N
 mb 5.6
 Ms 5.7
 ML
 Source SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 21:06:08.4	41.4	82.7	1.1	139	5.6		
RGN	e P	Z 21:06:08.7	41.4	86.4					
GEC2	e P	Z 21:06:12.4	41.8	80.3	1.2	182	5.7		
CLL	e P	Z 21:06:12.2	41.9	82.6	1.1	146	5.6		
	e PP	Z 21:07:55.0							
	e PcP	Z 21:08:06.9							
	e S	N 21:12:34.8							
	e SS	N 21:15:42.4							
	e LR	Z 21:18:41.5							
	e L	Z 21:24:33.9			22.0	7500			
WET	e P	Z 21:06:16.1	42.3	80.1	1.1	111	5.5		
GUNZ	e P	Z 21:06:17.3	42.5	81.1					
WERD	e P	Z 21:06:17.2	42.5	81.2					
MOX	e P	Z 21:06:20.5	42.9	80.9	1.0	76	5.4		
BSEG	e P	Z 21:06:23.5	43.2	83.5	1.1	120	5.5		
GRA1	e P	Z 21:06:24.7	43.3	79.7	1.0	277	5.9		
	e S	E 21:12:56.4							
	e L	Z 21:28:11.6			18.4	9710		5.7	
CLZ	e P	Z 21:06:25.3	43.5	81.3	1.1	85	5.4		
NRDL	e P	Z 21:06:26.1	43.5	81.8					
FUR	e P	Z 21:06:25.8	43.5	78.1	1.0	283	5.9		
	e PP	Z 21:08:08.7							
UBBA	e P	Z 21:06:28.3	43.9	80.0					

STU	e P	Z	21:06:35.7	44.8	77.5			
IBBN	e P	Z	21:06:37.4	45.0	80.0			
BFO	e P	Z	21:06:40.6	45.4	76.5	0.9	97	5.8
BUG	e P	Z	21:06:41.1	45.4	78.8			
WLF	e P	Z	21:06:49.9	46.5	76.4			

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/17 21:03: 6.5 20.907S 176.768W 33.0N
 Fiji Islands region SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPpdf	Z	21:22:52.7	146.5	12.1					
	e pPKPbc	Z	21:22:54.1							
RUE	e PKPpdf	Z	21:22:54.1	147.4	18.5					
	e pPKPbc	Z	21:22:56.3							
NRDL	e pPKPbc	Z	21:22:57.9	148.0	12.2					
IBBN	e PKPpdf	Z	21:22:56.5	148.4	8.1					
	e pPKPbc	Z	21:22:59.2							
	e PKPab	Z	21:23:03.0							
CLZ	e PKPpdf	Z	21:22:56.0	148.6	12.9					
	e pPKPbc	Z	21:22:59.3							
CLL	e PKPpdf	Z	21:22:56.0	148.7	17.7	1.2	26			
	i PKPbc	+ Z	21:22:59.8			0.8	256			
	i PKPab	+ Z	21:23:03.5			0.7	152			
BRG	e pPKPbc	Z	21:25:20.6							
	e pPKPbc	Z	21:23:00.3	148.9	19.6					
BUG	e PKPab	Z	21:23:04.4							
	e PKPpdf	Z	21:22:57.5	149.3	7.4					
MOX	e pPKPbc	Z	21:23:01.4							
	e PKPpdf	Z	21:22:57.7	149.5	15.6					
	e pPKPbc	Z	21:23:02.1							
UBBA	e PKPab	Z	21:23:07.2							
	e pPKPbc	Z	21:23:02.2	149.6	12.6					
	e PKPab	Z	21:23:07.9	149.7	17.0					
GRA1	e PKPpdf	Z	21:22:59.6	150.5	15.3					
	e pPKPbc	Z	21:23:04.8							
	e PKPab	Z	21:23:12.3							
WET	e PKPpdf	Z	21:22:59.7	150.7	18.7					
	e pPKPbc	Z	21:23:05.0							
	e PKPab	Z	21:23:12.5							
GEC2	e PKPpdf	Z	21:22:59.6	150.8	20.4					
	e pPKPbc	Z	21:23:05.1							
WLF	e pPKPbc	Z	21:23:06.4	151.1	5.7					
	e PKPab	Z	21:23:15.1							
STU	e pPKPbc	Z	21:23:07.3	151.7	11.8					
FUR	e PKPpdf	Z	21:23:01.2	152.0	16.2					
	e pPKPbc	Z	21:23:07.4							

	e PKPab	Z	21:23:17.7		
BFO	e pPKPbc	Z	21:23:08.7	152.3	10.3
	e PKPab	Z	21:23:18.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/17	21:09:16.9	19.122S	177.342W	634.1				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PKPbc	Z	21:27:39.7	143.6	17.2					
BSEG	e PKPbc	Z	21:27:42.9	144.7	12.6					
HLG	e PKPbc	Z	21:27:43.5	144.7	8.6					
RUE	e PKPbc	Z	21:27:44.8	145.5	18.8					
NRDL	e PKPbc	Z	21:27:46.4	146.1	12.7					
IBBN	e PKPdf	Z	21:27:45.0	146.6	8.8					
	e PKPbc	Z	21:27:48.2							
	e PKPab	Z	21:27:52.1							
CLZ	e PKPbc	Z	21:27:48.7	146.7	13.4					
CLL	e PKPdf	Z	21:27:45.3	146.8	18.0	1.1	116			
	i PKPbc	- Z	21:27:49.1			0.8	1237			
	e PKPab	Z	21:27:53.1			0.9	1037			
	e		21:27:56.9							
	e pPKPbc	Z	21:30:10.6							
e SS	E	21:49:41.5								
e sSS	E	21:53:25.9								
BRG	e PKPbc	Z	21:27:49.2	147.0	19.9					
BUG	e PKPdf	Z	21:27:46.3	147.5	8.1					
	e PKPbc	Z	21:27:50.3							
MOX	e PKPdf	Z	21:27:46.4	147.7	16.0					
	e PKPbc	Z	21:27:50.7							
WERD	e PKPbc	Z	21:27:50.6	147.7	17.3					
UBBA	e PKPbc	Z	21:27:50.5	147.8	13.1					
GUNZ	e PKPdf	Z	21:27:47.1	147.8	17.3					
	e PKPbc	Z	21:27:51.1							
	e PKPab	Z	21:27:57.4							
GRA1	e PKPdf	Z	21:27:48.4	148.7	15.7					
	e PKPbc	Z	21:27:53.7							
	e PKPab	Z	21:28:01.0							
GRFO	e pPKPbc	Z	21:30:19.3							
	e PKPbc	Z	21:27:53.6	148.7	15.7					
WET	e PKPab	Z	21:28:01.5							
	e PKPbc	Z	21:27:53.9	148.9	18.9					
GEC2	e PKPab	Z	21:28:02.0							
	e PKPbc	Z	21:27:54.0	149.0	20.6					
WLF	e PKPbc	Z	21:27:55.3	149.3	6.5					
	e pPKPbc	Z	21:30:18.2							
STU	e PKPdf	Z	21:27:50.1	149.9	12.4					

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	e	PKPbc	Z	21:27:56.2						
FUR	e	PKPdf	Z	21:27:50.2	150.1	16.5				
	e	PKPbc	Z	21:27:56.4						
	e	PKPab	Z	21:28:06.6						
BFO	e	PKPbc	Z	21:27:57.3	150.4	10.9				
	e	PKPab	Z	21:28:08.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/17	21:32:26.9	20.500S	178.210W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 21:52:02.8	145.9	14.4				
RUE	e	PKPbc	Z 21:52:05.3	146.7	20.8				
NRDL	e	PKPbc	Z 21:52:07.1	147.4	14.6				
CLL	e	PKPbc	Z 21:52:08.8	148.0	20.1				
BRG	e	PKPbc	Z 21:52:09.4	148.2	21.9				
MOX	e	PKPbc	Z 21:52:11.0	148.9	18.0				
WERD	e	PKPbc	Z 21:52:11.2	148.9	19.3				
GUNZ	e	PKPbc	Z 21:52:11.5	149.0	19.4				
	e	PKPab	Z 21:52:17.0						
UBBA	e	PKPbc	Z 21:52:11.3	149.0	15.1				
GRA1	e	PKPbc	Z 21:52:13.5	149.9	17.8				
	e	PKPab	Z 21:52:20.7						
GEC2	e	PKPbc	Z 21:52:13.7	150.1	22.8				
WLF	e	PKPbc	Z 21:52:16.2	150.6	8.4				
STU	e	PKPbc	Z 21:52:16.3	151.1	14.5				
FUR	e	PKPbc	Z 21:52:16.9	151.3	18.7				
	e	PKPab	Z 21:52:26.9						
BFO	e	PKPbc	Z 21:52:17.7	151.7	13.0				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	00:22:27.4	36.665N	21.507E	33.0N				SZGRF
Southern Greece								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e	P	Z 00:26:02.6	15.0	146.4	1.5	62		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	02:13: 6.2	32.226S	178.113W	10.0G				neic-m
South of Kermadec Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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HLG	e	PKPab	Z	02:33:34.7	157.6	13.4
NRDL	e	PKPab	Z	02:33:39.1	158.9	19.6
CLL	e	PKPab	Z	02:33:41.1	159.2	27.4
CLZ	e	PKPab	Z	02:33:42.5	159.4	20.8
WERD	e	PKPab	Z	02:33:45.2	160.2	26.9
MOX	e	PKPab	Z	02:33:45.6	160.2	25.0
GUNZ	e	PKPab	Z	02:33:45.9	160.3	27.0
GEC2	e	PKPab	Z	02:33:49.3	161.2	32.4
WET	e	PKPab	Z	02:33:50.0	161.2	30.0
GRA1	e	PKPab	Z	02:33:50.6	161.2	25.2
FUR	e	PKPab	Z	02:33:56.4	162.6	27.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	02:30:40.2	40.527N	73.374E	33.0N	4.8			SZGRF

Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:38:40.8	43.5	77.5	1.0	25	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	06:09:12.0	49.023N	149.108E	33.0N	5.0			SZGRF

Northwest of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 06:20:31.3	71.7	29.1	0.6	29	5.6		
CLL	e P	Z 06:20:37.9	72.9	28.4	0.6	22	5.5		
WERD	e P	Z 06:20:43.3	73.9	27.9	0.8	4	4.6		
MOX	e P	Z 06:20:43.6	73.9	27.5	0.8	8	4.8		
GUNZ	e P	Z 06:20:44.3	73.9	27.9	0.7	9	4.9		
UBBA	e P	Z 06:20:45.8	74.2	26.5	1.9	13	4.7		
WET	e P	Z 06:20:49.5	74.9	28.0	0.8	9	4.9		
GEC2	e P	Z 06:20:49.3	74.9	28.5	0.6	9	5.0		
GRA1	e P	Z 06:20:50.1	74.9	27.1	0.8	28	5.4		
BFO	e P	Z 06:21:01.0	76.9	25.2	0.9	8	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	12:27: 7.2	21.322S	178.235W	629.2				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z 12:45:38.5	147.5	21.2					
	e PKPbc	Z 12:45:41.3							
	e PKPab	Z 12:45:45.1							

NRDL	e	PKPdf	Z	12:45:39.5	148.2	14.8
	e	PKPbc	Z	12:45:43.0		
	e	PKPab	Z	12:45:47.7		
IBBN	e	PKPdf	Z	12:45:40.7	148.7	10.8
	e	PKPbc	Z	12:45:44.6		
CLZ	e	PKPdf	Z	12:45:40.5	148.8	15.6
	e	PKPbc	Z	12:45:44.8		
	e	PKPab	Z	12:45:50.6		
CLL	e	PKPdf	Z	12:45:39.9	148.8	20.5
	e	PKPbc	Z	12:45:44.6		
	e	PKPab	Z	12:45:50.3		
	e	pPKPbc	Z	12:48:07.6		
BUG	e	PKPdf	Z	12:45:42.0	149.6	10.2
	e	PKPbc	Z	12:45:46.5		
	e	PKPab	Z	12:45:53.4		
MOX	e	PKPdf	Z	12:45:41.6	149.7	18.4
	e	PKPbc	Z	12:45:46.6		
	e	PKPab	Z	12:45:54.0		
WERD	e	PKPdf	Z	12:45:41.3	149.7	19.8
	e	PKPbc	Z	12:45:46.9		
	e	PKPab	Z	12:45:54.4		
GUNZ	e	PKPdf	Z	12:45:42.1	149.8	19.8
	e	PKPbc	Z	12:45:47.4		
	e	PKPab	Z	12:45:55.0		
UBBA	e	PKPbc	Z	12:45:47.0	149.8	15.4
	e	PKPab	Z	12:45:55.2		
GRA1	e	PKPdf	Z	12:45:43.7	150.7	18.2
	e	PKPbc	Z	12:45:49.4		
	e	PKPab	Z	12:45:58.9		
WET	e	PKPdf	Z	12:45:43.3	150.8	21.6
	e	PKPbc	Z	12:45:49.1		
	e	PKPab	Z	12:45:59.3		
GEC2	e	PKPdf	Z	12:45:43.5	150.9	23.3
	e	PKPbc	Z	12:45:49.6		
	e	PKPab	Z	12:45:59.4		
WLF	e	PKPdf	Z	12:45:45.2	151.4	8.6
	e	PKPbc	Z	12:45:51.6		
	e	PKPab	Z	12:46:02.2		
STU	e	PKPdf	Z	12:45:45.5	151.9	14.8
	e	PKPbc	Z	12:45:52.3		
	e	PKPab	Z	12:46:03.6		
FUR	e	PKPdf	Z	12:45:45.5	152.1	19.2
	e	PKPbc	Z	12:45:52.5		
	e	PKPab	Z	12:46:04.6		
BFO	e	PKPbc	Z	12:45:53.0	152.5	13.3
	e	PKPab	Z	12:46:05.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	20:46:31.5	33.291N	136.831E	33.0N	5.4			SZGRF

Near south coast of western Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:58:59.1	84.0	43.1	1.1	29	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	21:18:55.8	39.251N	72.611E	33.0N	5.0			SZGRF

Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 21:26:43.5	41.8	84.2	1.2	31	4.9		
GEC2	e P	Z 21:26:46.0	42.3	80.1	1.2	23	4.8		
CLL	e P	Z 21:26:46.1	42.4	82.3	1.0	18	4.7		
WET	e P	Z 21:26:49.5	42.8	79.9	1.2	21	4.7		
GUNZ	e P	Z 21:26:51.0	42.9	80.9	1.6	44	4.9		
WERD	e P	Z 21:26:50.6	42.9	81.0	1.0	17	4.7		
MOX	e P	Z 21:26:54.0	43.3	80.7	1.7	36	4.8		
GRA1	e P	Z 21:26:58.3	43.7	79.5	1.5	69	5.2		
CLZ	e P	Z 21:27:00.2	43.9	81.1	1.6	37	4.9		
NRDL	e P	Z 21:27:00.5	44.0	81.6	1.2	32	4.9		
FUR	e P	Z 21:26:59.2	44.0	77.9	1.1	27	4.9		
UBBA	e P	Z 21:27:04.5	44.3	79.8	1.7	38	4.9		
STU	e P	Z 21:27:09.6	45.2	77.3	1.3	45	5.2		
IBBN	e P	Z 21:27:12.1	45.4	79.8	1.3	56	5.3		
BUG	e P	Z 21:27:16.3	45.9	78.6	1.4	53	5.4		
BFO	e P	Z 21:27:13.9	45.9	76.3	1.0	17	5.0		
WLF	e P	Z 21:27:24.6	47.0	76.2	1.5	56	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/18	21:38:21.5	44.500N	82.110E	33.0N	5.0			SZGRF

Northern Xinjiang, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 21:46:35.6	45.1	70.2	0.9	22	5.1		
GEC2	e P	Z 21:46:39.6	45.5	68.3	0.7	3	4.4		
WERD	e P	Z 21:46:41.8	45.8	69.0	1.0	11	4.8		
GUNZ	e P	Z 21:46:42.0	45.8	69.0	0.8	10	4.9		
WET	e P	Z 21:46:42.8	45.9	68.2	0.9	8	4.7		
MOX	e P	Z 21:46:44.3	46.1	68.8	1.0	13	4.9		
NRDL	e P	Z 21:46:46.2	46.4	69.6	1.2	37	5.4		
CLZ	e P	Z 21:46:46.6	46.4	69.2	1.2	18	5.1		
GRA1	e P	Z 21:46:49.3	46.7	67.8	0.8	22	5.3		
IBBN	e P	Z 21:46:57.2	47.8	68.1	0.6	47	5.8		

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BUG	e P	Z	21:47:01.9	48.4	67.1	0.9	17	5.0
BFO	e P	Z	21:47:06.3	49.0	65.2	1.4	17	4.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/19	17:23:51.1	32.690N	48.330E	33.0N	4.9			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 17:30:00.5	30.4	109.1	1.1	8	4.5		
WET	e P	Z 17:30:05.6	31.0	108.7	0.9	7	4.6		
CLL	e P	Z 17:30:11.9	31.7	112.2	0.9	7	4.6		
RUE	e P	Z 17:30:11.6	31.7	114.8	0.6	12	5.0		
FUR	e P	Z 17:30:12.5	31.7	105.4	0.8	70	5.7		
GRA1	e P	Z 17:30:16.8	32.2	107.7	0.6	14	5.1		
CLZ	e P	Z 17:30:27.3	33.4	110.0	0.9	14	4.9		
BFO	e P	Z 17:30:29.7	33.7	102.8	1.0	5	4.4		
NRDL	e P	Z 17:30:30.9	33.8	110.6	1.0	12	4.8		
WLF	e P	Z 17:30:43.4	35.4	102.6	1.0	20	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:36:08.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/19	20:05:16.5	32.354N	92.676E	33.0N	4.6			SZGRF

Xizang

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:15:25.1	60.7	73.3	1.4	15	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/19	23:49:37.5	32.208N	48.939E	33.0N	5.2			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 23:55:55.6	31.1	109.2	1.5	24	4.9		
WET	e P	Z 23:55:58.4	31.7	108.7	1.0	17	4.9		
CLL	e P	Z 23:56:04.1	32.4	112.1	1.0	11	4.7		
FUR	e P	Z 23:56:04.9	32.4	105.5	0.8	96	5.8		

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GRA1	e P	Z	23:56:09.2	32.9	107.7	0.8	34	5.3
	e		23:56:12.9					
CLZ	e P	Z	23:56:19.9	34.1	109.9	0.9	22	5.1
NRDL	e P	Z	23:56:23.9	34.5	110.5	1.2	39	5.2
IBBN	e P	Z	23:56:31.5	35.8	107.7	0.4	87	5.9
WLF	e P	Z	23:56:35.7	36.1	102.6	0.9	20	5.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	02:27:53.5	32.363N	48.824E	33.0N	4.5			SZGRF
Western Iran								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	02:34:23.6	32.7	107.7	1.0	7	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	03:50:43.0	31.670N	49.150E	33.0N	4.7			SZGRF
Western Iran								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	03:57:19.0	33.4	108.2	0.9	9	4.7		
	e		03:57:22.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	08:07:30.9	10.560N	83.130W	33.0N	6.6	6.7		SZGRF
Costa Rica								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	08:19:46.0	81.5	276.3	1.2	408	6.4		
IBBN	e P	Z	08:19:49.3	82.2	277.2	1.2	462	6.5		
BFO	e P	Z	08:19:53.6	83.1	278.1	1.3	369	6.4		
BSEG	e P	Z	08:19:56.2	83.5	279.0	2.7	1137	6.6		
NRDL	e P	Z	08:19:56.8	83.6	279.0	2.0	1142	6.7		
STU	e P	Z	08:19:56.5	83.6	278.7	1.3	530	6.6		
UBBA	e P	Z	08:19:57.7	83.8	279.1	2.1	862	6.6		
CLZ	e P	Z	08:19:58.3	83.9	279.3	1.2	388	6.5		
GRA1	e P	Z	08:20:02.8	84.8	280.1	1.1	418	6.6		
	e		08:20:11.6							
	e		08:20:14.1							
	e PP	Z	08:23:26.3							
	e S	R	08:30:28.0							
	e SS	R	08:36:18.6							
	e L	Z	08:54:01.7			20.0	35114		6.7	
MOX	e P	Z	08:20:03.0	84.8	280.4	1.3	343	6.4		

GRA1	e P	Z	16:57:20.2	39.6	105.9	1.3	9	4.2
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	17:44: 8.9	28.323N	54.566E	33.0N	3.9			SZGRF

Southern Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:51:33.4	39.1	106.7	0.9	3	3.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 18:27:18.0							
WET	e Pn	Z 18:27:14.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	20:42: 1.0	32.183N	49.212E	33.0N	4.5			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:48:34.3	33.1	107.5	0.9	6	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	22:01:45.4	13.848N	89.699W	33.0N	5.7	6.2		SZGRF

El Salvador

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e P	Z 22:14:09.9	83.5	284.3	1.3	56	5.6		
BSEG	e P	Z 22:14:16.0	84.6	286.2	1.0	63	5.8		
NRDL	e P	Z 22:14:17.3	84.9	286.1	1.3	86	5.8		
BFO	e P	Z 22:14:16.3	84.9	285.2	1.2	33	5.4		
CLZ	e P	Z 22:14:19.0	85.2	286.4	1.1	75	5.8		
UBBA	e P	Z 22:14:19.4	85.3	286.2	1.8	72	5.6		
STU	e P	Z 22:14:20.5	85.3	285.8	1.1	55	5.7		
MOX	e P	Z 22:14:23.9	86.3	287.4	1.2	58	5.6		
GRA1	e P	Z 22:14:24.6	86.4	287.2	1.1	70	5.7		
	e PP	Z 22:17:51.9							
	e S	R 22:24:50.4							
	e SS	R 22:31:14.2							
	e L	Z 22:51:36.1			19.6	10575		6.2	

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WERD	e P	Z	22:14:26.4	86.8	288.0	1.2	89	5.8
GUNZ	e P	Z	22:14:26.7	86.8	288.0	1.2	87	5.8
FUR	e P	Z	22:14:26.5	86.8	287.3	1.4	64	5.6
CLL	e P	Z	22:14:28.9	86.9	288.5	0.9	45	5.8
	e pP	Z	22:14:42.4					
	e sP	Z	22:14:48.0					
	e PP	Z	22:17:56.9					
	e PPP	Z	22:19:52.5					
	e SKSac	R	22:24:52.9					
	e S	T	22:25:13.7					
	e PS	R	22:26:20.3					
	e SS	R	22:31:13.6					
	e SSS	R	22:34:51.6					
	e LR	Z	22:43:09.9					
	e L	Z	22:50:45.8			22.0	6833	6.0
RUE	e P	Z	22:14:27.2	87.0	289.0	1.1	56	5.6
WET	e P	Z	22:14:30.5	87.6	288.5	1.2	99	6.0
GEC2	e P	Z	22:14:32.9	88.2	289.1	1.2	44	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/20	23:38:52.9	18.170S	175.220W	33.0N				SZGRF

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPbc	Z 23:58:25.7	145.0	15.0					
NRDL	e PKPbc	Z 23:58:26.7	145.4	8.9					
IBBN	e PKPbc	Z 23:58:28.2	145.8	5.0					
CLZ	e PKPbc	Z 23:58:29.2	146.0	9.5					
CLL	e PKPbc	Z 23:58:29.4	146.2	14.1					
MOX	e PKPbc	Z 23:58:32.1	147.1	12.0					
WERD	e PKPbc	Z 23:58:32.4	147.2	13.3					
GUNZ	e PKPbc	Z 23:58:32.9	147.2	13.3					
	e PKPab	Z 23:58:34.5							
GRA1	e PKPbc	Z 23:58:35.0	148.1	11.6					
GEC2	e PKPbc	Z 23:58:36.0	148.5	16.4					
WLF	e PKPbc	Z 23:58:36.3	148.5	2.5					
	e PKPab	Z 23:58:39.8							
STU	e PKPbc	Z 23:58:37.7	149.2	8.2					
	e PKPab	Z 23:58:42.3							
FUR	e PKPbc	Z 23:58:38.7	149.5	12.2					
BFO	e PKPbc	Z 23:58:38.7	149.7	6.7					
	e PKPab	Z 23:58:44.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	07:14:41.6	23.340S	179.030W	557.8				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 07:33:26.3	148.6	16.6					
	e PKPab	Z 07:33:31.9							
	e pPKPbc	Z 07:35:35.4							
NRDL	e PKPbc	Z 07:33:29.4	150.0	17.0					
	e PKPab	Z 07:33:36.8							
CLL	e PKPpdf	Z 07:33:24.2	150.5	22.9					
	i PKPbc	Z 07:33:30.7							
	i PKPab	Z 07:33:39.3							
	e pPKPbc	Z 07:35:39.7							
	e pPKPab	Z 07:35:46.3							
IBBN	e PKPab	Z 07:33:40.0	150.6	12.8					
CLZ	e PKPpdf	Z 07:33:24.2	150.6	17.8					
	e PKPbc	Z 07:33:30.9							
	e PKPab	Z 07:33:40.1							
	e pPKPbc	Z 07:35:40.4							
MOX	e PKPbc	Z 07:33:32.9	151.5	20.8					
WERD	e PKPbc	Z 07:33:32.7	151.5	22.2					
GUNZ	e PKPbc	Z 07:33:33.1	151.6	22.3					
	e PKPab	Z 07:33:44.2							
UBBA	e PKPbc	Z 07:33:32.9	151.6	17.7					
GRA1	e PKPpdf	Z 07:33:27.7	152.4	20.7					
	e PKPbc	Z 07:33:34.9							
	e PKPab	Z 07:33:48.0							
	e pPKPbc	Z 07:35:44.8							
WET	e PKPbc	Z 07:33:34.3	152.5	24.3					
GEC2	e PKPbc	Z 07:33:34.9	152.6	26.1					
WLF	e PKPbc	Z 07:33:37.6	153.4	10.7					
STU	e PKPpdf	Z 07:33:29.2	153.8	17.3					
	e PKPbc	Z 07:33:37.7							
FUR	e PKPbc	Z 07:33:37.6	153.9	21.9					
	e PKPab	Z 07:33:54.0							
BFO	e PKPbc	Z 07:33:39.0	154.3	15.8					

Date 2004/11/21
 Origin Time 08:44:41.2
 Costa Rica

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:57:19.9	86.3	279.9	0.8	10	5.0		

Date 2004/11/21
 Origin Time 11:07:16.4
 Lat 15.149S
 Long 175.699W
 Depth 264.2
 Source SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	11:26:07.8	140.9	9.2					
RUE	e PKPbc	Z	11:26:10.9	141.9	14.9					
NRDL	e PKPbc	Z	11:26:12.6	142.4	9.2					
IBBN	e PKPbc	Z	11:26:14.2	142.7	5.5					
CLZ	e PKPbc	Z	11:26:14.8	143.0	9.8					
CLL	e PKPbc	Z	11:26:14.8	143.2	14.1					
MOX	e PKPbc	Z	11:26:18.0	144.0	12.1					
UBBA	e PKPbc	Z	11:26:17.7	144.0	9.4					
WERD	e PKPbc	Z	11:26:18.5	144.1	13.3					
GUNZ	e PKPbc	Z	11:26:18.6	144.2	13.3					
GRA1	e PKPbc	Z	11:26:21.2	145.0	11.7					
	e pPKPbc	Z	11:27:26.5							
WET	e PKPbc	Z	11:26:22.3	145.3	14.6					
GEC2	e PKPbc	Z	11:26:22.5	145.4	16.1					
WLF	e PKPbc	Z	11:26:23.0	145.5	3.2					
STU	e PKPdf	Z	11:26:23.4	146.1	8.5					
	e PKPbc	Z	11:26:24.9							
	e pPKPbc	Z	11:27:31.2							
FUR	e PKPdf	Z	11:26:24.0	146.5	12.3					
	e PKPbc	Z	11:26:26.0							
BFO	e PKPdf	Z	11:26:23.9	146.7	7.1					
	e PKPbc	Z	11:26:26.4							

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/21 11:41:27.0 15.458N 60.798W 157.6 6.5 SZGRF
 Leeward Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	11:51:40.2	63.4	262.6					
BFO	e P	Z	11:51:48.1	64.7	265.0	2.1	538	6.4		
IBBN	e P	Z	11:51:48.1	64.8	262.6	1.7	1413	6.9		
STU	e P	Z	11:51:51.7	65.3	265.4	1.1	412	6.6		
NRDL	e P	Z	11:51:57.7	66.2	264.5					
CLZ	e P	Z	11:51:58.2	66.3	265.0	1.4	418	6.5		
BSEG	e P	Z	11:51:59.0	66.5	264.0	1.4	514	6.6		
FUR	e P	Z	11:52:00.4	66.6	267.3	1.9	861	6.7		
GRA1	e P	Z	11:52:00.9	66.7	266.6	1.9	1014	6.7		
	e pP	Z	11:52:38.5							
	e S	E	12:00:55.3							
	e P'P'	Z	12:20:31.4							
MOX	e P	Z	11:52:02.3	67.0	266.5	2.0	375	6.3		
WERD	e P	Z	11:52:05.3	67.4	267.1					
GUNZ	e P	Z	11:52:05.6	67.4	267.2					
WET	e P	Z	11:52:07.4	67.7	268.1	1.3	290	6.4		

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CLL	e P	Z	11:52:08.2	67.9	267.3	1.4	390	6.5		
	e S	E	12:01:06.1							
	e PPS	E	12:01:46.9							
	e SS	E	12:05:29.2							
	e SSS	E	12:08:54.9							
	e LR	Z	12:12:56.4							
	e L	Z	12:16:10.7			20.0	32991		6.6	
	e PKPPKPbc	Z	12:20:27.9							
GEC2	e P	Z	11:52:10.9	68.3	268.9	1.5	409	6.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	13:37: 9.5	17.288N	61.611W	33.0N	5.3			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:47:52.3	65.9	268.6	1.3	26	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	13:50: 7.2	16.991N	61.797W	33.0N	5.4			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:00:52.1	66.2	268.5	1.9	54	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	18:53: 4.4	15.028N	61.200W	33.0N	5.6	4.8		SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 19:03:35.9	64.0	262.6					
BFO	e P	Z 19:03:43.5	65.3	265.0	1.8	58	5.5		
IBBN	e P	Z 19:03:44.0	65.3	262.7					
STU	e P	Z 19:03:47.7	65.9	265.4	1.1	54	5.7		
NRDL	e P	Z 19:03:53.4	66.8	264.5					
CLZ	e P	Z 19:03:54.3	66.9	265.0	1.3	39	5.5		
BSEG	e P	Z 19:03:54.5	67.1	264.1	1.2	47	5.6		
GRA1	e P	Z 19:03:56.1	67.3	266.6	1.6	118	5.9		
	e S	Z 19:12:49.6							
	e L	Z 19:29:56.8			19.0	572		4.8	
WERD	e P	Z 19:04:01.4	68.0	267.1					
GUNZ	e P	Z 19:04:01.1	68.0	267.2					
WET	e P	Z 19:04:03.5	68.3	268.1	1.7	69	5.6		
CLL	i P	- Z 19:04:04.1	68.5	267.3	1.8	103	5.8		

	e PcP	Z	19:04:28.8								
	e PP	R	19:06:36.8								
	e S	R	19:13:07.2								
	e PS	Z	19:13:29.4								
	e SS	Z	19:17:44.1								
	e LR	Z	19:24:49.0								
	e L	Z	19:28:01.7			22.0	1220		5.1		
GEC2	e P	Z	19:04:06.7	68.9	268.8	1.5	57	5.6			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	20:45:22.0	39.230N	72.570E	33.0N	4.8			SZGRF

Kyrgyzstan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	20:53:13.9	42.3	80.2	1.2	19	4.7		
CLL	i P	+ Z	20:53:14.1	42.4	82.4	1.4	22	4.7		
	e LR	Z	21:05:40.5							
	e L	Z	21:11:35.5			20.8	304		4.2	
WET	e P	Z	20:53:17.7	42.8	80.0	1.2	20	4.7		
WERD	e P	Z	20:53:18.9	42.9	81.0					
MOX	e P	Z	20:53:22.1	43.3	80.8	1.2	13	4.5		
GRA1	e P	Z	20:53:26.3	43.7	79.5	1.1	31	5.0		
CLZ	e P	Z	20:53:27.1	43.9	81.2	1.4	15	4.5		
FUR	e P	Z	20:53:27.9	44.0	78.0	1.1	35	5.0		
STU	e P	Z	20:53:37.3	45.2	77.3					
IBBN	e P	Z	20:53:39.0	45.4	79.8					
BFO	e P	Z	20:53:42.2	45.9	76.4	1.0	16	5.0		
WLF	e P	Z	20:53:51.3	46.9	76.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	21:37:21.9	32.730N	47.810E	33.0N	5.1			SZGRF

Iran-Iraq border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ARSA	e P	Z	21:43:14.1	28.4	109.1					
MOA	e P	Z	21:43:23.0	29.4	108.7					
GEC2	e P	Z	21:43:28.4	30.1	109.7	1.2	12	4.6		
WET	e P	Z	21:43:33.3	30.7	109.2	1.2	17	4.9		
WTTA	e P	Z	21:43:36.1	30.9	104.9					
CLL	e P	Z	21:43:39.5	31.4	112.7					
FUR	e P	Z	21:43:40.4	31.4	105.9	1.0	76	5.6		
RUE	e P	Z	21:43:40.1	31.4	115.4					
GRA1	e P	Z	21:43:44.9	31.9	108.2	1.3	70	5.4		
DAVA	e P	Z	21:43:46.2	32.1	103.1					
CLZ	e P	Z	21:43:55.4	33.1	110.5	1.6	39	5.1		

NRDL	e P	Z	21:43:59.1	33.5	111.1
BSEG	e P	Z	21:44:02.6	33.9	113.4
WLF	e P	Z	21:44:11.7	35.0	103.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	21:45:50.4	34.426N	46.753E	33.0N	5.0			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:51:57.1	30.1	107.0	2.0	49	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/21	22:56:39.9	16.620N	61.375W	33.0N	5.1			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:07:24.8	66.2	267.9	1.3	16	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/22	02:01:31.0	16.864N	61.012W	33.0N	4.7			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:12:13.2	65.8	267.8	1.2	6	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/22	04:01:23.9	32.707N	48.407E	33.0N	5.1			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 04:07:34.0	30.4	109.0	1.6	15	4.7		
WET	e P	Z 04:07:38.2	31.1	108.6	1.1	18	4.9		
CLL	e P	Z 04:07:44.4	31.7	112.1	1.1	18	4.9		
RUE	e P	Z 04:07:45.8	31.8	114.7	0.9	23	5.1		
FUR	e P	Z 04:07:45.4	31.8	105.3	0.9	122	5.8		
GRA1	e P	Z 04:07:49.8	32.3	107.6	1.2	56	5.4		
CLZ	e P	Z 04:08:00.3	33.5	109.9	1.3	30	5.1		
BFO	e P	Z 04:08:02.8	33.7	102.7	1.2	18	4.9		
NRDL	e P	Z 04:08:04.3	33.8	110.5	1.2	31	5.1		
BSEG	e P	Z 04:08:08.3	34.2	112.7	1.1	36	5.2		
IBBN	e P	Z 04:08:16.8	35.1	107.7	1.4	68	5.4		

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WLF e P Z 04:08:16.7 35.4 102.5 1.0 23 5.1

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/22 04:44:22.3 56.720N 154.215W 33.0N 4.9
Kodiak Island, Alaska, United States, region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e P Z 04:55:48.6 72.9 351.7 1.4 13 4.9

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/22 11:04:53.8 16.400S 174.670W 33.0N
Tonga Islands

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
BUG e PKPbc Z 11:24:26.5 144.9 3.2
MOX e PKPbc Z 11:24:27.7 145.4 10.7
WERD e PKPbc Z 11:24:28.3 145.5 11.9
GUNZ e PKPbc Z 11:24:28.7 145.6 11.9
GRA1 e PKPbc Z 11:24:31.6 146.4 10.2
WET e PKPbc Z 11:24:32.1 146.7 13.3
WLF e PKPbc Z 11:24:32.2 146.7 1.4
GEC2 e PKPbc Z 11:24:32.7 146.8 14.8
BFO e PKPbc Z 11:24:35.5 148.0 5.4

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/22 13:36:19.0 56.314N 153.725W 33.0N 4.8
Kodiak Island, Alaska, United States, region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e P Z 13:47:47.4 73.3 351.3 1.4 13 4.8

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/22 14:57:39.5 42.410N 144.560E 33.0N 5.3 5.2
Hokkaido, Japan, region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
BSEG e P Z 15:09:26.2 76.0 33.0 1.0 34 5.4
RUE e P Z 15:09:26.3 76.0 35.2 1.1 52 5.6
CLL e P Z 15:09:32.5 77.3 34.5 0.8 36 5.6
NRDL e P Z 15:09:33.3 77.3 32.7 1.0 12 5.0
CLZ e P Z 15:09:35.9 77.7 32.8 1.5 80 5.6

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IBBN	e P	Z	15:09:38.3	78.2	31.1	1.3	60	5.5		
WERD	e P	Z	15:09:38.3	78.2	33.9	1.1	15	4.9		
GUNZ	e P	Z	15:09:38.8	78.3	33.9	0.9	13	5.0		
MOX	e P	Z	15:09:38.7	78.3	33.5	1.2	19	5.0		
GEC2	e P	Z	15:09:42.5	79.1	34.7	1.1	12	4.9		
BUG	e P	Z	15:09:42.7	79.1	30.7	0.8	24	5.3		
WET	e P	Z	15:09:43.5	79.1	34.2	1.3	36	5.3		
GRA1	e P	Z	15:09:44.5	79.3	33.1	0.8	49	5.5		
	e L	Z	15:48:37.8			19.8	1211		5.2	
FUR	e P	Z	15:09:51.2	80.5	33.0	1.2	56	5.5		
STU	e P	Z	15:09:52.0	80.7	31.7	0.8	31	5.4		
BFO	e P	Z	15:09:55.4	81.4	31.1	1.6	51	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/22 15:07:14.4 32.526N 48.559E 33.0N 4.6
 Western Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	15:13:42.1	32.5	107.7	0.9	6	4.6		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/22 19:13:33.3 38.573N 25.768E 9.0G 4.4 4.6
 Aegean Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	19:16:45.3	13.4	135.3					
WET	e P	Z	19:17:02.1	14.0	134.0					
FUR	e P	Z	19:17:03.2	14.2	127.1					
GUNZ	e P	Z	19:17:14.3	15.1	136.0					
GRA1	e P	Z	19:17:12.9	15.2	131.5	1.1	29			
	e L	Z	19:23:44.1			11.4	2273		4.6	
WERD	e P	Z	19:17:15.0	15.2	136.1	1.2	28			
CLL	e P	Z	19:17:18.5	15.6	139.9	1.4	32	4.3		
MOX	e P	Z	19:17:20.2	15.7	134.9	1.5	51			
STU	e P	Z	19:17:14.6	15.7	124.4	1.1	40			
BFO	e P	Z	19:17:18.4	15.9	121.3	1.1	32	4.4		
RUE	e P	Z	19:17:26.1	16.2	144.4	1.1	74			
CLZ	e P	Z	19:17:36.5	17.1	135.0	1.8	68	4.5		
WLF	e P	Z	19:17:44.0	17.8	121.0	2.1	158			
RGN	e P	Z	19:17:49.3	18.1	147.1	1.2	172			
BUG	e P	Z	19:17:49.7	18.2	127.6	1.5	67	4.6		
IBBN	e P	Z	19:17:52.8	18.6	130.6	1.4	61			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/22	20:26:23.0	47.750S	165.800E	33.0N		7.3		SZGRF

Off west coast of South Island, New Zealand

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKPdf	Z	20:46:21.7	161.5	97.2					
	e PKPab	Z	20:47:05.2							
RUE	e PKPdf	Z	20:46:22.0	161.6	86.4					
	e PKPab	Z	20:47:04.7							
WET	e PKPdf	Z	20:46:22.4	162.1	95.9					
	e PKPab	Z	20:47:07.1							
CLL	e PKPdf	Z	20:46:22.4	162.1	89.3					
	e PKPab	Z	20:47:07.2							
GUNZ	e PKPdf	Z	20:46:23.1	162.5	91.7					
	e PKPab	Z	20:47:06.9							
WERD	e PKPdf	Z	20:46:22.8	162.5	91.4					
	e PKPab	Z	20:47:08.7							
MOX	e PKPdf	Z	20:46:23.2	163.0	90.3					
	e PKPab	Z	20:47:10.8							
FUR	e PKPdf	Z	20:46:23.8	163.0	98.2					
GRA1	e PKPdf	Z	20:46:24.0	163.2	93.1					
	e PKPab	Z	20:47:13.0							
	e		20:47:28.5							
	e PP	Z	20:50:57.4							
	e SKKSac	R	20:57:41.0							
	e SS	R	21:11:37.4							
	e L	Z	22:03:54.1			21.9	45486		7.3	
BSEG	e PKPdf	Z	20:46:24.0	163.4	78.1					
	e PKPab	Z	20:47:13.5							
CLZ	e PKPdf	Z	20:46:24.3	163.7	85.2					
	e PKPab	Z	20:47:14.2							
NRDL	e PKPdf	Z	20:46:24.3	163.8	82.7					
	e PKPab	Z	20:47:14.6							
UBBA	e PKPdf	Z	20:46:24.2	164.0	88.4					
	e PKPab	Z	20:47:15.7							
STU	e PKPdf	Z	20:46:24.8	164.5	95.1					
	e PKPab	Z	20:47:18.0							
HLG	e PKPab	Z	20:47:20.0	164.8	74.1					
BFO	e PKPdf	Z	20:46:25.0	165.0	96.2					
	e PKPab	Z	20:47:19.9							
IBBN	e PKPdf	Z	20:46:25.8	165.2	80.8					
	e PKPab	Z	20:47:21.4							
BUG	e PKPdf	Z	20:46:25.9	165.7	83.5					
	e PKPab	Z	20:47:23.0							
WLF	e PKPdf	Z	20:46:27.0	166.5	89.7					
	e PKPab	Z	20:47:27.2							

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/22	21:24:16.9	17.872N	60.170W	33.0N	5.1			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:34:50.8	64.5	267.9	1.3	17	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/23	02:26:18.8	40.310N	20.102E	10.0G		4.5		SZGRF

Greece-Albania border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
OBKA	e P	Z 02:28:06.4	7.4	145.0						
	e S	E 02:29:36.3								
	e L	E 02:30:45.2	19.7	13058						4.6
	e L	Z 02:31:23.1	21.4	8122						4.3
ARSA	e P	Z 02:28:09.2	7.7	152.9						
	e L	Z 02:31:30.5								20.6
KBA	e P	Z 02:28:20.8	8.3	141.8						
	e L	Z 02:32:14.7								23.0
MOA	e P	Z 02:28:23.0	8.6	148.8						
	e S	N 02:30:04.9								
	e L	Z 02:31:59.9								18.8
WTTA	e P	Z 02:28:32.4	9.2	135.7						
	e S	E 02:30:19.1								
	e L	Z 02:32:16.8								26.2
GEC2	e P	Z 02:28:36.3	9.7	149.6						
FUR	e P	Z 02:28:43.8	10.1	138.0						
	e L	Z 02:32:37.8								29.2
DAVA	e P	Z 02:28:44.4	10.1	129.8						
	e L	Z 02:32:43.1								24.8
WET	e P	Z 02:28:44.8	10.2	147.2						
GRA1	e S	E 02:31:09.7	11.3	143.0						
	e L	E 02:33:39.3								21.9
STU	e P	Z 02:29:01.3	11.5	133.5						
	e L	Z 02:33:24.2								25.5
BFO	e P	Z 02:29:03.0	11.6	129.3						
MOX	e P	Z 02:29:08.4	11.9	146.9						
CLL	e L	Z 02:34:34.7	12.0	153.2						15.6
WLF	e P	Z 02:29:30.8	13.6	128.3						
	e L	Z 02:34:26.3								24.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/23	03:15:37.0	52.009N	179.901E	33.0N	4.9			SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:27:31.6	77.8	7.1	1.4	14	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/23	04:12:45.0	40.783N	19.781E	10.0G				SZGRF

Albania

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 04:14:23.8	6.9	144.7					
	e Sn	E 04:15:39.4							
ARSA	e Pn	Z 04:14:28.0	7.2	153.2					
MOA	e Pn	Z 04:14:41.6	8.1	148.9					
	e Sn	N 04:16:10.2							
WTTA	e Pn	Z 04:14:50.1	8.7	135.0					
	e Sn	N 04:16:24.2							
GEC2	e Sn	N 04:16:34.5	9.1	149.7					
DAVA	e Pn	Z 04:15:03.4	9.6	128.9					
	e Sn	N 04:16:46.1							
WET	e Pn	Z 04:15:03.5	9.7	147.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/23	05:14: 0.0	17.516S	176.677W	20.0N				neic-m

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKP	Z 05:33:40.5	145.2	11.8					
CLL	e PKP	Z 05:33:40.5	145.3	16.4					
BUG	e PKP	Z 05:33:42.1	145.9	6.7					
MOX	e PKP	Z 05:33:43.5	146.2	14.3					
WERD	e PKP	Z 05:33:43.7	146.3	15.6					
GUNZ	e PKP	Z 05:33:44.4	146.4	15.6					
GRA1	e PKP	Z 05:33:46.7	147.2	14.0					
WET	e PKP	Z 05:33:48.1	147.4	17.1					
GEC2	e PKP	Z 05:33:48.5	147.6	18.7					
WLF	e PKP	Z 05:33:48.8	147.8	5.1					
BFO	e PKP	Z 05:33:51.1	148.9	9.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/23	21:04:59.6	24.112S	179.845W	550.0G				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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BSEG	e PKPdf	Z	21:23:38.6	149.2	18.3		
	e PKPbc	Z	21:23:43.9				
	e PKPab	Z	21:23:50.8				
	e pPKPbc	Z	21:25:55.3				
HLG	e PKPbc	Z	21:23:44.7	149.4	13.9		
	e PKPab	Z	21:23:51.9				
	e pPKPbc	Z	21:25:56.4				
NRDL	e PKPdf	Z	21:23:40.7	150.6	18.8		
	e PKPbc	Z	21:23:47.3				
	e PKPab	Z	21:23:56.5				
	e pPKPbc	Z	21:25:59.7				
CLL	e PKPdf	Z	21:23:41.2	151.1	24.8	1.2	36
	i PKPbc	+ Z	21:23:48.1			0.8	446
	e PKPab	Z	21:23:58.2			0.7	154
	e pPKPdf	Z	21:25:53.5				
	e pPKPbc	Z	21:26:00.6				
	e pPP	Z	21:29:28.7				
	e SKSP	Z	21:36:57.6				
	e pSKSP	Z	21:39:40.4				
	e SSP	Z	21:47:05.7				
CLZ	e PKPdf	Z	21:23:41.6	151.2	19.6		
	e PKPbc	Z	21:23:48.8				
	e PKPab	Z	21:23:59.0				
	e pPKPbc	Z	21:26:01.1				
IBBN	e PKPdf	Z	21:23:41.7	151.2	14.5		
	e PKPbc	Z	21:23:48.5				
	e PKPab	Z	21:23:59.2				
	e pPKPbc	Z	21:26:01.1				
MOX	e PKPdf	Z	21:23:42.5	152.0	22.7		
	e PKPbc	Z	21:23:50.2				
	e PKPab	Z	21:24:02.4				
	e pPKPbc	Z	21:26:02.6				
WERD	e PKPdf	Z	21:23:42.7	152.0	24.2		
	e PKPbc	Z	21:23:50.2				
	e PKPab	Z	21:24:02.6				
	e pPKPbc	Z	21:26:02.7				
GUNZ	e PKPdf	Z	21:23:42.7	152.1	24.3		
	e PKPbc	Z	21:23:50.4				
	e PKPab	Z	21:24:02.9				
	e pPKPbc	Z	21:26:03.2				
BUG	e PKPdf	Z	21:23:42.9	152.1	14.0		
	e PKPbc	Z	21:23:50.2				
	e PKPab	Z	21:24:02.3				
	e pPKPbc	Z	21:26:02.8				
UBBA	e PKPdf	Z	21:23:42.6	152.2	19.6		
	e PKPbc	Z	21:23:50.3				
	e PKPab	Z	21:24:02.8				
	e pPKPbc	Z	21:26:03.0				
GRA1	e PKPdf	Z	21:23:44.0	153.0	22.7		

	e	PKPbc	Z	21:23:52.6					
	e	PKPab	Z	21:24:07.1					
	e	SS	E	21:46:34.3					
WET	e	PKPdf	Z	21:23:44.0	153.1	26.3			
	e	PKPbc	Z	21:23:52.4					
	e	PKPab	Z	21:24:07.0					
	e	pPKPbc	Z	21:26:05.1					
GEC2	e	PKPdf	Z	21:23:43.8	153.1	28.2			
	e	PKPbc	Z	21:23:52.1					
	e	PKPab	Z	21:24:06.7					
	e	pPKPbc	Z	21:26:04.4					
WLF	e	PKPdf	Z	21:23:46.4	154.0	12.6			
	e	PKPbc	Z	21:23:55.2					
	e	PKPab	Z	21:24:11.3					
STU	e	PKPdf	Z	21:23:46.2	154.3	19.3			
	e	PKPbc	Z	21:23:55.3					
	e	PKPab	Z	21:24:12.2					
	e	pPKPbc	Z	21:26:08.1					
FUR	e	PKPdf	Z	21:23:45.9	154.4	24.0			
	e	PKPbc	Z	21:23:55.1					
	e	PKPab	Z	21:24:12.9					
	e	pPKPbc	Z	21:26:07.1					
BFO	e	PKPdf	Z	21:23:46.2	154.9	17.8			
	e	PKPbc	Z	21:23:56.3					
	e	PKPab	Z	21:24:14.7					
	e	pPKPbc	Z	21:26:09.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/23 23:14:48.2 51.361N 179.805W 33.0N 4.5
 Andeanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:26:46.6	78.5	7.0	0.9	5	4.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/24 07:33:23.1 28.295N 126.926E 33.0N 5.3
 Northwest of Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:45:47.6	83.4	53.0	0.6	12	5.3		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/25 06:21:16.4 42.988N 15.415E 10.0G 5.4
 SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 06:22:11.7	3.6	169.8					5.7
ARSA	e Pn	Z 06:22:21.0	4.3	181.1					5.2
KBA	e Pn	Z 06:22:22.4	4.3	159.6					5.3
MOA	e Pn	Z 06:22:30.8	4.9	170.2					
	e Sn	E 06:23:26.7							
DAVA	e Pn	Z 06:22:43.2	5.8	135.8					
	e Sn	N 06:23:47.3							
WET	e Pn	Z 06:22:49.9	6.4	163.1					
	e Sn	N 06:23:59.2							
OKC	e Pn	Z 06:23:00.5	7.1	196.4					
BFO	e Pn	Z 06:23:01.5	7.3	134.6					
GRFO	e Pn	Z 06:23:01.6	7.3	155.1					
NKC	e Pn	Z 06:23:05.0	7.5	163.2					
GUNZ	e Pn	Z 06:23:07.1	7.7	162.9					
WERD	e Pn	Z 06:23:08.2	7.8	162.9					
MOX	e Pn	Z 06:23:12.0	8.1	159.8					
CLL	e Pn	Z 06:23:18.2	8.5	167.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/25	06:43:17.0	43.107N	15.878E	10.0G			3.7	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 06:44:12.2	3.5	164.0					4.0
	e Sg	E 06:45:08.6							
KBA	e Pn	Z 06:44:22.7	4.4	154.9					3.5
	e Sn	N 06:45:13.5							
MOA	e Pn	Z 06:44:30.9	4.9	166.0					3.5
	e Sn	E 06:45:25.8							
GEC2	e Pn	Z 06:44:44.4	5.9	164.4					
	e Sn	N 06:45:49.3							
DAVA	e Pn	Z 06:44:44.5	5.9	132.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/25	07:26:17.7	43.146N	15.216E	10.0G			4.2	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 07:27:11.1	3.4	171.8					4.5
	e Sg	E 07:28:05.7							
ARSA	e Pn	Z 07:27:20.1	4.1	183.1					3.9
KBA	e Pn	Z 07:27:21.2	4.1	160.8					4.2

MOA	e Pn	Z	07:27:29.6	4.8	171.6							4.0
	e Sn	E	07:28:23.6									
DAVA	e Pn	Z	07:27:41.8	5.6	135.8							
GEC2	e Pn	Z	07:27:42.6	5.8	169.0							
	e Sn	N	07:28:48.8									
GRA1	e Pn	Z	07:28:01.7	7.1	155.7							
	e Sn	E	07:29:17.4									
GUNZ	e Pn	Z	07:28:05.8	7.5	163.6							
TANN	e Pn	Z	07:28:06.1	7.5	164.4							
WERD	e Pn	Z	07:28:06.9	7.6	163.7							
BRG	e Pn	Z	07:28:09.2	7.8	173.1							
MOX	e Pn	Z	07:28:10.7	7.9	160.5							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/25

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z	08:16:01.3							
	e Sn	N	08:17:06.1							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/25

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z	08:25:02.5							
	e Sn	N	08:26:09.2							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/25 10:11:44.2 42.951N 15.154E 10.0G 3.7 SZGRF
Adriatic Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	10:12:40.2	3.6	172.9					4.2
	e Sn	N	10:13:23.0							
ARSA	e Pn	Z	10:12:48.9	4.3	183.6					3.5
	e Sn	N	10:13:38.4							
KBA	e Pn	Z	10:12:50.2	4.3	162.1					3.7
MOA	e Pn	Z	10:12:58.6	4.9	172.4					3.6
	e Sn	N	10:13:53.8							
GEC2	e Pn	Z	10:13:12.2	6.0	169.7					
	e Sn	N	10:14:16.8							
MOX	e Pn	Z	10:13:40.4	8.1	161.2					

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 18:42:51.8							
	e Sn	N 18:43:56.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/25								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 20:27:06.6							
	e Sn	N 20:28:11.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/25	23:11:34.8	33.173N	141.491E	33.0N	5.1			SZGRF
Off east coast of Honshu, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 23:23:58.6	83.2	39.4	1.1	24	5.4		
BRG	e P	Z 23:24:02.8	84.1	41.8	1.4	19	5.1		
CLL	i P	+ Z 23:24:03.2	84.2	41.2	1.0	31	5.4		
	e pP	Z 23:24:16.5							
NRDL	e P	Z 23:24:04.0	84.4	39.1	1.1	9	4.9		
CLZ	e P	Z 23:24:06.5	84.8	39.3	1.1	28	5.4		
WERD	e P	Z 23:24:08.0	85.1	40.6	1.2	11	5.0		
GUNZ	e P	Z 23:24:08.4	85.2	40.6	1.4	15	5.0		
MOX	e P	Z 23:24:08.6	85.3	40.1	1.3	14	4.9		
IBBN	e P	Z 23:24:09.4	85.5	37.4	1.2	39	5.4		
GRA1	e P	Z 23:24:12.9	86.1	39.8	1.6	24	5.1		
BUG	e P	Z 23:24:13.6	86.3	36.9	1.1	16	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/25	23:45: 1.2	20.600S	177.340W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 00:04:37.5	146.2	12.9					
NRDL	e PKPbc	Z 00:04:42.0	147.6	13.1					
CLZ	e PKPbc	Z 00:04:43.6	148.2	13.8					
	e PKPab	Z 00:04:46.8							
CLL	i PKPbc	+ Z 00:04:43.7	148.2	18.6	0.6	15			
	e PKPab	Z 00:04:46.4			0.9	32			
	e pPKPbc	Z 00:05:47.2							
	e pPKPab	Z 00:05:50.5							

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BRG	e	PKPbc	Z	00:04:44.6	148.5	20.5
	e	PKPab	Z	00:04:47.8		
MOX	e	PKPbc	Z	00:04:46.1	149.1	16.5
WERD	e	PKPbc	Z	00:04:46.5	149.2	17.8
	e	PKPab	Z	00:04:51.0		
GUNZ	e	PKPbc	Z	00:04:46.7	149.3	17.9
	e	PKPab	Z	00:04:51.3		
GRA1	e	PKPbc	Z	00:04:48.6	150.1	16.2
	e	PKPab	Z	00:04:54.9		
GEC2	e	PKPbc	Z	00:04:49.5	150.4	21.3
WLF	e	PKPbc	Z	00:04:50.6	150.8	6.7
FUR	e	PKPbc	Z	00:04:52.0	151.6	17.1
	e	PKPab	Z	00:05:00.8		
BFO	e	PKPbc	Z	00:04:52.5	151.9	11.3
	e	PKPab	Z	00:05:01.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26	01:13:50.0	43.100N	15.372E	10.0G			3.2	SZGRF

Adriatic Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	01:14:43.1	3.5	170.0					3.6
ARSA	e Pn	Z	01:14:52.7	4.2	181.5					2.8
	e Sn	N	01:15:40.6							
KBA	e Pn	Z	01:14:54.0	4.2	159.5					
	e Sn	E	01:15:42.5							
MOA	e Pn	Z	01:15:02.5	4.8	170.3					
	e Sn	E	01:15:58.1							
GEC2	e Pn	Z	01:15:17.6	5.9	168.0					
	e Sn	N	01:16:19.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26	02:24:58.4	4.940S	135.390E	35.0N		7.4		neic-m

Irian Jaya, Indonesia, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PP	Z	02:44:15.2	112.1	65.7					
	e SS	T	02:59:58.9							
RUE	e PP	Z	02:44:18.9	112.7	66.9					
	e SP	Z	02:53:46.9							
BRG	e PP	Z	02:44:24.0	113.3	67.7					
CLL	e Pdiff	Z	02:39:45.1	113.6	66.7	1.5	39			
	e PKiKP	Z	02:43:40.9			0.9	52			
	e PP	Z	02:44:28.6							
	e PPP	Z	02:46:53.8							

	e SKSac	R	02:50:22.1								
	e SKKSac	Z	02:51:28.2								
	e Sdiff	T	02:52:05.3								
	e PS	R	02:53:58.1								
	e PPS	E	02:55:15.7								
	e SS	T	03:00:11.7								
	e SSS	T	03:04:22.5								
	e LQ	T	03:17:28.0								
	e LR	Z	03:20:27.2								
	e L	Z	03:36:18.1			22.0	70640			7.2	
	e R2	Z	04:35:08.5								
BSEG	e PP	Z	02:44:28.4	114.0	63.2						
GEC2	e PP	Z	02:44:32.2	114.2	68.3						
MOX	e PP	Z	02:44:33.4	114.7	65.7						
	e SS	T	03:00:24.4								
NRDL	e PP	Z	02:44:34.5	114.8	63.6						
CLZ	e PP	Z	02:44:34.9	114.9	64.1						
HLG	e PP	Z	02:44:36.4	115.1	60.8						
GRA1	e Pdiff	Z	02:39:53.4	115.3	65.8						
	e		02:43:11.7								
	e PP	Z	02:44:37.6								
	e SP	Z	02:54:14.1								
	e SS	T	03:00:35.5								
	e L	Z	03:37:55.6			19.5	99812			7.4	
UBBA	e PP	Z	02:44:39.1	115.5	64.2						
FUR	e Pdiff	Z	02:39:55.2	115.9	66.5						
	e PP	Z	02:44:42.0								
	e SS	T	03:00:49.1								
IBBN	e PP	Z	02:44:42.4	116.1	61.5						
BUG	e PP	Z	02:44:46.5	116.8	61.4						
	e SP	Z	02:54:25.5								
STU	e PP	Z	02:44:47.8	116.9	64.4						
	e SS	T	03:00:54.3								
BFO	e PP	Z	02:44:52.4	117.6	63.8						
	e SP	Z	02:54:32.3								
WLF	e PP	Z	02:44:57.5	118.3	61.2						
	e SP	Z	02:54:35.5								
	e SS	T	03:01:14.4								

Date 2004/11/26 Origin Time 05:05:27.3 Lat 16.547N Long 61.703W Depth 33.0N mb 5.3 Ms ML Source SZGRF
 Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:16:13.9	66.5	268.1	1.4	26	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 05:24:40.4							
BSEG	e PKP	Z 05:24:35.7							
CLL	e PKP	Z 05:24:39.9							
GUNZ	e PKP	Z 05:24:42.2							
NRDL	e PKP	Z 05:24:38.5							
RUE	e PKP	Z 05:24:37.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26	10:36:30.9	43.133N	15.461E	10.0G			3.4	SZGRF
Adriatic Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 10:37:24.5	3.4	168.8					3.7
ARSA	e Pn	Z 10:37:33.7	4.1	180.6					3.0
KBA	e Pn	Z 10:37:33.9	4.2	158.5					3.4
MOA	e Pn	Z 10:37:42.6	4.8	169.5					
	e Sn	E 10:38:37.4							
DAVA	e Pn	Z 10:37:56.3	5.7	134.6					
	e Sn	N 10:38:58.7							
GEC2	e Pn	Z 10:37:57.0	5.8	167.3					
	e Sn	N 10:39:01.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26	15:29: 3.2	3.500S	135.600E	33.0N				GSRC-M
Irian Jaya, Indonesia, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PP	Z 15:48:24.3	112.6	65.7					
	e LR	Z 16:24:01.0							
	e L	Z 16:40:11.9			20.0	458		5.1	
GRA1	e PP	Z 15:48:40.0	114.3	64.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/26	22:42:41.0	42.790N	143.490E	84.2	5.5	5.3		SZGRF
Hokkaido, Japan, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 22:54:17.2	75.3	33.6	0.9	58	5.7		

	e pP	Z	22:54:39.6								
RUE	e P	Z	22:54:17.1	75.3	35.7	0.9		67	5.8		
	e pP	Z	22:54:39.1								
CLL	i P	+ Z	22:54:23.6	76.6	35.0	0.9		76	5.8		
	e PcP	Z	22:54:33.3								
	e pP	Z	22:54:39.7								
	e sP	Z	22:54:45.8								
	e PP	Z	22:57:17.4								
	e S	E	23:04:06.4								
BRG	e P	Z	22:54:23.9	76.6	35.6	1.0		26	5.3		
CLZ	e P	Z	22:54:27.0	77.0	33.3	0.9		70	5.8		
	e pP	Z	22:54:49.1								
IBBN	e P	Z	22:54:29.2	77.5	31.6	0.8		53	5.7		
WERD	e P	Z	22:54:29.3	77.5	34.4	1.0		22	5.2		
GUNZ	e P	Z	22:54:29.7	77.6	34.5	0.9		27	5.4		
MOX	e P	Z	22:54:29.8	77.6	34.0	0.9		30	5.4		
UBBA	e P	Z	22:54:32.0	78.0	33.0	0.9		12	5.0		
GEC2	e P	Z	22:54:33.6	78.3	35.2	0.9		17	5.1		
BUG	e P	Z	22:54:34.0	78.4	31.2	0.9		47	5.5		
GRA1	e P	Z	22:54:35.4	78.5	33.6	0.9		84	5.8		
	e pP	Z	22:54:57.6								
	e L	Z	23:31:32.9				21.8	1472		5.3	
FUR	e P	Z	22:54:42.0	79.8	33.5	0.9		82	5.7		
STU	e P	Z	22:54:43.0	80.0	32.2	0.8		58	5.5		
WLF	e P	Z	22:54:44.6	80.3	30.3	1.1		22	5.1		
BFO	e P	Z	22:54:46.6	80.7	31.6	1.0		28	5.2		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/27 01:54: 7.3 44.962N 15.101E 10.0G 2.9 SZGRF
 Northwestern Balkan Peninsula

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	01:54:36.1	1.6	165.8					3.2
	e Sg	E	01:54:58.7							
ARSA	e Pn	Z	01:54:45.4	2.3	187.4					2.3
MOA	e Pn	Z	01:54:55.0	2.9	168.4					2.6
	e Sn	E	01:55:31.2							
GEC2	e Pn	Z	01:55:08.9	4.0	165.7					
	e Sn	N	01:55:54.8							
DAVA	e Sg	N	01:56:24.9	4.3	120.8					3.4
GUNZ	e Pn	Z	01:55:31.7	5.7	159.9					
TANN	e Sn	E	01:56:35.1	5.7	161.0					
BRG	e Sn	N	01:56:41.0	6.0	172.1					
MOX	e Pn	Z	01:55:37.4	6.1	156.3					
	e Sn	N	01:56:44.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 04:36:02.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	05:25:29.5	22.168N	100.849E	33.0N	5.0			SZGRF
Myanmar-China border region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:36:56.6	73.0	75.5	1.3	15	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	06:38:52.7	73.993N	10.625E	33.0G	4.7	3.8		SZGRF
Norwegian Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 06:43:27.8	20.1	0.2	1.3	97	4.9		
CLZ	e P	Z 06:43:47.8	22.2	0.2	1.4	32	4.6		
BUG	e P	Z 06:43:51.6	22.6	2.4	1.4	110	5.2		
CLL	e P	Z 06:43:52.6	22.7	358.3	1.7	37	4.6		
BRG	e P	Z 06:43:57.3	23.2	357.7	1.4	22	4.5		
UBBA	e P	Z 06:43:56.9	23.2	0.4					
MOX	e P	Z 06:43:58.9	23.4	359.3	1.3	61	5.0		
WERD	e P	Z 06:44:00.9	23.6	358.8					
GUNZ	e P	Z 06:44:01.9	23.6	358.8					
GRA1	e P	Z 06:44:07.6	24.3	359.6	1.4	35	4.7		
	e	06:44:15.0							
	e L	Z 06:56:32.8			19.7	282		3.8	
WLF	e P	Z 06:44:07.7	24.4	3.0					
GEC2	e P	Z 06:44:16.2	25.2	358.0	1.3	19	4.7		
STU	e P	Z 06:44:15.6	25.2	0.9					
BFO	e P	Z 06:44:19.3	25.7	1.5	1.5	24	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	09:48:54.0	4.888S	136.551E	33.0N		5.5		SZGRF
Irian Jaya, Indonesia, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 10:08:37.9	116.0	64.7					
	e L	Z 11:01:46.7			19.5	1069		5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	16:12:10.2	33.846N	47.326E	33.0N	5.3			SZGRF

Western Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:18:23.4	30.8	107.2	1.4	60	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	22:42:38.0	2.157N	97.032E	38.7	5.3			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 22:55:05.0	84.0	94.0	1.3	21	5.2		
GEC2	e P	Z 22:55:05.2	84.0	93.6	1.3	39	5.5		
RUE	e P	Z 22:55:05.7	84.2	94.0					
CLL	e P	Z 22:55:07.6	84.6	93.3	1.2	15	5.1		
GUNZ	e P	Z 22:55:09.9	85.0	92.7	1.2	19	5.2		
WERD	e P	Z 22:55:10.2	85.0	92.7					
MOX	e P	Z 22:55:12.0	85.4	92.2	1.3	16	5.1		
GRA1	e P	Z 22:55:13.7	85.6	91.8	1.2	37	5.4		
	e pP	Z 22:55:25.0							
CLZ	e P	Z 22:55:16.2	86.2	91.3	1.2	26	5.2		
BSEG	e P	Z 22:55:16.8	86.3	91.4	1.2	42	5.4		
NRDL	e P	Z 22:55:17.4	86.4	91.1					
UBBA	e P	Z 22:55:17.2	86.5	90.9					
STU	e P	Z 22:55:19.5	87.0	90.2					
BFO	e P	Z 22:55:21.6	87.5	89.5	1.1	12	5.1		
IBBN	e P	Z 22:55:24.1	87.9	89.3					
BUG	e P	Z 22:55:25.9	88.2	88.8	1.1	34	5.6		
WLF	e P	Z 22:55:29.6	88.9	87.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/27	23:44:23.0	15.722N	62.615W	33.0N	5.4			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:55:17.2	67.7	268.2	1.7	45	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/28	00:56:29.0	43.060N	15.259E	10.0G			3.6	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 00:57:22.8	3.5	171.4					3.8
	e Sn	Z 00:58:05.9							
ARSA	e Pn	Z 00:57:31.9	4.2	182.6					
KBA	e Pn	Z 00:57:33.3	4.2	160.7					
MOA	e Pn	Z 00:57:41.8	4.8	171.4					3.4
	e Sn	Z 00:58:38.1							
DAVA	e Pn	Z 00:57:54.7	5.7	136.2					
	e Sn	N 00:58:57.5							
GEC2	e Pn	Z 00:57:54.9	5.9	168.8					
	e Sn	N 00:59:00.3							
BFO	e Sn	N 00:59:29.4	7.1	134.9					
TANN	e Sn	N 00:59:40.7	7.6	164.4					
MOX	e Sn	N 00:59:48.8	8.0	160.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/28	02:35:15.1	26.238S	113.506W	10G	5.7	6.1		neic-m

Easter Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z 02:51:37.9	132.7	281.0					
	e PKPdf	Z 02:54:30.7			1.1	14			
	e PP	Z 02:56:59.7							
	e PKSbc	Z 02:57:58.0							
	e PS	E 03:07:17.5							
	e PPS	E 03:08:56.6							
	e SS	E 03:14:55.7							
	e PSPS	E 03:15:23.5							
	e SSS	N 03:19:55.7							
	e SSSS	E 03:23:27.7							
	e LQ	T 03:29:47.9							
	e LR	Z 03:38:22.5							
	e L	Z 03:45:58.4			21.3	5979		6.3	
	GRA1	e PKPdf	Z 02:54:28.4	131.8	278.0				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 04:40:16.6							
	e Sn	N 04:41:21.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/28	07:37:14.6	0.496N	134.162E	33.0N		6.1		SZGRF

Irian Jaya, Indonesia, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z	07:51:22.8	108.5	64.5					
	e PKiKP	Z	07:55:20.0							
	e PP	Z	07:56:08.3							
	e PPP	Z	07:58:25.5							
	e PPPP	Z	08:00:21.1							
	e SKSac	E	08:02:03.0							
	e SKKSac	E	08:03:07.6							
	e Sdiff	N	08:03:44.7							
	e PS	E	08:05:37.6							
	e PPS	N	08:06:47.0							
	e SS	N	08:11:45.6							
	e SSS	N	08:15:59.6							
	e LR	Z	08:31:47.6							
	e L	Z	08:47:56.0			20.0	4136		6.0	
GRA1	e Pdif	Z	07:51:33.2	110.2	63.4					
	e PP	Z	07:56:17.4							
	e PS	N	08:05:55.8							
	e SS	N	08:12:04.5							
	e L	Z	08:49:42.3			19.8	5285		6.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/28	18:32:16.0	43.355N	145.590E	33.0N	6.8	7.5		SZGRF

Hokkaido, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	18:43:48.6	74.0	34.0	1.3	2083	7.0		
BSEG	e P	Z	18:43:57.2	75.5	31.9	1.1	996	6.9		
RUE	e P	Z	18:43:57.5	75.6	34.0	1.4	2202	7.1		
HLG	e P	Z	18:44:00.3	76.0	30.3					
NRDL	e P	Z	18:44:04.4	76.8	31.6					
CLL	i P	+ Z	18:44:04.1	76.8	33.4	1.1	1367	7.0		
	e pP	Z	18:44:15.4							
	e sP	Z	18:44:19.9							
	e		18:44:30.4							
	e PP	Z	18:46:59.1							
	e PPP	Z	18:48:49.4							
	e PPPP	Z	18:49:58.2							
	e S	N	18:53:45.8							
	e SKSac	E	18:54:14.0							
	e PS	N	18:54:35.9							
	e SS	E	18:58:52.6							

	e LR	Z	19:09:25.5								
	e PKPPKPdf	Z	19:11:11.4								
	e L	Z	19:20:41.0			22.0	265794		7.5		
BRG	e P	Z	18:44:04.9	76.8	33.9	1.4	927		6.7		
CLZ	e P	Z	18:44:07.3	77.2	31.7	1.4	1781		7.0		
IBBN	e P	Z	18:44:09.3	77.7	30.0						
MOX	e P	Z	18:44:10.2	77.8	32.4	1.5	1098		6.8		
UBBA	e P	Z	18:44:12.2	78.2	31.3						
BUG	e P	Z	18:44:14.0	78.6	29.6						
GEC2	e P	Z	18:44:14.4	78.6	33.5						
GRA1	e P	Z	18:44:15.9	78.8	32.0	1.1	1696		7.0		
	e PP	Z	18:47:13.8								
	e S	N	18:54:09.5								
	e SS	E	18:59:29.1								
	e P'P'	Z	19:11:05.8								
	e L	Z	19:21:54.4			20.5	225522		7.5		
FUR	e P	Z	18:44:22.6	80.1	31.9	1.2	1277		6.7		
STU	e P	Z	18:44:23.5	80.3	30.6	1.0	913		6.7		
WLF	e P	Z	18:44:24.3	80.5	28.7						
BFO	e P	Z	18:44:26.7	80.9	30.0	1.1	431		6.4		

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/28

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 18:48:31.1			1.0	260	6.2		
	e pP	Z 18:48:44.2							
	e sP	Z 18:48:49.5							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/28

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (P)	Z 19:14:23.2							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/11/28 20:04:15.3
Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:16:05.2	77.0	33.0	0.7	6	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/29	00:44:41.5	40.894N	78.552E	33.0N	4.7			SZGRF

Southern Xinjiang, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:53:06.3	46.6	73.9	1.1	8	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/29	01:08:12.7	43.147N	15.229E	10.0G			4.1	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 01:09:05.8	3.4	171.6					4.2
ARSA	e Pn	Z 01:09:14.1	4.1	183.0					
KBA	e Pn	Z 01:09:15.9	4.1	160.6					3.7
MOA	e Pn	Z 01:09:24.4	4.8	171.5					3.8
	e Sn	E 01:10:18.8							
DAVA	e Pn	Z 01:09:36.7	5.6	135.8					3.9
GEC2	e Pn	Z 01:09:37.6	5.8	168.9					4.0
	e Sn	E 01:10:42.6							
BFO	e Pn	Z 01:09:54.9	7.1	134.6					4.2
	e Sn	E 01:11:12.7							
GRA1	e Pn	Z 01:09:56.0	7.1	155.6					4.5
TANN	e Pn	Z 01:10:00.9	7.5	164.4					
MOX	e Sn	N 01:11:30.5	7.9	160.4					4.4
CLL	e Pn	Z 01:10:11.9	8.3	168.7					4.5
	e Sn	E 01:11:42.7							
CLZ	e Pn	Z 01:10:26.4	9.3	157.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/29	06:21:53.1	43.148N	15.398E	10.0G			4.5	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 06:22:46.4	3.4	169.5					
ARSA	e Pn	Z 06:22:54.5	4.1	181.3					3.8
KBA	e Pn	Z 06:22:57.0	4.2	159.0					
MOA	e Pn	Z 06:23:05.3	4.8	170.0					
	e Sn	E 06:24:00.8							
DAVA	e Pn	Z 06:23:17.8	5.7	134.8					
	e Sn	N 06:24:21.6							
GEC2	e Pn	Z 06:23:18.5	5.8	167.7					4.3
	e Sn	N 06:24:23.7							
GRA1	e Pn	Z 06:23:36.5	7.1	154.7					4.8

	e Sn	N	06:24:53.1						
BFO	e Pn	Z	06:23:36.9	7.1	133.8				4.4
	e Sn	N	06:24:54.0						
TANN	e Pn	Z	06:23:42.8	7.5	163.4				4.6
	e Sn	N	06:25:03.4						
BRG	e Pn	Z	06:23:44.5	7.8	172.1				
MOX	e Pn	Z	06:23:46.9	7.9	159.6				4.5
CLL	e Pn	Z	06:23:53.0	8.3	167.8				4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/29	08:00:33.1	43.380N	143.650E	98.6	5.3			SZGRF
Hokkaido, Japan, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	08:12:04.9	74.8	33.2	0.9	42	5.5		
	e PcP	Z	08:12:16.7							
RUE	e P	Z	08:12:05.5	74.9	35.3					
CLL	e P	Z	08:12:11.8	76.1	34.6	0.9	56	5.7		
	e PcP	Z	08:12:23.6							
NRDL	e P	Z	08:12:12.1	76.1	32.9					
BRG	e P	Z	08:12:12.2	76.1	35.2	1.1	18	5.1		
CLZ	e P	Z	08:12:15.0	76.6	33.0	1.2	42	5.5		
	e pP	Z	08:12:40.6							
IBBN	e P	Z	08:12:17.1	77.0	31.3					
	e PcP	Z	08:12:29.3							
WERD	e P	Z	08:12:17.6	77.1	34.0					
GUNZ	e P	Z	08:12:18.0	77.1	34.1					
MOX	e P	Z	08:12:17.9	77.1	33.6	1.4	29	5.2		
UBBA	e P	Z	08:12:19.7	77.6	32.6					
	e PcP	Z	08:12:28.3							
GEC2	e P	Z	08:12:22.2	77.9	34.7	0.9	13	5.1		
	e pP	Z	08:12:47.7							
BUG	e P	Z	08:12:22.1	77.9	30.8					
GRA1	e P	Z	08:12:23.6	78.1	33.3	0.9	36	5.5		
	e pP	Z	08:12:48.7							
FUR	e P	Z	08:12:30.4	79.3	33.1	0.7	45	5.5		
STU	e P	Z	08:12:31.0	79.6	31.8	1.1	36	5.2		
WLF	e P	Z	08:12:33.7	79.8	29.9					
	e PcP	Z	08:12:38.4							
BFO	e P	Z	08:12:34.5	80.2	31.2	1.1	17	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/29	16:36:27.1	42.191N	145.381E	38.8	4.6			SZGRF
Hokkaido, Japan, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	16:48:32.1	79.7	32.7	1.0	8	4.6		
	e pP	Z	16:48:43.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/30	01:25:6.5	34.800S	179.940W	33.0N				SZGRF
South of Kermadec Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	01:45:02.9	159.6	24.7					
	e PKPab	Z	01:45:40.2							
RUE	e PKPdf	Z	01:45:03.5	159.8	34.3					
	e PKPab	Z	01:45:41.2							
NRDL	e PKPab	Z	01:45:46.0	160.9	26.0					
BRG	e PKPdf	Z	01:45:04.9	161.0	37.3					
	e PKPab	Z	01:45:46.5							
CLZ	e PKPdf	Z	01:45:06.2	161.4	27.5					
	e PKPab	Z	01:45:48.3							
IBBN	e PKPab	Z	01:45:49.3	161.7	20.4					
WERD	e PKPdf	Z	01:45:06.2	162.0	34.3					
	e PKPab	Z	01:45:50.3							
GUNZ	e PKPdf	Z	01:45:06.1	162.1	34.5					
	e PKPab	Z	01:45:50.5							
MOX	e PKPdf	Z	01:45:05.9	162.1	32.3					
	e PKPab	Z	01:45:50.5							
UBBA	e PKPdf	Z	01:45:06.1	162.4	28.0					
	e PKPab	Z	01:45:52.4							
GEC2	e PKPab	Z	01:45:53.7	162.7	40.7					
GRA1	e PKPdf	Z	01:45:06.9	163.0	33.0					
	e PKPab	Z	01:45:55.5							
FUR	e PKPab	Z	01:46:01.0	164.3	36.0					
WLF	e PKPab	Z	01:46:01.5	164.5	19.0					
STU	e PKPdf	Z	01:45:08.5	164.5	29.2					
	e PKPab	Z	01:46:01.9							
BFO	e PKPab	Z	01:46:04.2	165.1	27.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/11/30	13:36:13.6	17.190N	92.960W	33.0N	5.1			SZGRF
Chiapas, Mexico								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	13:48:35.3	82.7	288.0	0.7	15			
BSEG	e P	Z	13:48:40.3	83.7	290.7	1.0	16			
NRDL	e P	Z	13:48:42.2	84.1	290.7	0.9	12			
BFO	e P	Z	13:48:43.8	84.5	289.7	1.1	11			

CLZ	e P	Z	13:48:44.4	84.5	290.9	1.0	14
STU	e P	Z	13:48:46.1	84.9	290.3	0.8	22
MOX	e P	Z	13:48:49.7	85.6	292.0	0.6	6
GRA1	e P	Z	13:48:51.4	85.8	291.8	1.0	16 5.1

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/30 19:18:22.8 1.900S 99.500E 33.0N 5.0
 Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:31:24.3	90.3	92.5	1.8	20	5.0		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/11/30 20:07: 3.0 21.360S 176.840W 33.0N
 Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 20:26:42.2	147.0	12.3					
RUE	e PKPbc	Z 20:26:44.5	147.8	18.8					
NRDL	e PKPbc	Z 20:26:46.1	148.4	12.4					
IBBN	e PKPab	Z 20:26:51.4	148.8	8.3					
CLZ	e PKPbc	Z 20:26:47.9	149.0	13.1					
CLL	e PKPdf	Z 20:26:44.2	149.1	18.1					
	i PKPbc	- Z 20:26:47.7			0.9	68			
	e PKPab	Z 20:26:51.7							
BRG	e PKPbc	Z 20:26:48.3	149.3	20.0					
BUG	e PKPbc	Z 20:26:49.4	149.7	7.6					
	e PKPab	Z 20:26:54.7							
MOX	e PKPbc	Z 20:26:50.0	150.0	15.9					
WERD	e PKPbc	Z 20:26:50.5	150.0	17.2					
	e PKPab	Z 20:26:56.1							
UBBA	e PKPbc	Z 20:26:50.0	150.1	12.8					
GUNZ	e PKPbc	Z 20:26:50.7	150.1	17.3					
GRA1	e PKPbc	Z 20:26:52.5	151.0	15.6					
	e PKPab	Z 20:27:00.3							
WET	e PKPbc	Z 20:26:52.7	151.2	19.0					
	e PKPab	Z 20:27:00.9							
GEC2	e PKPbc	Z 20:26:53.1	151.3	20.8					
WLF	e PKPbc	Z 20:26:54.7	151.6	5.9					
	e PKPab	Z 20:27:03.1							
STU	e PKPbc	Z 20:26:55.8	152.2	12.1					
	e PKPab	Z 20:27:04.6							
FUR	e PKPbc	Z 20:26:55.8	152.4	16.5					
	e PKPab	Z 20:27:06.1							
BFO	e PKPbc	Z 20:26:56.4	152.7	10.5					

Format description

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In general all regional and teleseismic events clearly recorded with GRF-Array stations and stronger events recorded with stations of the German Regional Seismological Network (GRSN) are included in this bulletin. Additionally, some selected events are analysed more comprehensively at CLL-station and included in the bulletin (ISOP-analysis).

Each event is reported by several EPICENTER LINES with possible COMMENT LINES, a REGION LINE and a block of PHASE LINES.

EPICENTER LINES:

The epicenter locations of several authorities can be reported. The epicenter location with the highest priority (i.e. the most reliable one) is written in the undermost EPICENTER LINE. The REGION LINE and all origin related parameter in the PHASE LINES (i.e. Def, Dist, EvAz) are determined regarding this epicenter location with the highest priority.

Date	Date of the event
Origin Time	Origin time of the event
Lat	Geographic latitude (N/S) of epicenter in degree
Long	Geographic longitude (E/W) of epicenter in degree
Depth	Depth of the hypocenter beneath the surface in kilometer
	Appended flag indicates the method by which the depth was determined:
	BLANK - free
	N - preset depth of 33 kilometer
	G - geophysicist preset depth
mb, Ms, ML	Magnitudes of the event and magnitude type
Source	Abbreviations for the authority (e.g. SZGRF, NEIC, PIDC, SED)

COMMENT LINE:

Each EPICENTER LINE can be followed by a COMMENT LINE about interesting topics submitted by the preceding authority.

REGION LINE:

The region name of the epicenter location with the highest priority (undermost EPICENTER LINE).

PHASE LINE:

Sta	Station code of the reported phase
Phase	Preceded flag for the sharpness of the onset of the phase
	e - emergent
	i - impulsive

w - weak
ISC phase code
Flag for the direction of the first motion
 '+' - compression
 '-' - dilatation
Component where the phase was picked

Time Arrival time of the reported phase
Dist Distance from the epicenter location with the highest priority to the station in kilometer
BAz Backazimuth from the epicenter location with the highest priority to the station in degree
T[s] Phase Period
A[nm] Phase Amplitude
mb Body wave magnitude
MS Surface wave magnitude
ML Local Richter magnitude