

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

(produced by SZGRF/BGR - ERLANGEN)

FEBRUARY 2005 UPDATED 19.AUGUST.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		
2005/02/01	01:08: 6.8	8.900N	93.660E	19.4	5.4			SZGRF		
Nicobar Islands, India, region										
Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	01:19:57.0	76.6	92.3					
GEC2	e P	Z	01:19:57.4	76.7	91.6	1.3	39	5.4		
CLL	e P	Z	01:20:00.0	77.2	91.7					
WET	e P	Z	01:20:00.5	77.3	91.1	1.3	29	5.3		
MOX	e P	Z	01:20:04.5	78.1	90.4					
FUR	e P	Z	01:20:05.7	78.3	89.7					
GRA1	e P	Z	01:20:06.8	78.3	89.9	1.4	60	5.5		
	e pP	Z	01:20:12.4							
CLZ	e P	Z	01:20:09.3	78.9	89.7	1.6	93	5.6		
STU	e P	Z	01:20:13.3	79.7	88.2					
TNS	e P	Z	01:20:16.4	80.1	87.9					
BFO	e P	Z	01:20:17.1	80.3	87.5	1.5	37	5.1		
IBBN	e P	Z	01:20:18.0	80.5	87.7					
BUG	e P	Z	01:20:19.7	80.8	87.2					
WLF	e P	Z	01:20:24.3	81.6	86.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source		
2005/02/01	01:59:47.4	22.958N	121.272E	33.0N	5.1			SZGRF		
Taiwan region										
Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	02:12:07.6	82.9	61.8	2.1	54	5.4		
GEC2	e P	Z	02:12:12.5	83.6	62.0	1.1	12	5.1		
GRA1	e P	Z	02:12:18.1	84.7	60.3	1.1	9	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	02:49:28.2	5.500N	93.340E	33.0N	4.7			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	03:01:29.7	79.0	94.2	0.8	11	4.9		
BRG	e P	Z	03:01:29.2	79.1	94.8					
WET	e P	Z	03:01:32.6	79.6	93.6	0.8	5	4.5		
CLL	e P	Z	03:01:32.5	79.7	94.1					
MOX	e P	Z	03:01:37.1	80.5	92.9					
FUR	e P	Z	03:01:37.7	80.6	92.2					
GRA1	e P	Z	03:01:38.8	80.7	92.4	0.9	11	4.9		
CLZ	e P	Z	03:01:41.4	81.3	92.1	0.8	7	4.7		
TNS	e P	Z	03:01:48.3	82.5	90.4					
BFO	e P	Z	03:01:47.7	82.6	90.1	0.8	4	4.7		
IBBN	e P	Z	03:01:50.4	83.0	90.1					
BUG	e P	Z	03:01:51.9	83.3	89.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	09:21: 6.1	21.520S	178.170W	619.8				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	09:39:39.7	146.9	14.6					
	e PKPab	Z	09:39:43.5							
RUE	e PKPbc	Z	09:39:41.6	147.7	21.1					
	e PKPab	Z	09:39:46.3							
CLZ	e PKPbc	Z	09:39:45.1	149.0	15.5					
	e PKPab	Z	09:39:51.6							
CLL	e PKPbc	Z	09:39:44.7	149.0	20.5					
	e PKPab	Z	09:39:51.2							
	e pPKPab	Z	09:42:06.1							
BRG	e PKPbc	Z	09:39:45.3	149.2	22.4					
	e PKPab	Z	09:39:52.2							
	e pPKPab	Z	09:42:07.4							
BUG	e PKPbc	Z	09:39:47.1	149.8	10.1					
MOX	e PKPbc	Z	09:39:47.1	149.9	18.4					
	e PKPab	Z	09:39:54.9							
	e pPKPab	Z	09:42:10.4							
TNS	e PKPbc	Z	09:39:49.5	150.8	12.7					
	e PKPab	Z	09:39:59.4							
GRA1	e PKPbc	Z	09:39:49.2	150.9	18.2					
	e PKPab	Z	09:39:59.8							
WET	e PKPab	Z	09:40:00.5	151.0	21.6					

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GEC2	e PKPbc	Z	09:39:49.4	151.1	23.3
	e PKPab	Z	09:40:00.4		
WLF	e PKPbc	Z	09:39:52.0	151.6	8.5
	e PKPab	Z	09:40:03.3		
STU	e PKPbc	Z	09:39:52.7	152.1	14.8
FUR	e PKPbc	Z	09:39:52.8	152.3	19.2
	e PKPab	Z	09:40:05.8		
BFO	e PKPbc	Z	09:39:53.5	152.7	13.3
	e PKPab	Z	09:40:07.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	10:35:14.7	9.520N	94.010E	33.0N	5.2			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:47:00.8	76.4	91.6					
GEC2	e P	Z	10:47:01.4	76.5	91.0	0.9	22	5.3		
CLL	e P	Z	10:47:04.1	77.0	91.0					
WET	e P	Z	10:47:04.6	77.0	90.4	1.0	12	5.0		
MOX	e P	Z	10:47:08.7	77.8	89.8					
GRA1	e P	Z	10:47:10.3	78.1	89.3	3.1	283	5.9		
CLZ	e P	Z	10:47:13.2	78.6	89.1	0.8	19	5.2		
TNS	e P	Z	10:47:20.2	79.9	87.3					
BFO	e P	Z	10:47:20.8	80.0	86.8	1.0	12	4.8		
IBBN	e P	Z	10:47:21.8	80.2	87.1					
BUG	e P	Z	10:47:23.8	80.5	86.6					
WLF	e P	Z	10:47:28.5	81.4	85.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	10:28:45.3	20.580S	175.890W	222.5				SZGRF
Tonga Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	10:48:04.3	148.1	6.5					
	e PKPab	Z	10:48:07.9							
CLZ	e PKPbc	Z	10:48:04.8	148.4	11.2					
	e PKPab	Z	10:48:08.4							
CLL	e PKPbc	Z	10:48:05.1	148.5	16.1					
	e PKPab	Z	10:48:08.9							
BRG	e PKPbc	Z	10:48:06.0	148.7	17.9					
	e PKPab	Z	10:48:10.3							
BUG	e PKPbc	Z	10:48:06.6	149.0	5.8					
	e PKPab	Z	10:48:11.1							
MOX	e PKPbc	Z	10:48:07.6	149.4	13.9					
TNS	e PKPbc	Z	10:48:09.4	150.2	8.2					

	e PKPab	Z	10:48:16.1		
GRA1	e PKPbc	Z	10:48:10.2	150.3	13.5
	e PKPab	Z	10:48:16.9		
	e pPKPbc	Z	10:49:06.9		
WET	e PKPbc	Z	10:48:10.5	150.6	16.9
GEC2	e PKPbc	Z	10:48:10.7	150.7	18.6
WLF	e PKPbc	Z	10:48:11.7	150.9	3.9
STU	e PKPbc	Z	10:48:12.5	151.5	10.0
	e PKPab	Z	10:48:22.9		
FUR	e PKPbc	Z	10:48:13.3	151.8	14.3
	e PKPab	Z	10:48:23.3		
BFO	e PKPbc	Z	10:48:13.7	152.0	8.4
	e PKPab	Z	10:48:24.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	13:41:55.2	8.300N	93.890E	33.0N	5.2	4.7		SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:53:48.6	77.2	92.5					
GEC2	e P	Z	13:53:49.1	77.3	91.9	0.8	29	5.5		
CLL	e P	Z	13:53:51.6	77.8	91.9					
WET	e P	Z	13:53:52.2	77.9	91.3	0.8	18	5.2		
MOX	e P	Z	13:53:56.6	78.7	90.7					
GRA1	e P	Z	13:53:58.5	78.9	90.2	0.9	28	5.3		
	e pP	Z	13:54:03.8							
	e L	Z	14:33:48.1			21.8	374		4.7	
CLZ	e P	Z	13:54:01.0	79.5	89.9	0.8	27	5.2		
TNS	e P	Z	13:54:07.7	80.7	88.1					
BFO	e P	Z	13:54:08.0	80.9	87.8	0.9	11	4.9		
IBBN	e P	Z	13:54:09.7	81.1	87.9					
BUG	e P	Z	13:54:11.4	81.4	87.4					
WLF	e P	Z	13:54:16.0	82.2	86.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	14:15:49.7	4.660N	94.410E	33.0N	5.8			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	14:27:57.2	80.4	94.5					
GEC2	e P	Z	14:27:57.6	80.4	93.9	0.8	112	5.8		
WET	e P	Z	14:28:00.5	80.9	93.4	0.9	54	5.6		
CLL	e P	Z	14:28:00.1	81.0	93.8					
MOX	e P	Z	14:28:04.9	81.8	92.6					
FUR	e P	Z	14:28:05.3	82.0	92.0					

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GRA1	e P	Z	14:28:06.6	82.0	92.2	0.8	92	5.9
CLZ	e P	Z	14:28:09.2	82.7	91.8	0.9	76	6.0
STU	e P	Z	14:28:12.7	83.3	90.5			
TNS	e P	Z	14:28:15.5	83.8	90.1			
BFO	e P	Z	14:28:15.4	83.9	89.8	0.8	41	5.7
IBBN	e P	Z	14:28:17.6	84.3	89.8			
BUG	e P	Z	14:28:19.2	84.6	89.3			
WLF	e P	Z	14:28:23.4	85.3	88.3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	15:37:57.4	20.480S	180.060W	605.9				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	15:56:28.5	145.6	17.4					
RUE	e PKPbc	Z	15:56:30.5	146.3	23.8					
CLL	e PKPbc	Z	15:56:33.9	147.5	23.2					
	e pPKPbc	Z	15:58:51.4							
IBBN	e PKPbc	Z	15:56:34.7	147.6	13.8					
CLZ	e PKPbc	Z	15:56:34.1	147.6	18.5					
	e pPKPbc	Z	15:58:51.8							
BRG	e PKPbc	Z	15:56:33.8	147.7	25.1					
	e PKPab	Z	15:56:38.9							
	e pPKPbc	Z	15:58:52.6							
MOX	e PKPbc	Z	15:56:36.4	148.5	21.3					
	e pPKPbc	Z	15:58:55.1							
BUG	e PKPbc	Z	15:56:36.4	148.5	13.2					
GRA1	e PKPbc	Z	15:56:38.9	149.4	21.1					
	e PKPab	Z	15:56:46.2							
TNS	e PKPbc	Z	15:56:38.7	149.5	15.8					
WET	e PKPbc	Z	15:56:39.8	149.5	24.4					
	e PKPab	Z	15:56:46.7							
GEC2	e PKPbc	Z	15:56:39.3	149.6	26.1					
WLF	e PKPbc	Z	15:56:41.3	150.4	11.8					
STU	e PKPbc	Z	15:56:41.8	150.8	18.0					
FUR	e PKPbc	Z	15:56:42.1	150.8	22.2					
BFO	e PKPbc	Z	15:56:43.0	151.3	16.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	17:14: 4.8	3.740N	95.660E	29.9	5.1			SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	17:26:21.7	81.9	94.1					
GEC2	e P	Z	17:26:21.7	81.9	93.6	0.9	24	5.3		

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WET	e P	Z	17:26:24.6	82.5	93.0	1.1	14	5.0
CLL	e P	Z	17:26:24.5	82.5	93.4			
MOX	e P	Z	17:26:29.1	83.3	92.2			
GRA1	e P	Z	17:26:30.6	83.6	91.8	0.9	14	5.2
	e pP	Z	17:26:39.3					
CLZ	e P	Z	17:26:33.5	84.1	91.4	0.9	12	5.1
TNS	e P	Z	17:26:39.3	85.3	89.7			
BFO	e P	Z	17:26:39.7	85.4	89.5	0.9	6	4.8
BUG	e P	Z	17:26:43.1	86.1	88.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/01	20:19:58.4	7.710N	94.240E	18.2	4.8			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:31:55.4	77.9	92.6					
GEC2	e P	Z	20:31:55.9	78.0	92.0	1.0	13	5.0		
CLL	e P	Z	20:31:58.3	78.5	92.0					
WET	e P	Z	20:31:58.9	78.5	91.5	1.0	9	4.8		
MOX	e P	Z	20:32:03.4	79.4	90.8					
GRA1	e P	Z	20:32:05.3	79.6	90.3	1.0	14	4.8		
	e pP	Z	20:32:10.6							
CLZ	e P	Z	20:32:07.8	80.2	90.0	0.9	15	4.9		
TNS	e P	Z	20:32:14.5	81.4	88.3					
BFO	e P	Z	20:32:14.7	81.5	87.9	1.0	6	4.7		
IBBN	e P	Z	20:32:16.4	81.8	88.0					
BUG	e P	Z	20:32:18.1	82.1	87.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	00:52:41.5	7.620N	94.060E	18.9	4.7			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	01:04:37.9	77.9	92.8					
GEC2	e P	Z	01:04:38.4	77.9	92.2	0.8	7	4.9		
CLL	e P	Z	01:04:40.9	78.5	92.2					
WET	e P	Z	01:04:41.4	78.5	91.6	0.8	4	4.5		
MOX	e P	Z	01:04:45.9	79.3	91.0					
GRA1	e P	Z	01:04:47.8	79.6	90.5	0.9	10	4.8		
	e pP	Z	01:04:53.2							
CLZ	e P	Z	01:04:50.3	80.1	90.2	0.9	9	4.7		
TNS	e P	Z	01:04:56.9	81.3	88.5					
BFO	e P	Z	01:04:57.2	81.5	88.1	0.8	3	4.4		
IBBN	e P	Z	01:04:59.0	81.7	88.2					
BUG	e P	Z	01:05:00.7	82.1	87.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	01:30:19.4	9.500N	93.500E	33.0N	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:42:05.7	76.1	92.0					
GEC2	e P	Z 01:42:06.4	76.2	91.4	0.9	9	4.9		
CLL	e P	Z 01:42:08.7	76.7	91.4					
WET	e P	Z 01:42:09.5	76.7	90.8	1.0	7	4.8		
MOX	e P	Z 01:42:13.9	77.5	90.2					
FUR	e P	Z 01:42:15.0	77.8	89.4					
GRA1	e P	Z 01:42:15.9	77.8	89.7	1.1	20	5.2		
CLZ	e P	Z 01:42:18.2	78.3	89.5	0.9	12	5.0		
TNS	e P	Z 01:42:25.2	79.6	87.7					
BFO	e P	Z 01:42:25.7	79.7	87.2	1.0	6	4.5		
IBBN	e P	Z 01:42:27.1	79.9	87.5					
BUG	e P	Z 01:42:28.9	80.2	87.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	02:09:18.2	43.156N	15.062E	10.0G			4.2	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 02:10:42.4	5.8	170.1					4.1
	e Sn	N 02:11:47.6							
WET	e Pn	Z 02:10:47.8	6.2	165.0					4.0
	e Sn	N 02:11:56.9							
BFO	e Pn	Z 02:11:00.4	7.0	135.3					4.1
	e Sn	E 02:12:16.3							
TANN	e Pn	Z 02:11:07.3	7.5	165.3					4.2
MOX	e Pn	Z 02:11:10.6	7.8	161.3					4.2
	e Sn	N 02:12:36.2							
CLL	e Pn	Z 02:11:17.7	8.3	169.5					4.3
	e Sn	N 02:12:47.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	02:30:25.6	14.097N	144.654E	159D	5.5			NEIC-M

Rota region, Northern Mariana Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 02:48:32.9	104.4	46.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	06:28:35.3	7.567S	145.250E	13.0G				NEIC-M

Near south coast of New Guinea, Papua New Guinea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z 06:47:27.1	121.0	60.3					
BSEG	e PKPdf	Z 06:47:27.5	121.2	55.2					
CLL	e PKPdf	Z 06:47:27.5	121.3	59.2					
GEC2	e PKPdf	Z 06:47:29.3	122.1	61.2					
MOX	e PKPdf	Z 06:47:29.7	122.4	58.2					
CLZ	e PKPdf	Z 06:47:30.3	122.4	56.3					
WET	e PKPdf	Z 06:47:30.1	122.5	60.2					
GRA1	e PKPdf	Z 06:47:31.3	123.1	58.3					
GRFO	e PKPdf	Z 06:47:31.2	123.1	58.3					
IBBN	e PKPdf	Z 06:47:32.2	123.4	53.4					
FUR	e PKPdf	Z 06:47:33.1	123.9	59.2					
BUG	e PKPdf	Z 06:47:33.3	124.2	53.3					
TNS	e PKPdf	Z 06:47:33.9	124.3	55.2					
STU	e PKPdf	Z 06:47:34.5	124.7	56.8					
BFO	e PKPdf	Z 06:47:35.5	125.4	56.2					
WLF	e PKPdf	Z 06:47:37.1	125.8	53.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	07:43:26.1	28.864S	13.229W	33.0N	4.8			SZGRF

Southern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:55:40.6	81.5	201.5	1.2	12	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	09:04:40.4	7.633N	93.682E	44.3	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:16:41.5	79.3	90.8	0.9	22	5.2		
	e pP	Z 09:16:54.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	13:22:34.3	8.080N	93.540E	19.3	4.8			SZGRF

Nicobar Islands, India, region



Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:34:27.5	77.2	92.9					
GEC2	e P	Z	13:34:28.0	77.2	92.3	0.9	9	4.9		
CLL	e P	Z	13:34:30.5	77.8	92.3					
WET	e P	Z	13:34:31.0	77.8	91.7	0.9	7	4.8		
MOX	e P	Z	13:34:35.6	78.6	91.1					
FUR	e P	Z	13:34:36.4	78.8	90.3					
GRA1	e P	Z	13:34:37.4	78.9	90.6	0.8	13	5.0		
	e pP	Z	13:34:43.0			0.8	13			
CLZ	e P	Z	13:34:39.9	79.4	90.3	0.8	10	4.9		
TNS	e P	Z	13:34:46.6	80.7	88.6					
BFO	e P	Z	13:34:46.8	80.8	88.2	0.9	5	4.5		
IBBN	e P	Z	13:34:48.6	81.0	88.4					
BUG	e P	Z	13:34:50.3	81.4	87.8					
WLF	e P	Z	13:34:54.9	82.2	86.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	14:58:12.2	7.050N	90.460E	21.9	5.0			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	15:09:58.2	76.0	95.3	0.9	12	5.0		
BRG	e P	Z	15:09:58.5	76.0	96.0					
WET	e P	Z	15:10:01.5	76.6	94.8	1.1	12	4.9		
CLL	e P	Z	15:10:01.6	76.7	95.4					
MOX	e P	Z	15:10:06.7	77.5	94.1					
GRA1	e P	Z	15:10:08.0	77.7	93.6	0.8	14	5.2		
	e pP	Z	15:10:14.3							
CLZ	e P	Z	15:10:11.2	78.3	93.4	0.7	14	5.2		
TNS	e P	Z	15:10:17.6	79.5	91.6					
BFO	e P	Z	15:10:17.2	79.5	91.2	1.1	11	4.7		
WLF	e P	Z	15:10:25.8	81.0	89.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	15:11:51.6			N	4.5			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	15:23:28.6			0.8	4	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	20:41:1.3	6.570N	93.970E	33.0N	4.7			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:53:00.9	78.6	93.6					
GEC2	e P	Z	20:53:01.1	78.7	93.0	0.9	11	4.9		
WET	e P	Z	20:53:04.2	79.2	92.4	1.1	12	4.8		
CLL	e P	Z	20:53:03.8	79.2	92.9					
MOX	e P	Z	20:53:08.8	80.1	91.7					
FUR	e P	Z	20:53:09.7	80.2	91.0					
GRA1	e P	Z	20:53:10.5	80.3	91.3	0.9	9	4.7		
CLZ	e P	Z	20:53:13.2	80.9	91.0	0.8	6	4.7		
TNS	e P	Z	20:53:19.8	82.1	89.2					
BFO	e P	Z	20:53:19.8	82.2	88.9	0.8	4	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	23:26:58.0	37.987N	43.360E	10.0G	4.5			GSRC-M

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	23:32:28.3	25.7	104.8	1.0	13	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/02	23:56:1.8			N	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	00:07:54.7			0.9	8	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/03	04:27:42.1			N	4.8			SZGRF

Southwest Indian Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	04:40:38.4			0.9	6	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/03	04:51:20.9	5.720N	93.300E	49.3	5.3	4.7		SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:03:18.3	78.9	94.7					
GEC2	e P	Z	05:03:18.5	78.9	94.1	1.0	46	5.5		

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WET	e P	Z	05:03:21.5	79.4	93.5	1.1	25	5.2		
CLL	e P	Z	05:03:21.3	79.5	94.0					
MOX	e P	Z	05:03:26.1	80.3	92.8					
FUR	e P	Z	05:03:26.7	80.4	92.1					
GRA1	e P	Z	05:03:28.0	80.5	92.3	1.0	37	5.4		
	e pP	Z	05:03:42.3							
	e L	Z	05:43:49.2			20.4	324	4.7		
CLZ	e P	Z	05:03:30.5	81.1	92.0	0.9	23	5.2		
TNS	e P	Z	05:03:37.0	82.3	90.3					
BFO	e P	Z	05:03:36.7	82.4	89.9	1.0	16	5.1		
IBBN	e P	Z	05:03:39.3	82.8	90.0					
BUG	e P	Z	05:03:40.8	83.1	89.5					
WLF	e P	Z	05:03:44.9	83.8	88.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/03	05:33:14.8	43.021N	15.164E	10.0G			3.5	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 05:34:41.5	5.9	169.6					3.5
	e Sn	Z 05:35:47.4							
WET	e Pn	Z 05:34:46.8	6.3	164.6					3.4
	e Sn	N 05:35:57.1							
TANN	e Pn	Z 05:35:05.7	7.6	164.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/03								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:44:11.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/03	20:13:32.7	26.220N	95.360E	79.8	5.3			SZGRF

Myanmar-India border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 20:24:02.8	64.7	78.8					
CLL	e P	Z 20:24:05.7	65.2	78.4					
GEC2	e P	Z 20:24:06.7	65.3	77.7	0.9	29	5.5		
WET	e P	Z 20:24:09.6	65.7	77.3	0.7	15	5.3		
MOX	e P	Z 20:24:12.4	66.2	77.1					
GRA1	e P	Z 20:24:16.2	66.7	76.4	0.8	10	5.1		
	e pP	Z 20:24:36.3							

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CLZ	e P	Z	20:24:15.7	66.7	76.7	0.9	32	5.6
FUR	e P	Z	20:24:17.7	67.0	75.8			
IBBN	e P	Z	20:24:24.6	68.1	75.0			
STU	e P	Z	20:24:24.9	68.2	74.6			
TNS	e P	Z	20:24:25.4	68.3	74.7			
BUG	e P	Z	20:24:28.3	68.6	74.3			
BFO	e P	Z	20:24:28.6	68.8	73.9	0.8	6	4.9
WLF	e P	Z	20:24:35.8	69.8	72.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	00:20:24.5	38.920N	41.030E	33.0G	4.5			SZGRF

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 00:25:16.0	21.9	106.7	1.3	12	4.2		
BRG	e P	Z 00:25:21.0	22.4	111.7	1.1	11	4.2		
WET	e P	Z 00:25:22.6	22.5	106.4	1.0	12	4.4		
CLL	e P	Z 00:25:29.2	23.1	111.4	1.2	20	4.5		
RUE	e P	Z 00:25:28.6	23.1	115.0	1.1	27	4.7		
NOTT	e P	Z 00:25:28.7	23.2	107.0	1.1	17	4.5		
GUNZ	e P	Z 00:25:29.8	23.2	108.5	1.8	28	4.5		
FUR	e P	Z 00:25:29.8	23.3	102.3	0.9	36	4.9		
GRA1	e P	Z 00:25:34.1	23.7	105.7	1.2	37	4.8		
MOX	e P	Z 00:25:34.9	23.7	108.2	1.7	14	4.2		
CLZ	e P	Z 00:25:45.0	24.8	109.2	1.3	17	4.6		
NRDL	e P	Z 00:25:47.7	25.2	110.2	1.0	9	4.5		
TNS	e P	Z 00:25:51.8	25.5	103.7	1.3	17	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	03:40:49.0				4.7			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:53:22.6			0.8	4	4.7		
	e pP	Z 03:53:28.4			0.8	4			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	04:36:10.6			N	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:48:16.1			1.3	10	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	09:45: 0.6	8.500N	92.500E	33.0N	4.7	4.6		SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 09:56:49.0	76.2	93.5					
GEC2	e P	Z 09:56:49.5	76.2	92.8	1.0	12	5.0		
WET	e P	Z 09:56:52.4	76.8	92.2	0.9	6	4.7		
CLL	e P	Z 09:56:51.9	76.8	92.8					
MOX	e P	Z 09:56:57.0	77.7	91.6					
GRA1	e P	Z 09:56:58.9	77.9	91.1	1.0	10	4.9		
	e L	Z 10:36:51.0			22.0	351		4.6	
CLZ	e P	Z 09:57:01.3	78.5	90.9	0.8	5	4.6		
TNS	e P	Z 09:57:08.0	79.7	89.1					
BFO	e P	Z 09:57:08.2	79.8	88.6	0.8	5	4.5		
BUG	e P	Z 09:57:13.0	80.4	88.4					
WLF	e P	Z 09:57:16.2	81.2	87.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	12:15:49.8			N	4.8			SZGRF

Southern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:28:12.4			1.2	8	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	17:53: 8.5	7.910N	92.610E	15.6	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:04:59.5	76.7	93.8					
GEC2	e P	Z 18:05:00.0	76.8	93.1	0.9	5	4.7		
WET	e P	Z 18:05:03.1	77.3	92.6	0.9	4	4.5		
CLL	e P	Z 18:05:02.5	77.3	93.1					
MOX	e P	Z 18:05:07.6	78.2	91.9					
FUR	e P	Z 18:05:08.3	78.3	91.1					
GRA1	e P	Z 18:05:09.4	78.4	91.4	0.8	7	4.8		
	e pP	Z 18:05:13.9							
CLZ	e P	Z 18:05:11.9	79.0	91.2	0.8	6	4.7		
BFO	e P	Z 18:05:18.8	80.3	89.0	0.9	3	4.3		
IBBN	e P	Z 18:05:21.0	80.6	89.2					
BUG	e P	Z 18:05:23.2	80.9	88.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/04	18:34:21.0	33.780N	142.140E	56.6	5.3			SZGRF
Off east coast of Honshu, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 18:46:41.6	82.9	38.6	0.9	17	5.3		
BRG	e P	Z 18:46:46.0	83.9	41.1	0.8	23	5.4		
CLL	e P	Z 18:46:46.1	83.9	40.4	0.9	56	5.8		
CLZ	e P	Z 18:46:49.8	84.5	38.5	1.0	41	5.6		
MOX	e P	Z 18:46:51.5	85.0	39.4	1.5	40	5.4		
IBBN	e P	Z 18:46:52.5	85.2	36.6	1.0	53	5.7		
GEC2	e P	Z 18:46:53.9	85.5	40.8	1.5	26	5.1		
WET	e P	Z 18:46:55.1	85.6	40.2	2.3	38	5.1		
GRA1	e P	Z 18:46:56.2	85.9	39.0	1.1	38	5.4		
	e pP	Z 18:47:12.3							
BUG	e P	Z 18:46:56.5	86.0	36.2	0.9	28	5.4		
TNS	e P	Z 18:46:59.7	86.6	37.0	1.2	13	4.9		
FUR	e P	Z 18:47:02.4	87.0	39.0	0.8	22	5.3		
WLF	e P	Z 18:47:06.2	87.9	35.3	1.4	21	5.3		
BFO	e P	Z 18:47:06.4	88.1	36.9	0.9	9	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	01:16:42.4	36.514N	142.254E	44.5	5.0			SZGRF
Off east coast of Honshu, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:29:05.8	83.5	37.6	1.4	15	5.0		
	e pP	Z 01:29:18.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	01:58:12.3	14.090N	93.440E	31.3	4.7			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 02:09:36.9	72.5	89.0					
GEC2	e P	Z 02:09:37.9	72.7	88.2	0.9	6	4.8		
CLL	e P	Z 02:09:40.0	73.1	88.4					
WET	e P	Z 02:09:41.1	73.3	87.7	1.0	4	4.5		
MOX	e P	Z 02:09:45.5	74.0	87.2					
GRA1	e P	Z 02:09:47.5	74.3	86.6	0.7	8	4.8		
	e pP	Z 02:09:56.5							
CLZ	e P	Z 02:09:49.8	74.7	86.5	0.8	4	4.5		
TNS	e P	Z 02:09:57.3	76.0	84.6					

BUG e P Z 02:10:00.9 76.7 84.0

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/05 03:34:26.3 16.000N 145.800E 141.0N 6.3 NEIC-M  
 Mariana Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e Pdiff	Z	03:47:56.3	100.0	46.5					
	e PKKPab	Z	04:04:40.6							
BSEG	e Pdiff	Z	03:47:57.6	100.4	43.3					
	e PKKPbc	Z	04:04:12.2							
BRG	e Pdiff	Z	03:48:00.6	101.0	46.8					
	e PKKPbc	Z	04:04:10.1							
CLL	e Pdiff	Z	03:48:00.7	101.1	46.0					
	e SP	Z	04:00:55.4							
NRDL	e Pdiff	Z	03:48:03.4	101.5	43.3					
	e SP	Z	04:00:59.2							
CLZ	e Pdiff	Z	03:48:04.7	101.9	43.6					
	e SP	Z	04:01:03.0							
	e PKKPab	Z	04:04:32.6							
WERD	e Pdiff	Z	03:48:05.4	102.1	45.5					
	e PKKPbc	Z	04:04:07.9							
	e PKKPab	Z	04:04:32.0							
GUNZ	e Pdiff	Z	03:48:06.0	102.1	45.5					
MOX	e Pdiff	Z	03:48:06.5	102.2	44.9					
	e SP	Z	04:01:04.2							
	e PKKPbc	Z	04:04:07.5							
GEC2	e Pdiff	Z	03:48:07.2	102.5	46.9					
	e PKKPbc	Z	04:04:07.0							
NOTT	e Pdiff	Z	03:48:08.1	102.6	45.4					
	e PKKPab	Z	04:04:29.2							
IBBN	e Pdiff	Z	03:48:08.4	102.6	41.2					
	e SP	Z	04:01:09.3							
	e		04:03:00.5							
	e PKKPbc	Z	04:04:07.0							
	e PKPPKPdf	Z	04:12:20.9							
WET	e Pdiff	Z	03:48:08.6	102.7	46.2					
	e SP	Z	04:01:13.1							
	e PKKPbc	Z	04:04:06.3							
	e PKKPab	Z	04:04:28.5							
UBBA	e Pdiff	Z	03:48:08.7	102.8	43.4					
	e PKPPKPdf	Z	04:12:22.2							
GRA1	e Pdiff	Z	03:48:09.5	103.1	44.7					
	e PP	Z	03:52:29.3							
	e		04:03:01.3							
	e PKKPbc	Z	04:04:05.3							
	e PKPPKPdf	Z	04:12:22.2							

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BUG	e Pdiff	Z	03:48:11.4	103.5	40.9
	e PKKPab	Z	04:04:25.2		
TNS	e Pdiff	Z	03:48:13.9	103.9	42.1
	e SP	Z	04:01:21.9		
FUR	e PKKPbc	Z	04:04:02.3	104.1	45.0
	e PKKPab	Z	04:04:21.0		
	e PKPPKPdf	Z	04:12:19.9		
STU	e Pdiff	Z	03:48:17.3	104.7	43.0
	e SP	Z	04:01:30.8		
	e PKKPab	Z	04:04:18.7		
WLF	e Pdiff	Z	03:48:21.1	105.3	40.2
	e SP	Z	04:01:39.6		
	e		04:03:32.3		
	e PKKPab	Z	04:04:15.8		
	e PKPPKPdf	Z	04:12:19.2		
BFO	e SP	Z	04:01:37.1	105.4	42.4
	e PKKPbc	Z	04:03:58.6		
	e PKKPab	Z	04:04:15.5		
	e PKPPKPdf	Z	04:12:16.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	04:03:10.2	1.984N	96.003E	33.0N	5.7			SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	04:15:43.3	85.1	92.7	2.3	120	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	04:09:57.3	2.210N	94.070E	33.0N	4.9			SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:22:14.7	82.0	95.8	1.0	11	4.9		
BRG	e P	Z	04:22:14.6	82.1	96.3					
WET	e P	Z	04:22:17.4	82.6	95.2	1.0	5	4.7		
CLL	e P	Z	04:22:17.6	82.7	95.6					
MOX	e P	Z	04:22:22.3	83.5	94.4					
FUR	e P	Z	04:22:22.2	83.6	93.9					
GRA1	e P	Z	04:22:23.2	83.7	94.0	0.9	12	5.1		
CLZ	e P	Z	04:22:26.2	84.4	93.6	1.0	9	5.0		
TNS	e P	Z	04:22:32.4	85.5	92.0					
BFO	e P	Z	04:22:32.0	85.5	91.7	0.9	5	4.6		
IBBN	e P	Z	04:22:34.8	86.0	91.6					
BUG	e P	Z	04:22:36.4	86.3	91.1					



Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	04:19:47.1	15.906N	86.709E	29.0	5.3			SZGRF

Bay of Bengal

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:30:48.3	68.6	90.4	1.6	35	5.3		
	e pP	Z 04:30:56.5			1.6	34			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	04:21:17.0	8.892N	94.120E	36.3	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 04:33:05.9	76.9	92.0					
GEC2	e P	Z 04:33:06.5	77.0	91.3	0.9	7	4.8		
CLL	e P	Z 04:33:08.9	77.5	91.3					
WET	e P	Z 04:33:09.6	77.6	90.7	0.9	4	4.5		
GRA1	e P	Z 04:33:16.0	78.6	89.6	0.9	4	4.5		
	e pP	Z 04:33:26.5							
CLZ	e P	Z 04:33:18.5	79.2	89.4	0.9	7	4.7		
STU	e P	Z 04:33:22.9	80.0	87.9					
BFO	e P	Z 04:33:25.9	80.6	87.2	1.0	3	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	04:33:12.9	1.600N	96.030E	28.3	4.5			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 04:45:39.9	83.8	94.7	0.8	3	4.6		
BRG	e P	Z 04:45:39.8	83.8	95.1					
WET	e P	Z 04:45:42.6	84.3	94.1	0.7	2	4.4		
CLL	e P	Z 04:45:42.5	84.4	94.5					
MOX	e P	Z 04:45:47.2	85.2	93.3					
GRA1	e P	Z 04:45:48.9	85.4	92.9	0.7	4	4.8		
	e pP	Z 04:45:57.2							
CLZ	e P	Z 04:45:51.4	86.1	92.4	0.8	3	4.5		
TNS	e P	Z 04:45:57.3	87.2	90.8					
BFO	e P	Z 04:45:56.9	87.3	90.7	0.7	2	4.4		
BUG	e P	Z 04:46:01.0	88.0	90.0					
WLF	e P	Z 04:46:03.8	88.7	89.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	08:00:27.7	7.940N	93.860E	18.8	5.7			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:12:23.1	77.5	92.8					
GEC2	e P	Z 08:12:23.6	77.6	92.1	0.8	80	5.9		
CLL	e P	Z 08:12:26.1	78.1	92.1					
WET	e P	Z 08:12:26.7	78.1	91.6	0.9	52	5.7		
GUNZ	e P	Z 08:12:28.8	78.5	91.4					
WERD	e P	Z 08:12:28.5	78.5	91.4					
NOTT	e P	Z 08:12:29.2	78.6	91.1					
MOX	e P	Z 08:12:31.1	79.0	90.9					
FUR	e P	Z 08:12:31.9	79.2	90.2					
GRA1	e P	Z 08:12:33.0	79.2	90.4	0.9	85	5.8		
	e pP	Z 08:12:38.5							
CLZ	e P	Z 08:12:35.5	79.7	90.2	0.8	81	5.7		
BSEG	e P	Z 08:12:35.7	79.8	90.5					
NRDL	e P	Z 08:12:36.4	79.9	90.1					
UBBA	e P	Z 08:12:36.2	80.0	89.7					
STU	e P	Z 08:12:39.6	80.5	88.7					
TNS	e P	Z 08:12:42.2	81.0	88.4					
BFO	e P	Z 08:12:42.4	81.1	88.0	0.8	32	5.4		
IBBN	e P	Z 08:12:44.2	81.3	88.2					
BUG	e P	Z 08:12:45.9	81.7	87.7					
WLF	e P	Z 08:12:50.5	82.5	86.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	10:47:52.6	34.469N	73.231E	33.0N	4.7			SZGRF

Pakistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:56:20.9	47.0	84.4	1.0	6	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	12:23:16.4	5.282N	123.302E	494.0G	6.6			NEIC-M

Mindanao, Philippine Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e Sdiff	T 12:46:26.1	97.0	70.5					
	e	12:51:30.7							
RUE	e Pdiff	Z 12:35:55.6	97.5	71.2					
	e pPdiff	Z 12:37:58.1							
	e Sdiff	T 12:46:31.6							
	e	12:50:09.4							

BRG	e Pdiff	Z	12:35:57.5	97.9	71.5	0.8	281	7.0
	e Sdiff	T	12:46:35.3					
	e		12:51:41.8					
CLL	e Pdiff	Z	12:35:58.7	98.3	70.7	1.3	224	6.7
	e Sdiff	T	12:46:39.0					
	e		12:50:16.8					
GEC2	e Pdiff	Z	12:36:00.7	98.7	71.6	1.1	172	6.7
	e sPP	Z	12:42:55.7					
	e Sdiff	T	12:46:46.4					
	e		12:50:22.4					
	e		12:51:47.3					
BSEG	e Sdiff	T	12:46:48.2	98.9	68.1			
	e		12:50:22.4					
WET	e Pdiff	Z	12:36:02.8	99.1	70.9	1.3	163	6.6
	e sPP	Z	12:43:03.0					
	e Sdiff	T	12:46:48.2					
	e		12:50:24.2					
	e		12:51:51.0					
NOTT	e sPP	Z	12:43:04.9	99.3	70.2			
	e		12:50:26.0					
MOX	e Pdiff	Z	12:36:03.8	99.3	69.7	1.4	213	6.7
	e Sdiff	T	12:46:48.2					
	e		12:50:24.2					
CLZ	e Pdiff	Z	12:36:05.6	99.6	68.5	1.1	364	6.9
	e pPdiff	Z	12:38:07.3					
	e Sdiff	T	12:46:51.9					
	e		12:50:27.9					
	e		12:52:00.2					
GRA1	e Pdiff	Z	12:36:06.6	99.9	69.5	1.3	168	6.5
	e pPdiff	Z	12:38:10.9					
	e PP	Z	12:40:26.7					
	e sPP	Z	12:43:04.9					
	e Sdiff	T	12:46:55.6					
	e		12:50:29.7					
	e		12:52:00.2					
HLG	e		12:50:29.7	100.1	66.0			
	e		12:52:05.8					
UBBA	e Pdiff	Z	12:36:07.2	100.2	68.3			
	e Sdiff	T	12:46:59.3					
	e		12:50:27.9					
FUR	e Pdiff	Z	12:36:10.2	100.4	69.8	1.6	350	6.7
	e		12:50:35.3					
	e		12:52:07.6					
IBBN	e Pdiff	Z	12:36:11.3	100.9	66.2	1.2	506	6.9
	e pPdiff	Z	12:38:15.5					
	e		12:50:35.3					
	e		12:52:13.1					
TNS	e Pdiff	Z	12:36:13.2	101.4	67.2	1.4	146	6.3
	e Sdiff	T	12:47:06.7					

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STU	e Pdiff	Z	12:36:14.8	101.5	68.0	1.4	183	6.5
	e Sdiff	T	12:47:06.7					
	e		12:50:37.1					
BUG	e Pdiff	Z	12:36:14.8	101.6	66.0			
	e		12:50:40.8					
	e		12:52:20.5					
BFO	e Pdiff	Z	12:36:16.9	102.2	67.4	1.3	66	6.1
	e Sdiff	T	12:47:06.7					
	e		12:50:50.0					
WLF	e Sdiff	T	12:47:17.8	102.9	65.4			
	e		12:50:57.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:06:33.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	13:54:51.0	17.460N	116.370E	33.0N	4.9			SZGRF
South China Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 14:07:20.0	84.1	69.5	0.8	13	5.2		
CLL	e P	Z 14:07:21.0	84.5	68.8	0.7	5	4.8		
GEC2	e P	Z 14:07:23.4	84.9	69.1	0.8	6	4.9		
WET	e P	Z 14:07:25.7	85.3	68.5	1.0	3	4.5		
MOX	e P	Z 14:07:26.0	85.5	67.7	1.0	8	4.8		
CLZ	e P	Z 14:07:28.2	85.8	66.8	0.9	8	4.9		
GRA1	e P	Z 14:07:29.4	86.1	67.4	1.2	13	4.9		
IBBN	e P	Z 14:07:33.8	87.1	64.9	0.9	14	5.1		
TNS	e P	Z 14:07:36.9	87.5	65.3	1.3	13	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	17:35:48.0	7.960N	93.840E	33.0N	5.6			SZGRF
Nicobar Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 17:47:39.9	77.5	92.8					
GEC2	e P	Z 17:47:40.5	77.5	92.1	1.0	54	5.6		
CLL	e P	Z 17:47:42.9	78.1	92.1					
WET	e P	Z 17:47:43.5	78.1	91.6	1.2	68	5.7		
MOX	e P	Z 17:47:48.0	78.9	90.9					

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FUR	e P	Z	17:47:48.8	79.1	90.2				
GRA1	e P	Z	17:47:49.9	79.2	90.4	1.1	85	5.7	
CLZ	e P	Z	17:47:52.3	79.7	90.2	1.0	65	5.5	
TNS	e P	Z	17:47:59.0	80.9	88.4				
BFO	e P	Z	17:47:59.3	81.1	88.0	1.0	34	5.3	
IBBN	e P	Z	17:48:01.0	81.3	88.2				
BUG	e P	Z	17:48:02.7	81.7	87.7				
WLF	e P	Z	17:48:07.3	82.4	86.6				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	18:13:42.9	27.400N	140.100E	330.0N	5.0			GSRC-M

Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:26:10.5	90.5	43.7	0.8	7	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	19:41:30.3	22.530S	175.650W	84.9				SZGRF

Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 20:01:06.9	148.3	10.5					
NRDL	e PKPbc	Z 20:01:10.3	149.7	10.6					
CLZ	e PKPbc	Z 20:01:12.2	150.3	11.3					
CLL	e PKPbc	Z 20:01:12.0	150.4	16.4					
	e pPKPbc	Z 20:01:35.6							
BRG	e PKPbc	Z 20:01:13.0	150.7	18.3					
MOX	e PKPbc	Z 20:01:14.1	151.3	14.1					
WERD	e PKPbc	Z 20:01:14.5	151.4	15.5					
	e PKPab	Z 20:01:22.3							
GUNZ	e PKPbc	Z 20:01:14.6	151.5	15.6					
	e PKPab	Z 20:01:22.9							
NOTT	e PKPbc	Z 20:01:15.9	152.0	15.5					
TNS	e PKPbc	Z 20:01:16.0	152.1	8.1					
	e PKPab	Z 20:01:26.0							
GRA1	e PKPbc	Z 20:01:16.3	152.3	13.8					
	e PKPab	Z 20:01:26.8							
GEC2	e PKPbc	Z 20:01:17.5	152.7	19.1					
WLF	e PKPbc	Z 20:01:18.3	152.8	3.6					
STU	e PKPab	Z 20:01:31.0	153.5	10.1					
BFO	e PKPab	Z 20:01:32.9	154.0	8.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2005/02/05 22:57:38.3  
Malay Peninsula

N 4.2

SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:10:18.6			0.8	2	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	23:45:27.8	0.860S	96.579E	33.0N	5.0			SZGRF

Southwest of Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:58:13.3	87.7	94.1	1.0	8			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/05	23:56:0.8	5.382N	95.852E	33.0N	4.6			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:08:20.2	82.4	90.6	1.0	5	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	01:25:43.0	52.900S	140.200E	10.0N	5.0			NEIC-M

West of Macquarie Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:45:29.5	148.6	115.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	01:28:48.6	52.800S	139.700E	10.0G	5.3	5.2		NEIC-M

West of Macquarie Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:48:33.7	148.3	115.8					
	e L	Z 02:58:38.1			21.7	759		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	04:24:15.6	13.240N	93.570E	33.0N	5.7	5.0		SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:35:44.3	73.2	89.5	0.9	81	5.8		
RUE	e P	Z	04:35:44.6	73.3	89.8	1.0	194	6.2		
GEC2	e P	Z	04:35:45.6	73.4	88.7	0.9	107	5.9		
CLL	e P	Z	04:35:47.3	73.8	88.9	1.2	62	5.5		
WET	e P	Z	04:35:48.7	74.0	88.2	1.1	79	5.6		
GUNZ	e P	Z	04:35:50.5	74.3	88.1	1.3	80	5.6		
WERD	e P	Z	04:35:50.4	74.3	88.1	0.9	48	5.5		
MOX	e P	Z	04:35:52.9	74.7	87.6	0.9	46	5.5		
GRA1	e P	Z	04:35:55.2	75.0	87.1	1.3	104	5.7		
	e L	Z	05:14:36.6			22.0	767		5.0	
FUR	e P	Z	04:35:54.7	75.1	86.7	0.9	58	5.6		
BSEG	e P	Z	04:35:56.8	75.4	87.5	1.0	115	5.9		
CLZ	e P	Z	04:35:57.1	75.4	87.0	1.0	83	5.8		
NRDL	e P	Z	04:35:58.2	75.6	87.0	1.4	123	5.8		
UBBA	e P	Z	04:35:58.5	75.7	86.4	1.4	28	5.2		
STU	e P	Z	04:36:02.7	76.4	85.3	1.3	43	5.4		
TNS	e P	Z	04:36:04.7	76.8	85.1	1.0	44	5.6		
BFO	e P	Z	04:36:05.6	77.0	84.6	1.2	27	5.3		
IBBN	e P	Z	04:36:06.1	77.0	85.1	1.2	131	5.9		
BUG	e P	Z	04:36:08.2	77.4	84.5	1.1	93	5.8		
WLF	e P	Z	04:36:13.4	78.3	83.3	1.8	134	5.8		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/06 06:07:55.8 7.710N 93.600E 20.1 5.5 4.8  
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:19:50.2	77.5	93.1	1.0	26	5.3		
GEC2	e P	Z	06:19:50.7	77.6	92.5	1.1	44	5.5		
RUE	e P	Z	06:19:51.0	77.7	93.4	0.8	99	6.0		
	e pP	Z	06:19:56.7							
WET	e P	Z	06:19:53.7	78.1	91.9	1.1	31	5.4		
CLL	e P	Z	06:19:53.1	78.1	92.5	1.1	24	5.2		
GUNZ	e P	Z	06:19:55.8	78.5	91.8	1.1	25	5.2		
WERD	e P	Z	06:19:55.7	78.5	91.8	1.1	26	5.2		
MOX	e P	Z	06:19:58.2	79.0	91.3	1.0	22	5.1		
FUR	e P	Z	06:19:59.0	79.2	90.5	0.9	29	5.3		
GRA1	e P	Z	06:20:00.0	79.2	90.8	1.0	46	5.5		
	e pP	Z	06:20:05.9							
	e L	Z	06:59:41.4			20.6	459		4.8	
CLZ	e P	Z	06:20:02.5	79.8	90.5	0.9	37	5.3		
BSEG	e P	Z	06:20:03.0	79.8	90.9	0.9	94	5.7		
	e pP	Z	06:20:08.8							
NRDL	e P	Z	06:20:03.8	79.9	90.4	1.7	146	5.6		
UBBA	e P	Z	06:20:03.6	80.0	90.1	2.1	67	5.2		
STU	e P	Z	06:20:06.6	80.5	89.1	1.2	67	5.6		

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TNS	e P	Z	06:20:09.3	81.0	88.8	1.0	33	5.3
BFO	e P	Z	06:20:09.5	81.1	88.4	1.0	32	5.3
IBBN	e P	Z	06:20:11.2	81.4	88.5	0.9	66	5.7
	e pP	Z	06:20:17.0					
BUG	e P	Z	06:20:12.9	81.7	88.0	1.0	66	5.7
WLF	e P	Z	06:20:17.6	82.5	86.9	2.1	214	6.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	07:57: 3.3			N	4.4			SZGRF

North Pacific Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:09:13.6			1.2	5	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	11:13: 8.4	11.782N	93.399E	33.0N	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:24:52.7	76.0	88.2	1.0	11	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	12:00:22.6	7.586S	13.561W	33.0N	4.3			SZGRF

Ascension Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:10:34.5	61.2	208.3	1.2	6	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	16:25:41.2	9.790N	91.888E	33.0N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:37:28.5	76.5	90.7	1.2	11	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	23:01: 5.6	9.291N	97.592E	33.0N	4.3			SZGRF

Nicobar Islands, India, region



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Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:13:15.2	80.6	86.7	1.0	3	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/06	23:13: 6.0	9.157N	92.576E	33.0N	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:24:58.4	77.4	90.6	1.1	6			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	00:14:44.5	11.600N	92.903E	56.7	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:26:21.3	75.8	88.7	1.2	13	4.9		
	e pP	Z 00:26:37.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	06:23:41.7	51.527N	133.670W	33.0N	5.0			SZGRF

Queen Charlotte Islands, Canada, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 06:34:52.1	70.3	337.1	1.0	13	5.0		
IBBN	e P	Z 06:34:57.2	71.2	335.8	1.5	48	5.4		
NRDL	e P	Z 06:34:59.6	71.6	337.2	1.1	13	5.0		
CLZ	e P	Z 06:35:03.9	72.3	337.4	1.0	18	5.2		
UBBA	e P	Z 06:35:10.2	73.1	337.3	1.7	24	5.0		
TNS	e P	Z 06:35:09.2	73.3	336.5	1.3	18	4.9		
CLL	e P	Z 06:35:09.8	73.4	339.1	3.0	78	5.2		
MOX	e P	Z 06:35:11.6	73.7	338.3	0.9	11	4.9		
BRG	e P	Z 06:35:13.6	74.0	339.7	1.1	17	5.0		
GUNZ	e P	Z 06:35:13.6	74.1	338.8	1.0	8	4.7		
GRA1	e P	Z 06:35:17.1	74.5	338.2	1.0	15	5.0		
BFO	e P	Z 06:35:18.9	75.0	336.6	1.1	14	4.9		
WET	e P	Z 06:35:21.7	75.4	339.2	1.1	6	4.7		
GEC2	e P	Z 06:35:24.3	75.8	339.8	1.1	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	09:39:47.0	43.650N	147.060E	33.0N	5.1			SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:51:31.1	75.7	30.8	1.2	33	5.3		
RUE	e P	Z	09:51:31.6	75.8	32.9	0.8	31	5.5		
NRDL	e P	Z	09:51:38.1	77.0	30.5	1.2	10	4.8		
CLL	e P	Z	09:51:38.4	77.0	32.2	0.8	25	5.4		
BRG	e P	Z	09:51:38.7	77.1	32.8	0.8	11	5.0		
CLZ	e P	Z	09:51:41.2	77.4	30.6	0.9	33	5.5		
IBBN	e P	Z	09:51:42.7	77.8	28.9	0.7	22	5.4		
WERD	e P	Z	09:51:44.2	78.0	31.7	1.3	14	4.9		
MOX	e P	Z	09:51:44.1	78.1	31.3	1.3	21	5.1		
GUNZ	e P	Z	09:51:44.1	78.1	31.7	0.8	7	4.9		
UBBA	e P	Z	09:51:47.1	78.4	30.2					
BUG	e P	Z	09:51:48.0	78.7	28.4	0.9	20	5.1		
GEC2	e P	Z	09:51:48.8	78.9	32.4	0.4	5	4.9		
WET	e P	Z	09:51:49.4	78.9	31.9	1.2	16	4.9		
GRA1	e P	Z	09:51:50.1	79.0	30.9	1.0	30	5.3		
TNS	e P	Z	09:51:52.0	79.4	29.1	1.4	16	4.8		
STU	e P	Z	09:51:57.4	80.5	29.5	0.6	12	5.1		
BFO	e P	Z	09:52:00.7	81.1	28.9	1.1	9	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	14:04:40.6	21.350S	177.250W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	14:24:19.5	146.9	13.0					
RUE	e PKPbc	Z	14:24:21.9	147.7	19.5					
NRDL	e PKPbc	Z	14:24:23.5	148.3	13.1					
IBBN	e PKPbc	Z	14:24:25.0	148.8	9.0					
	e PKPab	Z	14:24:28.9							
CLZ	e PKPbc	Z	14:24:25.1	148.9	13.9					
	e PKPab	Z	14:24:29.3							
CLL	e PKPbc	Z	14:24:25.2	149.0	18.8					
	e PKPab	Z	14:24:29.1							
BRG	e PKPbc	Z	14:24:25.7	149.2	20.7					
	e PKPab	Z	14:24:30.0							
MOX	e PKPbc	Z	14:24:27.4	149.9	16.6					
	e PKPab	Z	14:24:32.9							
WERD	e PKPbc	Z	14:24:27.8	149.9	18.0					
	e PKPab	Z	14:24:33.3							
UBBA	e PKPbc	Z	14:24:27.2	150.0	13.6					
GUNZ	e PKPbc	Z	14:24:28.1	150.0	18.1					
	e PKPab	Z	14:24:33.9							
NOTT	e PKPbc	Z	14:24:29.2	150.6	18.0					
	e PKPab	Z	14:24:36.1							
TNS	e PKPbc	Z	14:24:29.7	150.8	10.9					

	e PKPab	Z	14:24:36.8								
GRA1	e PKPbc	Z	14:24:30.2	150.9	16.4						
	e PKPab	Z	14:24:37.7								
WET	e PKPbc	Z	14:24:30.4	151.1	19.8						
	e PKPab	Z	14:24:38.3								
GEC2	e PKPbc	Z	14:24:30.3	151.2	21.5						
	e PKPab	Z	14:24:38.4								
FUR	e PKPab	Z	14:24:43.1	152.3	17.3						
BFO	e PKPbc	Z	14:24:34.0	152.7	11.4						
	e PKPab	Z	14:24:44.6								

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	16:46:29.9			N	4.7			SZGRF
Southwest of Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:59:08.6			0.9	6	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 17:56:22.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	20:05:14.8			N				SZGRF
Tunisia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:08:50.0			1.1	13			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	20:02:19.0	4.500S	153.100E	52.0N		5.8		NEIC-M
New Ireland, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:21:12.6	124.6	48.4					
	e PP	Z 20:23:06.3							
	e SKPdf	Z 20:24:47.2							
	e L	Z 21:20:43.8			20.8	2189		5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/07	20:46:1.9			N				SZGRF
Tunisia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA2	e P	Z 20:49:36.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	02:18:11.2	14.220N	62.310W	105.1	5.0			SZGRF
Windward Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 02:28:43.4	65.3	262.9	0.9	16	5.3		
BFO	e P	Z 02:28:51.3	66.6	265.2	1.3	7	4.7		
IBBN	e P	Z 02:28:51.7	66.6	263.0	0.8	24	5.5		
TNS	e P	Z 02:28:53.2	66.8	264.5	0.9	16	5.2		
STU	e P	Z 02:28:55.1	67.2	265.7	0.9	19	5.3		
UBBA	e P	Z 02:28:58.6	67.9	265.5	1.2	7	4.8		
NRDL	e P	Z 02:29:00.9	68.1	264.9	0.9	16	5.2		
CLZ	e P	Z 02:29:01.7	68.2	265.4	1.4	23	5.2		
BSEG	e P	Z 02:29:02.4	68.3	264.5	1.0	21	5.3		
GRA1	e P	Z 02:29:04.2	68.6	266.9	1.5	34	5.3		
	e pP	Z 02:29:30.5							
MOX	e P	Z 02:29:05.9	68.9	266.8	1.5	11	4.9		
NOTT	e P	Z 02:29:07.6	69.2	267.5	1.4	9	4.8		
WERD	e P	Z 02:29:08.6	69.3	267.4	1.3	14	5.0		
GUNZ	e P	Z 02:29:08.5	69.3	267.5	0.9	7	4.9		
WET	e P	Z 02:29:10.6	69.6	268.4	0.9	6	4.7		
CLL	e P	Z 02:29:11.3	69.8	267.7	0.8	11	5.0		
GEC2	e P	Z 02:29:13.8	70.2	269.1	1.0	6	4.7		
BRG	e P	Z 02:29:15.2	70.4	268.6	0.9	12	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	02:29:22.7	36.340N	140.300E	33.0N	5.1			SZGRF
Near east coast of eastern Honshu, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 02:41:30.2	79.7	41.1	0.9	17	5.0		
BSEG	e P	Z 02:41:31.6	80.0	38.8	1.0	20	5.0		
BRG	e P	Z 02:41:36.2	80.9	41.1	0.9	13	4.9		
CLL	e P	Z 02:41:36.2	80.9	40.5	0.9	32	5.4		
NRDL	e P	Z 02:41:37.7	81.2	38.5	0.8	6	4.7		
CLZ	e P	Z 02:41:40.2	81.6	38.6	1.0	20	5.2		

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WERD	e P	Z	02:41:41.5	81.9	39.9	1.3	10	4.8
GUNZ	e P	Z	02:41:42.2	81.9	39.9	0.8	10	5.0
MOX	e P	Z	02:41:42.1	82.0	39.4	1.0	9	4.9
IBBN	e P	Z	02:41:43.6	82.2	36.8	0.8	24	5.5
NOTT	e P	Z	02:41:44.7	82.5	39.7	1.1	14	5.1
GEC2	e P	Z	02:41:44.6	82.5	40.7	0.9	8	4.9
WET	e P	Z	02:41:45.7	82.6	40.2	1.4	18	5.1
GRA1	e P	Z	02:41:47.2	82.9	39.1	0.9	33	5.6
BUG	e P	Z	02:41:47.4	83.1	36.4	0.9	14	5.2
TNS	e P	Z	02:41:50.4	83.6	37.1	1.0	8	4.9
FUR	e P	Z	02:41:53.1	84.1	39.0	0.9	28	5.5
STU	e P	Z	02:41:55.0	84.5	37.6	1.0	17	5.2
BFO	e P	Z	02:41:57.9	85.2	36.9	1.3	27	5.3

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/08 02:42:19.0 39.950N 74.930E 22.8 4.8  
 Southern Xinjiang, China

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	02:50:16.0	42.7	81.7					
BRG	e P	Z	02:50:17.5	42.9	80.1	1.0	14	4.7		
CLL	e P	Z	02:50:20.4	43.4	80.0	1.0	12	4.6		
GEC2	e P	Z	02:50:21.7	43.4	77.8	1.0	20	4.8		
WET	e P	Z	02:50:25.0	43.9	77.6	1.0	13	4.6		
WERD	e P	Z	02:50:25.4	44.0	78.6	1.0	8	4.4		
GUNZ	e P	Z	02:50:25.5	44.0	78.5	1.3	15	4.6		
NOTT	e P	Z	02:50:28.6	44.2	77.9	1.4	16	4.5		
MOX	e P	Z	02:50:28.8	44.4	78.4	1.1	11	4.7		
BSEG	e P	Z	02:50:31.1	44.6	80.8	1.1	30	5.1		
GRA1	e P	Z	02:50:33.2	44.8	77.2	1.0	35	5.3		
	e pP	Z	02:50:39.4							
CLZ	e P	Z	02:50:33.2	44.9	78.7	1.0	8	4.6		
NRDL	e P	Z	02:50:34.1	44.9	79.2	1.3	31	5.1		
FUR	e P	Z	02:50:35.7	45.1	75.7	0.9	30	5.2		
STU	e P	Z	02:50:44.6	46.3	75.1	1.1	21	5.1		
IBBN	e P	Z	02:50:45.2	46.4	77.5					
TNS	e P	Z	02:50:45.4	46.4	76.0	1.0	7	4.7		
BUG	e P	Z	02:50:48.6	46.9	76.3	1.4	25	5.2		
BFO	e P	Z	02:50:49.8	47.0	74.2	0.9	9	4.9		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/08 03:35:23.6 29.600N 84.710E 33.0 4.9  
 Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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RUE	e P	Z	03:44:57.0	55.6	84.7	0.7	13	5.1
BRG	e P	Z	03:44:58.0	55.7	83.8	0.8	8	4.8
GEC2	e P	Z	03:45:00.6	56.1	82.2	1.5	16	4.8
CLL	e P	Z	03:45:01.2	56.2	83.4	1.3	11	4.7
WET	e P	Z	03:45:03.4	56.6	81.9	1.2	11	4.8
GUNZ	e P	Z	03:45:05.3	56.7	82.3	0.7	4	4.6
WERD	e P	Z	03:45:05.5	56.8	82.3	0.4	10	5.2
NOTT	e P	Z	03:45:07.4	57.0	81.8	1.0	10	4.8
MOX	e P	Z	03:45:07.9	57.2	81.9	1.0	5	4.5
BSEG	e P	Z	03:45:11.2	57.5	83.1	1.3	19	5.0
GRA1	e P	Z	03:45:11.6	57.6	81.1	0.9	9	4.8
CLZ	e P	Z	03:45:12.9	57.8	81.8	0.9	13	5.0
FUR	e P	Z	03:45:13.7	57.8	80.1	0.6	9	5.0
NRDL	e P	Z	03:45:13.3	57.8	82.0	1.1	19	5.1
STU	e P	Z	03:45:20.9	59.0	79.1	0.9	7	4.7
TNS	e P	Z	03:45:22.5	59.2	79.4	0.9	9	4.8
WLF	e P	Z	03:45:33.4	60.8	77.5	1.0	17	4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	04:39: 1.8	0.264N	98.245E	33.0N	4.8			SZGRF
Northern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:51:48.4	87.9	92.1	1.1	6	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	07:21: 5.4	20.230N	95.260E	33.0N	5.4			SZGRF
Myanmar								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 07:32:08.3	69.0	83.8	1.0	74	5.9		
BRG	e P	Z 07:32:09.0	69.0	83.3	0.8	33	5.6		
GEC2	e P	Z 07:32:11.6	69.5	82.4	0.8	37	5.5		
CLL	e P	Z 07:32:12.1	69.6	82.8	1.2	25	5.2		
WET	e P	Z 07:32:14.6	69.9	81.9	1.0	26	5.3		
GUNZ	e P	Z 07:32:15.7	70.1	82.0	1.0	38	5.5		
WERD	e P	Z 07:32:15.6	70.1	82.0	0.9	28	5.4		
NOTT	e P	Z 07:32:17.2	70.3	81.6	1.0	41	5.5		
MOX	e P	Z 07:32:18.0	70.5	81.5	1.1	26	5.3		
BSEG	e P	Z 07:32:20.2	70.8	81.7	0.8	57	5.7		
GRA1	e P	Z 07:32:20.9	70.9	80.9	1.6	72	5.5		
CLZ	e P	Z 07:32:21.8	71.1	81.0	1.3	58	5.6		
NRDL	e P	Z 07:32:22.3	71.2	81.0	1.4	62	5.5		
UBBA	e P	Z 07:32:23.8	71.5	80.4	1.0	13	5.0		
STU	e P	Z 07:32:29.3	72.4	79.1	1.0	37	5.5		

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TNS	e P	Z	07:32:30.6	72.6	79.1	1.0	28	5.3
IBBN	e P	Z	07:32:30.6	72.6	79.2	0.8	32	5.5
BFO	e P	Z	07:32:32.6	73.0	78.4	1.1	16	5.0
BUG	e P	Z	07:32:33.4	73.1	78.6	0.9	28	5.4
WLF	e P	Z	07:32:40.2	74.2	77.2	1.1	64	5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	14:48:18.1	14.200S	167.300E	180.0N				GSRC-M

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 15:07:16.0	139.5	37.2					
	e PP	Z 15:10:21.5							
	e SKP	Z 15:10:45.4							
	e	15:12:15.3							
	e SKKP	Z 15:19:24.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	16:38:26.1	34.683N	27.267E	33.0N	4.4			SZGRF

Eastern Mediterranean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 16:42:29.1	17.3	139.7	0.7	12	4.1		
WET	e P	Z 16:42:34.3	17.9	138.4	0.8	9	4.0		
FUR	e P	Z 16:42:34.8	18.0	132.7	1.0	46	4.5		
NOTT	e P	Z 16:42:42.7	18.8	138.1	1.0	8	3.9		
BRG	e P	Z 16:42:46.1	18.8	144.1	0.9	12	4.2		
GRA1	e P	Z 16:42:46.2	19.1	135.9	1.6	63	4.6		
GUNZ	e P	Z 16:42:47.2	19.1	139.6	1.2	34	4.4		
WERD	e P	Z 16:42:48.3	19.2	139.7	1.1	26	4.4		
STU	e P	Z 16:42:51.0	19.4	129.8	0.9	27	4.5		
CLL	e P	Z 16:42:52.9	19.5	142.7	0.8	18	4.4		
BFO	e P	Z 16:42:53.0	19.6	127.2	1.1	24	4.3		
MOX	e P	Z 16:42:55.3	19.6	138.6	1.5	49	4.5		
UBBA	e P	Z 16:43:03.9	20.4	135.6	1.8	43	4.4		
TNS	e P	Z 16:43:05.3	20.7	131.4	1.1	36	4.6		
CLZ	e P	Z 16:43:08.5	21.0	138.2	1.1	21	4.4		
WLF	e P	Z 16:43:14.6	21.5	126.2	1.0	38	4.8		
NRDL	e P	Z 16:43:13.6	21.6	138.8	1.2	22	4.5		
BUG	e P	Z 16:43:20.0	22.1	131.6	3.8	426	5.2		
BSEG	e P	Z 16:43:25.4	22.6	141.5	1.0	19	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2005/02/08

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 17:39:39.2							
	e	17:39:45.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 19:06:06.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/08	21:21: 7.1			N	4.6			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:32:41.8			1.2	7	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 00:30:13.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/09	01:02:25.0	1.260N	94.510E	30.0	5.0			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 01:14:47.8	83.0	96.1	0.9	14	5.2		
BRG	e P	Z 01:14:48.0	83.1	96.5					
WET	e P	Z 01:14:50.7	83.6	95.5	0.9	6	4.8		
MOX	e P	Z 01:14:55.5	84.5	94.7					
FUR	e P	Z 01:14:55.4	84.6	94.2					
GRA1	e P	Z 01:14:56.3	84.7	94.3	0.9	14	5.2		
	e pP	Z 01:15:04.9							
CLZ	e P	Z 01:14:59.7	85.4	93.8	0.9	11	5.1		
TNS	e P	Z 01:15:05.7	86.5	92.2					
BFO	e P	Z 01:15:05.2	86.5	92.0	0.9	5	4.7		
IBBN	e P	Z 01:15:07.7	87.0	91.8					



BUG	e P	Z	01:15:09.1	87.3	91.4
WLF	e P	Z	01:15:12.6	88.0	90.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/09	02:45:56.6	6.570N	92.790E	27.8	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:57:52.3	77.9	94.5					
GEC2	e P	Z	02:57:52.5	77.9	93.9	1.0	24	5.3		
WET	e P	Z	02:57:55.6	78.4	93.3	1.0	18	5.1		
CLL	e P	Z	02:57:55.3	78.5	93.9					
MOX	e P	Z	02:58:00.4	79.3	92.6					
FUR	e P	Z	02:58:00.7	79.5	91.9					
GRA1	e P	Z	02:58:02.0	79.5	92.2	1.0	35	5.3		
	e pP	Z	02:58:10.0							
CLZ	e P	Z	02:58:04.7	80.2	91.9	1.0	18	5.0		
STU	e P	Z	02:58:08.2	80.8	90.5					
TNS	e P	Z	02:58:11.2	81.3	90.1					
BFO	e P	Z	02:58:11.2	81.4	89.7	0.9	10	4.8		
IBBN	e P	Z	02:58:13.4	81.8	89.9					
BUG	e P	Z	02:58:15.0	82.1	89.4					
WLF	e P	Z	02:58:19.4	82.8	88.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/09	04:39:50.4	2.320N	93.110E	33.0N	4.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:52:04.0	81.3	96.5	0.8	10	4.9		
BRG	e P	Z	04:52:04.0	81.4	97.0					
WET	e P	Z	04:52:06.9	81.9	95.9	0.9	4	4.6		
CLL	e P	Z	04:52:06.9	82.0	96.3					
MOX	e P	Z	04:52:11.5	82.8	95.1					
FUR	e P	Z	04:52:10.9	82.8	94.6					
GRA1	e P	Z	04:52:13.2	83.0	94.7	0.9	7	4.9		
CLZ	e P	Z	04:52:15.9	83.7	94.3	0.8	5	4.8		
STU	e P	Z	04:52:18.5	84.2	93.1					
BFO	e P	Z	04:52:21.9	84.8	92.4	0.7	3	4.6		
TNS	e P	Z	04:52:21.9	84.8	92.6					
IBBN	e P	Z	04:52:24.5	85.3	92.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2005/02/09 13:27:27.8 5.290N 95.240E 49.1 5.8 5.4 SZGRF  
Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:39:34.3	80.4	93.4					
	e S	N	13:49:36.7							
GEC2	e P	Z	13:39:34.8	80.5	92.9	1.1	129	5.8		
	e S	N	13:49:38.0							
WET	e P	Z	13:39:37.6	81.0	92.3	1.3	87	5.7		
	e S	N	13:49:44.0							
CLL	e P	Z	13:39:37.2	81.0	92.7					
MOX	e P	Z	13:39:41.9	81.9	91.6					
FUR	e P	Z	13:39:43.2	82.0	91.0					
GRA1	e P	Z	13:39:43.6	82.1	91.1	1.3	131	6.0		
	e pP	Z	13:39:57.9							
	e S	N	13:49:56.3							
	e L	Z	14:22:58.2			20.5	1804		5.4	
CLZ	e P	Z	13:39:46.2	82.7	90.8	1.3	106	5.9		
STU	e P	Z	13:39:49.7	83.4	89.5					
	e S	N	13:50:06.6							
TNS	e P	Z	13:39:52.5	83.9	89.1					
BFO	e P	Z	13:39:52.4	84.0	88.8	1.2	47	5.6		
IBBN	e P	Z	13:39:54.5	84.3	88.7					
BUG	e P	Z	13:39:56.0	84.6	88.3					
WLF	e P	Z	13:40:00.3	85.4	87.3					

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/09 18:46:14.3 27.080N 144.230E 33.0N 6.3 6.2 SZGRF  
Bonin Islands, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	18:59:09.6	89.5	42.7	1.5	321	6.3		
BSEG	e P	Z	18:59:11.0	89.7	39.9					
BRG	e P	Z	18:59:14.7	90.6	42.8	1.4	200	6.3		
CLL	e P	Z	18:59:14.8	90.7	42.0	1.3	201	6.3		
NRDL	e P	Z	18:59:16.5	90.9	39.7	1.5	122	6.0		
CLZ	e P	Z	18:59:18.5	91.3	40.0	1.6	272	6.3		
WERD	e P	Z	18:59:19.5	91.6	41.5	1.4	86	5.9		
GUNZ	e P	Z	18:59:19.8	91.6	41.5	1.4	156	6.2		
MOX	e P	Z	18:59:20.1	91.7	41.0	1.5	172	6.2		
IBBN	e P	Z	18:59:21.3	92.0	37.8	2.1	697	6.6		
NOTT	e P	Z	18:59:22.3	92.1	41.4	2.0	369	6.4		
GEC2	e P	Z	18:59:21.9	92.2	42.6	1.7	194	6.1		
UBBA	e P	Z	18:59:22.3	92.3	39.7	1.8	190	6.2		
WET	e P	Z	18:59:23.1	92.3	42.0	2.1	357	6.4		
GRA1	e P	Z	18:59:24.6	92.6	40.7	1.5	385	6.6		
	e PP	Z	19:03:07.2							

	e L	Z	19:48:24.0			19.3	9162	6.2	
GRFO	e P	Z	18:59:24.6	92.6	40.7				
BUG	e P	Z	18:59:25.1	92.8	37.5	1.4	126	6.2	
TNS	e P	Z	18:59:27.7	93.3	38.5	1.4	70	5.8	
FUR	e P	Z	18:59:29.6	93.8	40.8	1.5	367	6.5	
STU	e P	Z	18:59:31.4	94.2	39.1	1.6	266	6.3	
WLF	e P	Z	18:59:34.4	94.7	36.6	1.7	375	6.5	
BFO	e P	Z	18:59:34.4	94.9	38.5	1.3	116	6.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/09	20:59:56.9	13.610N	120.980E	144.4	5.2			SZGRF

Mindoro, Philippine Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 21:12:37.7	89.3	68.2	0.7	16	5.4		
BRG	e P	Z 21:12:39.0	89.8	68.3	1.5	27	5.2		
CLL	e P	Z 21:12:41.4	90.2	67.6	1.4	18	5.1		
GEC2	e P	Z 21:12:44.3	90.7	68.1	1.1	11	5.1		
WERD	e P	Z 21:12:45.3	91.0	67.1	1.3	14	5.1		
GUNZ	e P	Z 21:12:45.3	91.0	67.1	1.4	23	5.3		
WET	e P	Z 21:12:45.3	91.1	67.5	1.4	21	5.3		
MOX	e P	Z 21:12:46.7	91.3	66.5	1.4	18	5.2		
NOTT	e P	Z 21:12:47.2	91.3	66.9	1.3	14	5.1		
GRA1	e P	Z 21:12:49.4	91.9	66.2	1.3	16	5.2		
	e pP	Z 21:13:25.9							
	e PP	Z 21:16:30.8							
UBBA	e P	Z 21:12:50.5	92.1	65.2	1.1	7	4.9		
BFO	e P	Z 21:12:59.8	94.2	64.1	1.9	38	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	01:34:34.3	8.940N	93.800E	18.6	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:46:24.9	76.7	92.2	0.8	8	4.9		
GEC2	e P	Z 01:46:25.3	76.8	91.5	1.1	20	5.2		
RUE	e P	Z 01:46:25.7	76.8	92.4	0.8	34	5.5		
CLL	e P	Z 01:46:27.7	77.3	91.5	0.8	8	4.9		
WET	e P	Z 01:46:28.4	77.3	91.0	1.2	16	5.0		
WERD	e P	Z 01:46:30.5	77.7	90.8	0.7	6	4.8		
GRA1	e P	Z 01:46:34.7	78.4	89.8	0.9	19	5.2		
	e pP	Z 01:46:40.1							
CLZ	e P	Z 01:46:37.4	78.9	89.6	1.3	33	5.2		
BSEG	e P	Z 01:46:37.7	79.0	90.0	1.0	36	5.3		
TNS	e P	Z 01:46:43.9	80.2	87.8	1.2	18	4.9		

IBBN	e P	Z	01:46:46.0	80.5	87.6	1.0	36	5.4
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	01:37: 4.8	5.294N	99.077E	33.0N	5.0			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:49:35.2	84.6	88.2	1.1	10	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	02:33: 3.2			N	4.7	5.3		SZGRF

Near north coast of Colombia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:45:12.1			1.7	15	4.7		
	e L	Z 03:19:13.2			22.0	1473		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	04:42: 2.0	35.400S	103.600W	10.0N				NEIR-M

Southeast of Easter Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:01:12.3	131.5	261.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	06:26: 8.5	14.125N	92.326E	33.0G	4.6			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 06:37:38.6	73.6	87.4	1.4	10	4.6		
	e	06:37:52.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	07:10:35.0	15.200S	173.700W	10.0N				NEIC-M

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 07:30:14.8	145.3	8.4					
	e	07:30:27.2							

e 07:30:36.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	16:53:20.1	24.640S	169.900E	33.0N		5.9		SZGRF

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPpdf	Z 17:12:57.8	146.8	42.2					
BSEG	e PKPpdf	Z 17:12:58.1	147.0	35.6					
HLG	e PKP	Z 17:13:00.7	147.6	31.5					
NRDL	e PKPbc	Z 17:13:02.5	148.2	36.6					
CLZ	e PKPbc	Z 17:13:03.8	148.6	37.7					
IBBN	e PKPbc	Z 17:13:04.8	149.2	33.0					
GRA1	e PKPpdf	Z 17:13:04.2	150.0	41.3					
	e L	Z 18:12:22.8			21.2	1896		5.9	
BUG	e PKPpdf	Z 17:13:04.7	150.1	33.0					
	e PKP	Z 17:13:07.0							
TNS	e PKPbc	Z 17:13:08.6	150.7	36.2					
FUR	e PKPpdf	Z 17:13:05.1	151.1	43.2					
	e PKPbc	Z 17:13:09.8							
STU	e PKPpdf	Z 17:13:05.4	151.5	39.0					
	e PKPbc	Z 17:13:11.0							
WLF	e PKPbc	Z 17:13:12.3	152.0	32.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 17:32:32.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	19:51: 2.8			N				SZGRF

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPbc	Z 20:10:45.3							
FUR	e PKPbc	Z 20:10:42.9							
GRA1	e PKPbc	Z 20:10:38.6							
STU	e PKPbc	Z 20:10:43.9							
TNS	e PKPbc	Z 20:10:40.8							
WLF	e PKPbc	Z 20:10:44.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/10	21:52:24.4	22.290S	171.460E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	22:11:58.6	145.3	31.7					
RUE	e PKPbc	Z	22:11:58.0	145.3	38.1					
CLL	e PKPbc	Z	22:12:02.0	146.5	38.0					
WERD	e PKPbc	Z	22:12:04.6	147.5	37.8					
IBBN	e PKPbc	Z	22:12:05.1	147.5	28.9					
	e PKPab	Z	22:12:07.3							
GUNZ	e PKPbc	Z	22:12:04.5	147.5	37.9					
	e PKPab	Z	22:12:07.2							
BUG	e PKPab	Z	22:12:11.0	148.4	28.7					
GRA1	e PKPbc	Z	22:12:06.8	148.5	36.8					
	e PKPab	Z	22:12:11.1							
FUR	e PKPab	Z	22:12:15.8	149.7	38.4					
WLF	e PKPbc	Z	22:12:12.4	150.3	28.3					
	e PKPab	Z	22:12:18.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/11	15:03:22.7	19.030S	177.790W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	15:22:53.7	144.5	13.3					
RUE	e PKPbc	Z	15:22:56.7	145.4	19.5					
NRDL	e PKPbc	Z	15:22:58.5	146.0	13.4					
IBBN	e PKPbc	Z	15:23:00.2	146.4	9.5					
CLZ	e PKPbc	Z	15:23:00.7	146.6	14.1					
CLL	e PKPbc	Z	15:23:00.5	146.6	18.8					
BRG	e PKPbc	Z	15:23:01.0	146.8	20.6					
BUG	e PKPbc	Z	15:23:02.5	147.3	8.9					
MOX	e PKPbc	Z	15:23:03.1	147.5	16.7					
WERD	e PKPbc	Z	15:23:03.2	147.6	18.0					
NOTT	e PKPbc	Z	15:23:05.3	148.2	18.0					
TNS	e PKPbc	Z	15:23:05.8	148.4	11.3					
	e PKPab	Z	15:23:08.9							
GRA1	e PKPbc	Z	15:23:06.2	148.5	16.5					
	e PKPab	Z	15:23:09.7							
WET	e PKPbc	Z	15:23:06.3	148.7	19.7					
	e PKPab	Z	15:23:10.3							
GEC2	e PKPbc	Z	15:23:06.5	148.8	21.3					
WLF	e PKPbc	Z	15:23:08.5	149.2	7.3					
	e PKPab	Z	15:23:12.9							
STU	e PKPbc	Z	15:23:09.3	149.7	13.2					

	e	PKPab	Z	15:23:14.7					
FUR	e	PKPbc	Z	15:23:09.1	150.0	17.3			
	e	PKPab	Z	15:23:15.5					
BFO	e	PKPbc	Z	15:23:10.3	150.3	11.7			
	e	PKPab	Z	15:23:16.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/11	21:00:10.4	58.330N	141.400W	15.9	5.3	5.0		SZGRF

Off coast of southeastern Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z 21:11:03.8	66.8	344.2	1.2	28	5.4		
BUG	e P	Z 21:11:06.6	67.3	342.8	1.0	24	5.4		
RUE	e P	Z 21:11:07.7	67.4	346.2	1.0	21	5.3		
CLZ	e P	Z 21:11:07.9	67.5	344.4	1.4	34	5.4		
CLL	e P	Z 21:11:12.9	68.4	345.9	1.1	17	5.2		
TNS	e P	Z 21:11:15.8	68.7	343.6	1.3	16	5.1		
MOX	e P	Z 21:11:16.3	68.8	345.2	1.0	19	5.3		
BRG	e P	Z 21:11:17.2	69.0	346.4	1.3	27	5.3		
WERD	e P	Z 21:11:18.2	69.1	345.6	1.1	12	5.0		
GRA1	e P	Z 21:11:22.0	69.7	345.1	3.2	276	5.8		
	e pP	Z 21:11:26.5							
	e L	Z 21:42:56.8			19.5	788		5.0	
NOTT	e P	Z 21:11:22.4	69.7	345.5	1.4	19	5.1		
WET	e P	Z 21:11:27.2	70.5	346.0	1.3	29	5.2		
BFO	e P	Z 21:11:26.6	70.5	343.7	1.3	25	5.2		
GEC2	e P	Z 21:11:29.4	70.9	346.5	1.3	22	5.1		
FUR	e P	Z 21:11:29.9	71.2	345.2	1.0	27	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/11								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 21:54:22.0							
GRA1	e P	Z 21:54:30.1							
WET	e P	Z 21:54:24.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	02:09: 2.9	46.020N	153.440E	33.0N	4.2			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:21:03.0	78.8	25.7	0.8	2	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	02:30:13.9	42.789N	143.605E	33.0N	4.6			SZGRF

Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:42:12.6	78.6	33.6	0.9	6	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	02:38:43.3	23.327S	171.840E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 02:58:21.1	146.4	31.7					
RUE	e PKPbc	Z 02:58:20.9	146.4	38.3					
BRG	e PKPbc	Z 02:58:23.9	147.6	40.1					
CLL	e PKPbc	Z 02:58:24.3	147.6	38.2					
NRDL	e PKPbc	Z 02:58:24.6	147.7	32.6					
CLZ	e PKPbc	Z 02:58:25.8	148.1	33.6					
WERD	e PKPbc	Z 02:58:25.9	148.6	38.0					
IBBN	e PKPbc	Z 02:58:26.9	148.6	28.9					
MOX	e PKPbc	Z 02:58:26.0	148.7	36.7					
NOTT	e PKPbc	Z 02:58:28.3	149.1	38.3					
GEC2	e PKPbc	Z 02:58:28.4	149.2	41.9					
WET	e PKPbc	Z 02:58:28.8	149.3	40.3					
GRA1	e PKPbc	Z 02:58:29.3	149.6	37.0					
TNS	e PKPbc	Z 02:58:31.0	150.1	31.8					
FUR	e PKPbc	Z 02:58:32.3	150.8	38.7					
STU	e PKPbc	Z 02:58:33.2	151.1	34.5					
WLF	e PKPbc	Z 02:58:34.1	151.4	28.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	07:55:46.1	34.380N	145.620E	31.8	4.5			SZGRF

Off east coast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:08:19.4	84.7	38.2	1.1	3	4.4		
CLL	e P	Z 08:08:18.8	84.8	37.6	1.5	17	5.1		
MOX	e P	Z 08:08:24.0	85.8	36.5	0.9	2	4.2		
NOTT	e P	Z 08:08:26.6	86.3	36.9	0.9	3	4.4		
GEC2	e P	Z 08:08:26.8	86.4	38.0	0.8	1	4.1		
WET	e P	Z 08:08:28.1	86.5	37.4	1.0	1	4.0		
BUG	e P	Z 08:08:28.9	86.7	33.3	0.9	7	4.8		



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GRA1	e P	Z	08:08:29.2	86.7	36.2	0.8	5	4.7
	e pP	Z	08:08:38.5					
GRFO	e P	Z	08:08:29.2	86.7	36.2	0.8	4	4.6
TNS	e P	Z	08:08:31.6	87.3	34.2	0.8	3	4.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	08:10:38.8	48.410N	153.310E	33.0N	4.9			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 08:22:07.8	73.0	24.7	0.8	8	4.9		
CLL	e P	Z 08:22:17.1	74.7	26.1	0.8	15	5.1		
BRG	e P	Z 08:22:17.9	74.8	26.6	0.8	5	4.6		
CLZ	e P	Z 08:22:19.1	74.9	24.5	1.1	17	5.0		
IBBN	e P	Z 08:22:19.8	75.1	22.9	0.8	9	4.8		
MOX	e P	Z 08:22:23.0	75.6	25.1	0.9	6	4.7		
BUG	e P	Z 08:22:25.3	76.0	22.5	0.6	9	5.1		
GRA1	e P	Z 08:22:29.1	76.6	24.8	0.8	14	5.2		
WET	e P	Z 08:22:29.3	76.6	25.8	0.8	10	5.0		
GEC2	e P	Z 08:22:29.0	76.7	26.2	0.7	7	4.9		
TNS	e P	Z 08:22:29.9	76.9	23.1	0.8	8	4.9		
BFO	e P	Z 08:22:39.6	78.6	22.9	0.9	10	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/12	19:40:50.9	56.080N	162.110E	33.0N	4.8			SZGRF

Near east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 19:51:59.5	69.6	17.8	0.9	13	5.0		
BRG	e P	Z 19:52:01.3	69.8	18.3	1.1	9	4.8		
BUG	e P	Z 19:52:05.2	70.5	14.6	0.8	6	4.7		
MOX	e P	Z 19:52:05.7	70.5	17.0	1.0	11	4.9		
NOTT	e P	Z 19:52:09.8	71.2	17.1	0.7	3	4.6		
GRA1	e P	Z 19:52:12.2	71.5	16.6	0.8	13	5.1		
WET	e P	Z 19:52:12.8	71.7	17.5	0.8	7	4.8		
GEC2	e P	Z 19:52:13.1	71.8	17.9	0.8	5	4.7		
BFO	e P	Z 19:52:22.0	73.3	14.9	0.8	4	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/13	01:22: 6.5	4.750N	94.710E	33.0N	6.0			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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BRG	e P	Z	01:34:15.6	80.5	94.2	1.3	128	5.8
GEC2	e P	Z	01:34:16.0	80.5	93.6	0.9	227	6.2
RUE	e P	Z	01:34:16.5	80.7	94.3	1.0	256	6.2
WET	e P	Z	01:34:18.8	81.1	93.1	1.1	120	5.8
CLL	e P	Z	01:34:18.4	81.1	93.5	1.1	77	5.7
WERD	e P	Z	01:34:20.9	81.5	92.8	1.1	74	5.7
NOTT	e P	Z	01:34:21.8	81.6	92.6	1.0	55	5.6
MOX	e P	Z	01:34:23.2	82.0	92.3	1.3	83	5.7
FUR	e P	Z	01:34:23.7	82.1	91.7	0.9	100	5.9
GRA1	e P	Z	01:34:24.9	82.2	91.9	1.1	185	6.1
CLZ	e P	Z	01:34:27.5	82.8	91.5	1.2	140	6.1
BSEG	e P	Z	01:34:28.1	82.9	91.7	1.0	150	6.2
NRDL	e P	Z	01:34:28.8	82.9	91.4	1.3	153	6.1
STU	e P	Z	01:34:31.0	83.5	90.2	0.9	62	5.9
TNS	e P	Z	01:34:33.8	84.0	89.8	1.0	90	5.9
BFO	e P	Z	01:34:33.7	84.0	89.5	1.0	73	5.9
IBBN	e P	Z	01:34:35.9	84.4	89.5	1.3	198	6.2
BUG	e P	Z	01:34:37.4	84.7	89.0	1.1	148	6.1
WLF	e P	Z	01:34:41.7	85.4	88.0	1.3	123	6.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/13	02:02: 3.3	4.630N	94.790E	33.0N	5.7			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:14:13.7	80.6	94.2	1.1	58	5.5		
GEC2	e P	Z	02:14:14.1	80.7	93.7	0.9	129	5.9		
RUE	e P	Z	02:14:14.6	80.9	94.3	0.9	128	5.9		
WET	e P	Z	02:14:16.9	81.2	93.1	1.0	63	5.6		
CLL	e P	Z	02:14:16.5	81.3	93.5	1.2	54	5.5		
WERD	e P	Z	02:14:18.9	81.6	92.8	1.1	41	5.5		
NOTT	e P	Z	02:14:19.8	81.7	92.6	1.0	29	5.4		
MOX	e P	Z	02:14:21.4	82.1	92.3	1.3	47	5.5		
FUR	e P	Z	02:14:21.8	82.2	91.7	0.9	52	5.7		
GRA1	e P	Z	02:14:23.0	82.3	91.9	1.1	101	5.9		
CLZ	e P	Z	02:14:25.6	82.9	91.5	1.1	67	5.8		
BSEG	e P	Z	02:14:26.1	83.0	91.7	1.1	124	6.1		
NRDL	e P	Z	02:14:26.9	83.1	91.4	1.3	83	5.8		
STU	e P	Z	02:14:29.1	83.6	90.3	0.9	37	5.6		
TNS	e P	Z	02:14:31.9	84.1	89.8	1.0	56	5.7		
BFO	e P	Z	02:14:31.8	84.2	89.6					
IBBN	e P	Z	02:14:34.0	84.5	89.5	1.3	139	6.0		
BUG	e P	Z	02:14:35.5	84.8	89.0	1.2	115	6.0		
WLF	e P	Z	02:14:39.7	85.6	88.0	1.3	76	5.7		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/13								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:36:14.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/13	10:23:41.9	11.270N	93.240E	33.0N	4.6			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 10:35:18.0	74.5	91.1	0.8	6	4.7		
GEC2	e P	Z 10:35:18.9	74.7	90.3	0.8	8	4.8		
WET	e P	Z 10:35:21.9	75.2	89.8	0.8	4	4.5		
NOTT	e P	Z 10:35:25.0	75.7	89.4	1.1	6	4.7		
MOX	e P	Z 10:35:26.4	76.0	89.2	0.8	4	4.6		
GRA1	e P	Z 10:35:28.5	76.3	88.7	1.0	4	4.4		
BSEG	e P	Z 10:35:30.6	76.8	89.0	0.8	8	4.9		
CLZ	e P	Z 10:35:30.7	76.8	88.5	0.8	8	4.9		
NRDL	e P	Z 10:35:32.1	76.9	88.5	1.0	5	4.6		
TNS	e P	Z 10:35:38.5	78.0	86.7	0.8	4	4.6		
BFO	e P	Z 10:35:38.8	78.2	86.2	0.9	2	4.2		
BUG	e P	Z 10:35:41.5	78.7	86.0	0.9	10	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/14	23:38: 7.8	41.990N	80.160E	33.0N	6.3	6.5		SZGRF
Southern Xinjiang, China								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 23:46:17.5	44.4	77.6	1.1	1182	6.5		
	e S	T 23:52:50.6							
RUE	e P	Z 23:46:18.1	44.6	75.9					
BRG	e P	Z 23:46:20.8	44.9	74.4					
CLL	e P	Z 23:46:24.1	45.4	74.3					
WERD	e P	Z 23:46:29.7	46.0	73.0					
WET	e P	Z 23:46:30.1	46.1	72.2	1.1	140	5.9		
BSEG	e P	Z 23:46:32.3	46.2	75.0					
NOTT	e P	Z 23:46:32.4	46.3	72.3					
MOX	e P	Z 23:46:32.6	46.4	72.8					
CLZ	e P	Z 23:46:35.9	46.8	73.1	1.1	130	5.9		
GRA1	e P	Z 23:46:37.4	46.9	71.7	1.0	439	6.5		
	e S	N 23:53:26.7							
	e S	T 23:53:27.9							
FUR	e P	Z 23:46:40.8	47.4	70.4	1.1	472	6.5		
	e S	T 23:53:34.9							

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IBBN	e P	Z	23:46:46.7	48.2	71.9						
TNS	e P	Z	23:46:48.7	48.4	70.6						
	e S	T	23:53:50.0								
STU	e P	Z	23:46:48.7	48.5	69.8						
	e S	T	23:53:49.7								
BUG	e P	Z	23:46:51.2	48.7	70.9						
	e S	T	23:53:53.7								
BFO	e P	Z	23:46:53.8	49.2	69.0						
	e S	T	23:53:59.5								
WLF	e P	Z	23:47:01.1	50.0	68.8						
	e S	T	23:54:13.5								
GRA1	e L	Z	00:07:20.2	46.9	71.7	19.7	54052			6.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/14	03:32: 3.8	10.115N	83.584W	33.0N	5.2			SZGRF

Costa Rica

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:44:38.1	85.4	280.2	1.1	17	5.2		
	e	03:44:49.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/14	13:21:54.4	13.339N	92.599E	33.0N	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:33:29.0	74.3	87.7	1.0	12	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/14	17:07: 0.6	0.060S	97.380E	72.0	6.1	5.0		SZGRF

Southwest of Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 17:19:32.4	85.9	94.8	1.4	226	6.1		
BRG	e P	Z 17:19:32.3	85.9	95.1	1.0	85	5.8		
RUE	e P	Z 17:19:33.6	86.2	95.1	1.3	502	6.5		
	e pP	Z 17:19:53.1							
WET	e P	Z 17:19:35.0	86.5	94.2	1.0	98	5.9		
CLL	e P	Z 17:19:34.9	86.5	94.4	1.1	111	5.9		
WERD	e P	Z 17:19:37.1	86.9	93.8	1.0	76	5.8		
NOTT	e P	Z 17:19:37.9	87.0	93.7	1.2	69	5.6		
MOX	e P	Z 17:19:39.4	87.4	93.3	1.4	138	5.9		
FUR	e P	Z 17:19:39.4	87.4	92.9	1.2	91	5.8		

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GRA1	e P	Z	17:19:40.7	87.6	93.0	1.3	209	6.3	
	e pP	Z	17:20:00.5						
	e PP	Z	17:23:09.2						
	e L	Z	18:05:40.5			21.3	633		5.0
CLZ	e P	Z	17:19:43.4	88.2	92.4	1.3	317	6.5	
	e pP	Z	17:20:03.3						
BSEG	e P	Z	17:19:43.9	88.3	92.4	1.2	277	6.5	
	e pP	Z	17:20:03.8						
STU	e P	Z	17:19:46.3	88.9	91.4	1.0	80	5.9	
TNS	e P	Z	17:19:49.1	89.4	90.9	1.0	212	6.3	
BFO	e P	Z	17:19:48.7	89.4	90.7	0.9	78	5.9	
IBBN	e P	Z	17:19:51.0	89.8	90.3	1.2	284	6.4	
	e pP	Z	17:20:11.1						
BUG	e P	Z	17:19:52.3	90.1	90.0	1.0	155	6.2	
WLF	e P	Z	17:19:56.1	90.8	89.1	1.2	149	6.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/14	18:05:57.6	15.380N	61.840W	14.6	5.7	5.6		SZGRF
Leeward Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 18:16:32.3	64.1	263.4	1.1	74	5.8		
BUG	e P	Z 18:16:38.0	65.1	263.4	1.0	52	5.7		
BFO	e P	Z 18:16:40.4	65.4	265.7					
IBBN	e P	Z 18:16:40.7	65.5	263.4					
TNS	e P	Z 18:16:42.3	65.7	264.9					
STU	e P	Z 18:16:44.2	66.0	266.2					
CLZ	e P	Z 18:16:50.8	67.0	265.8	1.2	63	5.7		
BSEG	e P	Z 18:16:51.5	67.2	264.9					
FUR	e P	Z 18:16:53.2	67.4	268.0					
GRA1	e P	Z 18:16:53.4	67.4	267.4	1.2	76	5.8		
	e pP	Z 18:16:57.5							
	e S	E 18:25:51.7							
	e S	Z 18:25:52.2							
	e L	Z 18:42:54.0			19.0	3668			5.6
MOX	e P	Z 18:16:55.0	67.7	267.3					
NOTT	e P	Z 18:16:57.2	68.0	268.0					
WERD	e P	Z 18:16:57.8	68.1	267.9					
WET	e P	Z 18:17:00.0	68.5	268.8	1.7	92	5.7		
CLL	e P	Z 18:17:00.8	68.6	268.1					
GEC2	e P	Z 18:17:03.3	69.0	269.6	1.5	65	5.6		
RUE	e P	Z 18:17:04.0	69.1	268.3					
BRG	e P	Z 18:17:04.5	69.2	269.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2005/02/14

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z 19:14:38.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	02:32:54.2	1.137S	91.789E	28.4	5.0	4.8		SZGRF

South Indian Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:45:25.6	84.8	98.0	1.0	9	5.0		
	e pP	Z 02:45:33.9							
	e L	Z 03:27:46.2			20.1	435		4.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	11:16:19.0	42.270N	79.490E	33.0G	5.4	4.9		SZGRF

Lake Issyk-Kul, Kyrgyzstan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 11:24:24.3	44.0	76.0					
BRG	e P	Z 11:24:27.0	44.3	74.5					
CLL	e P	Z 11:24:30.3	44.8	74.4					
GEC2	e P	Z 11:24:33.1	45.1	72.4	1.5	50	5.2		
WERD	e P	Z 11:24:35.9	45.5	73.1					
WET	e P	Z 11:24:36.2	45.5	72.2	2.2	100	5.5		
BSEG	e P	Z 11:24:38.1	45.7	75.2					
MOX	e P	Z 11:24:38.8	45.8	72.9					
NRDL	e P	Z 11:24:42.2	46.2	73.7					
CLZ	e P	Z 11:24:41.7	46.2	73.2	1.2	24	5.1		
GRA1	e P	Z 11:24:43.6	46.4	71.8	0.9	48	5.6		
	e	11:25:57.8							
	e L	Z 11:45:25.6			19.4	1454		4.9	
UBBA	e P	Z 11:24:45.9	46.7	72.1					
FUR	e P	Z 11:24:47.0	46.8	70.4					
IBBN	e P	Z 11:24:52.9	47.6	72.0					
TNS	e P	Z 11:24:54.8	47.9	70.7					
STU	e P	Z 11:24:54.9	47.9	69.8					
BUG	e P	Z 11:24:57.2	48.2	71.0					
BFO	e P	Z 11:25:00.0	48.6	69.0	1.8	83	5.5		
WLF	e P	Z 11:25:07.3	49.5	68.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	11:34:18.0			N	4.7			SZGRF

Kazakhstan-Xinjiang border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:42:38.1			1.1	9	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	13:05:53.6	24.160N	93.420E	69.6	5.3			SZGRF

Myanmar-India border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 13:16:26.1	64.9	82.4					
BRG	e P	Z 13:16:27.1	65.0	81.8					
GEC2	e P	Z 13:16:30.2	65.5	80.7	0.8	9	5.0		
WET	e P	Z 13:16:33.2	65.9	80.3	0.8	5	4.8		
WERD	e P	Z 13:16:34.1	66.1	80.4					
MOX	e P	Z 13:16:36.3	66.5	80.0					
BSEG	e P	Z 13:16:38.4	66.7	80.5					
GRA1	e P	Z 13:16:39.9	66.9	79.3	6.9	2377	6.5		
	e pP	Z 13:16:58.4							
CLZ	e P	Z 13:16:39.9	67.0	79.6	1.1	20	5.3		
NRDL	e P	Z 13:16:40.6	67.1	79.7					
FUR	e P	Z 13:16:41.4	67.2	78.7					
STU	e P	Z 13:16:48.8	68.4	77.5					
TNS	e P	Z 13:16:49.8	68.5	77.6					
BFO	e P	Z 13:16:51.9	69.0	76.8	0.7	5	4.8		
WLF	e P	Z 13:16:59.9	70.1	75.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	14:42:23.5	4.190N	125.530E	33.0G		6.5		NEIC-M

Talau Islands, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e Pdiff	Z 14:56:06.8	99.6	70.0					
BRG	e Pdiff	Z 14:56:08.6	100.1	70.4					
	e SKSac	R 15:06:41.2							
CLL	e Pdiff	Z 14:56:10.0	100.5	69.5					
	e SKSac	R 15:06:43.5							
	e	15:07:40.9							
GEC2	e Pdiff	Z 14:56:12.5	100.9	70.5					
	e SKSac	R 15:06:47.4							
BSEG	e Pdiff	Z 14:56:12.6	101.0	66.8					
	e SKSac	R 15:06:48.2							
WERD	e Pdiff	Z 14:56:13.7	101.2	69.1					
WET	e Pdiff	Z 14:56:14.4	101.3	69.8					
	e SKSac	R 15:06:49.0							

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MOX	e Pdiff	Z	14:56:15.1	101.5	68.5			
	e SKSac	R	15:06:50.2					
	e		15:07:50.1					
NRDL	e Pdiff	Z	14:56:16.3	101.7	66.9			
	e SKSac	R	15:06:51.2					
CLZ	e Pdiff	Z	14:56:16.8	101.8	67.3			
	e SKSac	R	15:06:51.7					
	e		15:07:53.1					
GRA1	e Pdiff	Z	14:56:18.1	102.1	68.4			
	e PP	Z	15:00:33.5					
	e SKSac	R	15:06:52.8					
	e		15:07:55.7					
	e L	Z	15:45:22.7			21.2	17083	6.5
UBBA	e Pdiff	Z	14:56:18.7	102.4	67.1			
	e SKSac	R	15:06:53.8					
FUR	e Pdiff	Z	14:56:19.6	102.6	68.7			
	e SKSac	R	15:06:54.1					
IBBN	e Pdiff	Z	14:56:22.3	103.1	65.0			
	e SKSac	R	15:06:56.1					
TNS	e Pdiff	Z	14:56:25.0	103.6	66.0			
	e SKSac	R	15:07:01.1					
STU	e Pdiff	Z	14:56:25.3	103.7	66.9			
BUG	e Pdiff	Z	14:56:24.8	103.7	64.7			
	e SKSac	R	15:06:59.9					
	e		15:08:09.7					
BFO	e Pdiff	Z	14:56:27.4	104.4	66.3			
	e PP	Z	15:00:49.3					
	e		15:08:13.3					
WLF	e Pdiff	Z	14:56:32.1	105.1	64.2			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	19:46:40.9	36.860N	139.100E	45.5	5.4	4.8		SZGRF
Eastern Honshu, Japan								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	19:58:42.3	79.1	39.4					
BRG	e P	Z	19:58:46.8	79.9	41.6					
CLL	e P	Z	19:58:46.7	80.0	41.0					
NRDL	e P	Z	19:58:48.2	80.2	39.1					
CLZ	e P	Z	19:58:50.8	80.7	39.2	1.7	59	5.3		
WERD	e P	Z	19:58:52.1	80.9	40.5					
MOX	e P	Z	19:58:52.6	81.1	40.0					
IBBN	e P	Z	19:58:54.2	81.3	37.4					
GEC2	e P	Z	19:58:55.4	81.6	41.2	1.5	15	4.9		
UBBA	e P	Z	19:58:55.0	81.6	38.9					
WET	e P	Z	19:58:56.2	81.7	40.7	2.0	62	5.4		
GRA1	e P	Z	19:58:57.7	82.0	39.6	1.2	64	5.6		



	e pP	Z	19:59:10.9								
	e L	Z	20:38:39.4			20.4		403		4.8	
TNS	e P	Z	19:59:01.5	82.7	37.7						
FUR	e P	Z	19:59:03.8	83.1	39.5	0.9		43		5.7	
STU	e P	Z	19:59:05.5	83.5	38.1						
WLF	e P	Z	19:59:08.0	84.0	36.1						
BFO	e P	Z	19:59:08.6	84.2	37.5						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/15	20:08:45.3	9.517N	94.214E	33.0N				SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:20:42.1	78.2	89.1	1.0	12			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
1970/07/20	23:47:52.5	9.428N	94.438E	43.7	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:32:43.0	78.4	89.0	1.0	8	4.8		
	e pP	Z 20:32:55.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/16	00:25:41.9	10.322N	94.965E	33.0N	4.8			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:37:38.1	78.1	88.0	1.0	8	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/16								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 00:39:43.2							
BSEG	e PKP	Z 00:39:38.5							
CLL	e PKP	Z 00:39:42.8							
CLZ	e PKP	Z 00:39:43.6							
IBBN	e PKP	Z 00:39:43.3							
NRDL	e PKP	Z 00:39:41.9							
TNS	e PKP	Z 00:39:47.8							



WLF	e P	Z	11:00:50.8	35.7	259.2				
BFO	e P	Z	11:00:59.6	36.9	262.9	1.3	34	4.9	
IBBN	e P	Z	11:01:03.1	37.3	257.2				
TNS	e P	Z	11:01:03.7	37.3	260.5				
STU	e P	Z	11:01:05.7	37.5	263.1				
NRDL	e P	Z	11:01:15.7	38.7	259.2				
CLZ	e P	Z	11:01:16.1	38.7	260.2	1.5	76	5.1	
GRA1	e P	Z	11:01:18.3	39.0	263.6	1.1	30	4.8	
	e L	Z	11:14:11.1			18.3	2000		5.0
BSEG	e P	Z	11:01:18.5	39.1	257.7				
MOX	e P	Z	11:01:21.3	39.3	262.8				
NOTT	e P	Z	11:01:22.1	39.6	264.3				
WERD	e P	Z	11:01:24.0	39.7	263.7				
WET	e P	Z	11:01:26.1	40.0	265.7	1.5	25	4.6	
CLL	e P	Z	11:01:28.9	40.3	263.2				
GEC2	e P	Z	11:01:31.3	40.5	266.7	1.7	28	4.6	
BRG	e P	Z	11:01:33.6	40.8	264.5				
RUE	e P	Z	11:01:33.7	40.9	262.6				

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/16 11:41:41.5 21.240S 176.280W 33.0N SZGRF  
 Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 12:01:20.8	146.9	11.3					
RUE	e PKPbc	Z 12:01:23.1	147.8	17.8					
NRDL	e PKPbc	Z 12:01:24.5	148.4	11.4					
IBBN	e PKPbc	Z 12:01:25.9	148.8	7.3					
CLZ	e PKPbc	Z 12:01:26.5	149.0	12.1					
CLL	e PKPbc	Z 12:01:26.4	149.1	17.0					
BRG	e PKPbc	Z 12:01:27.2	149.3	18.9					
BUG	e PKPbc	Z 12:01:27.8	149.7	6.6					
	e PKPab	Z 12:01:32.9							
MOX	e PKPbc	Z 12:01:28.6	149.9	14.8					
	e PKPab	Z 12:01:34.1							
WERD	e PKPbc	Z 12:01:28.9	150.0	16.2					
NOTT	e PKPbc	Z 12:01:30.4	150.7	16.1					
	e PKPab	Z 12:01:37.3							
TNS	e PKPbc	Z 12:01:30.8	150.8	9.1					
	e PKPab	Z 12:01:37.8							
GRA1	e PKPbc	Z 12:01:30.9	150.9	14.5					
WET	e PKPbc	Z 12:01:31.4	151.2	17.9					
	e PKPab	Z 12:01:39.5							
GEC2	e PKPbc	Z 12:01:31.6	151.3	19.6					
WLF	e PKPbc	Z 12:01:32.9	151.5	4.8					
	e PKPab	Z 12:01:41.3							
STU	e PKPbc	Z 12:01:33.8	152.1	11.0					

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FUR	e	PKPbc	Z	12:01:34.1	152.4	15.3						
BFO	e	PKPbc	Z	12:01:34.7	152.7	9.4						
	e	PKPab	Z	12:01:45.4								

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/16	14:33:25.7	9.631N	93.103E	33.0N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:45:18.0	77.4	89.9	1.0	7	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/16	18:35:15.3	60.560N	150.460W	33.0N	5.2			SZGRF

Kenai Peninsula, Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 18:45:51.1	64.5	349.7					
NRDL	e P	Z 18:45:59.8	65.9	349.7	1.5	32	5.3		
RUE	e P	Z 18:46:03.5	66.3	351.6	1.0	26	5.4		
CLZ	e P	Z 18:46:05.0	66.6	349.9	1.4	18	5.1		
BUG	e P	Z 18:46:05.1	66.6	348.3					
CLL	e P	Z 18:46:09.2	67.3	351.3	1.0	11	5.1		
BRG	e P	Z 18:46:12.9	67.9	351.8	1.2	16	5.1		
MOX	e P	Z 18:46:12.9	67.9	350.6	1.2	23	5.3		
TNS	e P	Z 18:46:13.4	67.9	349.0					
WERD	e P	Z 18:46:14.5	68.1	351.0	1.6	25	5.2		
WLF	e P	Z 18:46:15.2	68.2	347.9	1.0	11	5.0		
NOTT	e P	Z 18:46:17.8	68.7	350.9	1.2	13	5.0		
GRA1	e P	Z 18:46:18.8	68.8	350.5	1.2	21	5.2		
STU	e P	Z 18:46:22.2	69.4	349.5					
WET	e P	Z 18:46:23.6	69.5	351.3	1.6	29	5.2		
BFO	e P	Z 18:46:24.7	69.8	349.1	1.5	23	5.1		
GEC2	e P	Z 18:46:25.4	69.8	351.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/16	20:27:58.8	35.491S	14.367W	33.0G	6.1	6.2		SZGRF

Tristan da Cunha region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 20:40:36.5	86.2	198.4	1.3	178	6.1		
WLF	e P	Z 20:40:41.4	87.1	196.6					
GEC2	e P	Z 20:40:45.4	88.0	202.5	1.4	63	5.6		
WET	e P	Z 20:40:45.8	88.0	201.9	1.4	199	6.1		

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TNS	e P	Z	20:40:46.3	88.1	198.4				
GRA1	e P	Z	20:40:46.6	88.1	200.6	1.3	290	6.3	
	e		20:40:54.4						
	e L	Z	21:18:42.6			18.7	9345	6.2	
NOTT	e P	Z	20:40:47.9	88.5	201.3				
BUG	e P	Z	20:40:50.9	89.0	197.5				
WERD	e P	Z	20:40:51.4	89.1	201.4				
MOX	e P	Z	20:40:51.5	89.1	200.9				
BRG	e P	Z	20:40:55.0	89.9	202.7				
IBBN	e P	Z	20:40:55.7	89.9	197.9				
CLZ	e P	Z	20:40:55.9	90.0	199.9	1.6	251	6.1	
CLL	e P	Z	20:40:56.0	90.1	202.0	1.6	294	6.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	05:31:25.8	4.470N	95.030E	33.0G	6.0	4.9		SZGRF
Northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:43:37.4	80.9	94.1	1.6	216	5.9		
GEC2	e P	Z	05:43:37.8	80.9	93.6	1.5	399	6.2		
RUE	e P	Z	05:43:38.3	81.1	94.2	1.3	285	6.1		
WET	e P	Z	05:43:40.6	81.5	93.0	1.4	155	5.9		
CLL	e P	Z	05:43:40.2	81.5	93.4	1.3	106	5.8		
RGN	e P	Z	05:43:40.7	81.6	94.2	1.5	541	6.4		
WERD	e P	Z	05:43:42.6	81.9	92.8	1.4	91	5.7		
NOTT	e P	Z	05:43:43.6	82.0	92.5	1.9	204	5.9		
MOX	e P	Z	05:43:45.0	82.4	92.3	1.6	165	5.9		
FUR	e P	Z	05:43:45.4	82.5	91.7	1.2	127	6.0		
GRA1	e P	Z	05:43:46.6	82.6	91.8	1.4	213	6.2		
	e		05:44:05.6							
	e L	Z	06:26:24.3			19.8	554		4.9	
CLZ	e P	Z	05:43:49.2	83.2	91.4	1.1	100	6.0		
BSEG	e P	Z	05:43:49.8	83.3	91.6	1.1	159	6.2		
NRDL	e P	Z	05:43:50.5	83.4	91.3	1.6	328	6.3		
UBBA	e P	Z	05:43:50.1	83.4	91.0	2.0	143	5.9		
STU	e P	Z	05:43:52.8	83.9	90.2	0.9	54	5.8		
TNS	e P	Z	05:43:55.5	84.4	89.8	1.0	76	5.9		
BFO	e P	Z	05:43:55.3	84.5	89.5	0.9	51	5.8		
	e		05:44:14.6							
HLG	e P	Z	05:43:57.1	84.7	89.7	1.0	112	6.1		
IBBN	e P	Z	05:43:57.5	84.8	89.4	1.3	197	6.2		
BUG	e P	Z	05:43:59.0	85.1	89.0	1.1	104	6.0		
	e		05:44:18.0							
WLF	e P	Z	05:44:03.3	85.9	88.0	1.5	157	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	06:12:16.0	5.800S	150.600E	38.0N		5.4		NEIC-M

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 06:31:12.4	124.4	51.8					
	e L	Z 07:26:06.2			21.6	854		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	06:28:36.9	36.883N	148.189E	40.7	4.9			SZGRF

North Pacific Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 06:41:10.5	85.4	33.2	1.1	12	4.9		
	e pP	Z 06:41:22.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	11:39:36.2			N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:51:30.9			1.1	9	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	15:26:48.0	24.890S	178.110E	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 15:46:34.0	149.6	22.2					
	e PKPab	Z 15:46:39.0							
HLG	e PKPbc	Z 15:46:34.5	149.8	17.8					
RUE	e PKPbc	Z 15:46:35.3	150.0	29.3					
NRDL	e PKPbc	Z 15:46:37.2	150.9	22.8					
CLL	e PKPbc	Z 15:46:38.2	151.2	29.0					
BRG	e PKPab	Z 15:46:47.2	151.3	31.0					
CLZ	e PKPbc	Z 15:46:39.0	151.5	23.8					
WERD	e PKPbc	Z 15:46:40.4	152.2	28.5					
MOX	e PKPbc	Z 15:46:40.6	152.2	27.0					
NOTT	e PKPbc	Z 15:46:41.8	152.8	28.7					
GEC2	e PKPbc	Z 15:46:42.5	153.1	32.6					
GRA1	e PKPbc	Z 15:46:42.8	153.2	27.1					
TNS	e PKPbc	Z 15:46:43.2	153.4	21.3					
	e PKPab	Z 15:46:55.2							

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WLF	e	PKPbc	Z	15:46:45.8	154.4	17.1
FUR	e	PKPab	Z	15:47:01.2	154.5	28.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	17:21:26.3	23.220S	169.380E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e	PKPbc	Z 17:41:00.0	145.3	41.9				
BSEG	e	PKPbc	Z 17:41:00.5	145.5	35.4				
CLL	e	PKPbc	Z 17:41:04.0	146.5	41.9				
CLZ	e	PKPbc	Z 17:41:06.1	147.2	37.4				
WERD	e	PKPbc	Z 17:41:06.7	147.5	41.7				
MOX	e	PKPbc	Z 17:41:06.6	147.6	40.5				
IBBN	e	PKPbc	Z 17:41:07.3	147.7	32.8				
	e	PKPab	Z 17:41:09.5						
GEC2	e	PKPbc	Z 17:41:08.3	148.0	45.6				
GRA1	e	PKPbc	Z 17:41:09.0	148.5	40.8				
BUG	e	PKPbc	Z 17:41:09.7	148.6	32.8				
	e	PKPab	Z 17:41:13.0						
WLF	e	PKPbc	Z 17:41:15.0	150.5	32.5				
	e	PKPab	Z 17:41:21.6						
BFO	e	PKPbc	Z 17:41:14.6	150.7	37.6				
	e	PKPab	Z 17:41:22.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/17	20:43: 0.6	1.800S	81.000W	40.0N	5.8	5.1		EMSC-A

Off coast of Ecuador

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e	P	Z 20:56:07.7	92.8	270.5	2.5	96	5.8	
	e	L	Z 21:34:22.6			21.2	670	5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/18	05:54:33.9	18.823N	89.859E	33.0N	4.7			SZGRF

Bay of Bengal

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e	P	Z 06:05:33.3	68.5	85.9	0.8	4	4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2005/02/18 10:06:16.7 51.217N 175.839W 33.0N 5.0 SZGRF  
Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:18:17.3	78.9	4.5	1.1	20	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/18	10:33:32.6	50.290N	178.780W	33.0N	5.0			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 10:45:16.3	75.5	6.0					
NRDL	e P	Z 10:45:24.4	76.9	5.8					
IBBN	e P	Z 10:45:26.3	77.3	4.3					
CLZ	e P	Z 10:45:28.1	77.6	6.0	1.0	34	5.4		
CLL	e P	Z 10:45:29.0	77.9	7.7					
BUG	e P	Z 10:45:30.8	78.1	3.9					
BRG	e P	Z 10:45:31.3	78.3	8.3					
MOX	e P	Z 10:45:33.8	78.7	6.8					
WERD	e P	Z 10:45:34.7	78.8	7.2					
TNS	e P	Z 10:45:37.5	79.3	4.7					
NOTT	e P	Z 10:45:38.3	79.5	7.1					
GRA1	e P	Z 10:45:39.7	79.7	6.5	1.0	36	5.3		
WLF	e P	Z 10:45:40.3	80.0	3.2					
WET	e P	Z 10:45:41.8	80.1	7.5	1.1	9	4.6		
GEC2	e P	Z 10:45:42.7	80.3	8.1	1.1	10	4.7		
BFO	e P	Z 10:45:47.6	81.2	4.6	1.2	14	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/18	15:25:32.0	25.210S	176.680W	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z 15:45:16.5	150.8	13.1					
	e PKPbc	Z 15:45:21.1							
NRDL	e PKPdf	Z 15:45:18.6	152.2	13.3					
	e PKPbc	Z 15:45:24.4							
IBBN	e PKPdf	Z 15:45:19.5	152.7	8.8					
	e PKPbc	Z 15:45:25.8							
CLZ	e PKPdf	Z 15:45:19.5	152.8	14.1					
	e PKPbc	Z 15:45:26.1							
CLL	e PKPbc	Z 15:45:25.8	152.9	19.5					
BRG	e PKPdf	Z 15:45:19.9	153.1	21.6					
	e PKPbc	Z 15:45:26.4							
MOX	e PKPdf	Z 15:45:20.9	153.8	17.2					



	e	PKPbc	Z	15:45:28.0					
WERD	e	PKPpdf	Z	15:45:21.0	153.8	18.7			
	e	PKPbc	Z	15:45:28.2					
UBBA	e	PKPbc	Z	15:45:27.9	153.9	13.8			
NOTT	e	PKPpdf	Z	15:45:21.9	154.5	18.7			
	e	PKPbc	Z	15:45:29.7					
TNS	e	PKPpdf	Z	15:45:22.3	154.7	10.9			
	e	PKPbc	Z	15:45:30.3					
GRA1	e	PKPbc	Z	15:45:31.2	154.8	17.0			
WET	e	PKPpdf	Z	15:45:21.8	154.9	20.8			
GEC2	e	PKPpdf	Z	15:45:22.0	155.0	22.7			
STU	e	PKPpdf	Z	15:45:24.3	156.0	13.2			
FUR	e	PKPpdf	Z	15:45:24.4	156.2	18.1			

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/18 19:33:47.5 5.190N 93.880E 48.6 6.0  
 Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:45:50.1	79.6	94.5					
GEC2	e P	Z 19:45:50.4	79.6	94.0	1.2	194	5.9		
WET	e P	Z 19:45:53.3	80.2	93.4	1.1	115	5.7		
CLL	e P	Z 19:45:52.9	80.3	93.9					
MOX	e P	Z 19:45:57.8	81.1	92.7					
FUR	e P	Z 19:45:58.3	81.2	92.0					
GRA1	e P	Z 19:45:59.4	81.3	92.2	1.4	241	6.0		
	e pP	Z 19:46:13.6							
CLZ	e P	Z 19:46:02.0	81.9	91.9	1.4	162	6.0		
STU	e P	Z 19:46:05.6	82.6	90.6					
TNS	e P	Z 19:46:08.4	83.1	90.2					
BFO	e P	Z 19:46:08.3	83.2	89.9	1.1	69	5.8		
IBBN	e P	Z 19:46:10.5	83.5	89.9	1.6	300	6.3		
BUG	e P	Z 19:46:12.9	83.8	89.4					
WLF	e P	Z 19:46:16.3	84.6	88.4					

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/18 20:18:24.6 23.911N 121.314E 33.0N 6.0 5.4  
 Taiwan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:30:51.7	83.9	59.7	1.5	153	6.0		
	e L	Z 21:11:00.7			18.6	1641		5.4	



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2005/02/19 14:23:54.6 4.024N 96.702E 28.3 5.3 SZGRF  
Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:36:22.1	84.0	90.8	1.4	29	5.3		
	e pP	Z 14:36:30.3			1.4	29			

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/19

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 18:06:54.9							

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/19 22:00:28.4 10.722S 65.811E 33.0N 4.9 SZGRF  
Mid-Indian Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:12:17.9	76.9	124.7	1.3	12	4.9		

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/19 23:45: 9.6 3.720N 94.420E 33.0N 5.0 SZGRF  
Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 23:57:22.1	81.1	94.6	1.0	12	4.9		
BRG	e P	Z 23:57:21.9	81.1	95.1					
WET	e P	Z 23:57:25.0	81.7	94.0	1.1	7	4.7		
CLL	e P	Z 23:57:25.2	81.7	94.4					
WERD	e P	Z 23:57:27.3	82.1	93.7					
MOX	e P	Z 23:57:29.9	82.6	93.2					
GRA1	e P	Z 23:57:31.1	82.8	92.8	1.0	13	5.1		
CLZ	e P	Z 23:57:33.9	83.4	92.4	1.0	10	5.0		
BSEG	e P	Z 23:57:34.6	83.5	92.6					
NRDL	e P	Z 23:57:35.4	83.6	92.2					
BFO	e P	Z 23:57:40.1	84.6	90.4	1.6	18	5.1		
BUG	e P	Z 23:57:43.9	85.3	89.9					

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/20 23:07:58.0 8.820N 93.820E 33.0N 5.0 4.7 SZGRF  
Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:19:47.0	76.8	92.2	1.0	9	4.9		
GEC2	e P	Z	23:19:47.7	76.9	91.6	1.1	22	5.2		
CLL	e P	Z	23:19:49.5	77.4	91.6	1.2	12	4.9		
WET	e P	Z	23:19:51.1	77.4	91.0	1.5	26	5.1		
WERD	e P	Z	23:19:52.4	77.8	90.9	1.0	6	4.7		
MOX	e P	Z	23:19:55.3	78.3	90.4	1.1	11	4.9		
FUR	e P	Z	23:19:56.2	78.5	89.6	1.1	15	5.0		
GRA1	e P	Z	23:19:56.9	78.5	89.9	2.3	96	5.4		
CLZ	e P	Z	23:19:59.5	79.0	89.6	1.7	36	5.1		
NRDL	e P	Z	23:20:00.7	79.2	89.6	1.7	33	5.1		
UBBA	e P	Z	23:20:00.1	79.3	89.2					
STU	e P	Z	23:20:04.6	79.8	88.2	0.7	12	4.9		
BFO	e P	Z	23:20:06.2	80.4	87.4	1.0	7	4.6		
IBBN	e P	Z	23:20:08.4	80.6	87.7	0.9	31	5.4		
GRA1	e L	Z	00:00:29.3	78.5	89.9	20.8	349		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z	04:27:47.0							
FUR	e PKP	Z	04:27:47.0							
GEC2	e PKP	Z	04:27:44.1							
GRA1	e PKP	Z	04:27:42.5							
NRDL	e PKP	Z	04:27:33.8							
TNS	e PKP	Z	04:27:41.0							
WLF	e PKP	Z	04:27:43.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	04:52:49.0	9.700N	126.200E	34.0N				NEIC-M
Mindanao, Philippine Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z	05:06:33.7	98.1	64.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	09:24:59.0	14.500S	173.400W	80.0N				GSRC-M
Samoa Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WERD	e PKP	Z	09:44:23.4	143.8	9.4					

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TNS	e	PKP	Z	09:44:25.0	144.2	3.1
GRA1	e	PKP	Z	09:44:26.7	144.6	7.7
WLF	e	PKP	Z	09:44:27.5	144.8	359.2
WET	e	PKP	Z	09:44:27.4	145.0	10.6
GEC2	e	PKP	Z	09:44:28.1	145.2	12.1
STU	e	PKP	Z	09:44:29.3	145.7	4.5
FUR	e	PKP	Z	09:44:31.4	146.1	8.1
BFO	e	PKP	Z	09:44:31.0	146.1	3.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	11:43:22.6	9.155N	95.336E	37.4	4.8			SZGRF
Nicobar Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:55:24.3	79.2	88.5	1.2	12	4.8		
	e pP	Z 11:55:35.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	12:14:53.0	4.700S	153.100E	67.0				NEIC-M
New Ireland, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 12:33:46.1	124.7	48.5					
	e pPKP	Z 12:33:59.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	13:17:9.0	9.011N	94.672E	33.0N	4.2			SZGRF
Nicobar Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:29:09.6	78.9	89.1	0.8	2	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	13:41:9.5	2.249S	67.556E	33.0N	4.8			SZGRF
Carlsberg Ridge								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:52:23.4	70.8	118.3	1.1	9	4.8		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	15:38:14.4	34.910N	24.420E	33.0N	4.2			SZGRF

Crete, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 15:41:59.7	16.0	146.5	0.9	13	4.1		
FUR	e P	Z 15:42:03.7	16.5	138.8	1.1	49	4.6		
WET	e P	Z 15:42:05.4	16.6	144.9	1.1	33	4.4		
GRA1	e P	Z 15:42:16.7	17.7	141.9	1.5	72	4.6		
BRG	e P	Z 15:42:18.7	17.7	150.6	1.0	14	4.0		
BFO	e P	Z 15:42:19.8	17.9	132.5	1.0	8	3.8		
MOX	e P	Z 15:42:24.1	18.3	144.6	0.8	7	3.8		
CLL	e P	Z 15:42:24.8	18.3	149.0	1.4	19	4.0		
UBBA	e P	Z 15:42:32.7	19.0	141.2	1.7	22	4.1		
TNS	e P	Z 15:42:34.7	19.2	136.7	0.9	7	3.9		
CLZ	e P	Z 15:42:40.3	19.7	143.8	1.4	16	4.1		
WLF	e P	Z 15:42:44.1	19.9	131.0	0.9	27	4.4		
BSEG	e P	Z 15:42:57.5	21.4	146.9	1.1	34	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	15:26:28.6	13.700S	167.200E	300.0N				GSRC-M

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKP	Z 15:45:16.8	135.8	38.6					
BSEG	e PKP	Z 15:45:15.7	135.8	33.2					
BRG	e PKP	Z 15:45:17.7	137.0	39.9					
CLL	e PKP	Z 15:45:17.9	137.0	38.3					
NRDL	e PKP	Z 15:45:17.0	137.1	33.8					
CLZ	e PKP	Z 15:45:19.6	137.6	34.5					
WERD	e PKP	Z 15:45:21.7	138.0	38.0					
MOX	e PKP	Z 15:45:19.2	138.1	37.0					
GEC2	e PKP	Z 15:45:21.3	138.6	41.0					
WET	e PKP	Z 15:45:23.1	138.8	39.7					
GRA1	e PKP	Z 15:45:21.4	139.0	37.1					
TNS	e PKP	Z 15:45:22.5	139.6	32.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/20	18:36:26.9	53.810N	151.270W	33.0N	4.8			SZGRF

South of Alaska

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 18:47:44.9	71.2	348.6	1.1	7	4.7		
NRDL	e P	Z 18:47:53.3	72.6	348.6	1.4	16	5.0		
CLZ	e P	Z 18:47:57.8	73.2	348.8	1.6	20	4.9		

CLL	e P	Z	18:48:01.3	74.1	350.4	1.0	6	4.6
MOX	e P	Z	18:48:05.2	74.6	349.6	1.3	11	4.7
TNS	e P	Z	18:48:05.1	74.6	347.7	1.9	21	4.9
BRG	e P	Z	18:48:05.0	74.6	351.0	1.8	25	4.9
GRA1	e P	Z	18:48:10.6	75.5	349.4	1.6	26	5.1
WET	e P	Z	18:48:14.9	76.2	350.4	2.2	35	5.1
BFO	e P	Z	18:48:15.0	76.4	347.8	1.4	8	4.7
GEC2	e P	Z	18:48:16.4	76.6	350.9	1.0	4	4.5

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/21 00:05:00.0 29.900S 177.100W 33.0N 5.0 GSRC-M  
 Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e PKPab	Z 00:25:21.4	156.8	16.0					
IBBN	e PKPab	Z 00:25:23.8	157.3	11.0					
CLL	e PKPab	Z 00:25:23.8	157.3	23.2					
	e pPKPab	Z 00:25:39.1							
CLZ	e PKPab	Z 00:25:24.3	157.4	17.0					
BRG	e PKPab	Z 00:25:24.6	157.5	25.7					
	e pPKPab	Z 00:25:40.0							
UBBA	e PKPab	Z 00:25:29.6	158.4	16.9					
GRA1	e PKPab	Z 00:25:32.7	159.2	20.7					
	e pPKPab	Z 00:25:48.3							
	e L	Z 01:38:41.1			21.3	218		5.0	
TNS	e PKPab	Z 00:25:33.4	159.3	13.7					
WET	e PKPab	Z 00:25:33.4	159.3	25.2					
GEC2	e PKPab	Z 00:25:33.2	159.3	27.4					
STU	e PKPab	Z 00:25:39.0	160.5	16.6					
FUR	e PKPab	Z 00:25:38.8	160.6	22.4					
	e pPKPab	Z 00:25:54.4							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/21

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:37:05.0							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/21 00:26:27.9 N 4.6 SZGRF  
 Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e P	Z	00:39:00.9				1.2	5	4.6
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/21	06:10: 5.2	2.260N	94.740E	33.8	5.2			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	06:22:24.5	82.4	95.3	1.0	40	5.5		
BRG	e P	Z	06:22:24.5	82.4	95.7	1.0	19	5.2		
WET	e P	Z	06:22:27.4	83.0	94.7	1.5	40	5.4		
CLL	e P	Z	06:22:27.3	83.1	95.1	0.7	8	5.1		
WERD	e P	Z	06:22:29.6	83.4	94.4	1.1	14	5.1		
MOX	e P	Z	06:22:32.0	83.9	93.9	1.1	15	5.1		
GRA1	e P	Z	06:22:33.5	84.1	93.5	1.2	41	5.5		
	e pP	Z	06:22:43.3							
	e sP	Z	06:22:47.7							
CLZ	e P	Z	06:22:36.4	84.7	93.0	1.1	20	5.3		
UBBA	e P	Z	06:22:37.2	84.9	92.7	1.8	29	5.2		
NRDL	e P	Z	06:22:37.6	84.9	92.9	1.8	44	5.4		
TNS	e P	Z	06:22:42.3	85.9	91.4	0.9	15	5.1		
BFO	e P	Z	06:22:41.9	85.9	91.2	1.3	19	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/21	11:08: 0.1			N	4.6			SZGRF

Bay of Bengal

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	11:19:30.2			1.0	6	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/21	16:39:23.0	23.210S	169.070E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPbc	Z	16:58:56.7	145.2	42.3					
BRG	e PKPbc	Z	16:58:59.9	146.3	44.2					
CLL	e PKPbc	Z	16:59:00.1	146.4	42.3					
NRDL	e PKPbc	Z	16:59:00.8	146.6	36.8					
CLZ	e PKPbc	Z	16:59:02.0	147.0	37.8					
WERD	e PKPbc	Z	16:59:02.5	147.3	42.2					
IBBN	e PKPbc	Z	16:59:03.5	147.6	33.3					
	e PKPab	Z	16:59:05.8							
GEC2	e PKPbc	Z	16:59:04.2	147.8	46.0					



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NOTT	e	PKPbc	Z	16:59:04.2	147.9	42.6
WET	e	PKPbc	Z	16:59:04.8	148.0	44.5
GRA1	e	PKPbc	Z	16:59:05.5	148.3	41.3
TNS	e	PKPbc	Z	16:59:07.7	149.0	36.4
	e	PKPab	Z	16:59:11.5		
STU	e	PKPbc	Z	16:59:09.5	149.9	39.1
WLF	e	PKPbc	Z	16:59:10.8	150.3	33.1
	e	PKPab	Z	16:59:17.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/22	23:14:18.2	65.645S	132.667E	10.0G		5.3		NEIC-M

South of Australia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
FUR	e	PKPbc	Z 23:33:54.9	145.3	141.8					
WET	e	PKPbc	Z 23:33:54.3	145.4	140.9					
NOTT	e	PKPbc	Z 23:33:58.0	146.2	140.3					
BRG	e	PKPbc	Z 23:33:58.2	146.3	139.3					
GRA1	e	PKPbc	Z 23:33:57.2	146.5	140.4					
BFO	e	PKPbc	Z 23:33:57.8	146.6	141.7					
CLL	e	PKPbc	Z 23:33:58.8	147.0	138.9					
MOX	e	PKPbc	Z 23:33:59.2	147.1	139.5					
TNS	e	PKPbc	Z 23:34:00.6	148.1	139.9					
CLZ	e	PKPbc	Z 23:34:02.5	148.5	138.2					
BUG	e	PKPbc	Z 23:34:04.9	149.5	138.6					
BSEG	e	PKPbc	Z 23:34:07.8	150.0	135.8					
GRA1	e	L	Z 01:05:07.9	146.5	140.4	20.8	544		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/22	02:25:18.7	30.300N	57.130E	33.0N	6.0	6.2		SZGRF

Northern and central Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
SUW	e	P	Z 02:31:59.6	34.0	120.4	1.1	1311	6.8		
	e	S	E 02:37:23.6							
OKC	e	P	Z 02:32:09.9	35.1	109.0	1.1	434	6.3		
	e	S	N 02:37:41.0							
ARSA	e	P	Z 02:32:18.2	36.0	102.9	1.0	78	5.6		
OBKA	e	P	Z 02:32:22.5	36.5	101.0	1.2	86	5.6		
	e	S	E 02:38:06.9							
MOA	e	P	Z 02:32:26.2	37.0	102.5	1.0	140	5.8		
PRU	e	P	Z 02:32:28.9	37.3	105.5	2.8	996	6.3		
KBA	e	P	Z 02:32:30.2	37.4	100.7	1.0	135	5.8		
	e	S	E 02:38:17.5							
WET	e	P	Z 02:32:36.0	38.2	102.9	1.2	210	5.8		

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RUE	e P	Z	02:32:39.5	38.5	107.8	1.1	382	6.1
	e S	E	02:38:33.2					
WTTA	e P	Z	02:32:39.6	38.6	99.4	0.9	316	6.1
CLL	e P	Z	02:32:40.8	38.6	105.6	1.4	570	6.2
NKC	e P	Z	02:32:40.9	38.7	103.8	1.1	88	5.5
NOTT	e P	Z	02:32:41.8	38.8	103.0	1.2	203	5.8
	e S	E	02:38:36.7					
WERD	e P	Z	02:32:41.8	38.8	103.9	1.1	47	5.2
FUR	e P	Z	02:32:42.9	39.0	100.2	0.9	259	6.0
MOX	e P	Z	02:32:47.5	39.3	103.5	2.0	316	5.7
	e S	E	02:38:45.4					
GRA1	e P	Z	02:32:46.7	39.3	102.0	1.1	380	6.0
	e S	E	02:38:46.9					
	e L	Z	02:53:28.0			21.1	33594	6.2
RGN	e P	Z	02:32:47.1	39.4	109.8	1.1	1791	6.7
	e S	E	02:38:48.9					
DAVA	e P	Z	02:32:49.3	39.8	97.9	0.8	294	6.1
STU	e P	Z	02:32:54.6	40.5	99.1	1.2	250	5.8
TNS	e P	Z	02:33:02.5	41.2	100.1	1.2	585	6.1
IBBN	e P	Z	02:33:09.1	42.0	101.8	2.4	1853	6.3
BUG	e P	Z	02:33:10.2	42.1	100.4	1.3	213	5.6
WLF	e P	Z	02:33:13.1	42.6	97.5	1.2	373	5.9

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/22 03:20:21.2 12.513N 121.372E 79.5 5.9  
 Mindoro, Philippine Islands SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:33:25.7	93.0	66.6	2.0	100	5.9		
	e pP	Z 03:33:47.2							
	e PP	Z 03:37:16.6							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/22 08:07:11.7 34.660N 138.880E 364.8 5.5  
 Mindoro, Philippine Islands SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:17:59.1			1.0	4	4.6		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/22 11:20:27.2 34.660N 138.880E 364.8 5.5  
 Near south coast of eastern Honshu, Japan SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 11:32:03.7	80.9	40.6	1.0	68	5.7		
	e pP	Z 11:33:26.0							
BRG	e P	Z 11:32:07.5	81.7	43.0	0.7	31	5.5		
	e S	T 11:41:48.8							
	e SP	Z 11:42:37.0							
CLL	e P	Z 11:32:07.8	81.8	42.3	1.2	99	5.8		
	e S	T 11:41:50.6							
NRDL	e S	T 11:41:53.3	82.1	40.3					
CLZ	e P	Z 11:32:11.8	82.5	40.5	1.0	92	5.9		
WERD	e P	Z 11:32:12.7	82.7	41.8	1.1	32	5.2		
MOX	e P	Z 11:32:13.3	82.9	41.3	1.3	45	5.3		
	e S	T 11:42:01.6							
NOTT	e P	Z 11:32:15.5	83.3	41.6	1.3	65	5.5		
	e pP	Z 11:33:40.1							
	e S	T 11:42:05.8							
GEC2	e P	Z 11:32:15.0	83.3	42.6	0.7	21	5.3		
	e S	T 11:42:07.4							
	e SP	Z 11:42:56.3							
WET	e P	Z 11:32:16.1	83.5	42.1	0.9	18	5.1		
	e S	T 11:42:08.8							
	e SP	Z 11:43:01.2							
	e (PS)	T 11:44:39.6							
GRA1	e P	Z 11:32:18.1	83.8	40.9	1.4	96	5.5		
	e pP	Z 11:33:39.6							
	e PP	Z 11:35:39.0							
	e	11:36:11.8							
TNS	e S	T 11:42:12.1							
	e S	T 11:42:17.4	84.5	39.0					
STU	e P	Z 11:32:25.2	85.3	39.4	0.9	27	5.3		
	e S	T 11:42:25.9							
	e SP	Z 11:43:25.2							
BFO	e P	Z 11:32:28.3	86.0	38.8	0.6	16	5.3		
	e S	T 11:42:33.0							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/22 17:11:54.2 9.580N 91.940E 33.0N 5.6 5.0  
 Nicobar Islands, India, region SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 17:23:33.0	75.0	93.2	1.1	64	5.6		
GEC2	e P	Z 17:23:33.4	75.1	92.5	1.1	49	5.5		
WET	e P	Z 17:23:36.6	75.6	91.9	1.2	46	5.5		
CLL	e P	Z 17:23:36.1	75.6	92.6	1.1	47	5.5		
NOTT	e P	Z 17:23:39.9	76.1	91.5	1.5	78	5.6		
MOX	e P	Z 17:23:41.5	76.5	91.3	1.3	55	5.5		
FUR	e P	Z 17:23:42.2	76.7	90.5	1.3	71	5.6		

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GRA1	e P	Z	17:23:43.3	76.7	90.8	1.1	80	5.8			
	e L	Z	18:00:33.7			20.4	850		5.0		
GRFO	e P	Z	17:23:43.4	76.7	90.8	1.1	70	5.7			
CLZ	e P	Z	17:23:45.9	77.3	90.6	1.0	61	5.7			
BSEG	e P	Z	17:23:46.4	77.3	91.1	1.1	90	5.8			
NRDL	e P	Z	17:23:47.2	77.4	90.6	1.4	120	5.8			
TNS	e P	Z	17:23:53.0	78.5	88.8	1.1	50	5.5			
BFO	e P	Z	17:23:53.3	78.6	88.3	1.2	39	5.3			
BUG	e P	Z	17:23:56.5	79.2	88.1	1.1	35	5.3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/22	18:19:36.0	3.849N	83.253W	33.0N	4.8			SZGRF
Off coast of central America								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:32:32.3	90.0	275.9	1.0	7	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/22	19:15:59.8	27.410N	111.624W	33.0N	5.1	5.5		SZGRF
Gulf of California, Mexico								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:28:45.7	87.7	311.7	1.1	12	5.1		
	e L	Z 20:06:04.0			19.4	1642		5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 02:38:26.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23	02:42: 9.6	2.160N	95.090E	29.8	5.2			SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:54:31.2	82.7	95.1	1.2	33	5.4		
BRG	e P	Z 02:54:31.1	82.7	95.5					
WET	e P	Z 02:54:34.0	83.3	94.5	1.1	12	5.0		
CLL	e P	Z 02:54:33.8	83.4	94.8					
MOX	e P	Z 02:54:38.5	84.2	93.7					

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FUR	e P	Z	02:54:38.5	84.3	93.2				
GRA1	e P	Z	02:54:40.0	84.4	93.3	1.1	26	5.4	
	e pP	Z	02:54:48.6						
CLZ	e P	Z	02:54:42.8	85.0	92.8	1.1	18	5.2	
STU	e P	Z	02:54:45.7	85.7	91.7				
TNS	e P	Z	02:54:48.6	86.2	91.2	1.1	22	5.2	
IBBN	e P	Z	02:54:51.0	86.7	90.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (Pdiff)	Z 05:04:10.2							
	e	05:04:16.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (Pdiff)	Z 07:56:33.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23	10:40:33.7	18.100S	168.300E	60.0N				EMSC-A
Vanuatu Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 11:00:00.2	143.4	38.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23	11:33:57.8	6.200S	150.500E	38.0N				NEIC-M
New Britain, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z 11:52:49.3	122.6	54.3					
CLL	e PKPdf	Z 11:52:49.5	122.9	53.1					
WERD	e PKPdf	Z 11:52:51.4	123.7	52.8					
CLZ	e PKPdf	Z 11:52:51.2	123.8	50.1					
GEC2	e PKPdf	Z 11:52:51.8	123.9	55.1					
MOX	e PKPdf	Z 11:52:52.2	123.9	52.0					
NOTT	e PKPdf	Z 11:52:52.6	124.2	53.0					
WET	e PKPdf	Z 11:52:52.3	124.2	54.1					

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UBBA	e	PKPdf	Z	11:52:53.5	124.6	50.2					
GRA1	e	PKPdf	Z	11:52:53.5	124.7	52.1					
TNS	e	PKPdf	Z	11:52:55.5	125.8	48.9					
STU	e	PKPdf	Z	11:52:56.7	126.3	50.5					
BFO	e	PKPdf	Z	11:52:59.4	127.1	49.8					
WLF	e	PKPdf	Z	11:52:59.0	127.2	46.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23	19:55:20.9	52.564N	100.775E	33.0N	4.7			SZGRF

Tuva-Buryatia-Mongolia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:04:31.2	52.5	50.0	1.0	11	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/23	20:15:32.9	35.560N	23.840E	10.0G	4.0	3.7		SZGRF

Crete, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 20:19:12.9	15.2	147.0					
WET	e P	Z 20:19:18.8	15.8	145.3	1.0	22	4.2		
NOTT	e P	Z 20:19:28.5	16.6	144.7	0.9	6	3.7		
GRA1	e P	Z 20:19:31.2	16.9	142.2	1.1	40	4.4		
	e L	Z 20:29:23.7			18.6	386		3.7	
BRG	e P	Z 20:19:31.9	16.9	151.2	1.4	18	4.0		
TANN	e P	Z 20:19:33.1	17.0	146.7	1.2	10	3.8		
WERD	e P	Z 20:19:32.9	17.1	146.3	2.0	44	4.2		
MOX	e P	Z 20:19:39.0	17.5	145.0	1.1	5	3.6		
CLL	e P	Z 20:19:38.5	17.6	149.5	0.9	12	4.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	04:14:51.8	42.560N	15.810E	10.0G			3.5	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 04:15:46.6	4.1	166.7					3.9
	e Sn	N 04:16:27.6							
KBA	e Pn	Z 04:15:57.3	4.8	158.0					3.1
	e Sn	E 04:16:45.6							
MOA	e Pn	Z 04:16:05.8	5.4	167.8					
	e Sn	E 04:16:58.9							
DAVA	e Pn	Z 04:16:17.9	6.3	136.3					
	e Sn	N 04:17:20.7							

GEC2	e Pn	Z	04:16:19.0	6.5	166.1
	e Sn	E	04:17:23.5		
WET	e Pn	Z	04:16:24.7	6.9	161.7
	e Sn	E	04:17:33.6		
TANN	e Pn	Z	04:16:43.7	8.2	162.4
	e Sn	N	04:18:04.9		
WERD	e Pn	Z	04:16:44.2	8.2	161.7
MOX	e Pn	Z	04:16:47.3	8.6	158.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	04:55:50.7	21.000S	113.600W	10.0N		5.4		NEIC-M

Southern East Pacific Rise

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e PKPdf	Z	05:14:55.5	125.0	278.5					
BUG	e PKPdf	Z	05:14:55.5	125.4	280.7					
TNS	e PKPdf	Z	05:14:59.9	126.3	280.8					
BFO	e PKPdf	Z	05:14:59.6	126.6	279.4					
CLZ	e PKPdf	Z	05:14:57.5	127.2	283.7					
GRA1	e PKPdf	Z	05:14:58.7	128.2	282.8					
	e L	Z	06:08:11.8			21.1	877		5.4	
MOX	e PKPdf	Z	05:14:58.8	128.2	283.9					
FUR	e PKPdf	Z	05:15:01.6	128.5	281.7					
WET	e PKPdf	Z	05:15:00.4	129.4	283.9					
BRG	e PKPdf	Z	05:15:00.0	129.6	286.2					
GEC2	e PKPdf	Z	05:15:01.6	130.0	284.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	06:16:32.6	13.940N	93.380E	33.9	4.8			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:27:58.0	72.6	89.2					
GEC2	e P	Z	06:27:59.2	72.8	88.3	0.9	11	5.0		
CLL	e P	Z	06:28:01.0	73.2	88.6					
WET	e P	Z	06:28:02.4	73.3	87.8	1.2	16	5.0		
MOX	e P	Z	06:28:06.6	74.1	87.3					
GRA1	e P	Z	06:28:08.9	74.4	86.7	0.9	12	4.9		
	e pP	Z	06:28:18.6							
CLZ	e P	Z	06:28:10.9	74.8	86.7	1.0	11	4.8		
TNS	e P	Z	06:28:18.4	76.1	84.8					
BFO	e P	Z	06:28:19.5	76.4	84.2	0.9	3	4.4		
WLF	e P	Z	06:28:27.4	77.6	82.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	07:35:54.6	2.530N	94.350E	33.0N	5.4	5.3		SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	07:48:11.2	81.9	95.4	1.8	81	5.5		
BRG	e P	Z	07:48:11.0	82.0	95.9	2.0	47	5.3		
WET	e P	Z	07:48:13.9	82.5	94.8	2.7	110	5.6		
CLL	e P	Z	07:48:14.4	82.6	95.2	1.3	11	4.9		
MOX	e P	Z	07:48:19.0	83.4	94.0	2.0	46	5.4		
GRA1	e P	Z	07:48:19.4	83.6	93.6	1.8	61	5.5		
	e S	N	07:58:41.9							
	e L	Z	08:34:34.5			18.2	1223		5.3	
CLZ	e P	Z	07:48:23.2	84.3	93.2	1.8	40	5.3		
BSEG	e P	Z	07:48:23.3	84.4	93.3	1.7	62	5.6		
UBBA	e P	Z	07:48:23.7	84.5	92.8	2.3	68	5.5		
NRDL	e P	Z	07:48:23.8	84.5	93.0	1.6	49	5.5		
STU	e P	Z	07:48:26.1	84.9	92.0	1.3	28	5.3		
TNS	e P	Z	07:48:28.6	85.4	91.5	1.8	36	5.3		
BFO	e P	Z	07:48:28.2	85.5	91.3	1.5	20	5.1		
IBBN	e P	Z	07:48:31.8	85.9	91.1	2.2	223	5.9		
WLF	e P	Z	07:48:36.5	86.9	89.7	1.7	41	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	11:03:40.7	14.380N	92.750E	38.5	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	11:15:00.5	71.9	89.3	0.7	7	4.9		
GEC2	e P	Z	11:15:01.6	72.1	88.5	0.8	12	5.1		
WET	e P	Z	11:15:04.7	72.6	88.0	1.3	14	5.0		
WERD	e P	Z	11:15:06.7	72.9	88.0	1.1	10	4.8		
MOX	e P	Z	11:15:09.2	73.3	87.5	0.9	6	4.7		
GRA1	e P	Z	11:15:11.2	73.6	86.9	1.4	15	4.8		
	e pP	Z	11:15:22.1							
BSEG	e P	Z	11:15:13.1	74.0	87.4	1.2	23	5.1		
CLZ	e P	Z	11:15:13.4	74.1	86.9	0.8	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	15:06:41.8			N				SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	15:18:46.8							



e pP Z 15:18:58.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	18:57:44.0	50.040N	152.450E	33.0N	5.5			SZGRF

Northwest of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 19:09:01.9	71.3	24.6	0.9	47	5.6		
RUE	e P	Z 19:09:04.3	71.7	26.5	1.0	99	5.9		
NRDL	e P	Z 19:09:09.8	72.6	24.3	1.0	38	5.5		
CLL	e P	Z 19:09:11.3	73.0	25.9	1.0	83	5.8		
BRG	e P	Z 19:09:12.3	73.1	26.4	1.2	40	5.4		
CLZ	e P	Z 19:09:13.4	73.2	24.4	1.2	92	5.7		
IBBN	e P	Z 19:09:14.1	73.4	22.8	0.8	56	5.6		
WERD	e P	Z 19:09:17.5	73.9	25.4	1.4	56	5.4		
MOX	e P	Z 19:09:17.4	73.9	25.0	1.1	44	5.4		
UBBA	e P	Z 19:09:18.7	74.2	24.0	1.3	32	5.2		
BUG	e P	Z 19:09:20.1	74.3	22.4	0.7	22	5.3		
GRA1	e P	Z 19:09:23.5	74.9	24.6	0.9	99	5.8		
WET	e P	Z 19:09:23.8	74.9	25.6	1.0	56	5.6		
GEC2	e P	Z 19:09:23.5	75.0	26.0	0.6	21	5.4		
TNS	e P	Z 19:09:24.4	75.1	23.0	0.8	42	5.5		
FUR	e P	Z 19:09:31.2	76.3	24.5	0.9	55	5.7		
STU	e P	Z 19:09:30.8	76.3	23.3	1.1	45	5.5		
BFO	e P	Z 19:09:34.3	76.9	22.7	1.2	40	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	20:33:48.0	66.358S	133.591E	33.0N				SZGRF

Antarctica

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKPbc	Z 20:53:21.2	145.2	142.5					
WET	e PKPbc	Z 20:53:23.1	145.8	142.2					
BRG	e PKPbc	Z 20:53:26.4	146.7	140.6					
GRA1	e PKPbc	Z 20:53:26.4	146.9	141.7					
BFO	e PKPbc	Z 20:53:27.0	147.0	143.1					
WERD	e PKPbc	Z 20:53:26.9	147.0	141.0					
MOX	e PKPbc	Z 20:53:27.9	147.5	140.8					
BUG	e PKPbc	Z 20:53:34.9	149.8	140.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	21:00:38.0	18.174S	175.344E	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPab	Z	21:19:58.8	142.4	23.7					
CLL	e PKPab	Z	21:20:05.2	144.0	29.4					
BRG	e PKPab	Z	21:20:05.7	144.1	31.1					
CLZ	e PKPab	Z	21:20:07.2	144.3	25.0					
IBBN	e PKPab	Z	21:20:07.4	144.5	20.6					
WERD	e PKPab	Z	21:20:09.9	145.0	28.9					
MOX	e PKPab	Z	21:20:09.3	145.0	27.7					
UBBA	e PKPab	Z	21:20:11.6	145.3	25.0					
WET	e PKPab	Z	21:20:13.4	146.0	30.7					
GRA1	e PKPab	Z	21:20:14.6	146.0	27.7					
TNS	e PKPab	Z	21:20:15.6	146.3	22.8					
FUR	e PKPab	Z	21:20:20.6	147.3	28.9					
STU	e PKPab	Z	21:20:20.8	147.4	25.0					
BFO	e PKPab	Z	21:20:23.2	148.0	23.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/24	22:53:15.0	34.241N	144.619E	33.0N	4.6	5.0		SZGRF

Off east coast of Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	23:05:54.8	86.5	37.0					
	e L	Z	23:48:18.6			18.6	536		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	06:53:23.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25	13:30:17.7	10.045N	94.024E	33.0N	5.3			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	13:42:11.6	77.7	88.9	1.1	27	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25	13:31:25.5	10.459N	94.712E	24.7	5.6	5.0		SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:43:20.2	77.8	88.1	1.2	65	5.6		
	e pP	Z 13:43:27.3							
	e L	Z 14:23:17.4			21.2	849		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25	15:33:54.3	45.781N	146.420E	33.0N	5.5			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 15:45:24.2	73.5	30.3	1.2	46	5.4		
RUE	e P	Z 15:45:25.1	73.7	32.3					
NRDL	e P	Z 15:45:31.5	74.8	29.9					
CLL	e P	Z 15:45:31.7	74.9	31.6	0.7	83	5.8		
BRG	e P	Z 15:45:32.3	75.0	32.2	0.9	20	5.1		
CLZ	e P	Z 15:45:34.6	75.3	30.0	0.8	62	5.8		
IBBN	e P	Z 15:45:36.3	75.7	28.4					
WERD	e P	Z 15:45:37.6	75.9	31.1					
MOX	e P	Z 15:45:37.9	76.0	30.7	1.2	41	5.4		
UBBA	e P	Z 15:45:39.4	76.3	29.7					
NOTT	e P	Z 15:45:41.3	76.5	30.9					
BUG	e P	Z 15:45:42.1	76.6	28.0					
GEC2	e P	Z 15:45:42.7	76.8	31.8	1.0	24	5.3		
WET	e P	Z 15:45:43.3	76.8	31.3	1.0	50	5.6		
GRA1	e P	Z 15:45:43.8	76.9	30.3	0.7	108	6.1		
TNS	e P	Z 15:45:45.6	77.3	28.6	0.7	41	5.7		
FUR	e P	Z 15:45:50.7	78.2	30.2	1.0	57	5.6		
STU	e P	Z 15:45:51.3	78.4	28.9					
BFO	e P	Z 15:45:54.7	79.0	28.3	0.9	24	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25	20:40:29.7	2.592N	72.100E	31.4	5.1			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:52:56.2	83.8	93.3	1.6	19	5.1		
	e pP	Z 20:53:05.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/25	23:03:59.0	37.700N	94.691E	33.0G	6.3			SZGRF

Tajikistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 23:12:21.2			1.5	454	6.4		
BRG	e P	Z 23:11:49.8			1.2	932	6.4		
BSEG	e P	Z 23:12:05.1			0.9	462	6.2		
BUG	e P	Z 23:12:23.0							
CLL	e P	Z 23:11:53.7			1.4	753	6.2		
CLZ	e P	Z 23:12:06.7			1.4	708	6.4		
FUR	e P	Z 23:12:07.1			1.2	1129	6.7		
GEC2	e P	Z 23:11:53.5			1.2	395	6.0		
GRA1	e P	Z 23:12:05.8			1.3	1074	6.4		
	e SS	N 23:21:57.8							
IBBN	e P	Z 23:12:18.6							
MOX	e P	Z 23:12:01.8			1.2	453	6.1		
NOTT	e P	Z 23:12:00.7							
NRDL	e P	Z 23:12:07.5							
RUE	e P	Z 23:11:48.8							
STU	e P	Z 23:12:16.6							
TNS	e P	Z 23:12:18.1			1.0	177	6.1		
UBBA	e P	Z 23:12:09.2							
WERD	e P	Z 23:11:58.5							
WET	e P	Z 23:11:57.2			1.3	454	6.0		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2005/02/26 11:12:15.1 25.570S 178.790W 50.0N  
 South of Fiji Islands SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 11:32:01.5	150.8	17.0					
	e PKPab	Z 11:32:09.0							
RUE	e PKPbc	Z 11:32:03.3	151.5	24.3					
NRDL	e PKPbc	Z 11:32:05.3	152.3	17.4					
	e PKPab	Z 11:32:14.6							
CLL	e PKPbc	Z 11:32:06.0	152.7	23.7					
	e PKPab	Z 11:32:16.4							
IBBN	e PKPbc	Z 11:32:06.6	152.8	13.0					
	e PKPab	Z 11:32:17.4							
CLZ	e PKPbc	Z 11:32:06.6	152.8	18.3					
	e PKPab	Z 11:32:17.5							
BRG	e PKPbc	Z 11:32:06.3	152.9	25.9					
	e PKPab	Z 11:32:17.4							
UBBA	e PKPab	Z 11:32:21.6	153.9	18.2					
GRA1	e PKPab	Z 11:32:25.2	154.7	21.5					
WET	e PKPab	Z 11:32:25.9	154.7	25.3					
BFO	e PKPab	Z 11:32:33.0	156.6	16.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/26	12:37:39.4	41.190N	142.804E	33.0G	6.0			SZGRF

Hokkaido, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	12:49:26.1	76.5	37.0					
BSEG	e P	Z	12:49:26.5	76.5	34.8	1.2	224	6.2		
BRG	e P	Z	12:49:32.7	77.7	36.9	1.2	90	5.8		
CLL	e P	Z	12:49:32.4	77.7	36.3	1.1	170	6.1		
NRDL	e P	Z	12:49:33.3	77.8	34.5					
CLZ	e P	Z	12:49:36.0	78.2	34.6	1.2	236	6.1		
IBBN	e P	Z	12:49:38.4	78.7	32.8					
MOX	e P	Z	12:49:38.6	78.8	35.3	1.4	133	5.8		
UBBA	e P	Z	12:49:40.7	79.2	34.2					
GEC2	e P	Z	12:49:42.1	79.4	36.4	1.2	80	5.5		
WET	i P	Z	12:49:43.0	79.5	35.9	1.2	181	5.9		
BUG	e P	Z	12:49:43.3	79.6	32.4					
GRA1	e P	Z	12:49:44.2	79.7	34.9	1.2	358	6.2		
	e		12:50:03.2							
	e		12:50:19.1							
TNS	e P	Z	12:49:46.7	80.2	33.1	1.2	115	5.8		
FUR	e P	Z	12:49:50.4	80.9	34.8	1.2	324	6.3		
STU	e P	Z	12:49:51.6	81.2	33.5					
BFO	e P	Z	12:49:55.2	81.9	32.8	1.2	159	6.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/26	12:56:49.7	1.902N	95.288E	33.0N	6.0	6.6		SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	13:09:11.7	83.0	95.1	1.9	390	6.3		
BRG	e P	Z	13:09:11.6	83.1	95.5	1.9	235	6.1		
RUE	e P	Z	13:09:12.6	83.3	95.6					
WET	e P	Z	13:09:14.5	83.6	94.5	1.7	212	6.1		
CLL	e P	Z	13:09:14.3	83.7	94.8	1.8	144	5.9		
MOX	e P	Z	13:09:19.0	84.5	93.7	2.1	195	6.0		
FUR	e P	Z	13:09:19.1	84.6	93.2					
GRA1	e P	Z	13:09:20.7	84.7	93.3	1.7	246	6.2		
	e S	N	13:19:39.8							
	e L	Z	13:54:00.3			19.8	25582		6.6	
CLZ	e P	Z	13:09:23.2	85.4	92.8	1.3	93	5.8		
BSEG	e P	Z	13:09:23.9	85.5	92.9	1.5	158	5.9		
UBBA	e P	Z	13:09:23.9	85.5	92.5					
NRDL	e P	Z	13:09:24.5	85.6	92.7					
STU	e P	Z	13:09:26.3	86.0	91.7					
TNS	e P	Z	13:09:29.2	86.5	91.2					
BFO	e P	Z	13:09:28.9	86.6	91.0	1.5	83	5.6		

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IBBN e P Z 13:09:31.5 87.0 90.8

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/26 14:24:58.1 9.141N 93.129E 39.6 5.1 SZGRF  
Nicobar Islands, India, region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML  
GRA1 e P Z 14:36:52.6 77.8 90.2 1.3 21 5.1  
e pP Z 14:37:04.0  
e 14:37:12.4

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/26 16:59:52.4 22.071S 178.320W 33.0N SZGRF  
South of Fiji Islands

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML  
BSEG e PKPbc Z 17:19:32.8 147.5 15.0  
e PKPab Z 17:19:35.4  
RUE e PKPbc Z 17:19:34.8 148.2 21.6  
NRDL e PKPbc Z 17:19:36.5 148.9 15.2  
IBBN e PKPbc Z 17:19:38.0 149.4 11.1  
CLL e PKPbc Z 17:19:37.8 149.5 21.0  
e PKPab Z 17:19:43.4  
CLZ e PKPbc Z 17:19:38.1 149.5 16.0  
BRG e PKPbc Z 17:19:38.0 149.6 22.9  
e PKPab Z 17:19:44.3  
MOX e PKPbc Z 17:19:40.3 150.4 18.9  
TNS e PKPbc Z 17:19:42.7 151.4 13.2  
e PKPab Z 17:19:51.2  
GRA1 e PKPbc Z 17:19:42.9 151.4 18.7  
e PKPab Z 17:19:52.1  
WET e PKPbc Z 17:19:43.0 151.5 22.2  
e PKPab Z 17:19:52.6  
GEC2 e PKPbc Z 17:19:43.0 151.6 23.9  
STU e PKPbc Z 17:19:45.6 152.6 15.3  
e PKPab Z 17:19:57.1  
FUR e PKPbc Z 17:19:45.8 152.8 19.8  
e PKPab Z 17:19:57.9  
BFO e PKPbc Z 17:19:46.6 153.2 13.8

Date Origin Time Lat Long Depth mb Ms ML Source  
2005/02/27 01:34: 5.9 30.854N 50.641E 33.0N 4.9 SZGRF  
Northern and central Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	01:40:54.8	34.9	107.7	1.2	20	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/27	01:39:24.6	34.015N	46.542E	33.0N	4.8			SZGRF

Western Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	01:45:32.5	30.2	107.8	0.9	13	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/27	04:54:57.2	15.907S	177.972W	570.0G				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	05:13:19.2	141.4	12.8					
RUE	e PKPbc	Z	05:13:21.8	142.3	18.7					
NRDL	e PKPbc	Z	05:13:23.8	142.9	12.9					
IBBN	e PKPbc	Z	05:13:25.6	143.3	9.2					
CLZ	e PKPbc	Z	05:13:25.9	143.5	13.6					
CLL	e PKPbc	Z	05:13:25.8	143.5	17.9					
BRG	e PKPbc	Z	05:13:26.8	143.7	19.6					
MOX	e PKPbc	Z	05:13:28.6	144.4	16.0					
WERD	e PKPdf	Z	05:13:26.8	144.5	17.2					
	e PKPbc	Z	05:13:28.9							
GUNZ	e PKPdf	Z	05:13:26.9	144.6	17.3					
	e PKPbc	Z	05:13:29.1							
TNS	e PKPbc	Z	05:13:31.4	145.3	10.9					
GRA1	e PKPbc	Z	05:13:31.2	145.4	15.7					
	e PKPab	Z	05:13:35.0							
	e pPKPbc	Z	05:15:42.6							
WET	e PKPbc	Z	05:13:32.0	145.6	18.7					
	e PKPab	Z	05:13:35.5							
GEC2	e PKPbc	Z	05:13:32.2	145.7	20.2					
STU	e PKPbc	Z	05:13:34.7	146.6	12.6					
FUR	e PKPbc	Z	05:13:35.2	146.9	16.4					
	e PKPab	Z	05:13:40.9							
BFO	e PKPbc	Z	05:13:35.8	147.2	11.2					
	e PKPab	Z	05:13:42.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/27	08:24: 5.4	51.057N	175.770W	33.0N	4.9			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:36:06.9	79.1	4.5	1.0	13	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/27								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:12:07.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/28	01:05:51.8	17.686N	106.741W	33.0N	5.7	5.6		SZGRF

Off coast of Jalisco, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:19:03.5	93.3	302.6	1.6	54	5.7		
	e L	Z 02:00:15.9			19.0	1979		5.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 08:50:27.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/28	12:49:26.7	48.048N	130.291W	33.0N	5.1			SZGRF

Vancouver Island, Canada, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 13:00:52.0	72.7	333.6	1.0	32	5.4		
IBBN	e P	Z 13:00:56.5	73.5	332.2					
NRDL	e P	Z 13:00:59.2	74.0	333.7					
CLZ	e P	Z 13:01:03.2	74.6	333.9	1.0	25	5.2		
UBBA	e P	Z 13:01:06.9	75.4	333.8					
TNS	e P	Z 13:01:07.7	75.5	332.9	1.0	10	4.9		
CLL	e P	Z 13:01:09.3	75.8	335.7	1.0	13	5.0		
MOX	e P	Z 13:01:10.9	76.0	334.8	1.0	15	5.1		
WERD	e P	Z 13:01:12.7	76.4	335.3					
BRG	e P	Z 13:01:13.5	76.4	336.3					
GUNZ	e P	Z 13:01:13.5	76.5	335.3					



GRA1	e P	Z	13:01:15.4	76.8	334.7	1.6	41	5.3
BFO	e P	Z	13:01:17.2	77.2	333.0	1.0	16	5.1
WET	e P	Z	13:01:20.6	77.7	335.8	1.0	7	4.8
GEC2	e P	Z	13:01:23.2	78.2	336.3	1.0	10	4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2005/02/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:24:21.8							

## Format description

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(K. Klinge Email:klinge@szgrf.bgr.de and A. Schick)

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-analyses).

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