

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

(produced by SZGRF/BGR - ERLANGEN)

JANUARY 2008 UPDATED 22.SEPTEMBER.2008

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		
2008/01/01	01:00:35.6	28.693N	140.347E	33.0N	5.3			SZGRF		
Bonin Islands, Japan, region										
Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	01:13:30.0	89.5	42.9	1.8	36	5.3		
Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source		
2008/01/01	06:32:23.2	39.033N	73.885E	33.0N	5.8	5.4		SZGRF		
Tajikistan-Xinjiang border region										
Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:40:16.9	42.8	81.9	1.0	164	5.7		
GEC2	e P	Z	06:40:21.4	43.3	79.6	1.3	231	5.8		
CLL	e P	Z	06:40:20.5	43.3	81.7	1.0	169	5.7		
WET	e P	Z	06:40:25.0	43.7	79.4	1.2	146	5.6		
TANN	e P	Z	06:40:25.1	43.8	80.4					
ROTZ	e P	Z	06:40:27.9	44.0	79.6					
RJOB	e P	Z	06:40:27.4	44.1	77.9					
MOX	e P	Z	06:40:29.0	44.3	80.1	1.2	134	5.6		
BSEG	e P	Z	06:40:31.2	44.6	82.5	0.9	368	6.3		
GRA1	e P	Z	06:40:33.2	44.7	78.9	1.0	241	6.1		
	e L	Z	07:00:53.7			20.7	4682		5.4	
CLZ	e P	Z	06:40:33.4	44.8	80.5	1.3	174	5.8		
NRDL	e P	Z	06:40:33.9	44.9	80.9					
FUR	e P	Z	06:40:35.4	45.0	77.4	1.1	211	6.0		
UBBA	e P	Z	06:40:36.5	45.2	79.2					
TNS	e P	Z	06:40:45.6	46.3	77.6	1.5	119	5.7		
IBBN	e P	Z	06:40:45.2	46.3	79.1					

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BUG	e P	Z	06:40:49.1	46.8	78.0	1.3	221	6.1
BFO	e P	Z	06:40:49.4	46.8	75.8	1.2	98	5.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/01	08:46:38.1	22.106S	177.941W	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 09:06:19.3	147.6	14.4					
IBBN	e PKPbc	Z 09:06:24.1	149.5	10.4					
CLZ	e PKPbc	Z 09:06:24.4	149.6	15.3					
CLL	e PKPbc	Z 09:06:24.0	149.6	20.3					
BRG	e PKPbc	Z 09:06:24.6	149.8	22.3					
MOX	e PKPbc	Z 09:06:26.3	150.5	18.2					
TANN	e PKPbc	Z 09:06:26.6	150.5	19.9					
ROTZ	e PKPbc	Z 09:06:28.1	151.2	19.8					
TNS	e PKPbc	Z 09:06:28.7	151.4	12.5					
GRA1	e PKPbc	Z 09:06:28.8	151.5	18.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/01	13:31:46.3	20.651S	176.334W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 13:51:23.8	146.3	11.3					
NRDL	e PKPbc	Z 13:51:27.6	147.8	11.4					
IBBN	e PKPbc	Z 13:51:28.6	148.2	7.3					
CLZ	e PKPbc	Z 13:51:29.2	148.4	12.0					
CLL	e PKPbc	Z 13:51:29.4	148.5	16.9					
BRG	e PKPbc	Z 13:51:30.1	148.7	18.8					
MOX	e PKPbc	Z 13:51:31.6	149.4	14.7					
TANN	e PKPbc	Z 13:51:32.2	149.4	16.3					
ROTZ	e PKPbc	Z 13:51:33.5	150.1	16.2					
TNS	e PKPbc	Z 13:51:34.1	150.2	9.0					
GRA1	e PKPbc	Z 13:51:33.7	150.3	14.4					
GEC2	e PKPbc	Z 13:51:34.7	150.7	19.5					
FUR	e PKPbc	Z 13:51:37.6	151.8	15.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/01	16:19:56.5	40.991N	144.395E	33.0N	4.7			SZGRF
Off east coast of Honshu, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1 e P Z 16:32:05.3 80.4 33.9 0.8 6 4.7

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/01 18:54:56.4 7.530S 145.590E 33.0N 6.3 SZGRF
 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	19:13:46.9	121.2	60.0					
	e PP	Z	19:15:15.4							
	e PKKPbc	Z	19:23:53.5							
BSEG	e PKPdf	Z	19:13:47.2	121.4	54.8					
	e PP	Z	19:15:17.3							
	e PKKPbc	Z	19:23:53.1							
CLL	e PKPdf	Z	19:13:47.0	121.4	58.8					
	e PP	Z	19:15:18.5							
	e PKKPbc	Z	19:23:52.2							
TANN	e PKPdf	Z	19:13:48.9	122.2	58.8					
	e PKKPbc	Z	19:23:49.5							
GEC2	e PKPdf	Z	19:13:49.2	122.3	60.8					
	e PP	Z	19:15:23.9							
	e PKKPbc	Z	19:23:48.8							
NRDL	e PKPdf	Z	19:13:49.0	122.3	55.3					
	e PP	Z	19:15:23.6							
	e PKKPbc	Z	19:23:49.0							
CLZ	e PKPdf	Z	19:13:49.7	122.5	55.9					
	e PP	Z	19:15:25.7							
	e PKKPbc	Z	19:23:49.7							
MOX	e PKPdf	Z	19:13:49.4	122.5	57.8					
	e PP	Z	19:15:25.4							
	e PKKPbc	Z	19:23:49.2							
WET	e PKPdf	Z	19:13:49.9	122.6	59.9					
	e PP	Z	19:15:26.1							
	e PKKPbc	Z	19:23:47.8							
ROTZ	e PKPdf	Z	19:13:49.9	122.7	58.9					
	e PP	Z	19:15:27.9							
	e PKKPbc	Z	19:23:48.0							
GRA1	e PKPdf	Z	19:13:50.9	123.3	57.9					
	e PP	Z	19:15:29.1							
	e PKKPbc	Z	19:23:46.0							
	e PS	E	19:25:26.5							
	e SS	N	19:32:24.5							
	e L	Z	20:09:07.1			22.0	7241		6.3	
UBBA	e PKPdf	Z	19:13:50.8	123.3	56.1					
	e PP	Z	19:15:31.4							
	e PKKPbc	Z	19:23:46.5							
RJOB	e PKPdf	Z	19:13:50.7	123.4	60.6					
	e PP	Z	19:15:32.6							

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IBBN	e PKPdf	Z	19:13:51.4	123.6	53.0
	e PP	Z	19:15:33.6		
	e PKKPbc	Z	19:23:44.7		
FUR	e PKPdf	Z	19:13:52.5	124.0	58.9
	e PP	Z	19:15:36.7		
BUG	e PKPdf	Z	19:13:52.7	124.3	53.0
	e PP	Z	19:15:38.9		
TNS	e PKPdf	Z	19:13:53.2	124.4	54.9
	e PP	Z	19:15:39.5		
	e PKKPbc	Z	19:23:41.9		
STU	e PKPdf	Z	19:13:53.8	124.9	56.4
	e PP	Z	19:15:41.7		
	e PKKPbc	Z	19:23:39.5		
BFO	e PKPdf	Z	19:13:55.0	125.6	55.8
	e PP	Z	19:15:47.6		
	e PKKPbc	Z	19:23:36.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/01								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 19:31:56.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/04	07:29:24.4	2.344S	100.291E	50.2	6.1	5.5		SZGRF
Southern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 07:42:16.0	89.5	94.3	1.5	272	6.3		
	e sP	Z 07:42:36.6							
GEC2	e P	Z 07:42:16.0	89.5	94.1	1.6	342	6.4		
RUE	e P	Z 07:42:18.1	89.7	94.2	1.5	559	6.7		
	e sP	Z 07:42:38.3							
FBE	e P	Z 07:42:18.0	89.9	93.9	1.5	268	6.4		
RJOB	e P	Z 07:42:18.6	90.1	93.4	1.2	75	5.9		
WET	e P	Z 07:42:18.5	90.1	93.5	1.4	178	6.2		
	e sP	Z 07:42:39.9							
CLL	e P	Z 07:42:18.8	90.1	93.6	1.4	136	6.1		
TANN	e P	Z 07:42:19.9	90.4	93.2	1.5	123	6.0		
WERN	e P	Z 07:42:20.2	90.5	93.1	1.4	74	5.8		
GUNZ	e P	Z 07:42:20.1	90.5	93.1	1.5	166	6.1		
	e sP	Z 07:42:41.6							
WERD	e P	Z 07:42:20.8	90.5	93.0	1.4	94	5.9		
ROTZ	e P	Z 07:42:21.4	90.6	93.0	1.4	139	6.1		
	e sP	Z 07:42:42.0							

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MANZ	e P	Z	07:42:21.5	90.6	92.9	1.6	306	6.4		
MOX	e P	Z	07:42:23.8	91.0	92.5	1.5	143	6.1		
	e sP	Z	07:42:43.6							
GRA1	e P	Z	07:42:23.9	91.2	92.2	1.4	185	6.3		
	e sP	Z	07:42:44.9							
	e PP	Z	07:46:01.4							
	e S	T	07:53:22.6							
	e L	Z	08:32:40.0			21.5	1911		5.5	
CLZ	e P	Z	07:42:27.7	91.8	91.5	1.5	157	6.2		
	e sP	Z	07:42:46.9							
BSEG	e P	Z	07:42:28.2	91.9	91.4	1.3	104	6.1		
NRDL	e P	Z	07:42:28.4	92.0	91.3	1.4	141	6.2		
UBBA	e P	Z	07:42:28.3	92.0	91.3	1.5	76	5.9		
	e sP	Z	07:42:48.3							
STU	e P	Z	07:42:31.6	92.5	90.7	1.1	53	5.8		
TNS	e P	Z	07:42:32.1	93.0	90.1	1.1	107	6.1		
	e PP	Z	07:46:18.1							
BFO	e P	Z	07:42:32.7	93.1	90.1	0.9	16	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/04	11:46:43.8	52.631N	170.586W	33.0N	5.1			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:58:37.5	77.7	1.1	1.5	21	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	01:56:37.2	13.550N	92.162W	109.2	5.2			SZGRF

Off coast of Chiapas, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 02:09:16.1	86.2	288.0	0.9	36	5.5		
	e pP	Z 02:09:44.5							
TNS	e P	Z 02:09:15.4	86.2	286.7	1.0	22	5.3		
NRDL	e P	Z 02:09:16.7	86.6	287.9	1.1	23	5.2		
BFO	e P	Z 02:09:17.0	86.7	286.8	1.2	21	5.2		
CLZ	e P	Z 02:09:19.3	86.9	288.1	0.9	22	5.3		
STU	e P	Z 02:09:19.4	87.1	287.4	1.1	20	5.2		
	e pP	Z 02:09:48.2							
MOX	e P	Z 02:09:23.7	88.0	289.1	1.1	19	5.3		
GRA1	e P	Z 02:09:24.8	88.1	288.9	1.1	31	5.6		
	e pP	Z 02:09:52.9							
	e S	R 02:19:47.7							
MANZ	e P	Z 02:09:26.3	88.5	289.5	1.1	12	5.0		
TANN	e P	Z 02:09:27.8	88.6	289.8	1.1	12	5.0		

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CLL	e P	Z	02:09:27.6	88.6	290.2	0.6	9	5.2
	e pP	Z	02:09:55.9					
ROTZ	e P	Z	02:09:28.0	88.7	289.6	1.4	12	5.0
WET	e P	Z	02:09:30.5	89.3	290.1	1.3	21	5.2
BRG	e P	Z	02:09:30.2	89.3	290.9	1.1	6	4.7
RJOB	e P	Z	02:09:31.0	89.7	290.1	2.2	51	5.4
GEC2	e P	Z	02:09:33.1	89.9	290.7	1.2	6	4.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	02:01:46.6	19.330S	176.940W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 02:21:19.0	144.9	12.0					
CLL	e PKPbc	Z 02:21:25.8	147.1	17.4					
BRG	e PKPbc	Z 02:21:26.6	147.3	19.3					
MOX	e PKPbc	Z 02:21:28.1	148.0	15.3					
TANN	e PKPbc	Z 02:21:28.6	148.0	16.9					
UBBA	e PKPbc	Z 02:21:29.0	148.0	12.4					
MANZ	e PKPbc	Z 02:21:30.1	148.5	16.5					
ROTZ	e PKPbc	Z 02:21:30.1	148.7	16.8					
TNS	e PKPbc	Z 02:21:30.9	148.8	9.9					
GRA1	e PKPbc	Z 02:21:31.2	148.9	15.1					
GEC2	e PKPbc	Z 02:21:31.8	149.3	19.9					
FUR	e PKPbc	Z 02:21:34.5	150.4	15.8					
RJOB	e PKPbc	Z 02:21:35.3	150.5	18.9					
BFO	e PKPbc	Z 02:21:35.5	150.7	10.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	07:29:33.8	22.700S	68.400W	103.0				NEIC
Northern Chile								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
UBBA	e PP	Z 07:47:14.4	100.5	246.8					
GRA1	e PP	Z 07:47:15.6	100.8	247.5					
RJOB	e PP	Z 07:47:18.0	101.0	248.2					
CLZ	e PP	Z 07:47:18.9	101.1	247.2					
NRDL	e PP	Z 07:47:19.1	101.2	247.2					
MOX	e PP	Z 07:47:19.9	101.4	247.9					
ROTZ	e PP	Z 07:47:21.0	101.4	248.2					
WERN	e PP	Z 07:47:23.2	101.7	248.4					
GUNZ	e PP	Z 07:47:23.0	101.7	248.4					
WERD	e PP	Z 07:47:23.4	101.7	248.4					
TANN	e PP	Z 07:47:22.8	101.8	248.5					
BSEG	e PP	Z 07:47:24.7	101.9	247.6					

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GEC2	e PP	Z	07:47:22.8	102.0	249.1
CLL	e PP	Z	07:47:27.5	102.4	249.1
FBE	e PP	Z	07:47:28.5	102.5	249.2
BRG	e PP	Z	07:47:31.3	102.8	249.7
RUE	e PP	Z	07:47:35.4	103.3	249.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	10:39:36.4	51.639N	130.754W	33.0N	5.0			SZGRF
Queen Charlotte Islands, Canada, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:51:07.0	73.6	336.5	1.7	27	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	11:01: 6.4	51.100N	132.600W	33.0N	5.9	6.7		SZGRF
Queen Charlotte Islands, Canada, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 11:12:19.6	70.5	336.3	1.5	219	6.1		
IBBN	e P	Z 11:12:25.1	71.3	335.0	2.0	682	6.4		
NRDL	e P	Z 11:12:27.2	71.7	336.4	1.4	158	6.0		
BUG	e P	Z 11:12:28.5	72.0	334.8	1.5	145	5.9		
CLZ	e P	Z 11:12:31.9	72.4	336.6	1.6	310	6.2		
RUE	e P	Z 11:12:32.8	72.6	338.6	1.5	221	6.1		
TNS	e P	Z 11:12:37.3	73.4	335.7	1.2	60	5.5		
CLL	e P	Z 11:12:37.7	73.5	338.3	1.6	152	5.8		
MOX	e P	Z 11:12:39.5	73.8	337.5	1.4	86	5.6		
FBE	e P	Z 11:12:40.9	74.0	338.5	1.8	254	6.0		
BRG	e P	Z 11:12:41.6	74.2	338.9	1.5	183	5.9		
WERD	e P	Z 11:12:41.3	74.2	338.0	1.7	115	5.6		
TANN	e P	Z 11:12:41.7	74.2	338.1	1.6	87	5.5		
GUNZ	e P	Z 11:12:41.9	74.2	338.0	1.7	128	5.7		
WERN	e P	Z 11:12:42.7	74.3	338.0	1.6	108	5.6		
MANZ	e P	Z 11:12:43.9	74.5	337.9	1.8	120	5.6		
GRA1	e P	Z 11:12:44.4	74.6	337.4	1.7	281	6.0		
	e S	T 11:22:25.4							
	e L	Z 11:44:51.9			21.8	46572		6.7	
ROTZ	e P	Z 11:12:44.8	74.8	338.0	1.6	112	5.6		
BFO	e P	Z 11:12:46.8	75.1	335.8	1.5	136	5.8		
WET	e P	Z 11:12:49.4	75.5	338.4	1.7	144	5.8		
GEC2	e P	Z 11:12:52.4	76.0	339.0	1.6	172	5.9		
FUR	e P	Z 11:12:52.7	76.0	337.6	2.5	784	6.4		
RJOB	e P	Z 11:12:56.8	76.8	338.5	1.6	110	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	11:44:50.4	51.000N	130.750W	33.0N	6.0	6.5		SZGRF

Queen Charlotte Islands, Canada, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	11:56:01.8	70.1	335.1	2.4	879	6.5		
IBBN	e P	Z	11:56:06.6	70.9	333.8	2.3	1358	6.7		
BUG	e P	Z	11:56:10.0	71.6	333.7	2.5	775	6.4		
CLZ	e P	Z	11:56:13.8	72.0	335.5	1.7	435	6.3		
RUE	e P	Z	11:56:14.8	72.3	337.5	1.9	550	6.4		
UBBA	e P	Z	11:56:18.0	72.9	335.4	2.3	411	6.2		
TNS	e P	Z	11:56:18.7	73.0	334.5	2.2	368	6.1		
CLL	e P	Z	11:56:19.7	73.2	337.1	2.0	299	6.0		
MOX	e P	Z	11:56:21.2	73.4	336.4	1.5	108	5.7		
FBE	e P	Z	11:56:22.4	73.6	337.4	2.2	546	6.2		
WERD	e P	Z	11:56:23.4	73.8	336.8	1.9	85	5.4		
BRG	e P	Z	11:56:23.6	73.8	337.7	1.8	282	6.0		
TANN	e P	Z	11:56:24.1	73.9	336.9	2.1	137	5.6		
GUNZ	e P	Z	11:56:23.7	73.9	336.8	1.7	96	5.5		
WERN	e P	Z	11:56:24.6	74.0	336.9	2.1	242	5.9		
MANZ	e P	Z	11:56:25.5	74.2	336.7	1.8	141	5.7		
GRA1	e P	Z	11:56:26.2	74.2	336.2	2.3	562	6.2		
	e PKPPKpdf	Z	12:24:01.3							
	e L	Z	12:28:14.3			20.9	25610		6.5	
ROTZ	e P	Z	11:56:27.4	74.4	336.8	2.2	297	5.9		
STU	e P	Z	11:56:27.9	74.5	335.1	1.3	87	5.6		
BFO	e P	Z	11:56:28.5	74.7	334.7	1.4	129	5.8		
WET	e P	Z	11:56:31.4	75.1	337.3	1.7	85	5.5		
GEC2	e P	Z	11:56:34.3	75.6	337.8	1.9	167	5.9		
FUR	e P	Z	11:56:34.1	75.6	336.4	1.9	479	6.3		
RJOB	e P	Z	11:56:39.2	76.4	337.4	1.5	55	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	20:01:52.1	4.510N	94.850E	71.8	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:13:58.2	80.8	94.2	1.8	111	5.6		
GEC2	e P	Z	20:13:58.6	80.8	93.7	1.7	208	5.9		
	e sP	Z	20:14:25.8							
RUE	e P	Z	20:13:59.1	81.0	94.3	0.9	82	5.8		
FBE	e P	Z	20:14:00.3	81.1	93.8	0.9	43	5.5		
RJOB	e P	Z	20:14:00.8	81.3	92.8	0.8	28	5.3		
WET	e P	Z	20:14:01.5	81.3	93.1	0.9	34	5.4		
CLL	e P	Z	20:14:01.0	81.4	93.5	1.0	23	5.2		
TANN	e P	Z	20:14:03.1	81.7	93.0	1.4	34	5.3		

WERN	e P	Z	20:14:03.5	81.7	92.9	1.0	19	5.2
GUNZ	e P	Z	20:14:03.5	81.8	92.9	1.8	93	5.6
	e sP	Z	20:14:31.4					
WERD	e P	Z	20:14:03.5	81.8	92.9	1.8	62	5.4
ROTZ	e P	Z	20:14:04.3	81.8	92.7	0.9	31	5.4
MANZ	e P	Z	20:14:04.7	81.9	92.7	1.5	77	5.6
MOX	e P	Z	20:14:05.9	82.2	92.4	1.7	63	5.5
FUR	e P	Z	20:14:06.4	82.4	91.8	0.9	41	5.6
GRA1	e P	Z	20:14:07.5	82.4	91.9	1.0	44	5.6
CLZ	e P	Z	20:14:10.2	83.0	91.6	0.9	30	5.5
	e sP	Z	20:14:37.8					
BSEG	e P	Z	20:14:10.7	83.1	91.8	0.9	41	5.6
	e sP	Z	20:14:38.8					
NRDL	e P	Z	20:14:11.3	83.2	91.4	1.5	79	5.7
UBBA	e P	Z	20:14:12.0	83.3	91.1	2.4	131	5.7
STU	e P	Z	20:14:13.7	83.7	90.3	0.8	22	5.4
TNS	e P	Z	20:14:16.5	84.2	89.9	1.0	27	5.4
BFO	e P	Z	20:14:16.5	84.3	89.6	0.8	22	5.4
IBBN	e P	Z	20:14:18.5	84.7	89.5	0.8	29	5.6
BUG	e P	Z	20:14:20.1	85.0	89.1	0.7	22	5.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/05	22:59:16.5	21.340S	178.460E	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e PKPbc	Z 23:18:57.0	147.6	20.5					
CLL	e PKPbc	Z 23:18:58.2	148.0	26.2					
BRG	e PKPbc	Z 23:18:58.4	148.1	28.0					
CLZ	e PKPbc	Z 23:18:58.6	148.1	21.4					
FBE	e PKPbc	Z 23:18:58.8	148.2	27.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/06	00:20:39.9	51.748N	130.810W	23.0	5.2	5.0		SZGRF

Queen Charlotte Islands, Canada, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 00:31:45.6	69.4	335.5	1.3	46	5.4		
IBBN	e P	Z 00:31:50.6	70.3	334.2	1.6	85	5.6		
NRDL	e P	Z 00:31:53.0	70.7	335.6	1.0	41	5.5		
BUG	e P	Z 00:31:53.7	70.9	334.0	0.9	29	5.4		
CLZ	e P	Z 00:31:57.4	71.4	335.8	0.9	44	5.6		
UBBA	e P	Z 00:32:01.5	72.2	335.7	1.5	21	5.0		
TNS	e P	Z 00:32:02.5	72.3	334.9	0.9	19	5.2		
	e pP	Z 00:32:09.1							

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CLL	e P	Z	00:32:03.3	72.5	337.5	1.3	24	5.2	
MOX	e P	Z	00:32:04.8	72.8	336.7	0.9	29	5.4	
	e pP	Z	00:32:11.5						
BRG	e P	Z	00:32:07.3	73.1	338.1	1.2	34	5.4	
	e pP	Z	00:32:13.7						
TANN	e P	Z	00:32:07.5	73.2	337.2	1.0	9	4.8	
MANZ	e P	Z	00:32:09.5	73.5	337.1	1.4	17	4.9	
GRA1	e P	Z	00:32:10.0	73.6	336.6	1.7	72	5.4	
	e L	Z	01:04:34.0			21.7	862		5.0
ROTZ	e P	Z	00:32:11.3	73.7	337.2	1.0	15	5.0	
STU	e P	Z	00:32:11.5	73.9	335.5	0.8	13	5.0	
	e pP	Z	00:32:18.0						
BFO	e P	Z	00:32:12.5	74.0	335.1	1.0	28	5.2	
	e pP	Z	00:32:18.9						
WET	e P	Z	00:32:15.2	74.5	337.6	1.0	11	4.8	
GEC2	e P	Z	00:32:17.8	75.0	338.2	1.2	17	4.9	
	e pP	Z	00:32:24.5						
FUR	e P	Z	00:32:18.2	75.0	336.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/06	04:51:22.7	44.376N	146.686E	33.0N	5.2			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 05:03:00.3	74.9	30.7	1.1	57	5.5		
NRDL	e P	Z 05:03:07.5	76.2	30.4	1.6	47	5.4		
CLL	e P	Z 05:03:07.7	76.3	32.1	1.0	47	5.6		
BRG	e P	Z 05:03:08.4	76.3	32.7	1.3	20	5.1		
CLZ	e P	Z 05:03:11.1	76.7	30.5	1.3	72	5.6		
IBBN	e P	Z 05:03:12.4	77.1	28.8	1.1	45	5.5		
TANN	e P	Z 05:03:13.8	77.2	31.7	1.8	26	5.1		
MOX	e P	Z 05:03:14.0	77.3	31.2	1.4	33	5.3		
UBBA	e P	Z 05:03:16.2	77.7	30.1	1.6	22	5.0		
MANZ	e P	Z 05:03:16.0	77.7	31.4	1.5	23	5.1		
ROTZ	e P	Z 05:03:16.3	77.9	31.4	1.3	18	5.0		
BUG	e P	Z 05:03:17.2	78.0	28.4	1.3	48	5.5		
GEC2	e P	Z 05:03:18.3	78.1	32.3	1.1	10	4.9		
WET	e P	Z 05:03:19.1	78.2	31.8	1.2	21	5.2		
GRA1	e P	Z 05:03:19.5	78.2	30.8	1.7	79	5.5		
TNS	e P	Z 05:03:22.0	78.7	29.0	1.3	16	4.9		
FUR	e P	Z 05:03:26.3	79.5	30.7	1.0	30	5.2		
STU	e P	Z 05:03:27.0	79.7	29.4	1.2	23	5.0		
BFO	e P	Z 05:03:30.5	80.4	28.8	1.1	13	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2008/01/06 05:14: 9.2
Southern Greece

37.051N

22.423E

33.0N

5.1

SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	05:17:23.6	13.4	148.5					
WET	e P	Z	05:17:30.8	13.9	146.7					
ROTZ	e P	Z	05:17:40.1	14.7	146.1					
MANZ	e P	Z	05:17:41.9	14.9	146.3					
GRA1	e P	Z	05:17:44.4	15.0	143.2					
	e L	Z	05:24:19.4			25.9	17831		5.1	
WERN	e P	Z	05:17:44.5	15.1	147.6					
BRG	e P	Z	05:17:44.4	15.1	153.1					
TANN	e P	Z	05:17:45.4	15.1	148.1					
GUNZ	e P	Z	05:17:47.3	15.1	147.6					
STU	e P	Z	05:17:47.9	15.2	135.7					
WERD	e P	Z	05:17:47.7	15.2	147.7					
BFO	e P	Z	05:17:49.8	15.3	132.4					
FBE	e P	Z	05:17:48.4	15.3	151.5					
MOX	e P	Z	05:17:53.7	15.6	146.3					
CLL	e P	Z	05:17:55.2	15.7	151.2					
UBBA	e P	Z	05:18:01.2	16.4	142.5					
TNS	e P	Z	05:18:06.9	16.5	137.4					
RUE	e P	Z	05:18:06.4	16.6	155.1					
CLZ	e P	Z	05:18:14.1	17.1	145.4					
NRDL	e P	Z	05:18:21.5	17.7	145.9					
BUG	e P	Z	05:18:26.2	17.9	137.4					
IBBN	e P	Z	05:18:31.8	18.4	140.2					
RGN	e P	Z	05:18:30.9	18.6	156.7					
BSEG	e P	Z	05:18:34.2	18.8	148.8					
HLG	e P	Z	05:18:45.3	19.8	143.8					

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/06

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPdf	Z	05:26:18.1							
BRG	e PKPdf	Z	05:26:17.4							
BSEG	e PKPdf	Z	05:26:25.5							
BUG	e PKPdf	Z	05:26:23.7							
CLL	e PKPdf	Z	05:26:18.7							
FUR	e PKPdf	Z	05:26:15.4							
GEC2	e PKPdf	Z	05:26:14.4							
GRA1	e PKPdf	Z	05:26:17.7							
GUNZ	e PKPdf	Z	05:26:18.3							
IBBN	e PKPdf	Z	05:26:24.8							
MANZ	e PKPdf	Z	05:26:17.5							
RUE	e PKPdf	Z	05:26:20.2							

STU	e	PKPdf	Z	05:26:18.1
TNS	e	PKPdf	Z	05:26:20.9
WERD	e	PKPdf	Z	05:26:18.7
WERN	e	PKPdf	Z	05:26:18.1
WET	e	PKPdf	Z	05:26:15.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/06	12:11:14.2	23.822S	179.519W	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e	PKPbc	Z 12:31:03.3	150.9	24.0				
BRG	e	PKPbc	Z 12:31:03.8	151.0	26.1				
FBE	e	PKPbc	Z 12:31:04.2	151.1	25.0				
NEUB	e	PKPbc	Z 12:31:04.4	151.3	21.9				
MOX	e	PKPbc	Z 12:31:05.7	151.8	22.0				
TANN	e	PKPbc	Z 12:31:05.5	151.8	23.7				
WERD	e	PKPbc	Z 12:31:05.8	151.8	23.4				
MANZ	e	PKPbc	Z 12:31:06.7	152.3	23.4				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/06	16:55:22.6	15.116N	91.292W	76.5	5.0			SZGRF

Mexico-Guatemala border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e	P	Z 17:07:57.4	86.4	289.2	1.2	14	5.0	
	e	pP	Z 17:08:18.1						
	e	sP	Z 17:08:25.5						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/06	18:30:11.0	16.297S	178.674W	500.0G				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 18:48:40.1	141.7	14.0				
RUE	e	PKPbc	Z 18:48:42.8	142.5	19.9				
NRDL	e	PKPbc	Z 18:48:45.1	143.1	14.1				
IBBN	e	PKPbc	Z 18:48:47.0	143.6	10.4				
CLZ	e	PKPbc	Z 18:48:47.3	143.7	14.8				
CLL	e	PKPbc	Z 18:48:46.6	143.8	19.2				
BRG	e	PKPbc	Z 18:48:47.6	144.0	20.9				
	e	pPKPbc	Z 18:50:53.4						
FBE	e	PKPbc	Z 18:48:48.1	144.1	19.9				

NEUB	e	PKPbc	Z	18:48:47.6	144.1	17.3
MOX	e	PKPbc	Z	18:48:49.2	144.7	17.2
TANN	e	PKPbc	Z	18:48:50.1	144.7	18.7
WERD	e	PKPbc	Z	18:48:49.6	144.7	18.5
	e	pPKPbc	Z	18:50:54.8		
UBBA	e	PKPbc	Z	18:48:50.2	144.8	14.5
GUNZ	e	PKPbc	Z	18:48:50.0	144.8	18.5
WERN	e	PKPbc	Z	18:48:50.6	144.9	18.6
NKC	e	PKPbc	Z	18:48:50.2	144.9	18.8
	e	pPKPbc	Z	18:50:57.0		
MANZ	e	PKPbc	Z	18:48:51.0	145.2	18.3
ROTZ	e	PKPbc	Z	18:48:51.5	145.4	18.6
	e	pPKPbc	Z	18:50:58.4		
TNS	e	PKPbc	Z	18:48:52.3	145.6	12.2
	e	pPKPbc	Z	18:50:58.9		
GRA1	e	PKPbc	Z	18:48:52.5	145.7	17.0
	e	pPKPbc	Z	18:50:59.2		
WET	e	PKPbc	Z	18:48:53.0	145.8	20.0
GEC2	e	PKPbc	Z	18:48:52.8	145.9	21.5
	e	pPKPbc	Z	18:50:59.6		
STU	e	PKPbc	Z	18:48:56.1	146.9	13.9
BFO	e	PKPbc	Z	18:48:57.3	147.5	12.6
	e	pPKPbc	Z	18:51:03.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/07 03:12:23.2 1.220S 134.700E 33.0G 5.3 5.6
 Irian Jaya, Indonesia, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e	Pdiff	Z 03:26:52.3	109.8	66.0	1.5	27	5.4		
	e	PKiKP	Z 03:30:55.9							
	e	PP	Z 03:31:27.6							
CLL	e	Pdiff	Z 03:26:53.5	110.2	65.0	1.4	24	5.3		
	e	PKiKP	Z 03:30:58.1							
	e	PP	Z 03:31:29.9							
BSEG	e	Pdiff	Z 03:26:54.2	110.5	61.7	1.7	44	5.4		
	e	PKiKP	Z 03:30:55.7							
	e	PP	Z 03:31:30.1							
GEC2	e	Pdiff	Z 03:26:56.4	110.8	66.4	1.4	14	5.0		
TANN	e	Pdiff	Z 03:26:56.8	110.9	64.8	2.7	84	5.5		
	e	PP	Z 03:31:35.3							
WET	e	Pdiff	Z 03:26:58.6	111.2	65.6	1.5	9	4.8		
	e	PP	Z 03:31:36.5							
NRDL	e	Pdiff	Z 03:26:59.5	111.3	62.0	1.9	71	5.6		
	e	PKiKP	Z 03:30:56.6							
	e	PP	Z 03:31:38.4							
MOX	e	Pdiff	Z 03:26:59.0	111.3	64.0	1.6	29	5.3		

	e PP	Z	03:31:37.1							
MANZ	e Pdiff	Z	03:26:58.4	111.3	64.7	2.2		31	5.1	
	e PKiKP	Z	03:30:57.3							
	e PP	Z	03:31:37.5							
ROTZ	e PP	Z	03:31:38.0	111.3	64.8					
CLZ	e Pdiff	Z	03:26:58.9	111.4	62.5	1.5		47	5.5	
	e PKiKP	Z	03:31:00.3							
	e PP	Z	03:31:38.8							
RJOB	e PP	Z	03:31:42.6	111.8	66.1					
GRA1	e Pdiff	Z	03:27:01.5	111.9	64.0	1.9		51	5.4	
	e PP	Z	03:31:42.5							
	e PS	R	03:41:19.4							
	e SS	T	03:47:25.6							
	e L	Z	04:20:28.2				19.5	1571		5.6
UBBA	e Pdiff	Z	03:27:02.7	112.1	62.5	1.3		13	5.0	
	e PP	Z	03:31:43.0							
FUR	e Pdiff	Z	03:27:05.9	112.5	64.6	1.8		73	5.7	
	e PP	Z	03:31:44.6							
TNS	e PP	Z	03:31:52.1	113.2	61.3					
BUG	e PP	Z	03:31:51.8	113.3	59.8					
STU	e PP	Z	03:31:53.2	113.5	62.6					
BFO	e PP	Z	03:31:58.2	114.2	62.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/07 07:46:29.7 12.300N 125.400E 56.0 5.6
 Samar, Philippine Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	07:59:40.7	93.8	64.9	1.6	23	5.2		
TANN	e P	Z	07:59:43.4	94.5	64.5	2.8	114	5.8		
WET	e P	Z	07:59:45.3	94.8	64.9	2.4	76	5.7		
MANZ	e P	Z	07:59:45.5	94.9	64.2	2.9	85	5.7		
CLZ	e P	Z	07:59:46.6	95.0	62.7	1.7	41	5.6		
RJOB	e P	Z	07:59:49.3	95.4	65.0	2.4	66	5.7		
GRA1	e P	Z	07:59:49.6	95.5	63.6	0.7	8	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/07 08:14:24.4 52.010N 178.010E 33.0N 5.3 5.0
 Rat Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	08:25:57.1	73.6	7.9	0.9	73	5.7		
NRDL	e P	Z	08:26:04.8	75.0	7.7	1.1	43	5.4		
IBBN	e P	Z	08:26:07.2	75.4	6.2	1.0	86	5.8		
CLZ	e P	Z	08:26:09.0	75.6	7.8	1.0	51	5.6		

CLL	e P	Z	08:26:09.7	75.9	9.4	0.7	17	5.3			
BRG	e P	Z	08:26:11.9	76.2	10.0	0.6	14	5.2			
BUG	e P	Z	08:26:11.9	76.3	5.9	0.9	30	5.4			
MOX	e P	Z	08:26:14.5	76.7	8.6	0.9	19	5.2			
TANN	e P	Z	08:26:15.5	76.8	9.1	1.2	17	5.0			
MANZ	e P	Z	08:26:17.9	77.3	8.8	0.8	14	5.2			
TNS	e P	Z	08:26:18.3	77.4	6.6	0.8	24	5.4			
ROTZ	e P	Z	08:26:19.4	77.5	8.9	1.3	29	5.2			
GRA1	e P	Z	08:26:20.4	77.7	8.3	0.9	40	5.5			
	e L	Z	09:08:34.0			20.5	808			5.0	
WET	e P	Z	08:26:22.3	78.1	9.3	1.2	15	5.0			
GEC2	e P	Z	08:26:23.6	78.3	9.8	0.7	14	5.1			
STU	e P	Z	08:26:26.2	78.8	7.0	0.7	18	5.2			
FUR	e P	Z	08:26:28.6	79.2	8.3	1.0	46	5.3			
BFO	e P	Z	08:26:28.8	79.3	6.4	1.4	18	4.8			
RJOB	e P	Z	08:26:29.9	79.5	9.2	0.8	19	5.1			

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/07 17:44: 7.3 53.863N 156.608E 33.0N 4.9
 Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:55:30.7	72.4	20.6	1.2	12	4.9		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/07 19:16:12.4 30.200S 177.700W 43.0 4.8
 Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 19:36:35.8	157.4	24.7					
BRG	e PKPab	Z 19:36:35.9	157.6	27.2					
TANN	e PKPab	Z 19:36:40.3	158.4	24.5					
GRA1	e PKPab	Z 19:36:44.0	159.4	22.4					
	e L	Z 20:45:53.5			21.9	146		4.8	
WET	e PKPab	Z 19:36:44.9	159.4	26.8					
GEC2	e PKPab	Z 19:36:43.8	159.4	29.1					
RJOB	e PKPab	Z 19:36:50.1	160.7	28.4					

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/08 00:16:48.1 15.546N 94.211W 33.0N 4.9 4.7
 Near coast of Oaxaca, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e P	Z	00:29:34.3	87.8	291.7	1.0	15	5.3	
	e L	Z	01:08:30.2			19.8	280		4.7
CLL	e P	Z	00:29:38.5	88.2	293.0	0.9	4	4.7	
WERN	e P	Z	00:29:42.3	88.3	292.5	2.3	65	5.5	
TANN	e P	Z	00:29:43.0	88.3	292.6	1.0	5	4.8	
BRG	e P	Z	00:29:41.9	88.9	293.7	1.1	8	4.8	
WET	e P	Z	00:29:42.0	89.0	292.9	0.9	5	4.7	
GEC2	e P	Z	00:29:43.9	89.6	293.5	1.1	7	4.8	

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/08 10:23:43.3 23.980S 179.120W 33.0G NEIC
 South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	10:43:28.7	149.2	17.0					
	e PKP	Z	10:43:32.0							
NRDL	e PKPbc	Z	10:43:32.0	150.6	17.4					
CLL	e PKPbc	Z	10:43:33.1	151.1	23.4					
	e PKP	Z	10:43:39.7							
IBBN	e PKPbc	Z	10:43:33.2	151.2	13.1					
CLZ	e PKPbc	Z	10:43:33.7	151.2	18.2					
BRG	e PKPbc	Z	10:43:33.5	151.3	25.4					
	e PKP	Z	10:43:40.2							
FBE	e PKPbc	Z	10:43:34.0	151.4	24.3					
	e PKP	Z	10:43:41.2							
MOX	e PKPbc	Z	10:43:35.3	152.1	21.3					
TANN	e PKPbc	Z	10:43:35.4	152.1	23.1					
WERD	e PKPbc	Z	10:43:35.6	152.1	22.7					
GUNZ	e PKPbc	Z	10:43:35.8	152.2	22.9					
	e PKP	Z	10:43:44.4							
WERN	e PKPbc	Z	10:43:36.1	152.2	23.0					
	e PKP	Z	10:43:44.6							
UBBA	e PKPbc	Z	10:43:35.3	152.2	18.1					
MANZ	e PKPbc	Z	10:43:36.6	152.6	22.7					
ROTZ	e PKPbc	Z	10:43:37.1	152.7	23.1					
GRA1	e PKPbc	Z	10:43:37.7	153.0	21.2					
	e PKP	Z	10:43:48.1							
TNS	e PKPbc	Z	10:43:37.9	153.1	15.4					
WET	e PKPbc	Z	10:43:37.8	153.1	24.9					
	e PKP	Z	10:43:48.7							
GEC2	e PKPbc	Z	10:43:37.7	153.2	26.7					
RJOB	e PKP	Z	10:43:54.4	154.4	25.9					
FUR	e PKP	Z	10:43:54.2	154.5	22.5					
BFO	e PKPbc	Z	10:43:41.3	154.9	16.2					

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/08	20:36:54.0	20.000S	170.480E	33.0N				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
TANN	e PKPbc	Z	20:56:26.2	145.0	37.8					
IBBN	e PKPbc	Z	20:56:26.6	145.0	29.1					
MOX	e PKPbc	Z	20:56:27.0	145.1	36.3					
MANZ	e PKPbc	Z	20:56:28.1	145.4	37.6					
UBBA	e PKPbc	Z	20:56:28.3	145.6	33.7					
ROTZ	e PKPbc	Z	20:56:29.1	145.6	38.0					
GEC2	e PKPbc	Z	20:56:28.9	145.7	41.1					
WET	e PKPbc	Z	20:56:29.1	145.8	39.6					
GRA1	e PKPbc	Z	20:56:30.5	146.0	36.6					
TNS	e PKPbc	Z	20:56:32.0	146.6	31.8					
RJOB	e PKPbc	Z	20:56:32.8	146.9	40.8					
STU	e PKPbc	Z	20:56:34.8	147.5	34.2					
WLF	e PKPbc	Z	20:56:35.7	147.8	28.5					
BFO	e PKPbc	Z	20:56:36.2	148.2	33.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/09	08:26:47.5	32.180N	85.380E	33.0G	6.5	6.7		SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	08:36:10.7	54.2	82.0	1.5	732	6.5		
RGN	e P	Z	08:36:11.3	54.2	83.2	1.2	998	6.7		
BRG	e P	Z	08:36:12.0	54.3	81.0	1.3	494	6.4		
	e PcP	Z	08:37:16.5							
	e S	R	08:43:48.9							
FBE	e P	Z	08:36:14.7	54.7	80.6	1.3	607	6.5		
	e PcP	Z	08:37:17.8							
GEC2	e P	Z	08:36:15.7	54.8	79.4	1.2	510	6.4		
	e S	R	08:43:54.1							
CLL	e P	Z	08:36:15.3	54.8	80.6	1.6	481	6.3		
	e PcP	Z	08:37:17.1							
	e PP	Z	08:38:17.1							
	e S	R	08:43:56.4							
WET	e P	Z	08:36:19.2	55.3	79.1	1.7	751	6.5		
	e S	R	08:44:02.7							
TANN	e P	Z	08:36:19.4	55.3	79.6	1.3	366	6.2		
	e S	R	08:44:03.7							
WERN	e P	Z	08:36:20.0	55.4	79.5	1.5	400	6.2		
GUNZ	e P	Z	08:36:20.0	55.4	79.5	1.2	438	6.4		
WERD	e P	Z	08:36:19.9	55.4	79.6	1.2	369	6.3		
	e PcP	Z	08:37:19.5							
	e PP	Z	08:38:23.3							

ROTZ	e P	Z	08:36:21.9	55.6	79.0	1.4	733	6.5
	e S	R	08:44:07.3					
MANZ	e P	Z	08:36:21.8	55.6	79.1	1.5	578	6.4
	e PcP	Z	08:37:21.4					
	e S	R	08:44:08.5					
RJOB	e P	Z	08:36:21.2	55.6	78.1	1.7	566	6.3
	e PcP	Z	08:37:20.6					
	e S	R	08:44:07.4					
MOX	e P	Z	08:36:22.8	55.8	79.2	1.1	275	6.2
	e S	R	08:44:08.2					
BSEG	e P	Z	08:36:24.6	56.0	80.5	1.1	693	6.6
	e PcP	Z	08:37:21.8					
	e S	R	08:44:11.0					
GRA1	e P	Z	08:36:26.4	56.2	78.3	2.2	2981	6.9
	e		08:37:29.2					
	e PP	Z	08:38:35.4					
	e S	R	08:44:13.8					
	e SS	R	08:48:09.1					
	e L	Z	09:02:33.3			19.7	61235	6.7
	e PKPPKPbc	Z	09:06:33.6					
NRDL	e P	Z	08:36:27.2	56.4	79.4	1.3	1221	6.8
	e S	R	08:44:19.0					
FUR	e P	Z	08:36:28.0	56.5	77.4	1.1	1254	6.9
	e S	R	08:44:18.6					
UBBA	e P	Z	08:36:29.4	56.8	78.2	1.8	831	6.5
	e PP	Z	08:38:36.4					
	e S	R	08:44:21.0					
HLG	e P	Z	08:36:34.1	57.4	78.8	1.3	759	6.6
STU	e P	Z	08:36:36.3	57.7	76.4	1.2	745	6.6
	e PcP	Z	08:37:28.7					
IBBN	e P	Z	08:36:37.2	57.8	77.6	1.9	1619	6.7
	e PcP	Z	08:37:28.3					
	e PP	Z	08:38:45.9					
TNS	e P	Z	08:36:37.4	57.9	76.8	1.1	399	6.4
	e PcP	Z	08:37:29.0					
	e S	R	08:44:38.3					
BUG	e P	Z	08:36:40.5	58.3	76.7	1.5	967	6.6
	e PP	Z	08:38:49.9					
	e S	R	08:44:42.2					
BFO	e P	Z	08:36:40.7	58.4	75.6	1.3	229	6.1
	e PcP	Z	08:37:30.1					
	e PP	Z	08:38:51.2					
	e S	R	08:44:42.1					
WLF	e P	Z	08:36:48.8	59.4	74.9	1.3	628	6.5

Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:09:34.1	86.1	51.6	1.9	14	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/09	13:54:11.0	32.080N	86.134E	33.0N	5.3			SZGRF

Xizang

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 14:03:40.4	54.9	80.6	1.7	38	5.3		
GEC2	e P	Z 14:03:42.3	55.4	79.0	1.3	23	5.2		
WET	e P	Z 14:03:47.6	55.8	78.7	1.4	19	5.1		
TANN	e P	Z 14:03:48.2	55.9	79.2	1.3	14	5.0		
ROTZ	e P	Z 14:03:49.8	56.2	78.6	1.6	29	5.3		
MANZ	e P	Z 14:03:50.1	56.2	78.7	2.9	120	5.6		
MOX	e P	Z 14:03:51.0	56.4	78.8	1.4	18	5.1		
GRA1	e P	Z 14:03:52.3	56.8	77.9	1.3	30	5.4		
CLZ	e P	Z 14:03:55.3	56.9	78.7	1.3	25	5.3		
NRDL	e P	Z 14:03:55.5	56.9	78.9	1.6	62	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/09	14:40:5.9	51.634N	131.403W	33.0N	5.4	5.9		SZGRF

Queen Charlotte Islands, Canada, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 14:51:13.1	69.7	335.8	2.8	317	6.0		
	e S	T 15:00:31.6							
IBBN	e P	Z 14:51:18.1	70.5	334.5	2.0	141	5.7		
NRDL	e P	Z 14:51:20.3	71.0	335.9	1.5	61	5.5		
	e S	T 15:00:44.0							
BUG	e P	Z 14:51:21.4	71.2	334.3	1.2	33	5.3		
	e S	T 15:00:46.6							
CLZ	e P	Z 14:51:24.9	71.6	336.1	1.3	43	5.4		
	e S	T 15:00:51.6							
UBBA	e P	Z 14:51:29.4	72.5	336.0	1.8	63	5.4		
	e S	T 15:01:00.5							
TNS	e P	Z 14:51:30.1	72.6	335.2	1.2	21	5.2		
	e S	T 15:01:05.4							
CLL	e P	Z 14:51:30.8	72.8	337.8	1.4	21	5.1		
	e S	T 15:01:07.2							
MOX	e P	Z 14:51:32.5	73.0	337.0	1.4	24	5.1		
	e S	T 15:01:10.4							
BRG	e P	Z 14:51:34.8	73.4	338.4	2.0	95	5.5		
	e S	T 15:01:12.2							

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TANN	e P	Z	14:51:35.1	73.5	337.6	2.5	94	5.4		
	e S	T	15:01:15.1							
MANZ	e P	Z	14:51:36.8	73.8	337.4	2.4	99	5.4		
	e S	T	15:01:18.6							
GRA1	e P	Z	14:51:37.6	73.8	336.9	1.5	57	5.4		
	e S	T	15:01:19.2							
	e L	Z	15:23:59.9			21.0	7205		5.9	
ROTZ	e P	Z	14:51:38.5	74.0	337.5	2.0	65	5.3		
	e S	T	15:01:21.2							
STU	e P	Z	14:51:39.0	74.1	335.8	1.6	42	5.2		
	e S	T	15:01:22.7							
BFO	e P	Z	14:51:40.0	74.3	335.4	2.0	105	5.5		
	e S	T	15:01:24.6							
WET	e P	Z	14:51:42.6	74.7	337.9	2.5	88	5.3		
	e S	T	15:01:29.5							
GEC2	e P	Z	14:51:45.4	75.2	338.5	2.0	87	5.5		
	e S	T	15:01:34.0							
FUR	e P	Z	14:51:45.8	75.2	337.1	1.0	30	5.4		
	e S	T	15:01:35.2							
RJOB	e P	Z	14:51:49.9	76.0	338.0	1.0	16	5.1		
	e S	T	15:01:43.8							

Date 2008/01/09 Origin Time 22:24: 5.2 Lat 35.800N Long 0.500W Depth 15.0 mb 4.4 Ms ML Source NEIC
Northern Algeria

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z	22:27:43.8	15.5	224.4	1.0	25			
TNS	e P	Z	22:27:51.8	15.8	207.6	1.6	38			
GRA1	e P	Z	22:27:58.2	16.3	216.0	1.2	72	4.7		
WET	e P	Z	22:27:59.5	16.5	221.2	0.9	23			
GEC2	e P	Z	22:27:57.9	16.7	223.9	1.2	34	4.4		
ROTZ	e P	Z	22:28:01.7	16.7	218.3	1.1	16			
MANZ	e P	Z	22:28:03.8	16.9	217.6	1.2	16	4.0		
MOX	e P	Z	22:28:06.9	17.2	215.1	1.2	39	4.4		
TANN	e P	Z	22:28:07.5	17.4	217.6	1.8	35			
RUE	e P	Z	22:28:33.2	19.5	216.8	1.0	27			
BSEG	e P	Z	22:28:36.5	19.6	206.9	1.2	28	4.4		

Date 2008/01/10 Origin Time 01:37:24.5 Lat 43.495N Long 127.536W Depth 33.0N mb 5.6 Ms 6.0 ML Source SZGRF
Off coast of Oregon, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	01:49:09.3	76.1	329.9	1.1	95	5.8		

	e S	T	01:58:58.7							
IBBN	e P	Z	01:49:12.9	76.7	328.4	1.2	218	6.1		
NRDL	e P	Z	01:49:15.8	77.3	329.9	1.2	87	5.8		
BUG	e P	Z	01:49:17.4	77.3	328.2	1.4	83	5.7		
CLZ	e P	Z	01:49:20.1	78.0	330.2	1.2	57	5.6		
	e S	T	01:59:18.0							
RUE	e P	Z	01:49:21.7	78.4	332.4					
UBBA	e P	Z	01:49:23.7	78.7	330.0	1.9	154	5.7		
	e S	T	01:59:28.1							
TNS	e P	Z	01:49:23.9	78.7	329.1	1.4	100	5.7		
	e S	T	01:59:28.2							
CLL	e P	Z	01:49:26.0	79.2	332.0	1.1	83	5.7		
	e S	T	01:59:31.3							
MOX	e P	Z	01:49:27.0	79.4	331.1	1.1	72	5.6		
	e S	T	01:59:33.2							
TANN	e P	Z	01:49:29.7	79.8	331.7	1.1	45	5.3		
	e S	T	01:59:37.5							
BRG	e P	Z	01:49:29.8	79.9	332.7	1.1	101	5.7		
	e S	T	01:59:39.4							
GRA1	e P	Z	01:49:31.4	80.1	331.0	1.1	92	5.6		
	e S	T	01:59:41.1							
	e L	Z	02:26:54.5			19.0	6699		6.0	
MANZ	e P	Z	01:49:30.9	80.1	331.5	1.2	46	5.3		
	e S	T	01:59:41.6							
STU	e P	Z	01:49:32.2	80.2	329.7	1.1	52	5.4		
BFO	e P	Z	01:49:32.6	80.3	329.2	1.1	94	5.6		
ROTZ	e P	Z	01:49:32.5	80.3	331.6	1.1	45	5.3		
	e S	T	01:59:45.3							
WET	e P	Z	01:49:36.2	81.1	332.1	1.2	38	5.3		
	e S	T	01:59:51.9							
FUR	e P	Z	01:49:38.8	81.5	331.1	1.2	97	5.7		
GEC2	e P	Z	01:49:39.2	81.6	332.7	0.9	37	5.4		

Date 2008/01/10 Origin Time 01:32: 9.5 Lat 20.440S Long 176.266W Depth 33.0G mb Ms ML Source SZGRF
 Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 01:51:46.9	146.1	11.1					
CLL	e PKPbc	Z 01:51:52.2	148.3	16.7					
BRG	e PKPbc	Z 01:51:53.1	148.5	18.5					
MOX	e PKPbc	Z 01:51:55.0	149.2	14.5					
TANN	e PKPbc	Z 01:51:55.4	149.2	16.1					
TNS	e PKPbc	Z 01:51:57.3	150.0	8.9					
GRA1	e PKPbc	Z 01:51:56.9	150.1	14.2					
GEC2	e PKPbc	Z 01:51:58.2	150.5	19.2					
FUR	e PKPbc	Z 01:52:01.0	151.6	15.0					

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BFO e PKPbc Z 01:52:01.4 151.9 9.2

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/10 17:27:22.0 22.744S 177.736W 33.0N
South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	17:47:10.0	150.2	20.3					
BRG	e PKPbc	Z	17:47:10.5	150.4	22.2					
FBE	e PKPbc	Z	17:47:11.0	150.5	21.1					
NEUB	e PKPbc	Z	17:47:11.1	150.6	18.1					
MOX	e PKPbc	Z	17:47:12.1	151.2	18.1					
TANN	e PKPbc	Z	17:47:12.3	151.2	19.8					
WERD	e PKPbc	Z	17:47:12.1	151.2	19.5					
WERN	e PKPbc	Z	17:47:13.1	151.3	19.7					
MANZ	e PKPbc	Z	17:47:13.5	151.7	19.4					

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/10 17:52:34.3 38.150N 28.470E 10.0G 4.2 3.8
Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	17:56:13.9	15.1	129.6	1.1	12			
WET	e P	Z	17:56:20.3	15.7	128.6	1.1	17			
BRG	e P	Z	17:56:27.3	16.3	135.5	1.4	22	4.1		
ROTZ	e P	Z	17:56:27.6	16.4	128.8	1.4	10			
FBE	e P	Z	17:56:30.8	16.6	134.3					
TANN	e P	Z	17:56:29.9	16.7	131.1	1.6	18			
GUNZ	e P	Z	17:56:32.0	16.7	130.7					
WERD	e P	Z	17:56:32.7	16.8	130.8					
GRA1	e P	Z	17:56:33.1	16.9	126.6	2.7	125			
	e L	Z	18:04:08.5			14.6	417		3.8	
CLL	e P	Z	17:56:35.0	17.1	134.4	1.6	23	4.1		
MOX	e P	Z	17:56:37.9	17.3	129.8	2.3	74			
CLZ	e P	Z	17:56:53.8	18.6	130.2	1.7	36	4.3		
BUG	e P	Z	17:57:07.1	19.9	123.5	1.4	37	4.4		

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/10 22:51:0.6 79.479N 10.509W 33.0N 4.9 3.9
Greenland Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
MOX	e P	Z	22:57:05.1	29.8	352.1	1.5	22	4.8		

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TANN	e P	Z	22:57:06.2	30.1	351.8	1.8	33	4.9		
GRA1	e P	Z	22:57:13.2	30.7	352.4	1.4	30	5.0		
	e L	Z	23:08:58.7			21.1	254		3.9	
ROTZ	e P	Z	22:57:13.8	30.8	352.1	1.9	37	5.0		
BFO	e P	Z	22:57:25.4	31.9	353.6	1.4	22	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/10	23:00:29.7	38.590N	141.007E	33.0N	5.2			SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 23:12:25.8	78.2	37.3	1.2	27	5.2		
BRG	e P	Z 23:12:31.7	79.2	39.4					
CLL	e P	Z 23:12:31.3	79.3	38.8	0.8	15	5.2		
FBE	e P	Z 23:12:32.8	79.4	39.0					
CLZ	e P	Z 23:12:35.2	79.9	37.1	1.2	22	5.2		
GUNZ	e P	Z 23:12:37.7	80.3	38.3					
WERN	e P	Z 23:12:37.9	80.3	38.3					
MOX	e P	Z 23:12:38.2	80.3	37.8	2.8	108	5.5		
IBBN	e P	Z 23:12:38.4	80.4	35.3	0.7	17	5.3		
MANZ	e P	Z 23:12:39.4	80.7	38.1					
ROTZ	e P	Z 23:12:40.8	80.8	38.1	1.2	11	4.9		
GEC2	e P	Z 23:12:41.0	80.9	39.0	0.7	5	4.8		
WET	e P	Z 23:12:41.7	81.0	38.5	1.3	13	4.9		
GRA1	e P	Z 23:12:42.8	81.3	37.4	0.8	17	5.2		
FUR	e P	Z 23:12:49.3	82.4	37.3	1.0	37	5.3		
STU	e P	Z 23:12:50.9	82.8	36.0	0.9	26	5.2		
BFO	e P	Z 23:12:55.2	83.5	35.3	1.4	32	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/11	00:22: 3.3	37.840N	10.463W	33.0N	3.8			SZGRF

Azores-Cape St. Vincent Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:26:28.4	19.5	240.8	1.0	6	3.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/11	23:42: 5.6	31.810N	85.150E	33.0N	4.9			SZGRF

Xizang

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 23:51:30.8	54.4	81.5	0.9	9	4.8		
FBE	e P	Z 23:51:33.7	54.8	81.1	1.2	16	4.9		

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GEC2	e P	Z	23:51:34.7	54.9	79.9	1.1	16	5.0
CLL	e P	Z	23:51:34.4	55.0	81.1	1.4	9	4.6
WET	e P	Z	23:51:37.7	55.4	79.6	1.2	11	4.7
TANN	e P	Z	23:51:38.2	55.4	80.1	1.1	10	4.8
WERD	e P	Z	23:51:38.8	55.5	80.1	0.9	7	4.6
ROTZ	e P	Z	23:51:40.5	55.7	79.5	1.1	13	4.9
RJOB	e P	Z	23:51:39.9	55.7	78.6	1.5	14	4.8
MANZ	e P	Z	23:51:40.6	55.7	79.6	1.3	11	4.7
MOX	e P	Z	23:51:41.4	55.9	79.7	1.0	7	4.6
BSEG	e P	Z	23:51:43.5	56.2	81.0	1.0	24	5.2
GRA1	e P	Z	23:51:44.9	56.3	78.8	1.2	24	5.1
CLZ	e P	Z	23:51:45.7	56.5	79.6	1.1	18	5.0
NRDL	e P	Z	23:51:46.1	56.5	79.9	0.9	21	5.1
FUR	e P	Z	23:51:47.0	56.6	77.9	1.6	77	5.5
TNS	e P	Z	23:51:56.2	58.0	77.3	0.8	10	4.9

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/12 02:48:47.0 20.677S 176.491W 33.0N
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	03:08:23.2	146.3	11.5					
CLL	e PKPbc	Z	03:08:29.9	148.5	17.2					
BRG	e PKPbc	Z	03:08:30.9	148.7	19.0					
FBE	e PKPbc	Z	03:08:31.3	148.8	18.0					
NEUB	e PKPbc	Z	03:08:31.0	148.8	15.0					
WERD	e PKPbc	Z	03:08:32.7	149.4	16.3					
TANN	e PKPbc	Z	03:08:32.6	149.4	16.6					
GUNZ	e PKPbc	Z	03:08:32.9	149.5	16.4					
MANZ	e PKPbc	Z	03:08:34.1	149.9	16.2					
GRA1	e PKPbc	Z	03:08:34.8	150.3	14.7					
GEC2	e PKPbc	Z	03:08:35.7	150.7	19.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/12 03:36: 7.1 43.124N 146.969E 33.0G 4.8
 Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	03:47:51.5	76.1	31.1	1.3	21	5.1		
CLL	e P	Z	03:47:58.2	77.5	32.6	1.0	17	5.1		
BRG	e P	Z	03:47:59.0	77.5	33.1	1.4	12	4.9		
FBE	e P	Z	03:48:00.2	77.7	32.7					
NEUB	e P	Z	03:48:01.4	78.0	31.7					
MANZ	e P	Z	03:48:06.7	78.9	31.8	1.1	6	4.5		
GEC2	e P	Z	03:48:08.9	79.3	32.7	1.4	8	4.5		

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WET	e P	Z	03:48:09.3	79.3	32.2	1.3	13	4.7
GRA1	e P	Z	03:48:10.6	79.4	31.2	1.4	26	5.0
RJOB	e P	Z	03:48:16.1	80.6	32.1	0.9	5	4.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/12	15:06:48.7	38.698N	25.558E	33.0N	4.1	3.6		SZGRF

Aegean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z 15:09:54.1	12.9	129.6	1.1	16			
GEC2	e P	Z 15:09:53.2	13.2	135.6	1.4	31			
WET	e P	Z 15:10:11.4	13.8	134.3	1.5	36			
BRG	e P	Z 15:10:15.9	14.7	141.6	1.2	16			
WERN	e P	Z 15:10:23.5	14.9	136.1	1.0	17			
TANN	e P	Z 15:10:23.5	14.9	136.7	1.3	19			
FBE	e P	Z 15:10:23.0	14.9	140.2	1.3	51			
GUNZ	e P	Z 15:10:24.3	15.0	136.2	1.1	17			
GRA1	e P	Z 15:10:23.9	15.0	131.7	1.2	23			
	e L	Z 15:16:34.1			18.9	385		3.6	
WERD	e P	Z 15:10:24.5	15.0	136.4	1.4	31			
CLL	e P	Z 15:10:25.6	15.4	140.2	1.0	16			
MOX	e P	Z 15:10:29.5	15.5	135.2	1.5	49			
STU	e P	Z 15:10:28.5	15.5	124.5					
BFO	e P	Z 15:10:29.5	15.7	121.4	1.4	24	4.1		
RUE	e P	Z 15:10:34.4	16.0	144.7					
TNS	e P	Z 15:10:44.3	16.7	127.0	1.6	47			
CLZ	e P	Z 15:10:44.5	16.9	135.2	1.4	44			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/12	22:44:47.1	22.734N	92.500E	33.0N	5.3	4.1		SZGRF

India-Bangladesh border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 22:55:26.7	65.4	84.2	1.2	50	5.6		
BRG	e P	Z 22:55:26.9	65.5	83.6	0.8	10	5.1		
FBE	e P	Z 22:55:29.6	65.8	83.2	1.5	50	5.5		
GEC2	e P	Z 22:55:29.5	65.9	82.5	1.0	13	5.1		
CLL	e P	Z 22:55:30.5	66.0	83.1	1.6	24	5.2		
WET	e P	Z 22:55:32.5	66.4	82.0	1.5	15	5.0		
TANN	e P	Z 22:55:33.2	66.5	82.3	1.5	16	5.1		
WERN	e P	Z 22:55:34.0	66.5	82.2	1.5	21	5.1		
GUNZ	e P	Z 22:55:33.5	66.5	82.2	1.4	25	5.2		
WERD	e P	Z 22:55:33.7	66.5	82.2	1.5	17	5.1		
ROTZ	e P	Z 22:55:35.7	66.7	81.8	1.5	40	5.4		
MANZ	e P	Z 22:55:35.5	66.7	81.8	1.1	15	5.1		

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MOX	e P	Z	22:55:36.8	67.0	81.7	1.3	14	5.0		
BSEG	e P	Z	22:55:38.9	67.3	82.1	1.1	22	5.3		
GRA1	e P	Z	22:55:39.3	67.3	81.1	1.6	38	5.4		
	e L	Z	23:29:05.0			20.9	108		4.1	
CLZ	e P	Z	22:55:40.1	67.5	81.3	1.3	40	5.5		
FUR	e P	Z	22:55:40.0	67.6	80.5	1.4	27	5.3		
NRDL	e P	Z	22:55:41.3	67.6	81.4	1.4	58	5.6		
STU	e P	Z	22:55:48.4	68.8	79.3	1.5	37	5.4		
TNS	e P	Z	22:55:50.1	69.0	79.3	1.4	28	5.3		
IBBN	e P	Z	22:55:49.8	69.1	79.5	1.4	53	5.6		
BUG	e P	Z	22:55:53.5	69.5	78.9	1.2	29	5.3		
WLF	e P	Z	22:56:00.1	70.6	77.4	1.3	57	5.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/13 11:16:32.7 18.840S 173.810W 33.0N
 Tonga Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	11:36:12.0	147.1	11.9					
BRG	e PKPbc	Z	11:36:12.5	147.4	13.7					
MOX	e PKPbc	Z	11:36:13.7	147.9	9.7					
TANN	e PKPbc	Z	11:36:14.4	148.0	11.3					
MANZ	e PKPbc	Z	11:36:15.9	148.5	10.8					
TNS	e PKPbc	Z	11:36:16.2	148.6	4.1					
ROTZ	e PKPbc	Z	11:36:17.1	148.7	11.0					
GRA1	e PKPbc	Z	11:36:17.6	148.9	9.2					
WLF	e PKPbc	Z	11:36:18.1	149.2	359.9					
WET	e PKPbc	Z	11:36:18.9	149.2	12.4					
GEC2	e PKPbc	Z	11:36:17.7	149.4	14.1					
STU	e PKPbc	Z	11:36:20.2	150.0	5.7					
FUR	e PKPbc	Z	11:36:20.1	150.4	9.8					
BFO	e PKPbc	Z	11:36:20.0	150.5	4.1					
RJOB	e PKPbc	Z	11:36:21.9	150.6	12.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/13 12:15:43.1 16.721N 119.949E 33.0N 5.5 5.6
 Luzon, Philippine Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	12:28:27.1	86.8	67.2	1.5	43	5.4		
CLL	e P	Z	12:28:28.0	87.1	66.5	1.0	13	5.0		
BSEG	e P	Z	12:28:29.5	87.5	64.5	1.0	24	5.5		
GEC2	e P	Z	12:28:31.8	87.7	67.0	1.5	44	5.6		
WET	e P	Z	12:28:31.9	88.1	66.4	1.4	14	5.1		
MOX	e P	Z	12:28:32.4	88.2	65.4	2.0	66	5.6		

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CLZ	e P	Z	12:28:34.6	88.4	64.5	1.5	48	5.5
RJOB	e P	Z	12:28:34.3	88.7	66.3	2.1	129	5.8
GRA1	e P	Z	12:28:34.2	88.8	65.1	1.8	70	5.6
	e S	R	12:39:13.0					
	e SS	R	12:45:26.2					
	e L	Z	13:10:31.9			21.5	2768	5.6
UBBA	e P	Z	12:28:37.9	89.0	64.2	1.6	63	5.6
FUR	e P	Z	12:28:39.4	89.4	65.1	1.4	89	5.8
IBBN	e P	Z	12:28:40.6	89.6	62.5	1.4	60	5.6
TNS	e P	Z	12:28:42.4	90.2	63.0	1.6	52	5.5
BUG	e P	Z	12:28:43.4	90.3	62.1	1.2	26	5.3
STU	e P	Z	12:28:43.4	90.4	63.6	1.6	71	5.7
BFO	e P	Z	12:28:48.4	91.1	62.9	2.0	93	5.8
WLF	e P	Z	12:28:51.3	91.8	61.2	1.4	79	5.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/13	15:57:14.1	20.432S	169.415E	33.0N				SZGRF
Vanuatu Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 16:16:42.5	144.0	39.7					
CLZ	e PKPbc	Z 16:16:45.7	144.6	35.4					
TANN	e PKPbc	Z 16:16:46.0	144.9	39.7					
IBBN	e PKPbc	Z 16:16:46.4	145.1	31.0					
MOX	e PKPbc	Z 16:16:46.6	145.1	38.2					
MANZ	e PKPbc	Z 16:16:47.5	145.4	39.6					
ROTZ	e PKPbc	Z 16:16:48.0	145.5	39.9					
GEC2	e PKPbc	Z 16:16:48.0	145.6	43.0					
GRA1	e PKPbc	Z 16:16:49.9	146.0	38.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/14								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:21:46.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/14	01:20: 8.7	33.508S	56.540E	15.7	5.7			SZGRF
Southwest Indian Ridge								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:33:16.3	92.4	143.6	1.8	71	5.7		
	e pP	Z 01:33:20.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/14	03:21:40.5	31.163N	85.207E	33.0N	4.9			SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	03:31:22.0	56.8	79.3	1.1	15	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/14	13:38:31.9	9.285N	92.725E	18.3	5.8	5.2		SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:50:14.4	75.7	92.8	1.6	154	5.9		
GEC2	e P	Z	13:50:14.8	75.8	92.1	1.1	86	5.8		
CLL	e P	Z	13:50:17.3	76.3	92.2	1.6	96	5.7		
WET	e P	Z	13:50:18.0	76.4	91.5	1.2	70	5.6		
TANN	e P	Z	13:50:19.6	76.7	91.5					
ROTZ	e P	Z	13:50:21.0	76.8	91.2					
MOX	e P	Z	13:50:22.7	77.2	90.9	1.9	140	5.8		
FUR	e P	Z	13:50:23.5	77.4	90.1	1.3	105	5.8		
GRA1	e P	Z	13:50:24.3	77.4	90.4	1.8	184	5.9		
	e pP	Z	13:50:29.6							
	e		13:50:37.2							
	e PP	Z	13:53:27.0							
	e S	N	14:00:04.8							
	e SS	E	14:05:07.0							
	e L	Z	14:30:33.2			20.7	1277		5.2	
CLZ	e P	Z	13:50:26.8	78.0	90.2	1.6	130	5.8		
BSEG	e P	Z	13:50:27.3	78.0	90.6	1.3	141	5.9		
UBBA	e P	Z	13:50:28.3	78.2	89.7					
STU	e P	Z	13:50:31.3	78.8	88.7					
TNS	e P	Z	13:50:34.2	79.2	88.4	2.3	219	5.8		
BFO	e P	Z	13:50:34.4	79.4	87.9	1.0	32	5.3		
IBBN	e P	Z	13:50:35.9	79.6	88.2					
BUG	e P	Z	13:50:37.7	79.9	87.7					
WLF	e P	Z	13:50:42.6	80.7	86.5	2.0	247	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/15	06:33:37.1	70.757N	14.688W	33.0N	4.8			SZGRF

Jan Mayen Island region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e P	Z	06:38:51.5	24.3	339.5	2.0	61	4.8
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/15	06:35:21.9	69.920N	14.240W	32.7	4.7	4.1		SZGRF

Jan Mayen Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z 06:40:00.7	20.7	336.4	1.4	37	4.5		
BUG	e P	Z 06:40:04.3	21.0	339.4					
UBBA	e P	Z 06:40:17.5	22.2	338.1	2.8	130	5.0		
CLL	e P	Z 06:40:21.0	22.5	335.7	1.3	23	4.6		
BRG	e P	Z 06:40:26.1	23.1	335.6	1.4	17	4.4		
GRA1	e P	Z 06:40:30.8	23.5	338.3	1.1	17	4.5		
	e pP	Z 06:40:39.2							
	e L	Z 06:48:37.1			20.5	636		4.1	
BFO	e P	Z 06:40:36.2	24.2	341.2	1.6	38	4.9		
WET	e P	Z 06:40:39.2	24.5	337.8	1.4	30	4.8		
GEC2	e P	Z 06:40:44.0	24.9	337.6	1.5	32	4.7		
RJOB	e P	Z 06:40:51.7	25.7	338.9	1.0	13	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/15	06:55:32.0	70.216N	14.965W	33.0N	4.9	3.8		SZGRF

Jan Mayen Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:00:43.7	23.9	338.4	2.3	97	4.9		
	e L	Z 07:09:12.0			20.4	362		3.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/15	07:00:58.3	70.211N	15.238W	33.0N	4.4	3.9		SZGRF

Jan Mayen Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:06:10.6	24.0	338.2	1.5	21	4.4		
	e L	Z 07:14:27.9			20.6	404		3.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/15	17:55:46.1	37.433N	141.938E	45.1	5.2			SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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BSEG	e P	Z	18:07:49.6	79.6	37.1	1.5	44	5.2
BRG	e P	Z	18:07:53.8	80.6	39.4	1.0	12	4.9
CLL	e P	Z	18:07:53.9	80.7	38.8	1.0	18	5.1
MANZ	e P	Z	18:08:01.2	82.0	38.0	1.3	18	5.0
WET	e P	Z	18:08:03.3	82.4	38.5	1.0	7	4.9
GRA1	e P	Z	18:08:04.7	82.6	37.4	1.0	30	5.5
	e pP	Z	18:08:17.8					
RJOB	e P	Z	18:08:09.2	83.5	38.3	1.1	11	5.0
FUR	e P	Z	18:08:10.9	83.8	37.3	1.1	33	5.5
STU	e P	Z	18:08:13.1	84.1	35.9	0.9	26	5.5

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/15 17:52:16.2 21.910S 179.110W 600.4 mb MS ML SZGRF
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	18:10:48.9	147.2	16.3					
	e PKPbc	Z	18:10:53.0							
HLG	e PKPbc	Z	18:10:53.6	147.3	12.1					
RUE	e PKPbc	Z	18:10:54.8	147.9	22.9					
CLL	e PKPbc	Z	18:10:57.9	149.1	22.3					
IBBN	e PKPbc	Z	18:10:58.0	149.1	12.5					
	e PP	Z	18:14:36.4							
CLZ	e PKPbc	Z	18:10:58.3	149.2	17.4					
	e PP	Z	18:14:33.8							
BRG	e PKPbc	Z	18:10:58.4	149.3	24.2					
FBE	e PKPbc	Z	18:10:58.9	149.4	23.2					
	e PP	Z	18:14:33.2							
BUG	e PKPbc	Z	18:10:59.8	150.1	11.9					
MOX	e PKPdf	Z	18:10:54.2	150.1	20.2					
	e PKPbc	Z	18:11:00.1							
	e PKPab	Z	18:11:08.1							
	e pPKPbc	Z	18:13:16.9							
TANN	e PKPdf	Z	18:10:53.6	150.1	21.9					
	e PKPbc	Z	18:11:00.4							
	e PKPab	Z	18:11:08.3							
WERD	e PKPdf	Z	18:10:53.7	150.1	21.6					
	e PKPbc	Z	18:11:00.4							
	e PKPab	Z	18:11:08.7							
	e pPKPbc	Z	18:13:18.0							
	e PP	Z	18:14:41.0							
GUNZ	e PKPdf	Z	18:10:54.6	150.2	21.7					
	e PKPbc	Z	18:11:00.5							
	e PKPab	Z	18:11:09.1							
	e pPKPbc	Z	18:13:18.6							
WERN	e PKPdf	Z	18:10:54.5	150.2	21.8					
	e PKPbc	Z	18:11:00.7							

	e PKPab	Z	18:11:09.1		
	e PP	Z	18:14:42.1		
MANZ	e PKPbc	Z	18:11:01.4	150.6	21.5
	e PKPab	Z	18:11:10.8		
ROTZ	e PKPdf	Z	18:10:55.2	150.7	21.9
	e PKPbc	Z	18:11:01.8		
	e PKPab	Z	18:11:11.6		
	e PP	Z	18:14:44.6		
GRA1	e PKPdf	Z	18:10:56.3	151.0	20.1
	e PKPbc	Z	18:11:03.2		
	e PKPab	Z	18:11:12.6		
	e pPKPbc	Z	18:13:19.9		
	e SS	T	18:33:13.4		
TNS	e PKPdf	Z	18:10:56.9	151.1	14.6
	e PKPbc	Z	18:11:02.4		
	e PKPab	Z	18:11:12.5		
WET	e PKPdf	Z	18:10:57.0	151.2	23.5
	e PKPbc	Z	18:11:02.5		
	e PKPab	Z	18:11:13.2		
	e pPKPbc	Z	18:13:19.6		
GEC2	e PKPdf	Z	18:10:56.0	151.2	25.3
	e PKPbc	Z	18:11:02.6		
	e PKPab	Z	18:11:13.5		
WLF	e PKPbc	Z	18:11:04.7	151.9	10.4
	e PKPab	Z	18:11:16.5		
STU	e PKPdf	Z	18:10:57.3	152.3	16.8
	e PKPbc	Z	18:11:05.3		
	e PKPab	Z	18:11:18.0		
	e pPKPbc	Z	18:13:23.6		
RJOB	e PKPdf	Z	18:10:57.6	152.5	24.5
	e PKPbc	Z	18:11:04.9		
	e PKPab	Z	18:11:19.3		
FUR	e PKPdf	Z	18:10:57.7	152.5	21.2
	e PKPbc	Z	18:11:05.3		
	e PKPab	Z	18:11:19.1		
BFO	e PKPbc	Z	18:11:06.0	152.9	15.3
	e PKPab	Z	18:11:20.1		

Date 2008/01/15
 Origin Time 18:00:58.7
 Lat 22.100S
 Long 178.680W
 Depth 601.4
 mb
 Ms
 ML
 Source SZGRF
 South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	18:19:36.0	147.4	15.6					
RUE	e PKPbc	Z	18:19:37.9	148.2	22.3					
IBBN	e PKPbc	Z	18:19:40.8	149.4	11.8					
	e PKPab	Z	18:19:48.2							

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CLL	e PKPbc	Z	18:19:40.8	149.4	21.6
	e PKPab	Z	18:19:47.8		
CLZ	e PKPbc	Z	18:19:41.3	149.4	16.7
	e pPKPbc	Z	18:21:58.8		
BRG	e PKPbc	Z	18:19:41.4	149.6	23.6
	e PKPab	Z	18:19:48.7		
FBE	e PKPbc	Z	18:19:41.5	149.7	22.5
	e PKPab	Z	18:19:49.6		
BUG	e PKPbc	Z	18:19:43.2	150.3	11.2
MOX	e PKPbc	Z	18:19:43.1	150.3	19.6
	e PKPab	Z	18:19:51.8		
TANN	e PKPbc	Z	18:19:43.4	150.4	21.2
	e pPKPbc	Z	18:22:01.6		
WERD	e PKPbc	Z	18:19:43.2	150.4	20.9
	e PKPab	Z	18:19:52.2		
GUNZ	e PKPbc	Z	18:19:43.8	150.4	21.0
	e PKPab	Z	18:19:52.7		
WERN	e PKPbc	Z	18:19:43.6	150.5	21.2
	e PKPab	Z	18:19:53.1		
MANZ	e PKPbc	Z	18:19:44.7	150.9	20.9
	e PKPab	Z	18:19:54.0		
	e pPKPbc	Z	18:22:02.3		
ROTZ	e PKPbc	Z	18:19:44.3	151.0	21.2
	e PKPab	Z	18:19:55.2		
GRA1	e PKPbc	Z	18:19:45.9	151.3	19.4
	e PKPab	Z	18:19:56.7		
TNS	e PKPbc	Z	18:19:45.8	151.3	13.9
	e PKPab	Z	18:19:56.0		
	e pPKPbc	Z	18:22:04.1		
WET	e PKPbc	Z	18:19:45.7	151.4	22.9
	e PKPab	Z	18:19:57.0		
GEC2	e PKPbc	Z	18:19:45.3	151.5	24.6
	e PKPab	Z	18:19:56.8		
WLF	e PKPbc	Z	18:19:46.9	152.2	9.6
STU	e PKPbc	Z	18:19:48.2	152.6	16.0
FUR	e PKPab	Z	18:20:02.6	152.7	20.5
RJOB	e PKPbc	Z	18:19:48.3	152.8	23.7
	e PKPab	Z	18:20:02.9		
BFO	e PKPab	Z	18:20:03.8	153.2	14.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/16	11:54:51.3	32.440N	85.160E	56.2N	6.0	6.1		SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	12:04:09.2	53.9	82.0	1.0	145	6.0		
RGN	e P	Z	12:04:09.9	53.9	83.1	1.2	334	6.3		

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 00:37:02.2							
CLL	e PKP	Z 00:37:01.9							
FBE	e PKP	Z 00:37:02.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/17	07:10:0.9	32.358N	85.765E	33.0N	5.0	4.3		SZGRF

Xizang

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 07:19:24.6	54.4	80.6	1.1	11	4.8		
CLL	e P	Z 07:19:27.6	55.0	80.2	1.5	15	4.8		
GEC2	e P	Z 07:19:28.4	55.0	79.0	1.3	17	4.9		
WET	e P	Z 07:19:31.6	55.4	78.6	1.7	39	5.2		
TANN	e P	Z 07:19:32.0	55.5	79.2	1.8	26	5.0		
ROTZ	e P	Z 07:19:34.2	55.7	78.6	1.6	37	5.2		
MANZ	e P	Z 07:19:34.1	55.8	78.7	1.3	11	4.7		
MOX	e P	Z 07:19:35.0	55.9	78.8	1.6	21	4.9		
BSEG	e P	Z 07:19:37.3	56.1	80.0	1.1	23	5.1		
GRA1	e P	Z 07:19:39.2	56.4	77.9	1.1	25	5.1		
	e L	Z 07:45:47.4			20.7	245		4.3	
CLZ	e P	Z 07:19:39.4	56.5	78.7	1.1	19	5.0		
NRDL	e P	Z 07:19:39.6	56.5	78.9	1.4	52	5.4		
FUR	e P	Z 07:19:41.0	56.7	76.9	0.7	23	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/17	15:39:11.0	52.730N	159.410E	33.0N	5.7	4.3		SZGRF

Off east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 15:50:16.6	69.1	21.2	1.0	163	6.2		
BSEG	e P	Z 15:50:23.9	70.3	19.3	1.2	94	5.8		
RUE	e P	Z 15:50:27.4	70.9	21.2	1.0	102	5.9		
NRDL	e P	Z 15:50:31.9	71.7	19.0	1.0	59	5.7		
CLL	e P	Z 15:50:34.6	72.2	20.6	1.0	103	5.9		
CLZ	e P	Z 15:50:35.9	72.2	19.1	1.1	150	6.0		
IBBN	e P	Z 15:50:35.9	72.3	17.6	1.2	156	6.0		
BRG	e P	Z 15:50:35.9	72.4	21.1	1.1	34	5.4		
FBE	e P	Z 15:50:36.7	72.5	20.8	1.1	72	5.7		
MOX	e P	Z 15:50:40.5	73.1	19.7	1.1	58	5.6		
TANN	e P	Z 15:50:40.9	73.2	20.2	1.4	46	5.4		
WERD	e P	Z 15:50:40.8	73.2	20.1	1.0	55	5.6		
GUNZ	e P	Z 15:50:41.3	73.2	20.1	1.0	43	5.5		
BUG	e P	Z 15:50:41.1	73.2	17.2	1.1	96	5.8		

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WERN	e P	Z	15:50:41.7	73.3	20.1	0.8	55	5.7	
UBBA	e P	Z	15:50:41.6	73.3	18.8	1.6	80	5.6	
MANZ	e P	Z	15:50:43.5	73.6	19.9	1.1	39	5.4	
ROTZ	e P	Z	15:50:45.0	73.8	20.0	1.0	47	5.5	
GRA1	e P	Z	15:50:46.7	74.1	19.4	1.1	130	5.9	
	e L	Z	16:20:03.1			37.4	301		4.3
TNS	e P	Z	15:50:46.8	74.2	17.8	1.0	73	5.7	
WET	e P	Z	15:50:47.6	74.2	20.3	1.0	73	5.6	
GEC2	e P	Z	15:50:47.7	74.3	20.8	1.2	51	5.4	
STU	e P	Z	15:50:53.7	75.4	18.1	1.0	58	5.6	
FUR	e P	Z	15:50:54.7	75.5	19.3	1.0	96	5.9	
RJOB	e P	Z	15:50:55.3	75.6	20.1	0.9	48	5.6	
BFO	e P	Z	15:50:57.1	76.0	17.6	1.1	48	5.6	

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/17 19:46:38.6 66.473N 139.793W 33.0N 5.1 4.4
 Northern Yukon Territory, Canada

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:56:54.2	61.8	347.3	1.1	16	5.1		
	e L	Z 20:25:26.0			18.6	295		4.4	

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/17 23:07:14.4 38.928N 98.979E 33.0N 4.8 4.0
 Qinghai, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:17:18.6	60.1	63.8	1.0	11	4.8		
	e L	Z 23:45:43.0			19.0	108		4.0	

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/18 08:07:1.0 22.259S 176.341W 33.0N
 South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 08:26:43.4	147.9	11.7					
NRDL	e PKPbc	Z 08:26:46.8	149.4	11.8					
IBBN	e PKPab	Z 08:26:53.5	149.8	7.6					
CLZ	e PKPbc	Z 08:26:48.5	150.0	12.5					
	e PKPab	Z 08:26:53.9							
CLL	e PKPbc	Z 08:26:48.4	150.1	17.5					
	e PKPab	Z 08:26:53.8							
BRG	e PKPbc	Z 08:26:49.2	150.3	19.5					

	e	PKPab	Z	08:26:54.6		
FBE	e	PKPbc	Z	08:26:49.5	150.4	18.4
MOX	e	PKPbc	Z	08:26:50.5	150.9	15.3
	e	PKPab	Z	08:26:57.6		
WERD	e	PKPbc	Z	08:26:51.0	151.0	16.7
TANN	e	PKPbc	Z	08:26:51.0	151.0	17.0
	e	PKPab	Z	08:26:58.0		
GUNZ	e	PKPbc	Z	08:26:51.3	151.1	16.8
MANZ	e	PKPbc	Z	08:26:52.2	151.5	16.6
ROTZ	e	PKPbc	Z	08:26:52.7	151.7	16.9
	e	PKPab	Z	08:27:01.1		
TNS	e	PKPab	Z	08:27:01.8	151.8	9.4
GRA1	e	PKPbc	Z	08:26:52.8	151.9	15.0
	e	PKPab	Z	08:27:02.4		
WET	e	PKPab	Z	08:27:03.1	152.1	18.5
GEC2	e	PKPbc	Z	08:26:53.5	152.2	20.3
FUR	e	PKPab	Z	08:27:08.2	153.4	15.9
RJOB	e	PKPab	Z	08:27:08.7	153.5	19.2
BFO	e	PKPbc	Z	08:26:57.2	153.7	9.8
	e	PKPab	Z	08:27:09.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/18	09:28:26.0	51.844N	178.018E	33.0N	5.0			SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e P	Z	09:40:07.6	75.5	6.2	0.9	26	5.4		
CLZ	e P	Z	09:40:09.4	75.8	7.8	1.0	23	5.3		
CLL	e P	Z	09:40:09.6	76.1	9.5					
BRG	e P	Z	09:40:12.2	76.4	10.0	0.9	10	5.0		
FBE	e P	Z	09:40:12.8	76.4	9.7	1.1	20	5.1		
MOX	e P	Z	09:40:14.8	76.9	8.6	1.4	22	5.1		
WERD	e P	Z	09:40:15.5	77.0	9.0	1.2	9	4.8		
TANN	e P	Z	09:40:15.7	77.0	9.1	0.9	8	4.8		
GUNZ	e P	Z	09:40:16.3	77.1	9.0	1.2	15	5.0		
WERN	e P	Z	09:40:16.4	77.1	9.0	0.8	14	5.1		
MANZ	e P	Z	09:40:18.5	77.5	8.9	0.9	7	4.8		
TNS	e P	Z	09:40:18.4	77.6	6.6	0.8	13	5.1		
ROTZ	e P	Z	09:40:19.7	77.7	8.9	1.2	12	4.9		
GRA1	e P	Z	09:40:20.6	77.8	8.3	0.8	25	5.4		
GRFO	e P	Z	09:40:21.1	77.8	8.3	0.9	23	5.3		
WET	e P	Z	09:40:22.6	78.2	9.3	1.1	5	4.5		
GEC2	e P	Z	09:40:23.6	78.4	9.8	0.9	7	4.7		
RJOB	e P	Z	09:40:30.4	79.6	9.2	0.7	12	4.9		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/18	11:34:22.0	25.052N	140.774E	33.0N	5.2			SZGRF

Volcano Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 11:47:19.6	90.2	43.6	1.8	68	5.6		
BRG	e P	Z 11:47:21.7	90.8	46.5	1.4	16	5.2		
CLL	e P	Z 11:47:22.6	90.9	45.7	1.1	14	5.2		
CLZ	e P	Z 11:47:26.8	91.7	43.6	1.4	17	5.2		
MOX	e P	Z 11:47:28.3	92.0	44.7	0.8	4	4.8		
MANZ	e P	Z 11:47:29.3	92.3	45.1	1.0	4	4.9		
GEC2	e P	Z 11:47:29.3	92.3	46.3	2.4	43	5.5		
ROTZ	e P	Z 11:47:30.0	92.4	45.1	1.3	10	5.1		
GRA1	e P	Z 11:47:31.9	92.9	44.4	1.1	15	5.4		
RJOB	e P	Z 11:47:34.9	93.5	45.7	0.9	8	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/18	19:18:47.8	37.495N	74.189E	33.0N	4.8			SZGRF

Tajikistan-Xinjiang border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:26:50.4	43.9	83.5	1.0	13	4.6		
FBE	e P	Z 19:26:53.4	44.3	83.1	0.8	14	4.7		
CLL	e P	Z 19:26:54.6	44.4	83.3	0.8	9	4.8		
WERD	e P	Z 19:26:59.1	45.0	81.9	0.9	6	4.5		
MOX	e P	Z 19:27:02.2	45.4	81.6	1.4	17	4.9		
GRA1	e P	Z 19:27:06.5	45.8	80.5	1.7	41	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/18	19:31:14.5	20.900S	178.190W	657.8				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 19:49:43.1	146.3	14.4					
RUE	e PKPbc	Z 19:49:45.2	147.1	20.9					
NRDL	e PKPpdf	Z 19:49:43.7	147.8	14.6					
	e PKPbc	Z 19:49:46.9							
IBBN	e PKPbc	Z 19:49:48.2	148.3	10.6					
CLZ	e PKPpdf	Z 19:49:44.5	148.3	15.4					
	e PKPbc	Z 19:49:48.2							
CLL	e PKPpdf	Z 19:49:44.3	148.4	20.2					
	e PKPbc	Z 19:49:48.2							
	e PKPab	Z 19:49:54.1							
	e pPKPbc	Z 19:52:16.9							
BRG	e PKPbc	Z 19:49:48.9	148.5	22.1					

	e PKPab	Z	19:49:55.0		
FBE	e PKPbc	Z	19:49:49.4	148.6	21.1
	e PKPab	Z	19:49:55.4		
BUG	e PKPdf	Z	19:49:46.0	149.2	10.0
	e PKPbc	Z	19:49:50.5		
	e PKPab	Z	19:49:57.3		
MOX	e PKPdf	Z	19:49:45.8	149.3	18.1
	e PKPbc	Z	19:49:50.8		
	e PKPab	Z	19:49:57.6		
TANN	e PKPdf	Z	19:49:45.8	149.3	19.8
	e PKPbc	Z	19:49:50.9		
WERD	e PKPbc	Z	19:49:50.6	149.3	19.5
	e PKPab	Z	19:49:58.1		
GUNZ	e PKPdf	Z	19:49:46.0	149.4	19.6
	e PKPbc	Z	19:49:51.2		
	e PKPab	Z	19:49:58.6		
UBBA	e PKPbc	Z	19:49:51.1	149.4	15.2
WERN	e PKPbc	Z	19:49:51.7	149.5	19.7
	e PKPab	Z	19:49:59.1		
MANZ	e PKPbc	Z	19:49:52.4	149.8	19.4
ROTZ	e PKPbc	Z	19:49:52.2	150.0	19.7
	e PKPab	Z	19:50:01.0		
TNS	e PKPbc	Z	19:49:52.7	150.2	12.6
	e PKPab	Z	19:50:01.9		
GRA1	e PKPbc	Z	19:49:53.1	150.3	17.9
	e PKPab	Z	19:50:02.3		
	e pPKPbc	Z	19:52:20.9		
WET	e PKPdf	Z	19:49:47.4	150.4	21.3
	e PKPbc	Z	19:49:53.0		
	e PKPab	Z	19:50:03.0		
GEC2	e PKPdf	Z	19:49:47.4	150.5	23.0
	e PKPbc	Z	19:49:53.0		
	e PKPab	Z	19:50:03.2		
WLF	e PKPdf	Z	19:49:49.1	151.0	8.4
	e PKPbc	Z	19:49:55.5		
	e PKPab	Z	19:50:05.9		
STU	e PKPbc	Z	19:49:55.8	151.5	14.6
	e PKPab	Z	19:50:07.2		
FUR	e PKPbc	Z	19:49:56.2	151.7	18.9
	e PKPab	Z	19:50:08.1		
RJOB	e PKPbc	Z	19:49:56.0	151.7	22.1
	e PKPab	Z	19:50:08.7		
BFO	e PKPbc	Z	19:49:56.7	152.1	13.1
	e PKPab	Z	19:50:09.4		

Mongolia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:41:39.0	53.2	53.0	1.9	30	4.9		
	e L	Z 08:05:38.3			20.5	1683		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	13:30:22.4	9.722S	35.978E	33.0N	4.9			SZGRF

Tanzania

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 13:40:38.2	61.8	154.9	1.4	15	5.0		
ROTZ	e P	Z 13:40:46.3	63.0	153.5	1.7	15	4.9		
GRA1	e P	Z 13:40:47.9	63.2	152.5	1.4	11	4.8		
MANZ	e P	Z 13:40:47.1	63.2	153.5	1.6	13	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	13:45:22.8	22.350S	178.080W	402.5				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PKPbc	Z 14:04:17.4	146.7	19.4					
BSEG	e PKPbc	Z 14:04:20.5	147.8	14.7					
	e pPKPbc	Z 14:05:55.2							
RUE	e PKPbc	Z 14:04:22.5	148.5	21.4					
NRDL	e PKPbc	Z 14:04:24.1	149.2	14.9					
	e pPKPbc	Z 14:06:02.5							
IBBN	e PKPbc	Z 14:04:25.5	149.7	10.8					
CLL	e PKPbc	Z 14:04:25.6	149.8	20.7					
CLZ	e PKPbc	Z 14:04:26.0	149.8	15.7					
BRG	e PKPbc	Z 14:04:26.2	150.0	22.6					
FBE	e PKPbc	Z 14:04:26.6	150.1	21.6					
	e pPKPbc	Z 14:06:02.1							
BUG	e PKPbc	Z 14:04:27.5	150.6	10.1					
MOX	e PKPbc	Z 14:04:27.9	150.7	18.6					
	e pPKPbc	Z 14:06:05.5							
TANN	e PKPbc	Z 14:04:28.0	150.7	20.3					
WERD	e PKPbc	Z 14:04:28.0	150.8	20.0					
GUNZ	e PKPbc	Z 14:04:28.2	150.8	20.1					
	e pPKPbc	Z 14:06:05.0							
UBBA	e PKPbc	Z 14:04:27.9	150.8	15.5					
	e PKPab	Z 14:04:37.7							
WERN	e PKPbc	Z 14:04:28.3	150.9	20.2					
	e PKPab	Z 14:04:36.8							
	e pPKPbc	Z 14:06:07.6							

MANZ	e PKPbc	Z	14:04:29.2	151.2	19.9
	e pPKPbc	Z	14:06:07.2		
ROTZ	e PKPbc	Z	14:04:29.3	151.4	20.2
TNS	e PKPbc	Z	14:04:30.0	151.7	12.8
GRA1	e PKPbc	Z	14:04:30.5	151.7	18.4
WET	e PKPbc	Z	14:04:30.7	151.8	21.9
GEC2	e PKPbc	Z	14:04:30.5	151.9	23.6
WLF	e PKPbc	Z	14:04:32.4	152.5	8.5
	e pPKPbc	Z	14:06:11.3		
STU	e PKPbc	Z	14:04:33.1	153.0	14.9
RJOB	e PKPbc	Z	14:04:33.2	153.2	22.7
	e PKPab	Z	14:04:46.4		
BFO	e PKPbc	Z	14:04:34.0	153.5	13.4
	e PKPab	Z	14:04:47.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	19:25: 5.7	37.124N	70.808E	210.5	4.9			SZGRF
Afghanistan-Tajikistan border region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	19:32:35.5	42.0	86.3	0.7	28	5.0		
RUE	e P	Z	19:32:35.6	42.0	88.0	0.9	39	5.1		
	e sP	Z	19:33:43.4							
RGN	e P	Z	19:32:38.3	42.2	89.9	0.7	68	5.4		
GEC2	e P	Z	19:32:37.6	42.3	83.9	0.9	10	4.4		
FBE	e P	Z	19:32:38.7	42.4	86.0	0.8	35	5.0		
	e pP	Z	19:33:23.3							
CLL	e P	Z	19:32:39.6	42.6	86.1	0.9	19	4.8		
	e pP	Z	19:33:24.5							
WET	e P	Z	19:32:42.8	42.8	83.7	1.5	15	4.5		
TANN	e P	Z	19:32:43.4	43.0	84.8	1.1	17	4.7		
	e sP	Z	19:33:52.1							
WERN	e P	Z	19:32:44.0	43.0	84.6	1.2	16	4.6		
GUNZ	e P	Z	19:32:44.1	43.1	84.6	0.9	16	4.8		
	e sP	Z	19:33:52.8							
RJOB	e P	Z	19:32:43.2	43.1	82.1	0.9	27	5.0		
WERD	e P	Z	19:32:43.9	43.1	84.7	0.8	14	4.7		
	e pP	Z	19:33:29.1							
ROTZ	e P	Z	19:32:45.6	43.2	83.9	1.2	27	4.8		
	e pP	Z	19:33:30.2							
MANZ	e P	Z	19:32:45.8	43.2	84.1	0.9	17	4.8		
MOX	e P	Z	19:32:47.4	43.5	84.4	0.8	20	4.9		
	e pP	Z	19:33:32.5							
	e sP	Z	19:33:56.0							
GRA1	e P	Z	19:32:50.8	43.8	83.1	0.8	20	4.9		
	e pP	Z	19:33:35.8							
	e PP	Z	19:34:31.9							

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FUR	e P	Z	19:32:51.3	44.0	81.6	0.8	31	5.1
	e sP	Z	19:33:59.8					
BSEG	e P	Z	19:32:52.2	44.0	86.9			
CLZ	e P	Z	19:32:52.8	44.1	84.8			
	e sP	Z	19:34:01.6					
NRDL	e P	Z	19:32:53.7	44.2	85.2			
	e sP	Z	19:34:02.6					
UBBA	e P	Z	19:32:54.9	44.5	83.5			
STU	e P	Z	19:33:01.2	45.3	80.9			
TNS	e P	Z	19:33:03.5	45.5	81.8			
IBBN	e P	Z	19:33:04.9	45.7	83.3			
	e sP	Z	19:34:14.0					
BFO	e P	Z	19:33:05.4	45.9	79.9			
BUG	e P	Z	19:33:07.9	46.1	82.2			
WLF	e P	Z	19:33:15.9	47.1	79.7			
	e pP	Z	19:34:01.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	19:33:48.8	14.900S	167.400E	118.0				NEIC
Vanuatu Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 19:52:59.0	140.2	37.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	21:41:30.4	33.041N	57.082E	33.0N	4.0			SZGRF
Northern and central Iran								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:48:42.2	37.5	98.7	1.0	3	4.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/19	23:13:14.5	40.820N	122.910W	33.0N	4.7			SZGRF
Northern California, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:25:26.0	80.9	326.6	1.5	12	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	06:08:55.6	35.300S	112.000W	10.0		5.1		NEIC
Southern East Pacific Rise								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 06:28:19.0	136.9	267.2					
	e L	Z 07:20:06.2			21.7	433		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 06:32:44.0							
FBE	e PKPab	Z 06:32:45.7							
GRA1	e PKPab	Z 06:32:50.4							
GUNZ	e PKPab	Z 06:32:47.6							
MANZ	e PKPab	Z 06:32:49.0							
WERD	e PKPab	Z 06:32:47.7							
WERN	e PKPab	Z 06:32:48.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	09:51:58.5	19.410S	177.440W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 10:11:31.0	145.0	12.8					
CLL	e PKPbc	Z 10:11:37.6	147.1	18.3					
BRG	e PKPbc	Z 10:11:38.2	147.3	20.1					
TANN	e PKPbc	Z 10:11:40.4	148.0	17.8					
MANZ	e PKPbc	Z 10:11:41.9	148.5	17.4					
ROTZ	e PKPbc	Z 10:11:42.5	148.7	17.7					
TNS	e PKPbc	Z 10:11:42.6	148.8	10.8					
	e PKPab	Z 10:11:46.2							
GRA1	e PKPab	Z 10:11:47.1	148.9	16.0					
GEC2	e PKPbc	Z 10:11:43.5	149.2	20.9					
WLF	e PKPbc	Z 10:11:45.1	149.6	6.7					
FUR	e PKPab	Z 10:11:53.3	150.4	16.8					
RJOB	e PKPbc	Z 10:11:46.5	150.5	19.9					
	e PKPab	Z 10:11:53.5							
BFO	e PKPbc	Z 10:11:47.1	150.7	11.2					
	e PKPab	Z 10:11:54.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	14:47:18.5	4.692N	93.470E	33.0N	4.4			SZGRF
Off west coast of northern Sumatera, Indonesia								

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Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	14:59:32.5	81.4	92.9	1.0	4	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	15:15:15.5	31.300S	180.000W	342.0				NEIC

Kermadec Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPab	Z	15:34:58.0	156.2	22.3					
CLL	e PKPab	Z	15:35:04.9	157.8	30.6					
BRG	e PKPab	Z	15:35:05.6	157.9	33.1					
IBBN	e PKPab	Z	15:35:06.7	158.2	18.1					
TANN	e PKPab	Z	15:35:09.6	158.8	30.6					
MOX	e PKPab	Z	15:35:09.6	158.8	28.4					
MANZ	e PKPab	Z	15:35:11.7	159.2	30.4					
ROTZ	e PKPab	Z	15:35:12.8	159.4	30.9					
GEC2	e PKPab	Z	15:35:13.0	159.6	35.6					
WET	e PKPab	Z	15:35:13.7	159.7	33.3					
GRA1	e PKPab	Z	15:35:13.9	159.8	28.8					
TNS	e PKPab	Z	15:35:15.0	160.1	21.6					
RJOB	e PKPab	Z	15:35:19.0	160.9	35.3					
FUR	e PKPab	Z	15:35:19.9	161.1	31.0					
STU	e PKPab	Z	15:35:20.0	161.2	25.1					
BFO	e PKPab	Z	15:35:22.6	161.8	23.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	16:49:54.0							
GRA1	e PKPbc	Z	16:50:01.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	18:41:53.5	44.885S	166.897E	35.0G				NEIC

Off west coast of South Island, New Zealand

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPab	Z	19:02:33.2	161.0	82.2					
GEC2	e PKPab	Z	19:02:34.8	161.4	87.9					
WET	e PKPab	Z	19:02:37.3	161.9	86.3					
ROTZ	e PKPab	Z	19:02:39.7	162.3	83.7					
MANZ	e PKPab	Z	19:02:39.7	162.3	83.0					
BSEG	e PKPab	Z	19:02:42.6	162.4	68.6					

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GRA1	e	PKPab	Z	19:02:41.3	162.9	83.0
NRDL	e	PKPab	Z	19:02:43.4	163.0	72.7
STU	e	PKPab	Z	19:02:47.5	164.3	84.1
IBBN	e	PKPab	Z	19:02:49.1	164.4	69.9
TNS	e	PKPab	Z	19:02:48.8	164.6	78.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/20	20:26:17.8	2.610N	124.850E	33.0		5.6		SZGRF

Celebes Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z 20:39:59.2	100.9	71.9					
	e PP	Z 20:44:09.2							
CLL	e Pdiff	Z 20:39:58.9	101.4	71.0					
	e PP	Z 20:44:12.2							
GEC2	e Pdiff	Z 20:40:01.3	101.7	72.1					
TANN	e Pdiff	Z 20:40:02.8	102.0	70.8					
BSEG	e Pdiff	Z 20:40:01.3	102.0	68.3					
	e PP	Z 20:44:16.1							
WET	e Pdiff	Z 20:40:05.0	102.1	71.4					
	e PP	Z 20:44:20.1							
MANZ	e Pdiff	Z 20:40:06.6	102.3	70.6					
	e PP	Z 20:44:19.7							
ROTZ	e Pdiff	Z 20:40:07.0	102.3	70.7					
	e PP	Z 20:44:19.8							
MOX	e Pdiff	Z 20:40:06.9	102.4	70.0					
	e PP	Z 20:44:22.8							
NRDL	e Pdiff	Z 20:40:07.7	102.6	68.4					
RJOB	e PP	Z 20:44:22.4	102.6	71.6					
CLZ	e Pdiff	Z 20:40:08.5	102.7	68.7					
GRA1	e Pdiff	Z 20:40:07.1	103.0	69.9					
	e PP	Z 20:44:24.4							
	e L	Z 21:32:38.4			21.8	1975		5.6	
UBBA	e Pdiff	Z 20:40:09.4	103.3	68.7					
FUR	e PP	Z 20:44:28.4	103.4	70.3					
IBBN	e Pdiff	Z 20:40:13.8	104.0	66.4					
TNS	e Pdiff	Z 20:40:16.3	104.4	67.5					
	e PP	Z 20:44:35.1							
STU	e PP	Z 20:44:38.5	104.5	68.5					
BFO	e PP	Z 20:44:42.8	105.2	67.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/21	02:49:17.5	9.970S	41.620E	33.0N	5.3	4.2		SZGRF

Northwest of Madagascar

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z	02:59:40.3	63.1	147.8	0.9	6	4.8		
GEC2	e P	Z	02:59:44.9	63.7	149.1	0.9	15	5.2		
FUR	e P	Z	02:59:46.3	64.0	146.4	1.2	23	5.3		
WET	e P	Z	02:59:48.2	64.3	148.3	1.0	8	4.9		
ROTZ	e P	Z	02:59:52.9	65.0	147.8					
MANZ	e P	Z	02:59:54.6	65.3	147.7	1.0	11	5.0		
BFO	e P	Z	02:59:54.6	65.3	143.5	1.1	10	5.0		
STU	e P	Z	02:59:55.9	65.3	144.5	0.9	11	5.1		
GRA1	e P	Z	02:59:54.8	65.3	146.7	1.6	57	5.5		
	e PcP	Z	03:00:26.9							
	e		03:00:39.6							
	e L	Z	03:32:10.0			18.0	145		4.2	
BRG	e P	Z	02:59:55.6	65.4	149.8	1.4	18	5.1		
TANN	e P	Z	02:59:56.7	65.5	148.2	1.2	28	5.4		
GUNZ	e P	Z	02:59:56.8	65.5	148.0	1.1	16	5.2		
WERD	e P	Z	02:59:56.7	65.6	148.0	1.3	30	5.4		
FBE	e P	Z	02:59:56.9	65.6	149.2	1.0	12	5.1		
MOX	e P	Z	02:59:59.3	66.0	147.4	1.0	9	5.0		
CLL	e P	Z	03:00:00.1	66.1	148.9	0.8	11	5.1		
TNS	e P	Z	03:00:05.0	66.8	144.1	0.9	17	5.2		
RUE	e P	Z	03:00:05.6	66.8	150.0	0.9	43	5.7		
WLF	e P	Z	03:00:07.6	67.2	141.7	1.1	24	5.4		
CLZ	e P	Z	03:00:09.5	67.4	146.4	1.4	42	5.5		
NRDL	e P	Z	03:00:13.5	68.0	146.3	2.0	75	5.6		
BUG	e P	Z	03:00:13.7	68.2	143.2	1.6	46	5.5		
IBBN	e P	Z	03:00:17.5	68.7	143.9	0.7	17	5.4		
BSEG	e P	Z	03:00:19.7	69.2	146.8	2.0	56	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/21 11:02:53.6 44.015N 10.075E 10.0G 3.6 SZGRF
 Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z	11:03:57.4	4.2	208.0					3.6
	e Sn	N	11:04:44.2							
BFO	e Pn	Z	11:04:01.9	4.5	163.7					3.3
	e Sn	N	11:04:50.7							
STU	e Sn	N	11:05:00.2	4.8	172.4					3.9
GEC2	e Pn	Z	11:04:13.7	5.4	208.7					
	e Sn	E	11:05:14.9							
WET	e Sn	E	11:05:16.0	5.5	201.6					
MOX	e Sn	E	11:05:46.6	6.7	189.5					

Date Origin Time Lat Long Depth mb Ms ML Source

2008/01/21 12:24:27.1 34.900S 112.000W 10.0 5.3 NEIC
Southern East Pacific Rise

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 12:43:49.6	136.6	267.7					
	e pPKPdf	Z 12:43:53.2							
	e PP	Z 12:46:35.3							
	e L	Z 13:44:52.0			20.4	529		5.3	

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/21 15:28:35.3 10.600S 41.500E 10.0 5.1 NEIC
Northwest of Madagascar

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
MANZ	e P	Z 15:39:29.3	65.8	148.1	1.3	14	5.0		
GRA1	e P	Z 15:39:30.4	65.9	147.1	1.4	30	5.3		
BRG	e P	Z 15:39:30.7	66.0	150.1	1.3	12	4.9		
TANN	e P	Z 15:39:31.2	66.1	148.5	1.8	33	5.3		
WERD	e P	Z 15:39:31.8	66.1	148.4					
MOX	e P	Z 15:39:34.7	66.5	147.7	1.2	10	4.9		
CLL	e P	Z 15:39:35.0	66.6	149.3	2.1	50	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/22

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z 00:29:15.3							
GEC2	e PKP	Z 00:29:10.8							
GRA1	e PKP	Z 00:29:10.1							
RJOB	e PKP	Z 00:29:15.3							
WLF	e PKP	Z 00:29:11.1							

Date Origin Time Lat Long Depth mb Ms ML Source
2008/01/22

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKP	Z 06:48:08.4							
GRA1	e PKP	Z 06:48:09.2							
MOX	e PKP	Z 06:48:12.7							
ROTZ	e PKP	Z 06:48:09.4							
WET	e PKP	Z 06:48:11.2							
WLF	e PKP	Z 06:48:10.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	07:55:53.2	15.300S	175.300W	33.0G		6.0		NEIC

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e PKPdf	Z 08:15:22.5	142.6	8.6					
MOX	e PKPdf	Z 08:15:25.8	144.2	11.5					
NKC	e PKPdf	Z 08:15:28.4	144.5	12.9					
TNS	e PKPdf	Z 08:15:25.4	144.9	6.3					
ROTZ	e PKPdf	Z 08:15:25.5	145.0	12.7					
GRA1	e PKPdf	Z 08:15:26.9	145.2	11.1					
	e L	Z 09:18:41.9			22.0	3046		6.0	
WET	e PKPdf	Z 08:15:26.9	145.5	14.0					
WLF	e PKPdf	Z 08:15:27.9	145.6	2.5					
GEC2	e PKPdf	Z 08:15:27.6	145.7	15.5					
BFO	e PKPdf	Z 08:15:30.8	146.8	6.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	10:49:26.6	15.300S	175.700W	41.0		6.0		NEIC

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z 11:09:00.6	143.6	15.8					
TNS	e PKPdf	Z 11:08:57.4	144.9	7.0					
GRA1	e PKPdf	Z 11:08:58.4	145.1	11.7					
	e L	Z 12:12:13.1			21.8	2762		6.0	
WET	e PKPdf	Z 11:08:58.8	145.4	14.7					
GEC2	e PKPdf	Z 11:08:59.2	145.6	16.2					
WLF	e PKPdf	Z 11:08:59.0	145.6	3.2					
BFO	e PKPdf	Z 11:09:02.4	146.8	7.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 17:15:46.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	17:14:55.5	1.260N	98.520E	44.1	6.0	6.0		SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 17:27:29.2	85.6	93.4	1.5	125	5.9		
	e pP	Z 17:27:41.9							
	e sP	Z 17:27:47.6							
	e S	T 17:37:58.8							
GEC2	e P	Z 17:27:29.5	85.6	93.1	1.4	197	6.2		
	e S	T 17:37:57.5							
WET	e P	Z 17:27:32.1	86.2	92.5	1.4	137	6.0		
	e pP	Z 17:27:44.9							
	e sP	Z 17:27:50.7							
CLL	e S	T 17:38:04.3	86.2	92.7	1.3	72	5.8		
	e P	Z 17:27:31.8							
	e sP	Z 17:27:50.1							
TANN	e S	T 17:38:03.7	86.5	92.2	1.4	68	5.7		
	e P	Z 17:27:33.6							
ROTZ	e S	T 17:38:08.7	86.7	92.0	1.2	98	5.8		
	e P	Z 17:27:34.7							
	e pP	Z 17:27:47.5							
MANZ	e sP	Z 17:27:53.4	86.7	91.9	1.2	134	5.9		
	e S	T 17:38:10.4							
	e P	Z 17:27:35.0							
MOX	e S	T 17:38:10.9	87.1	91.6	1.6	143	5.8		
	e P	Z 17:27:36.3							
	e pP	Z 17:27:49.1							
FUR	e sP	Z 17:27:54.6	87.2	91.2	1.2	78	5.7		
	e S	T 17:38:13.2							
	e P	Z 17:27:36.4							
GRA1	e pP	Z 17:27:49.3	87.3	91.2	1.2	129	5.9		
	e S	T 17:38:11.9							
	e P	Z 17:27:37.7							
CLZ	e L	Z 18:13:41.0	87.9	90.7	1.6	7485	6.0		
	e P	Z 17:27:40.6							
BSEG	e S	T 17:38:19.1	87.9	90.7	1.4	224	6.1		
	e P	Z 17:27:41.3							
NRDL	e S	T 17:38:20.6	88.0	90.5	1.4	260	6.2		
	e P	Z 17:27:41.8							
UBBA	e S	T 17:38:20.7	88.1	90.4					
	e P	Z 17:27:41.3							
STU	e S	T 17:38:22.1	88.6	89.7	1.9	202	5.9		
	e P	Z 17:27:43.5							
	e pP	Z 17:27:56.4							
TNS	e S	T 17:38:26.8	89.1	89.1	1.7	189	6.2		
	e P	Z 17:27:46.6							
	e sP	Z 17:28:04.7							
BFO	e S	T 17:38:32.5	89.2	89.0	1.7	118	5.9		
	e P	Z 17:27:46.1							
	e pP	Z 17:27:59.0							
	e S	T 17:38:32.1							

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IBBN	e P	Z	17:27:48.4	89.5	88.6	1.3	298	6.5
	e S	T	17:38:34.6					
BUG	e P	Z	17:27:49.8	89.8	88.2	1.4	221	6.2
	e S	T	17:38:38.5					
WLF	e P	Z	17:27:53.6	90.6	87.4	1.4	193	6.1
	e S	T	17:38:46.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	18:43:36.1	32.190N	85.280E	33.0N	5.8	5.4		SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	18:53:00.2	54.3	81.1	1.6	131	5.7		
	e PcP	Z	18:54:04.0							
	e PP	Z	18:55:03.6							
GEC2	e P	Z	18:53:03.8	54.8	79.5	1.4	101	5.7		
CLL	e P	Z	18:53:03.5	54.8	80.7	1.7	105	5.6		
	e PP	Z	18:55:08.0							
WET	e P	Z	18:53:07.4	55.2	79.1	1.9	175	5.8		
	e PcP	Z	18:54:07.4							
TANN	e P	Z	18:53:07.5	55.3	79.7	1.9	134	5.7		
ROTZ	e P	Z	18:53:10.1	55.5	79.1	1.5	152	5.8		
	e PP	Z	18:55:15.5							
MANZ	e P	Z	18:53:10.1	55.6	79.2	1.8	143	5.7		
	e PcP	Z	18:54:10.3							
MOX	e P	Z	18:53:11.0	55.7	79.3	1.8	151	5.7		
BSEG	e P	Z	18:53:12.8	56.0	80.5	2.0	309	6.0		
	e PcP	Z	18:54:10.7							
GRA1	e P	Z	18:53:14.6	56.2	78.4	1.5	157	5.8		
	e PP	Z	18:55:19.3							
	e L	Z	19:19:35.2			18.3	2661		5.4	
CLZ	e P	Z	18:53:14.9	56.3	79.2	1.5	151	5.8		
	e PcP	Z	18:54:11.4							
NRDL	e P	Z	18:53:15.4	56.3	79.4	1.8	404	6.1		
FUR	e P	Z	18:53:16.2	56.5	77.4	2.2	679	6.3		
UBBA	e P	Z	18:53:17.6	56.7	78.3	1.8	108	5.6		
STU	e P	Z	18:53:24.5	57.7	76.4	1.6	179	5.8		
IBBN	e P	Z	18:53:25.4	57.8	77.6	1.8	245	5.9		
TNS	e P	Z	18:53:25.6	57.8	76.8	1.3	64	5.5		
	e PcP	Z	18:54:15.6							
BUG	e P	Z	18:53:28.8	58.3	76.8	1.7	184	5.8		
BFO	e P	Z	18:53:28.9	58.3	75.6	2.6	217	5.7		
	e PcP	Z	18:54:19.1							
WLF	e P	Z	18:53:37.1	59.4	75.0	1.6	198	5.9		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	19:34:42.4	41.780N	141.560E	66.3	4.9			SZGRF

Hokkaido, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	19:46:25.7	75.6	35.4	1.0	20	5.2		
BRG	e P	Z	19:46:32.3	76.7	37.4	1.0	8	4.8		
CLL	e P	Z	19:46:32.0	76.7	36.8	0.9	23	5.3		
FBE	e P	Z	19:46:33.5	76.9	37.0					
CLZ	e P	Z	19:46:35.1	77.3	35.1	1.1	27	5.3		
TANN	e P	Z	19:46:37.3	77.7	36.3	1.2	5	4.5		
MOX	e P	Z	19:46:37.9	77.8	35.8	1.0	10	4.9		
WERN	e P	Z	19:46:38.3	77.8	36.3					
MANZ	e P	Z	19:46:40.0	78.1	36.0	0.8	5	4.7		
ROTZ	e P	Z	19:46:41.4	78.3	36.1	1.0	7	4.6		
GEC2	e P	Z	19:46:41.7	78.4	36.9	1.0	6	4.6		
WET	e P	Z	19:46:42.6	78.5	36.4	1.0	14	4.9		
GRA1	e P	Z	19:46:43.5	78.7	35.4	0.9	22	5.2		
	e pP	Z	19:47:05.9							
TNS	e P	Z	19:46:46.0	79.3	33.6	2.2	32	4.9		
FUR	e P	Z	19:46:50.2	79.9	35.3	0.9	17	5.0		
STU	e P	Z	19:46:51.4	80.2	34.0	0.7	19	5.2		
WLF	e P	Z	19:46:53.7	80.6	32.1	1.2	22	5.0		
BFO	e P	Z	19:46:54.9	80.9	33.4	1.8	25	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/22	23:45:17.7	21.780S	176.690W	33.0G				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	00:04:57.4	147.4	12.1					
NRDL	e PKPbc	Z	00:05:01.5	148.8	12.3					
CLZ	e PKPpdf	Z	00:04:59.8	149.4	13.0					
	e PKPbc	Z	00:05:04.0							
CLL	e PKPbc	Z	00:05:03.6	149.5	18.0					
BRG	e PKPpdf	Z	00:05:00.2	149.7	19.9					
	e PKPbc	Z	00:05:04.3							
	e PKPab	Z	00:05:09.2							
BUG	e PKPbc	Z	00:05:05.4	150.2	7.4					
MOX	e PKPpdf	Z	00:05:01.1	150.4	15.8					
	e PKPbc	Z	00:05:06.0							
TANN	e PKPbc	Z	00:05:06.1	150.5	17.4					
	e PKPab	Z	00:05:12.1							
UBBA	e PKPbc	Z	00:05:06.1	150.5	12.7					
MANZ	e PKPbc	Z	00:05:07.5	151.0	17.0					
ROTZ	e PKPbc	Z	00:05:07.8	151.1	17.3					
	e PKPab	Z	00:05:15.1							

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TNS	e	PKPbc	Z	00:05:07.7	151.3	10.0
GRA1	e	PKPbc	Z	00:05:08.9	151.4	15.5
	e	PKPab	Z	00:05:16.6		
WET	e	PKPbc	Z	00:05:08.4	151.6	18.9
	e	PKPab	Z	00:05:17.1		
GEC2	e	PKPdf	Z	00:05:02.6	151.7	20.7
	e	PKPbc	Z	00:05:08.8		
WLF	e	PKPbc	Z	00:05:10.0	152.0	5.6
STU	e	PKPbc	Z	00:05:11.4	152.6	11.9
FUR	e	PKPbc	Z	00:05:11.5	152.9	16.4
	e	PKPab	Z	00:05:22.4		
BFO	e	PKPbc	Z	00:05:12.0	153.1	10.4
	e	PKPab	Z	00:05:23.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/23	05:49:36.8	14.620N	92.940W	33.0N	5.6	5.4		SZGRF
Near coast of Chiapas, Mexico								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	06:02:11.1	84.6	286.3	1.3	75	5.8		
BUG	e P	Z	06:02:11.6	84.8	287.0	1.3	54	5.6		
IBBN	e P	Z	06:02:11.7	84.8	287.3	1.3	86	5.8		
BSEG	e P	Z	06:02:16.5	85.8	289.2	1.4	110	5.8		
TNS	e P	Z	06:02:17.0	85.9	288.0	1.0	69	5.8		
NRDL	e P	Z	06:02:18.4	86.1	289.1	1.6	63	5.5		
BFO	e P	Z	06:02:19.2	86.4	288.0	1.2	22	5.2		
CLZ	e P	Z	06:02:20.4	86.5	289.4	2.0	135	5.7		
UBBA	e P	Z	06:02:20.6	86.6	289.1	1.6	60	5.5		
STU	e P	Z	06:02:21.4	86.8	288.7	1.0	37	5.5		
MOX	e P	Z	06:02:25.6	87.7	290.4	2.3	118	5.8		
GRFO	e P	Z	06:02:26.5	87.7	290.1	1.8	106	5.9		
GRA1	e P	Z	06:02:26.4	87.7	290.1	1.7	104	5.9		
	e L	Z	06:42:34.8			18.6	1543		5.4	
WERD	e P	Z	06:02:27.9	88.1	290.9	1.4	30	5.4		
GUNZ	e P	Z	06:02:28.2	88.2	290.9	1.0	20	5.4		
MANZ	e P	Z	06:02:28.4	88.2	290.8	2.7	185	5.9		
WERN	e P	Z	06:02:28.5	88.2	291.0	1.1	28	5.5		
CLL	e P	Z	06:02:28.2	88.2	291.4	1.2	19	5.3		
TANN	e P	Z	06:02:28.4	88.2	291.0	1.1	22	5.4		
RUE	e P	Z	06:02:28.4	88.2	292.0	0.4	18	5.8		
ROTZ	e P	Z	06:02:28.7	88.3	290.9	1.6	25	5.3		
FBE	e P	Z	06:02:30.0	88.6	291.7	1.4	40	5.4		
BRG	e P	Z	06:02:31.6	88.9	292.2	1.1	24	5.3		
WET	e P	Z	06:02:31.9	88.9	291.4	1.3	34	5.4		
GEC2	e P	Z	06:02:34.4	89.6	292.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/23	06:13:27.6	23.140S	173.300E	33.0G				SZGRF

Southeast of Loyalty Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	06:33:05.2	146.6	29.3					
NRDL	e PKPbc	Z	06:33:09.5	148.0	30.1					
BRG	e PKPbc	Z	06:33:09.6	148.0	37.7					
CLL	e PKPbc	Z	06:33:08.7	148.0	35.8					
CLZ	e PKPbc	Z	06:33:09.7	148.4	31.1					
IBBN	e PKPbc	Z	06:33:11.4	148.8	26.3					
TANN	e PKPbc	Z	06:33:11.5	148.9	35.8					
MANZ	e PKPbc	Z	06:33:12.8	149.4	35.6					
UBBA	e PKPbc	Z	06:33:13.4	149.4	31.3					
ROTZ	e PKPbc	Z	06:33:14.0	149.5	36.0					
GEC2	e PKPbc	Z	06:33:12.8	149.7	39.4					
WET	e PKPbc	Z	06:33:14.4	149.8	37.7					
GRA1	e PKPbc	Z	06:33:14.1	150.0	34.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/23	12:20:13.1	19.656S	174.826W	33.0N				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	12:39:47.9	145.5	8.6					
NRDL	e PKPbc	Z	12:39:52.1	146.9	8.5					
IBBN	e PKPbc	Z	12:39:53.4	147.3	4.5					
CLZ	e PKPbc	Z	12:39:53.9	147.6	9.2					
CLL	e PKPbc	Z	12:39:54.0	147.8	13.9					
BRG	e PKPbc	Z	12:39:55.3	148.0	15.7					
BUG	e PKPbc	Z	12:39:55.5	148.2	3.7					
MOX	e PKPbc	Z	12:39:56.6	148.6	11.7					
UBBA	e PKPbc	Z	12:39:56.2	148.6	8.7					
TANN	e PKPbc	Z	12:39:56.8	148.7	13.3					
MANZ	e PKPbc	Z	12:39:58.1	149.2	12.8					
TNS	e PKPbc	Z	12:39:58.7	149.3	6.0					
ROTZ	e PKPbc	Z	12:39:58.6	149.4	13.1					
GRA1	e PKPbc	Z	12:39:59.1	149.6	11.3					
WET	e PKPbc	Z	12:39:59.7	149.9	14.6					
WLF	e PKPbc	Z	12:40:00.8	150.0	1.8					
GEC2	e PKPbc	Z	12:40:00.2	150.0	16.2					
STU	e PKPbc	Z	12:40:01.9	150.7	7.8					
FUR	e PKPbc	Z	12:40:02.5	151.1	11.9					
BFO	e PKPbc	Z	12:40:02.9	151.2	6.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/23	13:54:23.9	22.000S	179.600W	586.0				NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 14:13:06.1	149.1	23.2					
BRG	e PKPbc	Z 14:13:06.8	149.3	25.1					
FBE	e PKPbc	Z 14:13:07.3	149.4	24.1					
MOX	e PKPbc	Z 14:13:08.7	150.0	21.2					
TANN	e PKPbc	Z 14:13:08.8	150.1	22.8					
WERD	e PKPbc	Z 14:13:08.8	150.1	22.5					
MANZ	e PKPbc	Z 14:13:10.0	150.5	22.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/23	18:26:41.6	28.537N	140.298E	33.0N	5.2			SZGRF

Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:39:26.6	87.6	45.1	0.7	8	5.2		
CLL	e P	Z 18:39:27.0	87.7	44.4	1.6	16	5.1		
MOX	e P	Z 18:39:32.1	88.8	43.3	1.2	8	4.8		
MANZ	e P	Z 18:39:33.7	89.0	43.7	1.4	12	4.9		
GEC2	e P	Z 18:39:33.8	89.1	44.9	0.8	6	4.9		
IBBN	e P	Z 18:39:33.9	89.1	40.3	1.0	22	5.4		
ROTZ	e P	Z 18:39:34.4	89.2	43.7	1.4	18	5.1		
GRA1	e P	Z 18:39:36.5	89.7	43.0	1.2	29	5.4		
FUR	e P	Z 18:39:41.2	90.7	43.0	1.4	52	5.7		
STU	e P	Z 18:39:44.2	91.2	41.5	1.0	19	5.4		
BFO	e P	Z 18:39:46.9	91.9	40.8	1.0	13	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/24	00:28:15.8	29.574N	142.340E	33.0N	5.2	5.3		SZGRF

Southeast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 00:41:11.6	87.6	43.0	2.2	43	5.4		
GUNZ	e P	Z 00:41:06.3	88.7	41.8	1.4	18	5.1		
WERN	e P	Z 00:41:06.5	88.7	41.8	1.4	13	5.0		
ROTZ	e P	Z 00:41:09.4	89.2	41.7	1.6	16	5.0		
GRA1	e P	Z 00:41:10.6	89.6	40.9	1.9	65	5.5		
	e L	Z 01:30:14.4			18.8	1096		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/24	02:22: 2.5	37.100N	26.930E	33.0G	4.1			SZGRF

Dodecanese Islands, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:25:39.9	15.2	135.8	1.0	6			
WET	e P	Z 02:25:45.5	15.8	134.5	0.8	9			
FUR	e P	Z 02:25:47.6	15.9	128.3	1.0	27	4.3		
MANZ	e P	Z 02:25:56.1	16.7	134.8	1.1	7			
TANN	e P	Z 02:25:59.2	16.9	136.6	1.0	5			
GRA1	e P	Z 02:25:59.9	16.9	132.1	0.7	8			
CLL	e P	Z 02:26:02.5	17.3	139.8	0.8	7	3.8		
STU	e P	Z 02:26:03.3	17.4	125.6	0.7	13			
MOX	e P	Z 02:26:05.0	17.4	135.2	1.1	16			
BFO	e P	Z 02:26:07.1	17.6	122.7	0.7	11	4.1		
TNS	e P	Z 02:26:16.5	18.6	127.7	0.6	10			
WLF	e P	Z 02:26:28.7	19.5	122.2	1.0	13			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/24	02:50: 4.2	15.470S	176.560W	33.0N				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ROTZ	e PKPbc	Z 03:09:37.8	145.0	14.8					
TNS	e PKPbc	Z 03:09:36.7	145.0	8.4					
GRA1	e PKPbc	Z 03:09:37.1	145.2	13.2					
WET	e PKPbc	Z 03:09:38.7	145.5	16.2					
GEC2	e PKPbc	Z 03:09:39.4	145.6	17.7					
WLF	e PKPbc	Z 03:09:38.8	145.7	4.6					
STU	e PKPbc	Z 03:09:41.5	146.4	10.0					
FUR	e PKPbc	Z 03:09:41.9	146.7	13.8					
BFO	e PKPbc	Z 03:09:44.5	146.9	8.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/24	04:12:18.4	7.009N	82.328W	33.0N	5.1	5.6		SZGRF

South of Panama

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:25:00.5	86.9	277.2	1.8	31	5.1		
	e L	Z 04:58:01.0			21.9	2536		5.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/24	12:03:46.8	4.805S	98.304E	18.7	5.3	4.8		SZGRF

Southwest of Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 12:16:45.3	90.1	97.2	1.4	37	5.4		
	e S	T 12:27:20.3							
BRG	e P	Z 12:16:45.1	90.2	97.4	1.0	16	5.2		
	e S	T 12:27:18.7							
WET	e P	Z 12:16:48.0	90.7	96.6	1.0	11	5.1		
	e S	T 12:27:25.2							
CLL	e P	Z 12:16:48.0	90.8	96.7	1.2	11	5.1		
	e S	T 12:27:28.2							
TANN	e P	Z 12:16:49.7	91.1	96.3	1.4	16	5.2		
	e S	T 12:27:31.4							
ROTZ	e P	Z 12:16:50.6	91.2	96.1	1.2	11	5.1		
	e S	T 12:27:34.5							
MANZ	e P	Z 12:16:51.2	91.2	96.0	1.0	19	5.4		
FUR	e S	T 12:27:34.5	91.6	95.4					
MOX	e S	T 12:27:33.0	91.6	95.6					
GRA1	e P	Z 12:16:53.6	91.8	95.3	1.2	27	5.4		
	e S	T 12:27:36.1							
	e L	Z 13:03:28.4			21.5	350		4.8	
CLZ	e P	Z 12:16:56.4	92.5	94.6	1.1	15	5.2		
UBBA	e S	T 12:27:45.6	92.7	94.4					
BSEG	e P	Z 12:16:57.3	92.7	94.5	1.1	25	5.5		
	e S	T 12:27:45.6							
NRDL	e P	Z 12:16:57.8	92.7	94.4	1.2	22	5.5		
	e S	T 12:27:44.0							
BFO	e P	Z 12:17:01.9	93.6	93.2	1.6	17	5.1		
	e S	T 12:27:51.9							
TNS	e P	Z 12:17:02.7	93.6	93.2	1.3	27	5.4		
	e S	T 12:27:56.7							
IBBN	e P	Z 12:17:04.5	94.1	92.5	1.1	49	5.7		
BUG	e P	Z 12:17:06.1	94.4	92.2	1.1	30	5.5		
	e S	T 12:27:56.7							
WLF	e P	Z 12:17:09.9	95.1	91.5	1.2	26	5.5		
	e S	T 12:28:07.8							

Date 2008/01/24 Origin Time 22:29:56.9 Lat 5.740S Long 147.660E Depth 70.0 mb Ms ML Source NEIC
 Eastern New Guinea, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z 22:48:39.2	120.0	55.9					
BRG	e PKPdf	Z 22:48:40.8	120.8	56.8					
	e PP	Z 22:50:09.7							
BSEG	e PKPdf	Z 22:48:38.4	120.8	51.7					
CLL	e PKPdf	Z 22:48:40.8	121.0	55.7					

	e PP	Z	22:50:10.7		
FBE	e PKPpdf	Z	22:48:41.3	121.0	56.2
NRDL	e PKPpdf	Z	22:48:42.9	121.8	52.2
TANN	e PKPpdf	Z	22:48:42.5	121.8	55.6
WERD	e PKPpdf	Z	22:48:42.8	121.9	55.4
	e PP	Z	22:50:17.3		
GUNZ	e PKPpdf	Z	22:48:43.0	121.9	55.5
WERN	e PKPpdf	Z	22:48:42.9	121.9	55.6
	e PP	Z	22:50:17.6		
GEC2	e PKPpdf	Z	22:48:42.8	122.0	57.6
CLZ	e PKPpdf	Z	22:48:43.5	122.0	52.8
	e PP	Z	22:50:17.1		
MOX	e PKPpdf	Z	22:48:43.2	122.1	54.6
MANZ	e PKPpdf	Z	22:48:43.9	122.2	55.5
	e PP	Z	22:50:19.9		
WET	e PKPpdf	Z	22:48:43.6	122.3	56.7
	e PP	Z	22:50:20.2		
ROTZ	e PP	Z	22:50:21.8	122.3	55.7
GRA1	e PKPpdf	Z	22:48:44.7	122.9	54.7
	e PKKPbc	Z	22:58:42.3		
IBBN	e PP	Z	22:50:26.0	123.0	49.8
RJOB	e PKPpdf	Z	22:48:44.5	123.1	57.3
	e PP	Z	22:50:26.1		
FUR	e PKPpdf	Z	22:48:46.6	123.7	55.6
BUG	e PP	Z	22:50:31.6	123.8	49.7
TNS	e PKPpdf	Z	22:48:45.8	124.0	51.6
	e PP	Z	22:50:31.1		
STU	e PKPpdf	Z	22:48:48.1	124.5	53.2
BFO	e PKPpdf	Z	22:48:48.6	125.2	52.5
WLF	e PKPpdf	Z	22:48:50.4	125.5	49.5
	e PP	Z	22:50:43.8		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/25 07:39:49.1 22.480S 178.050W 33.0G
 South of Fiji Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	07:59:30.9	147.9	14.7					
RUE	e PKPbc	Z	07:59:33.0	148.7	21.4					
NRDL	e PKPbc	Z	07:59:34.4	149.3	14.9					
CLL	e PKPbc	Z	07:59:35.9	149.9	20.7					
	e PKPab	Z	07:59:41.2							
CLZ	e PKPbc	Z	07:59:36.1	149.9	15.7					
BRG	e PKPbc	Z	07:59:36.6	150.1	22.7					
	e PKPab	Z	07:59:42.1							
FBE	e PKPbc	Z	07:59:37.0	150.2	21.6					
BUG	e PKPbc	Z	07:59:38.1	150.7	10.1					

MOX	e	PKPbc	Z	07:59:38.3	150.8	18.6
TANN	e	PKPbc	Z	07:59:38.4	150.9	20.3
WERD	e	PKPbc	Z	07:59:38.4	150.9	20.0
	e	PKPab	Z	07:59:45.7		
GUNZ	e	PKPbc	Z	07:59:38.8	151.0	20.1
WERN	e	PKPbc	Z	07:59:39.2	151.0	20.2
	e	PKPab	Z	07:59:46.2		
MANZ	e	PKPbc	Z	07:59:39.7	151.4	19.9
ROTZ	e	PKPbc	Z	07:59:39.9	151.5	20.2
TNS	e	PKPbc	Z	07:59:40.7	151.8	12.8
	e	PKPab	Z	07:59:49.4		
GRA1	e	PKPbc	Z	07:59:40.4	151.8	18.4
WET	e	PKPbc	Z	07:59:40.8	152.0	21.9
	e	PKPab	Z	07:59:50.4		
GEC2	e	PKPbc	Z	07:59:40.8	152.0	23.7
WLF	e	PKPbc	Z	07:59:43.2	152.6	8.5
	e	PKPab	Z	07:59:52.9		
STU	e	PKPbc	Z	07:59:43.6	153.1	14.9
FUR	e	PKPbc	Z	07:59:43.9	153.3	19.4
	e	PKPab	Z	07:59:56.0		
RJOB	e	PKPbc	Z	07:59:43.5	153.3	22.8
	e	PKPab	Z	07:59:56.1		
BFO	e	PKPbc	Z	07:59:44.7	153.7	13.4
	e	PKPab	Z	07:59:56.9		

Date 2008/01/25
Origin Time 19:33:30.3
Sea of Japan

Lat	Long	Depth	mb	Ms	ML	Source
36.851N	135.671E	33.0N	4.7			SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:45:39.6	80.5	42.0	1.1	10	4.7		

Date 2008/01/25
Origin Time 22:31:59.4
Fiji Islands region

Lat	Long	Depth	mb	Ms	ML	Source
19.710S	177.810W	33.0G				SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z	22:51:32.5	145.2	13.5			
RUE	e	PKPbc	Z	22:51:35.3	146.0	19.8			
NRDL	e	PKPbc	Z	22:51:36.6	146.6	13.6			
IBBN	e	PKPbc	Z	22:51:38.5	147.1	9.7			
CLZ	e	PKPbc	Z	22:51:39.2	147.2	14.3			
CLL	e	PKPbc	Z	22:51:39.0	147.3	19.1			
BRG	e	PKPbc	Z	22:51:39.7	147.5	20.9			
FBE	e	PKPbc	Z	22:51:40.2	147.6	19.9			

MOX	e	PKPbc	Z	22:51:41.6	148.2	17.0
TANN	e	PKPbc	Z	22:51:41.9	148.2	18.6
WERD	e	PKPbc	Z	22:51:41.8	148.2	18.3
UBBA	e	PKPbc	Z	22:51:42.9	148.3	14.1
GUNZ	e	PKPbc	Z	22:51:42.1	148.3	18.4
WERN	e	PKPbc	Z	22:51:42.1	148.4	18.5
MANZ	e	PKPbc	Z	22:51:43.3	148.7	18.2
ROTZ	e	PKPbc	Z	22:51:43.9	148.9	18.5
TNS	e	PKPbc	Z	22:51:44.2	149.1	11.5
GRA1	e	PKPbc	Z	22:51:44.6	149.2	16.8
	e	PKPab	Z	22:51:48.7		
WET	e	PKPbc	Z	22:51:44.5	149.3	20.0
	e	PKPab	Z	22:51:49.7		
GEC2	e	PKPbc	Z	22:51:44.8	149.4	21.7
	e	PKPab	Z	22:51:50.1		
WLF	e	PKPbc	Z	22:51:46.7	149.9	7.4
STU	e	PKPbc	Z	22:51:47.8	150.4	13.4
FUR	e	PKPbc	Z	22:51:48.1	150.6	17.6
RJOB	e	PKPbc	Z	22:51:47.9	150.7	20.7
	e	PKPab	Z	22:51:55.3		
BFO	e	PKPbc	Z	22:51:48.8	151.0	12.0
	e	PKPab	Z	22:51:55.6		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/27 01:32:34.7 52.862N 168.293W 33.0N 5.1
 Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:44:27.1	77.4	359.7	1.2	18	5.1		

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/27

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 15:48:11.6							

Date Origin Time Lat Long Depth mb Ms ML Source
 2008/01/27 17:45:51.6 46.679N 152.934E 33.0N 4.9
 Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 17:57:35.3	76.1	27.1	1.0	12	5.0		
FBE	e P	Z 17:57:36.4	76.4	27.2	3.0	139	5.6		

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WERD	e P	Z	17:57:40.9	77.1	26.5	4.1	179	5.5
MOX	e P	Z	17:57:41.4	77.1	26.1	1.3	12	4.9
GUNZ	e P	Z	17:57:41.8	77.2	26.5	1.0	9	4.8
WERN	e P	Z	17:57:41.9	77.2	26.5	0.8	7	4.8
MANZ	e P	Z	17:57:44.1	77.6	26.3	1.0	5	4.5
ROTZ	e P	Z	17:57:45.2	77.7	26.4	0.9	6	4.6
GRA1	e P	Z	17:57:47.7	78.1	25.8	1.1	21	5.1
WET	e P	Z	17:57:46.9	78.1	26.8	0.8	5	4.6
GEC2	e P	Z	17:57:46.9	78.1	27.2	0.7	2	4.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/28	04:05:7.9	48.429N	155.178E	33.0N	4.8	4.6		SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 04:16:46.7	75.2	24.9	1.2	10	4.7		
CLZ	e P	Z 04:16:48.2	75.3	23.3	0.9	8	4.8		
ROTZ	e P	Z 04:16:56.7	76.8	24.2	1.2	6	4.6		
GRA1	e P	Z 04:16:58.3	77.1	23.6	1.1	21	5.2		
	e L	Z 04:52:15.1			20.0	288		4.6	
WET	e P	Z 04:16:58.8	77.1	24.6	1.0	7	4.7		
TNS	e P	Z 04:16:59.1	77.3	21.9	0.7	8	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/28	10:31:25.0	27.800S	176.600W	29.0				NEIC

Kermadec Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKPab	Z 10:51:41.0	155.4	14.9					
CLL	e PKPab	Z 10:51:40.8	155.4	20.8					
FBE	e PKPab	Z 10:51:42.1	155.7	21.8					
MOX	e PKPab	Z 10:51:45.0	156.3	18.3					
WERD	e PKPab	Z 10:51:45.3	156.4	20.0					
GUNZ	e PKPab	Z 10:51:46.1	156.4	20.1					
WERN	e PKPab	Z 10:51:46.1	156.5	20.2					
GRA1	e PKPab	Z 10:51:49.7	157.3	18.2					
WET	e PKPab	Z 10:51:50.4	157.4	22.3					
RJOB	e PKPab	Z 10:51:56.9	158.8	23.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/28	10:33:17.6	25.260S	178.960E	33.0N				SZGRF

South of Fiji Islands

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Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 10:53:04.5	150.1	20.9					
NRDL	e PKPbc	Z 10:53:08.0	151.5	21.5					
CLL	e PKPbc	Z 10:53:09.1	151.8	27.7					
	e PKPab	Z 10:53:17.8							
BRG	e PKPbc	Z 10:53:09.4	151.9	29.8					
CLZ	e PKPbc	Z 10:53:09.4	152.0	22.4					
FBE	e PKPbc	Z 10:53:10.0	152.1	28.7					
	e PKPab	Z 10:53:19.4							
IBBN	e PKPbc	Z 10:53:10.1	152.1	17.2					
TANN	e PKPbc	Z 10:53:11.5	152.8	27.5					
WERD	e PKPbc	Z 10:53:11.3	152.8	27.2					
	e PKPab	Z 10:53:22.4							
MOX	e PKPbc	Z 10:53:11.4	152.8	25.7					
BUG	e PKPbc	Z 10:53:12.5	153.1	16.8					
MANZ	e PKPbc	Z 10:53:12.3	153.3	27.2					
TNS	e PKPbc	Z 10:53:13.8	154.0	19.9					
WLF	e PKPbc	Z 10:53:16.7	155.0	15.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/28	11:50:31.0	56.840N	165.550E	33.0N	5.0			SZGRF
Komandorsky Islands, Russia, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e P	Z 12:01:40.5	69.4	14.2	1.4	30	5.3		
CLL	e P	Z 12:01:40.2	69.5	15.6	1.2	13	5.0		
BRG	e P	Z 12:01:41.8	69.8	16.1	1.0	6	4.8		
FBE	e P	Z 12:01:42.8	69.8	15.8	1.2	17	5.0		
BUG	e P	Z 12:01:45.2	70.3	12.4	0.8	12	5.1		
MOX	e P	Z 12:01:45.8	70.4	14.8	0.9	8	4.8		
WERD	e P	Z 12:01:46.5	70.5	15.1	1.3	19	5.1		
TANN	e P	Z 12:01:46.6	70.5	15.2	1.6	19	5.0		
GUNZ	e P	Z 12:01:47.3	70.5	15.2	1.5	20	5.1		
WERN	e P	Z 12:01:47.5	70.6	15.2	1.1	14	5.0		
MANZ	e P	Z 12:01:49.2	70.9	15.0	1.2	10	4.8		
ROTZ	e P	Z 12:01:50.8	71.1	15.0	1.3	13	4.9		
GRA1	e P	Z 12:01:52.0	71.4	14.5	1.0	17	5.1		
WET	e P	Z 12:01:53.6	71.6	15.3	1.1	13	4.9		
GEC2	e P	Z 12:01:54.2	71.8	15.8	1.3	12	4.9		
FUR	e P	Z 12:02:00.6	72.8	14.4	0.5	13	5.3		
RJOB	e P	Z 12:02:01.7	73.0	15.2	1.0	14	5.1		
BFO	e P	Z 12:02:02.2	73.1	12.8	1.2	11	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/29	15:16:51.8	37.579N	23.543E	7.0G		3.9		THE

Southern Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:20:29.8	15.0	139.2	0.9	14			
	e L	Z 15:58:51.3			20.5	931		3.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/29	20:02:26.9	48.981N	83.600E	32.9	4.5	4.2		SZGRF

Eastern Kazakhstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 20:10:24.3	43.2	64.1	1.8	20	4.4		
CLL	e P	Z 20:10:26.7	43.5	64.0	0.6	10	4.6		
BSEG	e P	Z 20:10:30.1	43.9	65.1	1.0	34	4.9		
TANN	e P	Z 20:10:32.8	44.2	62.9	1.7	15	4.3		
GEC2	e P	Z 20:10:33.0	44.2	62.1	1.1	4	4.0		
WET	e P	Z 20:10:36.1	44.6	62.0	0.9	5	4.3		
MOX	e P	Z 20:10:35.5	44.6	62.7	0.8	7	4.5		
NRDL	e P	Z 20:10:36.0	44.6	63.7	1.2	20	4.6		
GRA1	e P	Z 20:10:41.6	45.3	61.7	1.0	13	4.6		
	e pP	Z 20:10:50.8							
	e L	Z 20:31:30.4			18.0	271		4.2	
RJOB	e P	Z 20:10:42.5	45.3	60.7	1.3	11	4.5		
FUR	e P	Z 20:10:48.0	46.0	60.4	0.7	11	4.7		
TNS	e P	Z 20:10:52.0	46.6	60.9	1.9	52	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/30	01:13:10.6	2.809S	68.408E	33.0N	4.9			SZGRF

Carlsberg Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:24:30.1	71.8	117.9	1.6	17	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/30	07:32:47.8	7.321S	127.804E	42.0G		5.7		NEIC

Banda Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKiKP	Z 07:51:18.7	112.6	73.9					
	e Sdiff	T 07:59:48.5							
	e PKKP	Z 08:02:18.2							
	e L	Z 08:52:50.7			19.7	1963		5.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/31	00:01:39.1	41.330N	32.210E	33.0G	4.6	3.8		SZGRF

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	00:05:13.7	15.0	113.1	1.1	51	4.6		
WET	e P	Z	00:05:21.2	15.6	112.7	1.2	65	4.6		
BRG	e P	Z	00:05:23.2	15.8	120.1	1.4	45	4.4		
FBE	e P	Z	00:05:28.3	16.1	119.1					
ROTZ	e P	Z	00:05:29.3	16.3	113.6	1.2	32	4.4		
FUR	e P	Z	00:05:29.1	16.3	107.0					
WERN	e P	Z	00:05:29.3	16.4	115.5	1.4	43	4.5		
MANZ	e P	Z	00:05:30.3	16.4	114.1	1.5	21	4.1		
GUNZ	e P	Z	00:05:30.2	16.5	115.6	1.4	62	4.7		
WERD	e P	Z	00:05:31.2	16.5	115.9	1.3	51	4.6		
CLL	e P	Z	00:05:31.6	16.5	119.7	1.3	34	4.4		
RUE	e P	Z	00:05:34.7	16.7	124.4	1.4	117	4.9		
GRA1	e P	Z	00:05:35.9	16.8	111.8	1.6	101	4.8		
	e L	Z	00:13:24.8			19.6	488		3.8	
MOX	e P	Z	00:05:37.2	17.0	115.3	1.3	29	4.4		
CLZ	e P	Z	00:05:50.0	18.2	116.6	1.5	68	4.7		
BFO	e P	Z	00:05:51.1	18.2	103.7	1.5	59	4.7		
NRDL	e P	Z	00:05:55.7	18.7	117.9	1.3	102	5.0		
TNS	e P	Z	00:05:56.5	18.7	109.2	1.2	53	4.8		
BSEG	e P	Z	00:06:01.7	19.3	121.9	0.9	64	5.0		
BUG	e P	Z	00:06:09.3	19.8	110.9	1.4	54	4.8		
IBBN	e P	Z	00:06:07.5	19.9	113.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/30	23:48:10.0	13.800S	167.100E	228.0				NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	00:07:05.2	135.9	33.4					
BRG	e PKPdf	Z	00:07:06.1	137.0	40.1					
CLL	e PKPdf	Z	00:07:05.5	137.1	38.5					
NRDL	e PKPdf	Z	00:07:07.3	137.2	33.9					
FBE	e PKPdf	Z	00:07:06.5	137.2	39.3					
CLZ	e PKPdf	Z	00:07:07.3	137.6	34.7					
NEUB	e PKPdf	Z	00:07:06.4	137.6	37.0					
MANZ	e PKPdf	Z	00:07:08.1	138.5	38.3					
UBBA	e PKPdf	Z	00:07:10.2	138.6	34.8					
ROTZ	e PKPdf	Z	00:07:08.8	138.6	38.5					
GEC2	e PKPdf	Z	00:07:08.2	138.7	41.2					
WET	e PKPdf	Z	00:07:08.1	138.8	39.9					

GRA1	e	PKPdf	Z	00:07:10.2	139.0	37.3
TNS	e	PKPdf	Z	00:07:10.1	139.6	33.1
STU	e	PKPdf	Z	00:07:12.5	140.6	35.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/31	01:04:28.5	6.101S	129.675E	8.0G		5.4		NEIC

Banda Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKiKP	Z 01:23:14.3	112.8	71.5					
	e SS	T 01:39:43.3							
	e L	Z 02:13:50.4			20.9	1103		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2008/01/31								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 02:12:30.8							

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, SED, MAD)

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
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