

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

(produced by SZGRF/BGR - ERLANGEN)

DECEMBER 2007 UPDATED 17.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		
2007/12/01	01:44:29.8	1.090N	96.880E	33.0N	5.7	5.4		SZGRF		
Off west coast of northern Sumatera, Indonesia										
Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	01:57:01.1	84.7	94.4	1.1	73	5.8		
	e S	T	02:07:25.8							
BRG	e P	Z	01:57:00.8	84.7	94.8	1.1	45	5.6		
RUE	e P	Z	01:57:01.7	84.9	94.8	1.0	152	6.2		
FBE	e P	Z	01:57:02.7	85.1	94.3	1.0	61	5.8		
RJOB	e P	Z	01:57:02.9	85.2	93.7	0.9	52	5.8		
WET	e P	Z	01:57:03.6	85.3	93.8	0.9	63	5.8		
CLL	e P	Z	01:57:03.4	85.3	94.1	1.1	30	5.4		
RGN	e P	Z	01:57:04.0	85.4	94.6	1.1	165	6.2		
NKC	e P	Z	01:57:05.4	85.6	93.6	0.9	14	5.1		
TANN	e P	Z	01:57:05.2	85.6	93.6	1.1	26	5.3		
WERN	e P	Z	01:57:05.6	85.7	93.5	0.9	29	5.4		
GUNZ	e P	Z	01:57:05.7	85.7	93.5	0.9	35	5.5		
WERD	e P	Z	01:57:05.6	85.7	93.5	1.0	37	5.5		
ROTZ	e P	Z	01:57:06.4	85.7	93.4	0.9	52	5.6		
MANZ	e P	Z	01:57:06.8	85.8	93.3					
NEUB	e P	Z	01:57:07.3	86.1	93.1	1.0	62	5.7		
MOX	e P	Z	01:57:08.0	86.2	93.0	1.1	29	5.3		
FUR	e P	Z	01:57:08.3	86.3	92.6	1.0	48	5.6		
GRA1	e P	Z	01:57:09.4	86.4	92.6	0.9	66	5.7		
	e S	T	02:07:44.4							
	e L	Z	02:41:31.2			19.7	1422		5.4	
CLZ	e P	Z	01:57:12.0	87.0	92.1	1.0	70	5.7		
BSEG	e P	Z	01:57:12.5	87.1	92.1	1.0	106	5.9		
UBBA	e P	Z	01:57:13.1	87.2	91.7	1.6	68	5.5		
STU	e P	Z	01:57:15.2	87.7	91.0	0.9	36	5.7		

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BFO	e P	Z	01:57:17.8	88.2	90.4	0.9	34	5.7
HLG	e P	Z	01:57:19.4	88.5	90.2	1.0	323	6.5
IBBN	e P	Z	01:57:19.9	88.6	90.0	0.9	168	6.3
BUG	e P	Z	01:57:21.4	88.9	89.6	1.0	103	6.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	03:36:40.1	53.217S	135.519E	26.0				SZGRF
West of Macquarie Island								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKPab	Z	03:56:08.4	144.2	119.6					
	e pPKPab	Z	03:56:15.8							
WET	e PKPab	Z	03:56:10.2	144.8	119.0					
	e pPKPab	Z	03:56:18.6							
BRG	e PKPab	Z	03:56:12.0	145.0	117.2					
	e pPKPab	Z	03:56:19.7							
FBE	e PKPab	Z	03:56:13.9	145.4	116.9					
	e pPKPab	Z	03:56:21.5							
ROTZ	e pPKPab	Z	03:56:22.0	145.5	118.0					
WERN	e pPKPab	Z	03:56:23.2	145.6	117.4					
CLL	e PKPab	Z	03:56:15.1	145.7	116.3					
GRA1	e PKPab	Z	03:56:16.7	146.0	117.8					
	e pPKPab	Z	03:56:24.2							
GRFO	e PKPab	Z	03:56:17.0	146.0	117.8					
MOX	e pPKPab	Z	03:56:25.3	146.2	116.7					
BFO	e PKPab	Z	03:56:21.2	147.0	118.8					
	e pPKPab	Z	03:56:28.7							
UBBA	e pPKPab	Z	03:56:29.7	147.2	115.9					
BUG	e pPKPab	Z	03:56:38.6	149.0	114.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	07:14:15.3	39.108N	16.240E	33.0G				SZGRF
Southern Italy								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z	07:16:18.5	9.0	162.6					
FUR	e Pn	Z	07:16:28.5	9.7	156.6					
GEC2	e Pn	Z	07:16:30.2	9.9	168.5					
WET	e Pn	Z	07:16:35.0	10.3	165.3					
BFO	e Pn	Z	07:16:41.7	10.8	145.4					
STU	e Pn	Z	07:16:42.3	10.9	149.8					
ROTZ	e Pn	Z	07:16:43.6	11.0	163.4					
GRA1	e Pn	Z	07:16:45.2	11.2	159.5					
MANZ	e Pn	Z	07:16:46.6	11.3	163.4					
WERN	e Pn	Z	07:16:50.0	11.5	164.8					

GUNZ	e Pn	Z	07:16:51.0	11.6	164.7
TANN	e Pn	Z	07:16:52.6	11.6	165.3
WERD	e Pn	Z	07:16:52.1	11.7	164.7
BRG	e Pn	Z	07:16:55.7	11.9	171.3
FBE	e Pn	Z	07:16:57.3	12.0	169.2
MOX	e Pn	Z	07:16:56.0	12.0	162.5
CLL	e Pn	Z	07:17:02.5	12.4	168.2
UBBA	e Pn	Z	07:17:02.3	12.5	157.1
CLZ	e Pn	Z	07:17:14.3	13.4	159.9
RUE	e Pn	Z	07:17:16.9	13.5	171.8
BSEG	e Pn	Z	07:17:38.0	15.4	162.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	07:14:54.3	28.840N	141.360E	33.0G	5.4			SZGRF
Bonin Islands, Japan, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	07:27:21.8	87.1	41.4	1.0	24	5.3		
BRG	e P	Z	07:27:24.2	87.8	44.1	1.0	10	5.1		
CLL	e P	Z	07:27:24.5	87.9	43.4	1.5	37	5.5		
CLZ	e P	Z	07:27:28.2	88.6	41.4	1.1	21	5.3		
MOX	e P	Z	07:27:28.2	89.0	42.3	1.7	33	5.3		
MANZ	e P	Z	07:27:31.5	89.3	42.7	1.7	34	5.3		
IBBN	e P	Z	07:27:31.2	89.3	39.4	1.7	90	5.7		
ROTZ	e P	Z	07:27:32.4	89.4	42.8	1.3	23	5.3		
GEC2	e P	Z	07:27:31.2	89.4	43.9	1.2	24	5.3		
WET	e P	Z	07:27:32.5	89.5	43.3	2.1	64	5.5		
UBBA	e P	Z	07:27:32.2	89.5	41.1	2.0	45	5.3		
GRA1	e P	Z	07:27:34.3	89.9	42.0	1.1	32	5.5		
RJOB	e P	Z	07:27:37.9	90.6	43.2	1.0	33	5.6		
FUR	e P	Z	07:27:39.7	91.0	42.1	1.2	66	5.8		
STU	e P	Z	07:27:41.6	91.4	40.5	1.3	37	5.5		
BFO	e P	Z	07:27:44.5	92.1	39.8	1.1	24	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	07:15:14.8	27.410N	140.660E	33.0N	5.3			SZGRF
Bonin Islands, Japan, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:28:07.2	88.7	45.4	0.7	8	5.0		
CLL	e P	Z	07:28:07.2	88.8	44.7	0.7	9	5.1		
CLZ	e P	Z	07:28:11.3	89.6	42.6	0.7	13	5.3		
MOX	e P	Z	07:28:12.9	89.9	43.6	1.3	15	5.1		
MANZ	e P	Z	07:28:14.1	90.2	44.0	1.3	11	4.9		
GEC2	e P	Z	07:28:14.0	90.3	45.2	1.5	17	5.2		

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ROTZ	e P	Z	07:28:14.7	90.3	44.0	1.1	12	5.2
IBBN	e P	Z	07:28:14.5	90.3	40.6	0.6	29	5.8
GRA1	e P	Z	07:28:16.7	90.8	43.3	0.8	17	5.4
RJOB	e P	Z	07:28:20.0	91.5	44.5	0.9	17	5.4
FUR	e P	Z	07:28:22.0	91.9	43.4	1.1	46	5.7
STU	e P	Z	07:28:24.1	92.4	41.7	0.7	19	5.6
BFO	e P	Z	07:28:26.9	93.1	41.1	0.7	9	5.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	12:40:59.8	73.009N	9.997E	33.0N	4.5			SZGRF

Greenland Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:46:05.5	23.3	359.1	1.8	26	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	13:18:55.6	72.569N	9.013E	33.0N	4.4			SZGRF

Norwegian Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:23:57.0	22.9	358.3	1.9	25	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	14:59: 5.8	72.942N	8.145E	33.0N	4.8			SZGRF

Norwegian Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e P	Z 15:03:49.4	21.1	358.2	1.9	82	4.7		
CLL	e P	Z 15:03:59.1	21.7	356.2	1.8	45	4.6		
MOX	e P	Z 15:04:00.6	22.3	357.3	2.2	57	4.6		
TANN	e P	Z 15:04:05.9	22.6	356.7	2.0	51	4.7		
MANZ	e P	Z 15:04:07.5	23.0	357.0	2.4	78	4.8		
GRA1	e P	Z 15:04:11.1	23.3	357.7	2.0	100	5.0		
WET	e P	Z 15:04:17.5	23.9	356.6	2.0	63	4.8		
GEC2	e P	Z 15:04:20.3	24.2	356.0	1.4	17	4.4		
BFO	e P	Z 15:04:23.5	24.6	359.9	2.1	83	5.1		
FUR	e P	Z 15:04:26.9	24.8	357.8	1.9	113	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	16:09:48.0	22.340S	175.700W	33.0G				SZGRF

Tonga Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	16:29:30.0	148.1	10.6					
IBBN	e PKPab	Z	16:29:41.3	149.9	6.4					
CLZ	e PKPbc	Z	16:29:35.9	150.1	11.3					
	e PKPab	Z	16:29:41.5							
CLL	e PKPbc	Z	16:29:35.5	150.3	16.4					
	e PKPab	Z	16:29:41.4							
BRG	e PKPbc	Z	16:29:36.3	150.5	18.3					
	e PKPab	Z	16:29:42.8							
BUG	e PKPab	Z	16:29:45.5	150.8	5.6					
MOX	e PKPbc	Z	16:29:37.9	151.1	14.1					
	e PKPab	Z	16:29:44.8							
UBBA	e PKPbc	Z	16:29:38.4	151.2	11.0					
TANN	e PKPbc	Z	16:29:38.0	151.2	15.8					
MANZ	e PKPbc	Z	16:29:39.5	151.7	15.4					
ROTZ	e PKPbc	Z	16:29:39.5	151.9	15.7					
GRA1	e PKPbc	Z	16:29:40.6	152.1	13.8					
	e PKPab	Z	16:29:50.3							
WET	e PKPbc	Z	16:29:40.8	152.3	17.3					
	e PKPab	Z	16:29:51.1							
GEC2	e PKPbc	Z	16:29:41.1	152.5	19.1					
	e PKPab	Z	16:29:51.8							
STU	e PKPab	Z	16:29:54.7	153.3	10.1					
FUR	e PKPab	Z	16:29:55.6	153.6	14.6					
RJOB	e PKPab	Z	16:29:56.5	153.7	18.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/01 17:47:42.8 5.086S 100.364E 33.0N 4.7
 Southwest of Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	18:00:54.7	93.3	93.9	0.9	3	4.7		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/01 22:02:0.2 45.130N 151.773E 33.0N 4.7
 Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	22:14:02.1	79.2	27.2	1.2	11	4.7		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/01 22:45:15.2 73.254N 9.973E 33.0N 4.3
 SZGRF

Greenland Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	22:50:23.3	23.6	359.1	1.5	14	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/01	23:49:30.1	15.834S	172.609W	33.0N				SZGRF

Samoa Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	00:08:59.5	144.2	9.3					
NEUB	e PKPbc	Z	00:09:00.6	144.5	7.3					
BRG	e PKPbc	Z	00:09:00.6	144.6	10.9					
FBE	e PKPbc	Z	00:09:01.1	144.6	9.9					
MOX	e PKPbc	Z	00:09:02.4	145.0	7.1					
WERD	e PKPbc	Z	00:09:03.0	145.2	8.3					
TANN	e PKPbc	Z	00:09:03.0	145.2	8.6					
GUNZ	e PKPbc	Z	00:09:03.3	145.2	8.4					
WERN	e PKPbc	Z	00:09:03.5	145.3	8.4					
GRA1	e PKPbc	Z	00:09:05.7	146.0	6.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/02	06:33:30.2	0.520S	98.510E	50.9	5.5			SZGRF

Southern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	06:46:10.4	87.0	94.3	1.6	108	5.7		
BRG	e P	Z	06:46:10.4	87.0	94.5	1.0	25	5.3		
RUE	e P	Z	06:46:11.3	87.2	94.5	1.1	111	5.9		
FBE	e P	Z	06:46:12.1	87.4	94.1	1.8	124	5.7		
RJOB	e P	Z	06:46:12.2	87.5	93.5	1.1	19	5.1		
WET	e P	Z	06:46:12.9	87.5	93.6	1.3	47	5.7		
	e pP	Z	06:46:27.6							
CLL	e P	Z	06:46:12.8	87.6	93.8	1.4	41	5.6		
TANN	e P	Z	06:46:14.5	87.9	93.4	1.4	32	5.4		
WERN	e P	Z	06:46:14.9	87.9	93.3	1.3	31	5.5		
GUNZ	e P	Z	06:46:15.0	88.0	93.3	1.4	49	5.6		
WERD	e P	Z	06:46:14.9	88.0	93.3	1.1	24	5.4		
ROTZ	e P	Z	06:46:15.5	88.0	93.2	1.3	39	5.6		
MANZ	e P	Z	06:46:15.9	88.1	93.1	1.2	55	5.7		
MOX	e P	Z	06:46:17.0	88.4	92.7	1.6	35	5.4		
	e pP	Z	06:46:31.9							
GRA1	e P	Z	06:46:18.3	88.6	92.4	1.2	44	5.5		
CLZ	e P	Z	06:46:21.1	89.3	91.8	1.3	30	5.3		

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BSEG	e P	Z	06:46:21.2	89.4	91.8	1.5	36	5.4
STU	e P	Z	06:46:24.3	89.9	90.9	2.0	84	5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/02	11:56:56.4	35.840N	72.060E	245.3	5.3			SZGRF

Pakistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:04:37.1	43.6	86.9	1.3	66	5.2		
FBE	e P	Z 12:04:39.8	43.9	86.5	1.3	74	5.3		
	e pP	Z 12:05:31.6							
	e sP	Z 12:05:59.4							
CLL	e P	Z 12:04:41.6	44.1	86.7	1.5	49	5.0		
WET	e P	Z 12:04:43.7	44.4	84.3	1.6	31	5.0		
TANN	e P	Z 12:04:44.9	44.5	85.3	1.5	47	5.2		
	e pP	Z 12:05:36.4							
WERN	e P	Z 12:04:45.1	44.6	85.2	1.7	61	5.3		
GUNZ	e P	Z 12:04:46.0	44.6	85.2	1.4	46	5.2		
WERD	e P	Z 12:04:45.4	44.6	85.3	1.3	33	5.1		
ROTZ	e P	Z 12:04:47.4	44.8	84.5	1.6	91	5.5		
	e pP	Z 12:05:37.8							
MANZ	e P	Z 12:04:47.2	44.8	84.7	1.4	36	5.1		
MOX	e P	Z 12:04:49.0	45.1	85.0	1.4	42	5.2		
GRA1	e P	Z 12:04:52.6	45.4	83.7	1.7	155	5.8		
	e pP	Z 12:05:44.2							
FUR	e P	Z 12:04:53.1	45.6	82.3	1.4	111	5.7		
	e sP	Z 12:06:13.4							
BSEG	e P	Z 12:04:53.9	45.6	87.2	1.3	60	5.5		
	e sP	Z 12:06:13.2							
CLZ	e P	Z 12:04:54.1	45.7	85.2	1.5	90	5.6		
UBBA	e P	Z 12:04:56.7	46.1	84.0	1.6	48	5.3		
STU	e P	Z 12:05:02.8	46.8	81.5	1.0	35	5.5		
	e sP	Z 12:06:24.2							
IBBN	e P	Z 12:05:06.6	47.3	83.8	1.2	84	5.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/02	15:57:41.4	21.000S	179.000W	596.0				NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 16:16:26.0	150.2	19.5					
	e PKPab	Z 16:16:34.1							

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/02

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e PKP	Z 19:07:22.9							
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/02 20:21:59.3 37.706N 29.682E 10.0G 4.6

Turkey SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GEC2	e P	Z 20:25:45.9	16.0	128.0	1.9	44	4.3		
WET	e P	Z 20:25:50.0	16.7	127.1					
BRG	e P	Z 20:25:58.2	17.3	133.7					
ROTZ	e P	Z 20:25:59.0	17.4	127.3					
MANZ	e P	Z 20:26:03.4	17.6	127.7					
MOX	e P	Z 20:26:09.9	18.2	128.3	2.5	133	4.6		
BSEG	e P	Z 20:26:42.6	21.0	132.8	2.6	217	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/03 16:33:50.0 30.600N 138.800E 2.0 4.7

Southeast of Honshu, Japan NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e P	Z 16:46:46.0	87.2	43.1	1.4	9	4.7		
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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/03 21:52:47.1 6.400S 148.500E 40.0 5.8

New Britain, Papua New Guinea, region NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e PKP	Z 22:11:40.6	123.9	54.3					
	e pPKP	Z 22:11:56.3							
	e L	Z 23:08:36.8			19.6	2188		5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/03 22:33:13.1 6.400S 148.600E 32.0 5.7

New Britain, Papua New Guinea, region NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GRA1	e PKP	Z 22:52:07.9	123.9	54.2					
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e pPKP	Z	22:52:21.6										
e L	Z	23:48:53.9			19.9		1570			5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/04	03:45:51.5	50.728N	166.137W	33.0N	4.8			SZGRF
South of Aleutian Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:57:55.6	79.6	358.3	1.1	15	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/04								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 07:45:17.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/04								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:54:30.4							
	e pPKP	Z 20:54:34.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/05	01:41:49.0	24.069N	122.005E	33.0N	5.1			SZGRF
Taiwan region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:54:17.4	84.2	59.1	1.0	12	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/05	03:15:13.0	31.213N	69.767E	33.0N	4.7			SZGRF
Pakistan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:23:40.1	46.9	90.4	1.2	8	4.7		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/05	04:33:34.7	25.180N	124.740E	192.3	5.4			SZGRF

Northeast of Taiwan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 04:45:34.0	81.9	58.6	1.0	44	5.6		
BRG	e P	Z 04:45:37.5	82.7	58.5	1.0	16	5.2		
BSEG	e P	Z 04:45:39.0	82.9	56.1	0.8	17	5.3		
CLL	e P	Z 04:45:38.8	83.0	57.9	0.8	22	5.4		
	e pP	Z 04:46:26.0							
FBE	e P	Z 04:45:39.3	83.0	58.1	0.9	25	5.4		
TANN	e P	Z 04:45:43.0	83.7	57.4	1.2	12	5.0		
WERD	e P	Z 04:45:43.2	83.8	57.3	1.5	11	4.9		
GUNZ	e pP	Z 04:46:31.1	83.8	57.3					
WERN	e P	Z 04:45:43.6	83.8	57.3	1.1	17	5.2		
GEC2	e P	Z 04:45:44.0	83.9	58.2	1.0	25	5.4		
CLZ	e P	Z 04:45:45.3	84.0	56.0	0.9	33	5.6		
MANZ	e P	Z 04:45:45.1	84.1	57.1	1.2	13	5.0		
ROTZ	e P	Z 04:45:45.8	84.2	57.2	1.0	15	5.2		
GRA1	e P	Z 04:45:48.4	84.8	56.4					
	e pP	Z 04:46:35.6							
UBBA	e P	Z 04:45:48.3	84.8	55.6	1.6	35	5.3		
RJOB	e P	Z 04:45:49.4	85.0	57.4	0.9	35	5.6		
IBBN	e P	Z 04:45:50.1	85.1	54.0	1.1	66	5.8		
FUR	e P	Z 04:45:53.1	85.6	56.4	0.9	61	5.7		
BUG	e P	Z 04:45:53.7	85.8	53.6	1.3	64	5.6		
STU	e P	Z 04:45:56.1	86.4	54.9	1.0	31	5.4		
BFO	e P	Z 04:45:59.7	87.1	54.2	1.1	21	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/05								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 04:45:15.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/05	12:11: 4.9	14.170N	61.070W	33.0N	5.5			SZGRF

Windward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 12:21:47.7	65.8	264.2	1.6	45	5.4		
IBBN	e P	Z 12:21:48.8	65.9	262.0	1.1	102	6.0		
STU	e P	Z 12:21:51.3	66.4	264.7	0.9	64	5.9		
CLZ	e P	Z 12:21:58.5	67.5	264.3	1.0	54	5.7		
BSEG	e P	Z 12:21:59.2	67.7	263.4	1.0	66	5.8		

GRA1	e P	Z	12:22:00.7	67.8	265.9	1.4	52	5.6
MOX	e P	Z	12:22:02.3	68.1	265.8	0.9	13	5.2
MANZ	e P	Z	12:22:04.6	68.4	266.5	1.1	61	5.7
ROTZ	e P	Z	12:22:04.7	68.5	266.6	1.3	28	5.3
WERD	e P	Z	12:22:04.9	68.6	266.4	1.3	27	5.3
GUNZ	e P	Z	12:22:05.6	68.6	266.5	0.8	15	5.2
WERN	e P	Z	12:22:05.4	68.6	266.5	1.2	29	5.4
TANN	e P	Z	12:22:05.7	68.7	266.6	1.4	54	5.6
WET	e P	Z	12:22:07.2	68.9	267.4	1.1	32	5.4
CLL	e P	Z	12:22:08.3	69.1	266.6	1.0	43	5.6
FBE	e P	Z	12:22:09.6	69.3	267.1	0.9	32	5.5
GEC2	e P	Z	12:22:10.3	69.4	268.1	0.9	23	5.4
BRG	e P	Z	12:22:12.0	69.6	267.6	0.9	33	5.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/06	00:10:5.0	54.183N	160.884E	33.0N	5.0			SZGRF
Near east coast of Kamchatka Peninsula, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:21:32.1	73.0	18.0	0.9	12	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/06	10:25:45.5	10.818S	65.168E	33.0N	4.7			SZGRF
Mid-Indian Ridge								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:37:33.5	76.7	125.3	1.0	7	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/06	10:52:46.9	70.400N	7.160W	33.0N	5.1	4.1		SZGRF
Jan Mayen Island region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 10:56:59.6	18.2	341.2	2.2	352	5.1		
NRDL	e P	Z 10:57:13.8	19.5	342.7	1.3	128	5.0		
BUG	e P	Z 10:57:19.2	20.1	345.9	1.5	432	5.4		
RUE	e P	Z 10:57:21.8	20.3	339.8	1.6	232	5.2		
UBBA	e P	Z 10:57:30.6	21.1	344.1	1.8	193	5.1		
CLL	e P	Z 10:57:31.3	21.2	341.4	1.5	145	5.1		
MOX	e P	Z 10:57:35.0	21.6	342.9	1.5	64	4.8		
WLF	e P	Z 10:57:36.0	21.7	347.9	1.5	104	5.1		
FBE	e P	Z 10:57:35.7	21.7	341.4	1.3	110	5.1		
BRG	e P	Z 10:57:37.4	21.8	341.0	2.0	84	4.8		

Station	Type	Time	Depth	mb	Ms	ML	Source
WERD	e P	Z 10:57:38.6	21.9	342.6	1.2	73	5.0
TANN	e P	Z 10:57:39.4	22.0	342.5	1.3	93	5.1
GUNZ	e P	Z 10:57:39.5	22.0	342.6	2.4	386	5.4
WERN	e P	Z 10:57:40.4	22.1	342.6	2.5	513	5.5
MANZ	e P	Z 10:57:43.1	22.3	343.0	2.6	270	5.2
GRA1	e P	Z 10:57:44.0	22.4	343.9	1.6	236	5.5
	e L	Z 11:07:04.8			19.8	737	4.1
ROTZ	e P	Z 10:57:44.9	22.5	343.1	1.8	123	5.1
STU	e P	Z 10:57:49.9	23.0	346.0	2.1	192	5.3
WET	e P	Z 10:57:52.8	23.3	343.1	2.1	121	5.1
BFO	e P	Z 10:57:52.3	23.3	346.9	1.5	120	5.2
GEC2	e P	Z 10:57:56.9	23.7	342.7	1.3	62	5.0
FUR	e P	Z 10:58:00.4	23.9	344.8	1.5	166	5.3
RJOB	e P	Z 10:58:04.7	24.6	344.0	1.4	32	4.9

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/06 16:01:31.6 7.300S 156.000E 40.0 NEIC
 Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 16:20:34.8	128.4	46.9					
	e pPKPdf	Z 16:20:44.8							

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/06 17:12: 8.5 22.380N 44.410W 33.0N 5.5 5.0 SZGRF
 Northern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 17:20:44.0	47.9	254.3	1.2	82	5.7		
BFO	e P	Z 17:20:52.3	49.0	257.4	1.2	80	5.6		
BUG	e P	Z 17:20:53.0	49.1	253.8	1.3	65	5.5		
IBBN	e P	Z 17:20:57.1	49.6	253.5	1.4	121	5.7		
STU	e P	Z 17:20:56.8	49.6	257.7	1.0	81	5.6		
UBBA	e P	Z 17:21:04.6	50.6	256.8	1.3	41	5.2		
CLZ	e P	Z 17:21:08.0	51.0	256.3	1.1	64	5.5		
NRDL	e P	Z 17:21:08.3	51.0	255.6	1.1	94	5.6		
GRA1	e P	Z 17:21:08.4	51.1	258.8	1.2	89	5.6		
	e L	Z 17:37:30.7			21.7	1578		5.0	
BSEG	e P	Z 17:21:11.5	51.5	254.6	1.1	168	5.9		
MOX	e P	Z 17:21:11.6	51.5	258.3	1.2	49	5.3		
MANZ	e P	Z 17:21:13.1	51.7	259.3	1.0	23	5.1		
ROTZ	e P	Z 17:21:13.3	51.7	259.5	1.3	47	5.3		
RJOB	e P	Z 17:21:13.6	51.8	261.6	1.1	61	5.5		
GUNZ	e P	Z 17:21:15.1	51.9	259.2	1.4	47	5.2		
WERD	e P	Z 17:21:14.6	51.9	259.1	2.1	160	5.6		

WERN	e P	Z	17:21:15.2	51.9	259.3	1.6	219	5.8
TANN	e P	Z	17:21:15.2	52.0	259.3	1.5	96	5.5
WET	e P	Z	17:21:15.5	52.1	260.6	1.3	61	5.4
CLL	e P	Z	17:21:18.8	52.5	259.1	1.2	73	5.5
GEC2	e P	Z	17:21:19.3	52.5	261.5	1.4	112	5.6
FBE	e P	Z	17:21:20.2	52.7	259.6	1.4	115	5.6
BRG	e P	Z	17:21:22.8	53.0	260.2	1.3	74	5.5
RUE	e P	Z	17:21:24.0	53.2	258.9	1.4	253	6.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/06	21:21:49.3	35.746N	141.520E	33.0N	5.3			SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:34:16.4	83.9	38.5	2.1	40	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/06	21:43:49.4	12.200N	125.400E	59.0	5.2			NEIC

Samar, Philippine Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:57:09.2	95.6	63.6	1.2	11	5.2		
	e pP	Z 21:57:20.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/07	00:47:39.1	30.630N	140.830E	73.2	5.6			SZGRF

Southeast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 01:00:07.8	84.9	43.6	1.2	70	5.8		
BSEG	e P	Z 01:00:09.3	85.3	41.0	1.0	58	5.7		
BRG	e P	Z 01:00:12.7	86.0	43.6	2.0	113	5.7		
CLL	e P	Z 01:00:13.3	86.1	42.9	1.2	28	5.3		
FBE	e P	Z 01:00:13.9	86.2	43.2	2.0	168	5.8		
CLZ	e P	Z 01:00:17.0	86.8	41.0	1.2	38	5.4		
	e pP	Z 01:00:37.0							
TANN	e P	Z 01:00:17.8	87.0	42.5	1.7	40	5.3		
WERD	e P	Z 01:00:17.9	87.0	42.4	2.0	81	5.5		
MOX	e P	Z 01:00:18.4	87.2	41.9	1.3	26	5.2		
IBBN	e P	Z 01:00:19.9	87.5	39.0	0.6	42	5.9		
	e pP	Z 01:00:40.0							
ROTZ	e P	Z 01:00:20.7	87.6	42.3	1.5	64	5.7		
GEC2	e P	Z 01:00:20.5	87.6	43.4	1.0	16	5.3		

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WET	e P	Z	01:00:21.5	87.8	42.8	1.9	53	5.6
GRA1	e P	Z	01:00:23.3	88.1	41.6	1.3	57	5.8
	e PP	Z	01:03:51.7					
RJOB	e P	Z	01:00:26.4	88.8	42.7	1.6	59	5.6
FUR	e P	Z	01:00:27.9	89.2	41.6	1.4	83	5.8
BFO	e P	Z	01:00:33.2	90.3	39.4	1.1	36	5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/08	03:54:46.7	60.400S	52.100W	10.0		5.4		NEIC

South Shetland Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 04:13:44.1	121.3	211.1					
	e L	Z 05:00:55.4			20.7	837		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/08	07:09:18.0	39.700N	15.900E	305.0G				INGV

Southern Italy

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z 07:11:20.9	8.3	163.3					
GEC2	e Pn	Z 07:11:31.6	9.3	169.5					
WET	e Pn	Z 07:11:36.1	9.7	166.0					
BFO	e Pn	Z 07:11:42.3	10.2	145.1					
GRA1	e Pn	Z 07:11:46.1	10.5	159.9					
MOX	e Pn	Z 07:12:01.7	11.3	163.0					
CLL	e Pn	Z 07:12:03.5	11.8	169.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/08	19:55:19.3	7.346S	38.923E	33.0N	5.8	5.0		SZGRF

Tanzania

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:05:36.1	61.9	148.5	2.0	118	5.8		
	e L	Z 20:33:55.0			20.8	1045		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/09	07:28:21.3	26.970S	178.110W	158.6				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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RGN	e PKPdf	Z	07:47:50.0	151.2	21.5
	e PP	Z	07:51:34.0		
	e SS	T	08:10:47.2		
BSEG	e PKPdf	Z	07:47:51.3	152.3	16.3
	e PP	Z	07:51:42.8		
HLG	e PKPdf	Z	07:47:51.6	152.4	11.6
	e PP	Z	07:51:42.5		
	e SS	T	08:10:56.4		
RUE	e PKPdf	Z	07:47:52.2	153.0	23.8
	e PP	Z	07:51:45.3		
	e SS	T	08:11:06.6		
NRDL	e PKPdf	Z	07:47:53.5	153.7	16.7
	e PP	Z	07:51:50.0		
CLL	e PKPdf	Z	07:47:54.1	154.2	23.3
	e PP	Z	07:51:53.1		
	e SS	T	08:11:20.3		
IBBN	e PKPdf	Z	07:47:54.4	154.3	12.1
	e PKPab	Z	07:48:18.5		
	e PP	Z	07:51:52.3		
CLZ	e PKPdf	Z	07:47:54.7	154.3	17.7
	e PP	Z	07:51:55.0		
BRG	e PKPdf	Z	07:47:54.4	154.4	25.5
	e PP	Z	07:51:53.4		
	e SS	T	08:11:21.8		
MOX	e PKPdf	Z	07:47:56.0	155.2	21.0
	e pPKPab	Z	07:49:02.5		
	e PP	Z	07:51:58.4		
	e SS	T	08:11:30.7		
BUG	e PKPdf	Z	07:47:55.3	155.2	11.5
	e PKPab	Z	07:48:22.4		
	e pPKPab	Z	07:49:02.0		
	e PP	Z	07:52:00.3		
TANN	e PKPdf	Z	07:47:55.3	155.2	22.9
	e PKPab	Z	07:48:22.7		
	e pPKPab	Z	07:49:02.8		
	e PP	Z	07:51:57.5		
UBBA	e PKPdf	Z	07:47:55.6	155.4	17.6
	e PKPab	Z	07:48:22.7		
	e pPKPab	Z	07:49:03.1		
	e PP	Z	07:51:58.7		
	e SS	T	08:11:32.9		
ROTZ	e PKPdf	Z	07:47:56.3	155.9	23.0
	e PKPab	Z	07:48:26.0		
	e pPKPab	Z	07:49:06.5		
	e PP	Z	07:52:01.6		
GRA1	e PKPdf	Z	07:47:57.2	156.2	21.0
	e PKPab	Z	07:48:26.6		
	e PP	Z	07:52:03.1		
	e SKKSac	R	07:58:37.0		

	e SS	T	08:11:39.8		
WET	e PKPdf	Z	07:47:57.2	156.3	25.0
	e PKPab	Z	07:48:27.5		
	e pPKPab	Z	07:49:07.9		
	e PP	Z	07:52:04.7		
	e SS	T	08:11:41.7		
GEC2	e PKPdf	Z	07:47:57.5	156.3	27.0
	e PKPab	Z	07:48:27.8		
	e PP	Z	07:52:04.3		
	e SS	T	08:11:41.8		
WLF	e PKPdf	Z	07:47:58.1	157.1	9.8
	e PKPab	Z	07:48:30.5		
	e PP	Z	07:52:08.7		
STU	e PKPdf	Z	07:47:58.5	157.5	17.2
	e PP	Z	07:52:09.9		
	e SS	T	08:11:51.2		
RJOB	e PKPdf	Z	07:47:58.5	157.5	26.2
	e PKPab	Z	07:48:33.5		
	e pPKPab	Z	07:49:14.3		
	e PP	Z	07:52:11.3		
FUR	e PKPdf	Z	07:47:58.1	157.6	22.4
	e PKPab	Z	07:48:32.6		
	e PP	Z	07:52:11.9		
	e SS	T	08:11:56.0		
BFO	e PKPdf	Z	07:47:59.1	158.1	15.5
	e pPKPab	Z	07:49:14.7		
	e PP	Z	07:52:13.7		
	e SS	T	08:11:57.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 08:24:51.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/09	09:13:43.6	18.100S	177.000W	60.0				GSRC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPab	Z 09:33:13.1	145.6	8.0					
CLZ	e PKPab	Z 09:33:12.8	145.8	12.5					
CLL	e PKPab	Z 09:33:13.8	145.9	17.1					
BRG	e PKPab	Z 09:33:15.0	146.1	18.9					
GRA1	e PKPab	Z 09:33:22.2	147.7	14.7					

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STU e PKPab Z 09:33:26.3 148.9 11.5

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/09 20:29:50.8 37.012N 29.350E 14.0G 3.6 THE
Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 20:33:42.8	16.4	130.3	0.8	2	3.3		
WET	e P	Z 20:33:48.9	17.0	129.3	0.6	3	3.5		
GRA1	e P	Z 20:34:02.7	18.2	127.3	0.9	4	3.5		
MOX	e P	Z 20:34:07.5	18.6	130.3	0.8	3	3.5		
STU	e P	Z 20:34:08.6	18.8	121.3	0.9	8	4.0		
NRDL	e P	Z 20:34:28.7	20.5	131.3	1.0	6	3.9		

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/10 12:10:11.2 3.723S 144.360E 35.0 5.7 NEIC
Near north coast of New Guinea, Papua New Guinea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e SKPdf	Z 12:32:20.5	119.4	56.7					
	e L	Z 13:25:22.7			18.1	1694		5.7	

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/10 22:04:24.3 15.600S 173.300E 10.0 NEIC
Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPdf	Z 22:24:00.4	145.0	25.8					

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/11 11:05:27.2 19.560S 178.660W 33.0N SZGRF
Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 11:24:59.3	144.9	14.8					
NRDL	e PKPbc	Z 11:25:04.0	146.4	15.0					
CLL	e PKPbc	Z 11:25:06.1	147.0	20.4					
CLZ	e PKPbc	Z 11:25:06.1	147.0	15.7					
BRG	e PKPbc	Z 11:25:06.8	147.1	22.3					
MOX	e PKPbc	Z 11:25:08.5	147.9	18.4					
TANN	e PKPbc	Z 11:25:08.9	147.9	20.0					

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UBBA	e	PKPbc	Z	11:25:08.5	148.0	15.5
ROTZ	e	PKPbc	Z	11:25:11.1	148.6	19.9
GRA1	e	PKPbc	Z	11:25:11.8	148.9	18.2
	e	PKPab	Z	11:25:15.2		
WET	e	PKPbc	Z	11:25:11.8	149.0	21.5
	e	PKPab	Z	11:25:15.5		
GEC2	e	PKPbc	Z	11:25:12.2	149.1	23.1
	e	PKPab	Z	11:25:15.8		
WLF	e	PKPbc	Z	11:25:13.9	149.7	9.0
	e	PKPab	Z	11:25:18.5		
STU	e	PKPbc	Z	11:25:14.8	150.1	15.0
	e	PKPab	Z	11:25:20.0		
FUR	e	PKPbc	Z	11:25:15.2	150.3	19.1
	e	PKPab	Z	11:25:21.0		
RJOB	e	PKPbc	Z	11:25:15.1	150.3	22.2
	e	PKPab	Z	11:25:22.0		
BFO	e	PKPbc	Z	11:25:15.9	150.7	13.5
	e	PKPab	Z	11:25:22.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/11	15:56:48.2	35.880N	76.400E	15.5	5.1	4.1		SZGRF
Eastern Kashmir								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 16:05:14.5	46.3	83.7	0.8	18	5.2		
	e pP	Z 16:05:18.4							
GEC2	e P	Z 16:05:17.4	46.7	81.6	1.2	14	4.8		
CLL	e P	Z 16:05:18.2	46.8	83.4	1.0	14	5.1		
WET	e P	Z 16:05:21.5	47.2	81.4	0.9	6	4.8		
TANN	e P	Z 16:05:21.9	47.3	82.2	1.2	13	4.9		
RJOB	e P	Z 16:05:23.0	47.5	80.0	1.0	10	4.9		
ROTZ	e P	Z 16:05:24.9	47.5	81.5	1.0	18	5.1		
MOX	e P	Z 16:05:25.7	47.8	81.9	0.9	15	5.1		
	e pP	Z 16:05:30.5							
BSEG	e P	Z 16:05:29.1	48.2	83.9	0.8	19	5.3		
GRA1	e P	Z 16:05:29.5	48.2	80.8	1.2	38	5.4		
	e pP	Z 16:05:33.2							
	e S	E 16:12:29.8							
	e L	Z 16:30:08.9			18.5	187		4.1	
CLZ	e P	Z 16:05:30.7	48.4	82.1	1.2	25	5.2		
FUR	e P	Z 16:05:31.2	48.4	79.4	0.9	37	5.5		
NRDL	e P	Z 16:05:30.8	48.4	82.4	1.6	69	5.5		
STU	e P	Z 16:05:40.1	49.6	78.6	0.8	28	5.3		
	e pP	Z 16:05:44.5							
WLF	e P	Z 16:05:53.7	51.4	77.4	0.9	19	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/11	17:20:58.5	62.100S	66.200W	36.0		5.4		NEIC

Southern Pacific Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPdf	Z 17:39:54.5	125.3	213.5					
RJOB	e PKPdf	Z 17:39:56.1	126.4	214.8					
GRA1	e PKPdf	Z 17:39:58.5	127.4	215.1					
	e PP	Z 17:41:58.6							
	e SP	Z 17:52:06.2							
	e SS	T 17:59:00.4							
	e L	Z 18:40:54.2			19.8	758		5.4	
GEC2	e PKPdf	Z 17:39:58.1	127.7	215.6					
MOX	e PKPdf	Z 17:40:00.2	128.4	215.7					
TANN	e PKPdf	Z 17:40:00.5	128.5	215.9					
CLZ	e PKPdf	Z 17:40:02.6	128.9	215.8					
NRDL	e PKPdf	Z 17:40:03.1	129.3	216.0					
CLL	e PKPdf	Z 17:40:02.1	129.4	216.5					
BRG	e PKPdf	Z 17:40:02.5	129.4	216.6					
BSEG	e PKPdf	Z 17:40:04.9	130.6	216.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/11	17:46: 1.1	30.200S	177.800W	53.0				NEIC

Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 18:06:22.5	157.4	25.0					
IBBN	e PKPab	Z 18:06:24.0	157.5	12.6					
CLZ	e PKPab	Z 18:06:23.8	157.5	18.8					
BRG	e PKPab	Z 18:06:23.9	157.5	27.4					
FBE	e PKPab	Z 18:06:25.0	157.7	26.1					
WERD	e PKPab	Z 18:06:28.0	158.4	24.3					
GUNZ	e PKPab	Z 18:06:28.2	158.5	24.5					
GRA1	e PKPab	Z 18:06:31.7	159.4	22.6					
WET	e PKPab	Z 18:06:32.2	159.4	27.1					
WLF	e PKPab	Z 18:06:36.8	160.3	10.2					
RJOB	e PKPab	Z 18:06:38.3	160.7	28.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/12	23:40: 4.6	52.257N	131.633W	11.8	5.5	5.4		SZGRF

Queen Charlotte Islands, Canada, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 23:51:08.4	69.2	336.2	1.7	101	5.7		

RGN	e P	Z	23:51:09.4	69.3	337.9	1.4	160	6.0
IBBN	e P	Z	23:51:13.5	70.0	334.9	1.8	142	5.8
NRDL	e P	Z	23:51:15.8	70.4	336.3	1.2	39	5.4
	e pP	Z	23:51:19.3					
BUG	e P	Z	23:51:17.1	70.7	334.8	1.5	87	5.7
CLZ	e P	Z	23:51:20.4	71.1	336.5	1.3	67	5.6
RUE	e P	Z	23:51:21.2	71.3	338.5	1.6	125	5.8
UBBA	e P	Z	23:51:25.0	72.0	336.4	1.8	76	5.5
WLF	e P	Z	23:51:25.3	72.0	334.4	1.7	63	5.5
CLL	e P	Z	23:51:26.4	72.2	338.2	1.7	59	5.4
MOX	e P	Z	23:51:28.1	72.5	337.4	1.4	29	5.2
FBE	e P	Z	23:51:29.3	72.7	338.4	2.0	124	5.7
	e pP	Z	23:51:32.2					
BRG	e P	Z	23:51:30.4	72.9	338.8	1.9	126	5.7
	e pP	Z	23:51:34.0					
WERD	e P	Z	23:51:30.1	72.9	337.8	1.9	41	5.2
TANN	e P	Z	23:51:30.7	72.9	337.9	2.4	104	5.5
GUNZ	e P	Z	23:51:30.8	72.9	337.9	2.4	99	5.5
WERN	e P	Z	23:51:31.4	73.0	337.9	2.0	66	5.4
MANZ	e P	Z	23:51:32.5	73.2	337.8	2.2	64	5.3
GRA1	e P	Z	23:51:33.2	73.3	337.3	2.0	157	5.7
	e PP	Z	23:54:19.3					
ROTZ	e P	Z	23:51:34.1	73.5	337.9	1.6	33	5.1
STU	e P	Z	23:51:34.7	73.6	336.2	1.8	45	5.2
BFO	e P	Z	23:51:35.7	73.8	335.8	1.6	71	5.5
	e pP	Z	23:51:39.2					
WET	e P	Z	23:51:38.3	74.2	338.3	2.1	76	5.3
GEC2	e P	Z	23:51:41.1	74.7	338.8	2.0	76	5.4
FUR	e P	Z	23:51:41.5	74.7	337.5	1.9	140	5.7
RJOB	e P	Z	23:51:45.6	75.5	338.4	0.9	16	5.2
GRA1	e S	R	00:01:10.9	73.3	337.3			
	e SS	R	00:05:49.3					
	e L	Z	00:27:20.5			18.3	1795	5.4

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/12 06:28:25.7 50.020N 152.200E 33.0N 5.2
 Northwest of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 06:39:43.9	71.2	24.8	0.9	21	5.3		
RUE	e P	Z 06:39:46.5	71.6	26.7	0.8	38	5.6		
NRDL	e P	Z 06:39:51.8	72.6	24.4	1.0	15	5.1		
CLL	e P	Z 06:39:53.3	72.9	26.1	1.0	52	5.6		
BRG	e P	Z 06:39:54.1	73.0	26.6	0.8	14	5.1		
CLZ	e P	Z 06:39:55.4	73.1	24.5	1.5	50	5.4		
FBE	e P	Z 06:39:55.1	73.1	26.2	0.9	30	5.4		
TANN	e P	Z 06:39:59.3	73.9	25.6	0.7	6	4.8		

WERD	e P	Z	06:39:59.3	73.9	25.5	0.8	12	5.0
MOX	e P	Z	06:39:59.4	73.9	25.1	1.2	27	5.1
GUNZ	e P	Z	06:39:59.8	73.9	25.5	0.7	19	5.2
WERN	e P	Z	06:40:00.1	74.0	25.5	0.7	26	5.4
UBBA	e P	Z	06:40:00.8	74.1	24.2	0.8	8	4.8
ROTZ	e P	Z	06:40:03.3	74.5	25.4	1.1	24	5.1
GRA1	e P	Z	06:40:05.4	74.8	24.8	0.9	47	5.5
WET	e P	Z	06:40:05.5	74.9	25.7	1.2	32	5.2
GEC2	e P	Z	06:40:05.3	74.9	26.2	0.7	11	5.0
RJOB	e P	Z	06:40:12.9	76.2	25.5	1.0	16	5.1
STU	e P	Z	06:40:12.6	76.2	23.5	0.7	16	5.2
BFO	e P	Z	06:40:16.3	76.9	22.9	0.8	14	5.1

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/12 17:35:13.5 51.600N 172.640E 33.0G 5.2 4.6
 Near Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	17:46:45.3	73.4	11.3	1.5	47	5.3		
RUE	e P	Z	17:46:51.4	74.4	13.4	1.8	97	5.6		
NRDL	e P	Z	17:46:53.7	74.9	11.1	1.6	27	5.1		
IBBN	e P	Z	17:46:56.0	75.3	9.6	1.8	120	5.7		
CLZ	e P	Z	17:46:57.2	75.5	11.3	1.5	36	5.3		
CLL	e P	Z	17:46:57.6	75.7	12.9	1.3	26	5.2		
BRG	e P	Z	17:46:59.4	76.0	13.5	1.1	19	5.1		
FBE	e P	Z	17:46:59.9	76.0	13.1	1.5	51	5.4		
MOX	e P	Z	17:47:02.6	76.5	12.0	1.5	16	5.0		
UBBA	e P	Z	17:47:02.7	76.5	11.0	1.7	30	5.2		
WERD	e P	Z	17:47:03.3	76.6	12.4	1.7	44	5.3		
TANN	e P	Z	17:47:03.5	76.6	12.5	1.7	47	5.3		
GUNZ	e P	Z	17:47:03.9	76.7	12.4	1.8	62	5.4		
WERN	e P	Z	17:47:04.3	76.7	12.4	1.9	78	5.4		
MANZ	e P	Z	17:47:05.9	77.1	12.3	1.8	31	5.0		
ROTZ	e P	Z	17:47:07.5	77.3	12.3	1.7	41	5.2		
GRA1	e P	Z	17:47:08.6	77.5	11.7	1.6	54	5.3		
	e L	Z	18:18:40.4			20.8	333		4.6	
WET	e P	Z	17:47:10.3	77.8	12.7	1.5	31	5.0		
GEC2	e P	Z	17:47:11.1	78.0	13.2	1.4	24	4.9		
WLF	e P	Z	17:47:11.6	78.1	8.5	1.6	34	5.0		
STU	e P	Z	17:47:15.0	78.6	10.4	0.7	11	4.9		
FUR	e P	Z	17:47:17.2	79.0	11.7	1.3	45	5.3		
BFO	e P	Z	17:47:17.5	79.2	9.8	1.1	13	4.9		
RJOB	e P	Z	17:47:17.2	79.2	12.6	1.0	11	4.8		

Date Origin Time Lat Long Depth mb Ms ML Source

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22

2007/12/12 20:31:50.2
Windward Islands

12.480N

59.300W

87.7

4.9

SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z	20:42:38.0	67.6	261.2	1.1	10	4.9		
GRA1	e P	Z	20:42:40.1	68.0	263.3	1.8	29	5.2		
	e pP	Z	20:43:01.8							
MANZ	e P	Z	20:42:43.9	68.6	263.9	0.9	5	4.8		
ROTZ	e pP	Z	20:43:06.9	68.6	264.0					
GUNZ	e P	Z	20:42:45.1	68.7	263.9	1.1	7	4.8		
TANN	e P	Z	20:42:45.8	68.8	264.0	3.2	79	5.4		
	e pP	Z	20:43:07.8							
WET	e P	Z	20:42:46.2	69.0	264.8	1.7	12	4.9		
	e pP	Z	20:43:09.1							
CLL	e P	Z	20:42:47.8	69.3	264.1	1.3	12	5.0		
FBE	e pP	Z	20:43:11.6	69.4	264.5					
GEC2	e P	Z	20:42:49.4	69.5	265.5	1.2	10	4.8		
BRG	e P	Z	20:42:51.5	69.8	265.0	1.1	5	4.5		

Date Origin Time
2007/12/13 00:36:52.8
South of Fiji Islands

Lat 21.770S

Long 179.810E

Depth 33.0G

mb

Ms

ML

Source
SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	00:55:31.4	146.9	18.0					
CLL	e PKPbc	Z	00:55:36.4	148.7	24.1					
	e PKPab	Z	00:55:43.2							
CLZ	e PKPbc	Z	00:55:36.9	148.8	19.2					
BRG	e PKPbc	Z	00:55:36.6	148.9	26.0					
	e PKPab	Z	00:55:44.3							
FBE	e PKPbc	Z	00:55:37.5	149.0	25.0					
NEUB	e PKPbc	Z	00:55:37.5	149.1	22.0					
MOX	e PKPbc	Z	00:55:38.7	149.7	22.1					
	e PKPab	Z	00:55:47.3							
TANN	e PKPbc	Z	00:55:38.9	149.7	23.8					
WERD	e PKPbc	Z	00:55:38.8	149.7	23.5					
GUNZ	e PKPbc	Z	00:55:39.2	149.8	23.6					
WERN	e PKPbc	Z	00:55:40.0	149.8	23.7					
NKC	e PKPbc	Z	00:55:39.4	149.9	23.9					
MANZ	e PKPbc	Z	00:55:40.0	150.2	23.4					
ROTZ	e PKPbc	Z	00:55:40.3	150.3	23.8					
GRA1	e PKPbc	Z	00:55:41.3	150.7	22.0					
WET	e PKPbc	Z	00:55:41.7	150.7	25.4					
	e PKPab	Z	00:55:52.7							
GEC2	e PKPbc	Z	00:55:41.2	150.8	27.2					
RJOB	e PKPab	Z	00:55:58.1	152.0	26.4					
FUR	e PKPab	Z	00:55:58.3	152.1	23.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/13	05:20:25.7	23.200S	70.500W	41.0		5.8		NEIC

Near coast of northern Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z	05:34:16.8	102.4	248.6					
	e PP	Z	05:38:24.2							
	e SKSac	R	05:44:57.8							
	e Sdiff	T	05:46:04.3							
	e PS	R	05:47:38.0							
	e SS	T	05:53:09.1							
	e L	Z	06:23:44.4			18.1	2664		5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/13	05:33: 0.2	20.530S	175.552W	33.0G				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	05:52:37.5	146.3	9.9					
NRDL	e PKPbc	Z	05:52:41.0	147.7	10.0					
IBBN	e PKPbc	Z	05:52:43.1	148.1	5.9					
	e PKPab	Z	05:52:46.0							
CLZ	e PKPbc	Z	05:52:43.4	148.3	10.6					
	e PKPab	Z	05:52:47.1							
CLL	e PKPbc	Z	05:52:42.8	148.5	15.5					
	e PKPab	Z	05:52:47.1							
BRG	e PKPbc	Z	05:52:44.5	148.8	17.3					
	e PKPab	Z	05:52:48.3							
MOX	e PKPbc	Z	05:52:45.8	149.4	13.3					
UBBA	e PKPbc	Z	05:52:45.9	149.4	10.3					
	e PKPab	Z	05:52:49.4							
TANN	e PKPbc	Z	05:52:46.2	149.5	14.9					
MANZ	e PKPbc	Z	05:52:47.5	149.9	14.4					
ROTZ	e PKPbc	Z	05:52:48.1	150.1	14.7					
GRA1	e PKPbc	Z	05:52:48.1	150.3	12.9					
WET	e PKPbc	Z	05:52:49.2	150.6	16.2					
GEC2	e PKPbc	Z	05:52:49.2	150.7	17.9					
WLF	e PKPbc	Z	05:52:50.1	150.8	3.3					
FUR	e PKPbc	Z	05:52:51.8	151.8	13.6					
RJOB	e PKPbc	Z	05:52:51.8	152.0	16.8					
BFO	e PKPbc	Z	05:52:52.0	152.0	7.8					
	e PKPab	Z	05:53:01.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/13	07:09:51.4	23.694S	66.692E	20.9	5.2			SZGRF

Mauritius - Reunion region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	07:22:32.2	86.5	132.9	1.0	9	4.8		
	e pP	Z	07:22:38.6			1.0	9			
WET	e P	Z	07:22:35.6	87.1	132.3	1.0	11	4.9		
	e pP	Z	07:22:41.3			1.0	11			
FUR	e P	Z	07:22:37.5	87.3	131.0	1.1	74	5.7		
	e pP	Z	07:22:43.7			1.1	74			
BRG	e P	Z	07:22:39.3	87.8	133.2	1.3	18	5.2		
	e pP	Z	07:22:45.3			1.3	18			
ROTZ	e P	Z	07:22:39.6	87.9	131.8	1.9	21	5.1		
MANZ	e P	Z	07:22:40.2	88.1	131.7	1.1	11	5.1		
	e pP	Z	07:22:46.3			1.1	11			
NKC	e P	Z	07:22:41.1	88.1	132.0					
FBE	e P	Z	07:22:40.4	88.1	132.7					
WERN	e P	Z	07:22:41.1	88.2	131.9					
TANN	e P	Z	07:22:41.2	88.2	132.0	1.8	27	5.3		
GUNZ	e P	Z	07:22:41.7	88.2	131.9					
WERD	e P	Z	07:22:41.6	88.3	131.9					
GRA1	e P	Z	07:22:41.5	88.3	131.0	1.2	41	5.6		
	e pP	Z	07:22:48.0			1.2	41			
GRFO	e P	Z	07:22:41.7	88.3	131.0					
CLL	e P	Z	07:22:42.9	88.5	132.4	1.7	32	5.4		
	e pP	Z	07:22:48.9			0.8	10			
MOX	e P	Z	07:22:43.8	88.8	131.3	1.4	17	5.1		
	e pP	Z	07:22:50.2							
BFO	e P	Z	07:22:44.6	88.9	128.8	1.7	34	5.3		
WLF	e P	Z	07:22:53.1	90.8	127.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/13	07:23:46.5	23.000S	70.300W	59.0		6.1		NEIC

Near coast of northern Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e PP	Z	07:41:22.4	99.1	245.0					
BFO	e PP	Z	07:41:26.4	99.9	246.3					
BUG	e PP	Z	07:41:32.2	100.5	246.1					
STU	e PP	Z	07:41:31.7	100.6	247.0					
IBBN	e PP	Z	07:41:36.1	101.1	246.6					
FUR	e PP	Z	07:41:39.2	101.6	248.4					
UBBA	e PP	Z	07:41:40.9	101.8	248.0					
GRA1	e Pdiff	Z	07:37:35.3	102.1	248.6					
	e PP	Z	07:41:43.5							

	e	SKSac	R	07:48:08.5						
	e	Sdiff	T	07:49:14.1						
	e	PS	R	07:50:54.1						
	e	SS	T	07:56:19.8						
	e	L	Z	08:28:37.6			18.4	4912		6.1
RJOB	e	PP	Z	07:41:45.0	102.4	249.3				
CLZ	e	PP	Z	07:41:46.7	102.4	248.4				
MOX	e	PP	Z	07:41:47.6	102.7	249.1				
ROTZ	e	PP	Z	07:41:48.4	102.8	249.3				
MANZ	e	PP	Z	07:41:47.6	102.8	249.3				
WET	e	PP	Z	07:41:50.0	102.9	249.7				
TANN	e	PP	Z	07:41:51.0	103.1	249.7				
BSEG	e	PP	Z	07:41:50.7	103.1	248.9				
GEC2	e	PP	Z	07:41:51.5	103.3	250.2				
CLL	e	PP	Z	07:41:55.2	103.8	250.3				
BRG	e	PP	Z	07:41:58.7	104.2	250.8				

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/13 15:51:29.3 15.747S 171.159W 33.0N 6.0
 Samoa Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 16:10:51.0	141.8	2.3					
NRDL	e PKPbc	Z 16:10:55.8	143.2	2.0					
IBBN	e PKPbc	Z 16:10:56.2	143.4	358.3					
CLZ	e PKPbc	Z 16:10:58.0	143.9	2.5					
CLL	e PKPbc	Z 16:10:58.5	144.3	6.9					
	e PP	Z 16:14:17.0							
BUG	e PKPbc	Z 16:10:58.8	144.3	357.4					
BRG	e PKPbc	Z 16:11:00.3	144.6	8.5					
FBE	e PKPbc	Z 16:11:00.3	144.6	7.5					
	e PP	Z 16:14:19.5							
UBBA	e PKPbc	Z 16:11:00.7	144.9	1.9					
	e PP	Z 16:14:20.6							
MOX	e PKPbc	Z 16:11:01.3	145.0	4.7					
WERD	e PKPbc	Z 16:11:01.9	145.2	5.8					
	e PP	Z 16:14:23.2							
TANN	e PKPbc	Z 16:11:02.0	145.2	6.1					
GUNZ	e PKPbc	Z 16:11:02.3	145.3	5.9					
	e PP	Z 16:14:23.3							
WERN	e PKPbc	Z 16:11:02.6	145.3	6.0					
	e PP	Z 16:14:24.2							
MANZ	e PKPbc	Z 16:11:03.8	145.7	5.6					
	e PP	Z 16:14:25.8							
ROTZ	e PKPbc	Z 16:11:04.7	145.9	5.8					
	e PP	Z 16:14:27.6							
GRA1	e PKPbc	Z 16:11:06.1	146.0	4.1					

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	e L	Z	17:15:09.5			20.1	2303	6.0
WLF	e PKPbc	Z	16:11:05.7	146.0	355.4			
WET	e PKPbc	Z	16:11:06.1	146.4	7.0			
	e PP	Z	16:14:31.3					
GEC2	e PKPbc	Z	16:11:06.9	146.7	8.5			
STU	e PKPbc	Z	16:11:08.2	147.0	0.6			
BFO	e PKPbc	Z	16:11:09.0	147.4	359.1			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/13	18:06:11.3	38.194N	34.238E	10.0G	4.7	3.8		SZGRF

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 18:10:22.8	18.2	118.1	1.1	29	4.3		
RJOB	e P	Z 18:10:23.9	18.3	113.6	1.2	24	4.2		
WET	e P	Z 18:10:29.0	18.8	117.5	1.8	80	4.7		
BRG	e P	Z 18:10:33.5	19.1	123.7	1.1	16	4.2		
FUR	e P	Z 18:10:37.3	19.4	112.5	1.5	120	4.9		
FBE	e P	Z 18:10:38.4	19.5	122.8	1.1	35	4.5		
ROTZ	e P	Z 18:10:37.5	19.5	118.0	1.2	15	4.1		
TANN	e P	Z 18:10:40.2	19.7	120.0	2.2	60	4.4		
GUNZ	e P	Z 18:10:41.1	19.7	119.7	1.1	28	4.4		
WERD	e P	Z 18:10:41.1	19.8	119.8	1.1	20	4.3		
CLL	e P	Z 18:10:41.9	19.9	123.1	1.3	34	4.4		
GRA1	e P	Z 18:10:43.3	20.0	116.3	1.4	34	4.4		
	e L	Z 18:18:05.7			21.9	506		3.8	
RUE	e P	Z 18:10:44.7	20.1	127.1	2.3	404	5.2		
MOX	e P	Z 18:10:46.7	20.3	119.2	2.1	102	4.7		
STU	e P	Z 18:10:53.0	20.9	111.0	1.3	121	5.1		
UBBA	e P	Z 18:10:57.6	21.2	117.1	1.5	97	4.9		
BFO	e P	Z 18:10:57.8	21.3	108.8	1.2	190	5.3		
CLZ	e P	Z 18:11:00.3	21.5	119.9	1.2	96	5.1		
RGN	e P	Z 18:11:01.5	21.6	130.5	1.2	263	5.5		
TNS	e P	Z 18:11:04.0	21.9	113.4					
NRDL	e P	Z 18:11:05.1	22.0	120.9	1.2	55	4.9		
BSEG	e P	Z 18:11:11.8	22.7	124.2	1.1	45	4.9		
WLF	e P	Z 18:11:15.5	23.1	109.1	1.8	71	4.9		
IBBN	e P	Z 18:11:17.3	23.2	117.0	1.2	42	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/14	15:36:42.9	25.310S	178.600W	33.0G				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 15:55:47.5	150.6	16.6					

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NRDL	e PKPbc	Z	15:55:50.7	152.0	17.0
	e PKPab	Z	15:56:01.1		
CLL	e PKPbc	Z	15:55:51.9	152.5	23.2
	e PKPab	Z	15:56:04.3		
IBBN	e PKPbc	Z	15:55:52.6	152.6	12.6
CLZ	e PKPbc	Z	15:55:52.2	152.6	17.8
BRG	e PKPbc	Z	15:55:52.2	152.7	25.3
	e PKPab	Z	15:56:05.3		
FBE	e PKPbc	Z	15:55:52.5	152.8	24.2
	e PKPab	Z	15:56:05.9		
NEUB	e PKPbc	Z	15:55:52.7	152.9	20.9
	e PKPab	Z	15:56:06.3		
MOX	e PKPab	Z	15:56:08.7	153.5	21.0
TANN	e PKPab	Z	15:56:08.5	153.5	22.9
WERD	e PKPbc	Z	15:55:53.9	153.5	22.5
	e PKPab	Z	15:56:08.9		
GUNZ	e PKPbc	Z	15:55:54.2	153.6	22.6
	e PKPab	Z	15:56:09.1		
WERN	e PKPab	Z	15:56:09.4	153.6	22.8
MANZ	e PKPbc	Z	15:55:55.1	154.0	22.5
GRA1	e PKPab	Z	15:56:12.7	154.5	21.0
WET	e PKPab	Z	15:56:14.2	154.5	24.7
WLF	e PKPab	Z	15:56:16.8	155.4	10.4
RJOB	e PKPab	Z	15:56:20.0	155.8	25.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/14	18:24:43.9	26.600S	176.400W	29.0				NEIC
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 18:45:04.5	156.2	17.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/15	02:46: 2.5	19.100S	176.200W	35.0				NEIC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 03:05:46.6	148.8	13.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/15	04:52:46.0	42.024N	142.321E	33.0N	4.7			SZGRF
Hokkaido, Japan, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:04:45.8	78.8	34.8	1.8	14	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/15	08:03:17.7	7.600S	127.400E	194.0				NEIC

Banda Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKiKP	Z 08:21:27.2	110.3	75.5					
BRG	e PKiKP	Z 08:21:27.4	110.6	76.2					
FBE	e PKiKP	Z 08:21:28.0	110.9	75.7					
CLL	e PKiKP	Z 08:21:28.0	111.0	75.3					
GEC2	e PKiKP	Z 08:21:28.2	111.2	76.8					
TANN	e PKiKP	Z 08:21:29.3	111.6	75.2					
WET	e PKiKP	Z 08:21:29.8	111.7	76.0					
WERN	e PKiKP	Z 08:21:29.6	111.7	75.2					
WERD	e PKiKP	Z 08:21:28.7	111.7	75.0					
GUNZ	e PKiKP	Z 08:21:29.5	111.7	75.1					
BSEG	e PKiKP	Z 08:21:30.3	111.9	72.0					
ROTZ	e PKiKP	Z 08:21:30.4	111.9	75.2					
MANZ	e PKiKP	Z 08:21:30.0	111.9	75.0					
RJOB	e PKiKP	Z 08:21:29.6	112.1	76.5					
MOX	e PKiKP	Z 08:21:30.3	112.1	74.4					
CLZ	e PKiKP	Z 08:21:31.3	112.5	72.9					
GRA1	e Pdiff	Z 08:17:37.9	112.6	74.4					
	e PKiKP	Z 08:21:31.1							
	e PP	Z 08:22:22.5							
	e PKKPbc	Z 08:32:22.2							
	e PKKPab	Z 08:32:29.4							
FUR	e PKiKP	Z 08:21:31.7	112.9	75.1					
UBBA	e PKiKP	Z 08:21:32.4	113.0	72.9					
HLG	e PKiKP	Z 08:21:32.6	113.1	69.7					
IBBN	e PKiKP	Z 08:21:33.5	113.9	70.4					
STU	e PKiKP	Z 08:21:34.3	114.1	73.1					
BUG	e PKiKP	Z 08:21:34.6	114.4	70.3					
BFO	e PKiKP	Z 08:21:34.8	114.8	72.6					
WLF	e PKiKP	Z 08:21:37.9	115.7	70.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/15	09:39:49.3	6.752S	131.124E	20.0N		5.8		NEIC

Tanimbar Islands, Indonesia, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKiKP	Z 09:58:26.3	114.2	70.7					

e SP	Z	10:08:46.1									
e L	Z	10:50:52.5			21.7	2570				5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/15	18:22:28.7	32.448S	71.368W	32.0N		5.8		NEIC

Near coast of central Chile

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e L	Z 19:24:47.8	109.8	242.8	21.5	2798		5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/16	05:15:51.4	40.400N	143.389E	33.0N	4.6			SZGRF

Off east coast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:28:01.0	80.6	34.9	1.1	6	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/16	08:09:30.7	21.620S	68.780W	48.2		6.4		SZGRF

Chile-Bolivia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z 08:22:53.8	97.1	244.8					
	e Sdiff	T 08:34:17.8							
	e SP	Z 08:35:41.9							
	e SS	T 08:41:07.7							
BFO	e Pdiff	Z 08:22:56.8	97.9	246.2					
	e Sdiff	T 08:34:26.1							
	e SP	Z 08:35:51.2							
	e SS	T 08:41:04.6							
BUG	e Pdiff	Z 08:22:59.9	98.5	245.8					
	e Sdiff	T 08:34:28.8							
	e SP	Z 08:35:57.4							
	e SS	T 08:41:13.3							
STU	e Pdiff	Z 08:23:00.1	98.6	246.9					
	e Sdiff	T 08:34:31.8							
	e SP	Z 08:35:59.0							
	e SS	T 08:41:14.9							
IBBN	e Pdiff	Z 08:23:02.7	99.2	246.3					
	e Sdiff	T 08:34:32.4							
	e SP	Z 08:36:05.4							
	e SS	T 08:41:25.4							
FUR	e Pdiff	Z 08:23:05.2	99.6	248.2					

	e Sdiff	T	08:34:41.6				
	e SP	Z	08:36:10.3				
	e SS	T	08:41:29.1				
UBBA	e Pdiff	Z	08:23:05.8	99.9	247.8		
	e Sdiff	T	08:34:42.2				
	e SP	Z	08:36:12.9				
	e SS	T	08:41:32.0				
GRA1	e Pdiff	Z	08:23:07.4	100.2	248.5		
	e pPdiff	Z	08:23:21.8				
	e PP	Z	08:27:15.4				
	e SKSac	R	08:33:45.7				
	e Sdiff	T	08:34:46.2				
	e SP	Z	08:36:16.8				
	e SS	T	08:41:36.5				
	e L	Z	09:09:06.4			22.0	11757
RJOB	e Pdiff	Z	08:23:08.9	100.4	249.2		6.4
	e Sdiff	T	08:34:47.4				
	e SP	Z	08:36:18.2				
	e SS	T	08:41:38.1				
CLZ	e Pdiff	Z	08:23:08.7	100.5	248.2		
	e Sdiff	T	08:34:46.1				
	e SP	Z	08:36:20.1				
	e SS	T	08:41:38.8				
NRDL	e SS	T	08:41:39.8	100.6	248.1		
MOX	e Pdiff	Z	08:23:10.0	100.8	248.9		
	e Sdiff	T	08:34:51.6				
	e SP	Z	08:36:23.5				
	e SS	T	08:41:44.2				
ROTZ	e Pdiff	Z	08:23:10.6	100.8	249.2		
	e Sdiff	T	08:34:52.0				
	e SP	Z	08:36:24.4				
	e SS	T	08:41:44.7				
MANZ	e Pdiff	Z	08:23:10.6	100.8	249.1		
	e Sdiff	T	08:34:52.5				
	e SP	Z	08:36:23.6				
	e SS	T	08:41:45.5				
WET	e Pdiff	Z	08:23:11.1	101.0	249.5		
	e Sdiff	T	08:34:53.2				
	e SP	Z	08:36:25.0				
	e SS	T	08:41:46.1				
TANN	e Pdiff	Z	08:23:12.8	101.2	249.5		
	e Sdiff	T	08:34:55.4				
	e SP	Z	08:36:29.0				
	e SS	T	08:41:50.7				
BSEG	e Pdiff	Z	08:23:11.9	101.2	248.5		
	e Sdiff	T	08:34:50.5				
	e SP	Z	08:36:25.5				
	e SS	T	08:41:48.3				
GEC2	e Pdiff	Z	08:23:12.9	101.4	250.1		

	e Sdiff	T	08:34:56.2					
	e SP	Z	08:36:27.9					
	e SS	T	08:41:51.6					
CLL	e Pdiff	Z	08:23:14.6	101.8	250.0			
	e Sdiff	T	08:34:58.9					
	e SP	Z	08:36:34.7					
	e SS	T	08:41:57.2					
BRG	e Pdiff	Z	08:23:16.8	102.2	250.6			
	e Sdiff	T	08:35:03.0					
	e SP	Z	08:36:38.8					
	e SS	T	08:42:03.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/16	10:05:15.6	71.252N	0.669E	33.0N	4.4			SZGRF
Norwegian Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z 10:09:38.5	19.2	350.8	1.5	29	4.3		
CLZ	e P	Z 10:09:45.7	19.9	350.8	1.1	23	4.3		
CLL	e P	Z 10:09:53.4	20.7	348.8	1.4	16	4.2		
UBBA	e P	Z 10:09:55.3	20.9	351.6	1.4	17	4.2		
FBE	e P	Z 10:09:58.0	21.1	348.7	1.5	42	4.6		
MOX	e P	Z 10:09:59.5	21.2	350.3	1.6	29	4.4		
BRG	e P	Z 10:09:59.2	21.3	348.3	1.5	23	4.3		
WERD	e P	Z 10:10:02.5	21.5	349.8	1.0	10	4.2		
TANN	e P	Z 10:10:02.8	21.5	349.7	1.1	12	4.2		
GUNZ	e P	Z 10:10:03.2	21.6	349.8	1.7	24	4.4		
WERN	e P	Z 10:10:04.5	21.6	349.8	1.2	27	4.5		
WLF	e P	Z 10:10:04.7	21.7	355.2	1.7	34	4.5		
GRA1	e P	Z 10:10:08.5	22.1	351.0	1.8	35	4.5		
WET	e P	Z 10:10:16.9	22.8	349.9	2.2	40	4.5		
GEC2	e P	Z 10:10:20.2	23.2	349.4	1.0	14	4.4		
RJOB	e P	Z 10:10:29.4	24.2	350.5	2.0	43	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/16	15:22:12.8	26.000S	177.700W	167.0				NEIC
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 15:42:11.5	155.3	19.5					
	e pPKPab	Z 15:42:54.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/12/17 07:30:41.7
Southern Xinjiang, China

39.805N 76.003E 33.0N 4.4 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 07:38:43.5	43.6	79.6	0.7	4	4.2		
FBE	e P	Z 07:38:46.4	44.0	79.2	0.7	5	4.4		
CLL	e P	Z 07:38:47.5	44.1	79.4	0.6	5	4.4		
GEC2	e P	Z 07:38:47.9	44.2	77.4	1.3	10	4.4		
WET	e P	Z 07:38:51.6	44.7	77.2	1.0	4	4.3		
GRA1	e P	Z 07:38:58.8	45.6	76.7	0.8	4	4.5		

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/17 09:03:17.9 51.225N 179.539W 33.0N 4.8 4.5 SZGRF
Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 09:15:07.9	77.3	8.6	1.2	11	4.9		
MOX	e P	Z 09:15:11.4	77.7	7.1	0.8	6	4.8		
WERD	e P	Z 09:15:12.1	77.8	7.6	1.2	6	4.6		
WERN	e P	Z 09:15:13.3	78.0	7.6	0.9	8	4.9		
MANZ	e P	Z 09:15:14.9	78.3	7.4	1.4	10	4.7		
GRA1	e P	Z 09:15:17.1	78.7	6.8	0.9	20	5.1		
	e L	Z 09:54:08.3			21.2	246		4.5	

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/17 20:12:30.8 20.038S 170.597E 140.6 SZGRF
Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z 20:31:46.7	144.1	39.4					
	e SKPdf	Z 20:35:15.2							
CLL	e PKPbc	Z 20:31:46.1	144.1	37.7					
	e SKPdf	Z 20:35:15.2							
FBE	e PKPbc	Z 20:31:48.0	144.3	38.5					
	e SKPdf	Z 20:35:15.7							
CLZ	e PKPbc	Z 20:31:49.4	144.6	33.3					
	e SKPdf	Z 20:35:16.4							
TANN	e PKPbc	Z 20:31:50.0	145.1	37.6					
	e pPKPbc	Z 20:32:25.6							
	e SKPdf	Z 20:35:17.4							
IBBN	e PKPbc	Z 20:31:50.1	145.1	29.0					
	e SKPdf	Z 20:35:18.0							
WERD	e PKPbc	Z 20:31:50.1	145.1	37.4					
	e SKPdf	Z 20:35:17.4							
GUNZ	e PKPbc	Z 20:31:50.3	145.1	37.5					

	e SKPdf	Z	20:35:17.7		
WERN	e PKPbc	Z	20:31:50.6	145.2	37.6
	e SKPdf	Z	20:35:17.9		
MOX	e PKPbc	Z	20:31:50.1	145.2	36.2
	e pPKPbc	Z	20:32:27.7		
MANZ	e PKPbc	Z	20:31:51.5	145.5	37.5
	e SKPdf	Z	20:35:18.4		
UBBA	e PKPbc	Z	20:31:51.5	145.6	33.6
	e SKPdf	Z	20:35:17.9		
ROTZ	e PKPbc	Z	20:31:52.2	145.7	37.8
	e pPKPbc	Z	20:32:29.7		
GEC2	e PKPbc	Z	20:31:52.0	145.8	40.9
WET	e PKPbc	Z	20:31:52.5	145.9	39.4
BUG	e PKPbc	Z	20:31:52.9	146.0	28.8
GRA1	e PKPbc	Z	20:31:53.9	146.1	36.4
	e pPKPbc	Z	20:32:30.4		
RJOB	e PKPbc	Z	20:31:55.8	147.0	40.7
FUR	e PKPbc	Z	20:31:57.1	147.3	37.9
STU	e PKPbc	Z	20:31:58.1	147.6	34.0
WLF	e PKPbc	Z	20:31:59.4	147.9	28.3
BFO	e PKPbc	Z	20:31:59.5	148.3	33.0
	e pPKPbc	Z	20:32:37.0		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/18 01:38:58.7 26.100S 177.700W 267.0
 South of Fiji Islands NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:58:47.5	155.4	19.6					

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/18 03:03:32.9 23.540S 176.440W 33.0N
 South of Fiji Islands SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 03:23:18.1	149.2	12.2					
NRDL	e PKPbc	Z 03:23:21.1	150.6	12.3					
CLZ	e PKPbc	Z 03:23:23.4	151.2	13.1					
CLL	e PKPbc	Z 03:23:23.1	151.3	18.2					
BRG	e PKPbc	Z 03:23:23.8	151.5	20.3					
FBE	e PKPbc	Z 03:23:24.3	151.6	19.1					
NEUB	e PKPbc	Z 03:23:24.5	151.6	16.0					
MOX	e PKPbc	Z 03:23:25.3	152.2	16.0					
WERD	e PKPbc	Z 03:23:25.5	152.2	17.4					

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TANN	e	PKPbc	Z	03:23:25.5	152.2	17.7
GUNZ	e	PKPbc	Z	03:23:25.5	152.3	17.5
MANZ	e	PKPbc	Z	03:23:26.8	152.7	17.3
ROTZ	e	PKPbc	Z	03:23:27.5	152.9	17.6
GRA1	e	PKPbc	Z	03:23:27.5	153.2	15.7
GEC2	e	PKPbc	Z	03:23:27.6	153.5	21.2
STU	e	PKPbc	Z	03:23:30.5	154.4	12.0
RJOB	e	PKPbc	Z	03:23:31.2	154.7	20.1
BFO	e	PKPbc	Z	03:23:31.4	154.9	10.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/18	03:26:38.1	45.626N	15.433E	10.0G			3.1	SZGRF
Northwestern Balkan Peninsula								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ARSA	e Pg	Z 03:27:06.9	1.6	182.2					2.5
	e Sn	N 03:27:24.7							
KBA	e Pg	Z 03:27:15.0	2.0	134.5					2.9
	e Pn	Z 03:27:16.3	2.4	159.8					2.7
MOA	e Sn	N 03:27:44.9							
	e Pn	Z 03:27:22.5	2.8	138.4					3.1
WTTA	e Pn	Z 03:27:27.3	3.1	120.7					3.1
	e Sn	E 03:28:00.3							
GEC2	e Pn	Z 03:27:30.1	3.4	159.3					3.0
	e Sn	N 03:28:09.4							
DAVA	e Pn	Z 03:27:42.0	4.2	111.4					3.4
	e Sn	N 03:28:24.9							
TANN	e Pn	Z 03:27:53.7	5.2	156.3					
	e Sn	Z 03:28:50.3							
BFO	e Pn	Z 03:27:59.2	5.5	116.5					
	e Sn	N 03:28:59.1							
MOX	e Pn	Z 03:27:59.8	5.6	151.6					
	e Sn	N 03:29:02.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/18	05:56:20.9	30.109N	69.294E	33.0N	5.1	4.3		SZGRF
Pakistan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:04:37.4	45.6	95.2	1.0	13	4.9		
GEC2	e P	Z 06:04:37.0	45.6	93.0	1.0	10	4.8		
CLL	e P	Z 06:04:42.3	46.2	94.9	1.1	10	4.7		
TANN	e P	Z 06:04:45.2	46.5	93.6	1.2	12	4.9		
ROTZ	e P	Z 06:04:45.8	46.6	92.7	1.0	14	5.0		
MANZ	e P	Z 06:04:46.3	46.7	92.9	1.1	30	5.4		

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MOX	e P	Z	06:04:48.9	47.1	93.1						
GRA1	e P	Z	06:04:51.3	47.3	91.9	0.8	29	5.4			
	e pP	Z	06:04:58.7								
	e L	Z	06:28:37.0			19.4	333	4.3			
CLZ	e P	Z	06:04:54.7	47.9	93.2	1.1	34	5.4			
BSEG	e P	Z	06:04:56.6	48.1	95.0	1.1	27	5.3			
NRDL	e P	Z	06:04:56.4	48.1	93.6	1.1	23	5.2			
BFO	e P	Z	06:05:05.8	49.2	88.5	1.2	18	5.0			
IBBN	e P	Z	06:05:07.9	49.5	91.5	0.9	39	5.3			
WLF	e P	Z	06:05:15.8	50.6	88.0	1.3	22	4.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/18	14:35:26.2	50.913N	175.564E	33.0N	4.9			SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e P	Z 14:47:12.4	76.5	9.5	0.8	11	5.0		
MOX	e P	Z 14:47:18.5	77.5	10.3	1.0	10	4.9		
GRA1	e P	Z 14:47:24.6	78.5	10.0	1.1	8	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/18	19:47:23.0	39.400N	15.300E	307.0G				INGV

Tyrrhenian Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:49:48.3	10.7	162.8	0.7	9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	01:57:29.3	19.137N	64.225W	33.0N	4.9	4.4		SZGRF

Virgin Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:08:14.2	66.2	271.9	1.2	9	4.9		
	e L	Z 02:30:55.7			22.0	255		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	02:44:16.5	44.146N	147.130E	33.0N	4.9			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z 02:56:03.1	76.5	30.2	2.0	30	5.0		

CLL	e P	Z	02:56:03.3	76.6	32.0	0.6	14	5.2
BRG	e P	Z	02:56:03.7	76.7	32.5	0.5	2	4.4
FBE	e P	Z	02:56:05.2	76.8	32.1	0.9	10	4.9
CLZ	e P	Z	02:56:06.3	77.0	30.3	0.8	10	4.9
IBBN	e P	Z	02:56:08.2	77.4	28.6	0.9	14	5.1
MOX	e P	Z	02:56:09.5	77.6	31.0	0.6	4	4.7
GUNZ	e P	Z	02:56:09.6	77.7	31.4	0.8	7	4.9
WERN	e P	Z	02:56:10.0	77.7	31.4	0.6	7	4.9
UBBA	e P	Z	02:56:11.6	78.0	29.9	0.7	4	4.7
ROTZ	e P	Z	02:56:12.9	78.2	31.3	1.2	5	4.5
GEC2	e P	Z	02:56:14.3	78.5	32.1	0.9	5	4.6
WET	e P	Z	02:56:15.0	78.5	31.6	1.0	11	4.9
GRA1	e P	Z	02:56:15.3	78.6	30.6	0.7	15	5.2
TNS	e P	Z	02:56:17.3	79.0	28.9	1.6	34	5.2
BFO	e P	Z	02:56:26.4	80.7	28.6	1.2	6	4.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	09:30:26.3	51.060N	179.620E	33.0N	6.4	6.9		SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 09:42:00.3	73.8	8.9	1.4	1866	6.9		
	e S	T 09:51:32.1							
HLG	e P	Z 09:42:04.8	74.5	5.4	1.3	1106	6.7		
	e S	T 09:51:39.2							
BSEG	e P	Z 09:42:05.2	74.6	6.9	1.1	681	6.6		
	e S	T 09:51:41.5							
RUE	e P	Z 09:42:11.4	75.8	9.1	1.2	561	6.6		
	e S	T 09:51:52.9							
NRDL	e P	Z 09:42:13.0	76.1	6.8	1.3	555	6.5		
	e S	T 09:51:56.4							
IBBN	e P	Z 09:42:15.3	76.4	5.3	1.5	1793	7.0		
	e S	T 09:52:00.4							
CLZ	e P	Z 09:42:17.1	76.7	6.9	1.5	1160	6.8		
	e S	T 09:52:04.2							
CLL	e P	Z 09:42:17.9	77.0	8.6	1.2	258	6.2		
	e S	T 09:52:05.6							
BUG	e P	Z 09:42:19.8	77.3	4.9	1.3	491	6.5		
	e S	T 09:52:10.3							
BRG	e P	Z 09:42:20.0	77.3	9.2	1.4	374	6.3		
	e S	T 09:52:09.5							
FBE	e P	Z 09:42:20.5	77.4	8.8	1.2	487	6.5		
UBBA	e P	Z 09:42:22.4	77.7	6.7	1.6	574	6.5		
	e S	T 09:52:14.8							
MOX	e P	Z 09:42:22.7	77.8	7.7	1.2	348	6.4		
	e S	T 09:52:15.9							
WERD	e P	Z 09:42:23.6	77.9	8.1	1.2	254	6.2		

TANN	e P	Z	09:42:23.8	77.9	8.2	1.5	345	6.3
	e S	T	09:52:16.9					
GUNZ	e P	Z	09:42:24.1	78.0	8.1	1.1	283	6.3
WERN	e P	Z	09:42:24.6	78.1	8.2	1.1	440	6.5
MANZ	e P	Z	09:42:26.1	78.4	8.0	1.2	210	6.1
	e S	T	09:52:23.2					
TNS	e P	Z	09:42:26.3	78.4	5.6	1.2	370	6.3
	e S	T	09:52:21.7					
ROTZ	e P	Z	09:42:27.7	78.6	8.0	1.1	290	6.2
	e S	T	09:52:23.7					
GRA1	e P	Z	09:42:28.6	78.8	7.4	1.2	685	6.6
	e S	T	09:52:26.4					
	e SS	R	09:57:59.1					
	e PKPPKPdf	Z	10:09:24.7					
	e L	Z	10:25:23.5			18.2	55065	6.9
GRFO	e S	T	09:52:25.9	78.8	7.4			
WLF	e P	Z	09:42:30.4	79.1	4.2	1.1	324	6.2
	e S	T	09:52:30.6					
WET	e P	Z	09:42:30.6	79.2	8.4	1.5	322	6.0
	e S	T	09:52:30.4					
GEC2	e P	Z	09:42:31.6	79.4	9.0	1.4	256	6.0
	e S	T	09:52:32.9					
STU	e P	Z	09:42:33.8	79.8	6.1	1.0	314	6.2
	e S	T	09:52:39.4					
FUR	e P	Z	09:42:36.5	80.3	7.4	1.1	444	6.4
	e S	T	09:52:43.7					
BFO	e P	Z	09:42:36.5	80.3	5.5	1.4	328	6.2
	e S	T	09:52:43.6					
RJOB	e P	Z	09:42:38.1	80.6	8.4	0.8	219	6.2
	e S	T	09:52:47.0					

Date 2007/12/19 Origin Time 09:44:17.9 Lat 50.820N Long 178.820E Depth 33.0N mb 5.5 Ms ML Source SZGRF
 Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 09:55:53.0	73.9	9.5	0.8	185	6.2		
HLG	e P	Z 09:55:57.2	74.7	5.9	1.2	137	5.9		
BSEG	e P	Z 09:55:57.8	74.8	7.5	0.9	110	5.9		
RUE	e P	Z 09:56:03.8	75.9	9.7	0.9	66	5.7		
NRDL	e P	Z 09:56:05.5	76.2	7.3	1.0	56	5.6		
IBBN	e P	Z 09:56:07.9	76.6	5.8	1.0	145	6.1		
CLZ	e P	Z 09:56:09.4	76.9	7.5	1.0	78	5.8		
CLL	e P	Z 09:56:10.2	77.2	9.1	0.8	30	5.5		
BUG	e P	Z 09:56:12.2	77.5	5.5	0.6	37	5.7		
BRG	e P	Z 09:56:12.4	77.5	9.7	0.8	30	5.5		
FBE	e P	Z 09:56:12.8	77.5	9.3	1.0	52	5.6		

UBBA	e P	Z	09:56:14.8	77.9	7.2	1.5	43	5.3
MOX	e P	Z	09:56:15.0	78.0	8.2	0.9	38	5.5
WERD	e P	Z	09:56:15.9	78.1	8.7	1.1	24	5.2
TANN	e P	Z	09:56:15.9	78.1	8.8	1.5	31	5.2
GUNZ	e P	Z	09:56:16.2	78.2	8.7	0.9	27	5.3
WERN	e P	Z	09:56:16.9	78.2	8.7	1.0	64	5.6
MANZ	e P	Z	09:56:18.6	78.6	8.5	1.1	24	5.1
TNS	e P	Z	09:56:18.6	78.6	6.2	0.8	40	5.5
ROTZ	e P	Z	09:56:20.1	78.8	8.6	1.2	39	5.3
GRA1	e P	Z	09:56:20.9	78.9	7.9	0.9	62	5.7
WET	e P	Z	09:56:23.0	79.3	9.0	0.9	18	5.0
WLF	e P	Z	09:56:22.9	79.3	4.7	0.9	41	5.3
GEC2	e P	Z	09:56:23.6	79.5	9.5	0.9	29	5.2
STU	e P	Z	09:56:26.3	80.0	6.6	0.7	29	5.3
FUR	e P	Z	09:56:28.9	80.4	7.9	1.1	73	5.6
BFO	e P	Z	09:56:29.0	80.5	6.1	1.0	25	5.2
RJOB	e P	Z	09:56:30.7	80.7	8.9	0.8	32	5.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	09:46:59.0	51.628N	179.663E	78.7	5.1			SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 09:58:21.8	73.2	8.8	0.6	89	5.9		
BSEG	e P	Z 09:58:26.6	74.1	6.9	0.9	36	5.4		
	e pP	Z 09:58:47.8							
RUE	e P	Z 09:58:32.9	75.2	9.0	0.7	29	5.5		
NRDL	e P	Z 09:58:34.4	75.5	6.7	1.0	19	5.2		
IBBN	e P	Z 09:58:36.7	75.8	5.2	0.7	37	5.6		
	e pP	Z 09:58:57.7							
CLZ	e P	Z 09:58:38.6	76.1	6.8	0.8	26	5.4		
CLL	e P	Z 09:58:39.4	76.4	8.5	0.7	14	5.2		
BUG	e P	Z 09:58:41.1	76.7	4.8	0.6	14	5.2		
	e pP	Z 09:59:02.1							
BRG	e P	Z 09:58:41.4	76.8	9.0	0.8	10	5.0		
	e pP	Z 09:59:02.5							
FBE	e P	Z 09:58:41.9	76.8	8.7	1.1	19	5.1		
	e pP	Z 09:59:02.5							
MOX	e P	Z 09:58:44.1	77.2	7.6	0.8	11	5.1		
	e pP	Z 09:59:05.0							
WERD	e P	Z 09:58:45.0	77.4	8.0	1.1	10	4.9		
	e pP	Z 09:59:05.6							
TANN	e P	Z 09:58:45.2	77.4	8.1	1.0	5	4.6		
GUNZ	e P	Z 09:58:45.5	77.4	8.0	0.8	9	5.0		
WERN	e P	Z 09:58:46.0	77.5	8.0	0.8	20	5.3		
	e pP	Z 09:59:07.1							
MANZ	e P	Z 09:58:47.5	77.8	7.9	0.8	6	4.8		

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TNS	e P	Z	09:58:47.7	77.9	5.6	0.7	14	5.2
	e pP	Z	09:59:08.8					
ROTZ	e P	Z	09:58:49.1	78.0	7.9	0.9	8	4.9
	e pP	Z	09:59:09.6					
GRA1	e P	Z	09:58:50.0	78.2	7.3	0.8	22	5.2
	e pP	Z	09:59:10.8					
WLF	e P	Z	09:58:51.8	78.6	4.1	0.8	15	5.1
	e pP	Z	09:59:12.5					
WET	e P	Z	09:58:52.0	78.6	8.3	1.0	8	4.7
GEC2	e P	Z	09:58:53.0	78.8	8.8	0.7	10	4.9
STU	e P	Z	09:58:55.2	79.3	6.0	0.7	14	5.0
BFO	e P	Z	09:58:57.9	79.8	5.5	0.8	8	4.7
	e pP	Z	09:59:18.5					
RJOB	e P	Z	09:58:59.5	80.0	8.2	0.7	13	4.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	10:01:4.3	51.216N	179.933W	33.0N	5.2			SZGRF
Andreanof Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:12:39.8	74.5	6.6	0.9	33	5.4		
NRDL	e P	Z	10:12:47.9	75.9	6.5	1.0	24	5.3		
IBBN	e P	Z	10:12:50.1	76.3	5.0	0.8	42	5.6		
CLZ	e P	Z	10:12:51.9	76.6	6.6	1.0	28	5.3		
CLL	e P	Z	10:12:52.7	76.9	8.3	0.9	10	5.0		
BRG	e P	Z	10:12:54.6	77.2	8.9	0.8	11	5.0		
MOX	e P	Z	10:12:57.4	77.7	7.4	1.0	12	5.0		
TANN	e P	Z	10:12:58.4	77.8	7.9	1.8	42	5.3		
MANZ	e P	Z	10:13:00.7	78.3	7.7	1.1	10	4.8		
TNS	e P	Z	10:13:00.7	78.3	5.3	0.9	15	5.0		
ROTZ	e P	Z	10:13:02.3	78.5	7.7	1.3	20	5.0		
GRA1	e P	Z	10:13:03.4	78.6	7.1	1.4	51	5.4		
WLF	e P	Z	10:13:05.4	79.0	3.9	1.0	20	5.1		
WET	e P	Z	10:13:05.4	79.0	8.1	1.4	21	5.0		
GEC2	e P	Z	10:13:06.0	79.3	8.6	0.9	9	4.7		
RJOB	e P	Z	10:13:11.3	80.4	8.0	0.9	13	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	10:05:39.2	51.454N	179.941W	33.0N	5.0			SZGRF
Andreanof Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:17:13.7	74.3	6.6	0.9	26	5.3		
NRDL	e P	Z	10:17:21.6	75.7	6.4	1.2	18	5.1		
IBBN	e P	Z	10:17:23.7	76.0	4.9	0.9	31	5.4		

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CLZ	e P	Z	10:17:25.5	76.3	6.6	1.0	22	5.2
MANZ	e P	Z	10:17:34.5	78.0	7.6	1.1	7	4.7
ROTZ	e P	Z	10:17:35.9	78.3	7.7	1.0	8	4.7
GRA1	e P	Z	10:17:37.0	78.4	7.1	0.7	17	5.2
GEC2	e P	Z	10:17:40.0	79.0	8.6	1.5	12	4.7
RJOB	e P	Z	10:17:46.8	80.2	8.0	0.9	7	4.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	10:24:30.5	50.770N	179.450E	33.0N	5.6			SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	10:36:05.9	74.0	9.1	0.9	208	6.2		
HLG	e P	Z	10:36:10.3	74.8	5.5	1.0	142	5.9		
BSEG	e P	Z	10:36:10.8	74.9	7.1	0.9	119	5.9		
RUE	e P	Z	10:36:16.9	76.0	9.3	0.9	57	5.7		
NRDL	e P	Z	10:36:18.5	76.3	6.9	1.0	73	5.8		
IBBN	e P	Z	10:36:20.9	76.7	5.4	0.9	163	6.2		
CLZ	e P	Z	10:36:22.7	77.0	7.1	0.9	94	5.9		
CLL	e P	Z	10:36:23.4	77.3	8.7	0.9	34	5.5		
BUG	e P	Z	10:36:25.3	77.6	5.1	0.8	44	5.7		
BRG	e P	Z	10:36:25.5	77.6	9.3	0.9	31	5.4		
FBE	e P	Z	10:36:26.0	77.6	9.0	1.1	59	5.6		
UBBA	e P	Z	10:36:28.0	78.0	6.8	1.7	64	5.5		
MOX	e P	Z	10:36:28.2	78.1	7.8	0.9	38	5.5		
WERD	e P	Z	10:36:29.1	78.2	8.3	1.1	29	5.2		
TANN	e P	Z	10:36:29.3	78.2	8.4	1.4	33	5.2		
GUNZ	e P	Z	10:36:29.6	78.3	8.3	1.0	32	5.3		
WERN	e P	Z	10:36:30.1	78.3	8.3	0.9	64	5.7		
MANZ	e P	Z	10:36:31.6	78.7	8.1	1.0	28	5.3		
TNS	e P	Z	10:36:31.9	78.7	5.8	0.9	52	5.6		
ROTZ	e P	Z	10:36:33.2	78.9	8.2	1.1	34	5.3		
GRA1	e P	Z	10:36:34.1	79.0	7.6	1.0	90	5.8		
WLF	e P	Z	10:36:35.9	79.4	4.3	0.9	49	5.4		
WET	e P	Z	10:36:35.8	79.4	8.6	1.1	26	5.1		
GEC2	e P	Z	10:36:37.1	79.6	9.1	0.8	22	5.1		
STU	e P	Z	10:36:39.3	80.1	6.2	1.0	50	5.4		
FUR	e P	Z	10:36:41.9	80.5	7.5	1.1	72	5.6		
BFO	e P	Z	10:36:42.0	80.6	5.7	1.0	30	5.3		
RJOB	e P	Z	10:36:43.6	80.8	8.5	0.8	37	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	11:35:1.2	7.100S	155.700E	44.3				NEIC

Bougainville - Solomon Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z	11:53:52.5	125.0	48.4					
BSEG	e PKPdf	Z	11:53:53.4	125.5	43.8					
BRG	e PKPdf	Z	11:53:54.3	126.0	49.4					
	e pPKPdf	Z	11:54:07.3							
CLL	e PKPdf	Z	11:53:54.1	126.2	48.1					
	e pPKPdf	Z	11:54:07.5							
FBE	e PKPdf	Z	11:53:54.7	126.2	48.7					
HLG	e PKPdf	Z	11:53:54.4	126.3	41.0					
NRDL	e PKPdf	Z	11:53:55.4	126.6	44.3					
CLZ	e PKPdf	Z	11:53:56.3	127.0	45.0					
	e pPKPdf	Z	11:54:09.5							
TANN	e PKPdf	Z	11:53:56.2	127.0	48.0					
WERD	e PKPdf	Z	11:53:56.0	127.1	47.9					
GUNZ	e PKPdf	Z	11:53:56.3	127.1	47.9					
	e pPKPdf	Z	11:54:09.7							
WERN	e PKPdf	Z	11:53:56.4	127.1	48.0					
MOX	e PKPdf	Z	11:53:56.4	127.2	47.0					
GEC2	e PKPdf	Z	11:53:56.9	127.4	50.3					
MANZ	e PKPdf	Z	11:53:57.0	127.5	47.9					
	e pPKPdf	Z	11:54:10.7							
ROTZ	e PKPdf	Z	11:53:56.9	127.6	48.1					
WET	e PKPdf	Z	11:53:57.8	127.6	49.2					
	e pPKPdf	Z	11:54:10.5							
IBBN	e PKPdf	Z	11:53:57.9	127.7	41.8					
UBBA	e PKPdf	Z	11:53:57.8	127.9	45.1					
	e pPKPdf	Z	11:54:11.4							
GRA1	e PKPdf	Z	11:53:57.9	128.1	47.1					
	e pPKPdf	Z	11:54:11.6							
BUG	e PKPdf	Z	11:53:59.3	128.6	41.7					
RJOB	e PKPdf	Z	11:53:58.7	128.6	50.0					
TNS	e PKPdf	Z	11:53:59.8	129.0	43.7					
FUR	e PKPdf	Z	11:54:00.1	129.1	48.1					
STU	e PKPdf	Z	11:54:01.6	129.7	45.4					
	e pPKPdf	Z	11:54:15.4							
WLF	e PKPdf	Z	11:54:04.1	130.4	41.3					
BFO	e PKPdf	Z	11:54:01.6	130.4	44.6					
	e pPKPdf	Z	11:54:15.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	12:30:55.1	51.706N	179.487E	33.0N	5.5			SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	12:42:27.9	74.0	7.0	1.0	109	5.8		
NRDL	e P	Z	12:42:35.7	75.4	6.8	1.0	62	5.7		
IBBN	e P	Z	12:42:38.0	75.8	5.3	1.0	142	6.0		

CLZ	e P	Z	12:42:39.8	76.0	6.9	1.1	94	5.8
CLL	e P	Z	12:42:40.7	76.4	8.6	1.0	35	5.4
BUG	e P	Z	12:42:42.5	76.6	4.9	1.2	70	5.7
BRG	e P	Z	12:42:42.8	76.7	9.1	1.0	33	5.4
UBBA	e P	Z	12:42:45.2	77.1	6.7	1.4	34	5.3
MOX	e P	Z	12:42:45.4	77.1	7.7	1.0	41	5.5
TANN	e P	Z	12:42:46.5	77.3	8.2	1.4	40	5.3
MANZ	e P	Z	12:42:48.7	77.7	8.0	0.9	21	5.2
TNS	e P	Z	12:42:49.0	77.8	5.7	1.0	46	5.6
ROTZ	e P	Z	12:42:50.3	78.0	8.0	1.2	41	5.4
GRA1	e P	Z	12:42:51.2	78.1	7.4	1.1	90	5.8
WLF	e P	Z	12:42:53.0	78.5	4.2	1.0	44	5.4
WET	e P	Z	12:42:53.3	78.5	8.4	1.3	33	5.2
GEC2	e P	Z	12:42:54.3	78.7	8.9	1.2	29	5.2
STU	e P	Z	12:42:56.5	79.2	6.1	0.9	36	5.3
FUR	e P	Z	12:42:59.2	79.6	7.4	1.2	65	5.4
BFO	e P	Z	12:42:59.2	79.7	5.6	1.2	30	5.1
RJOB	e P	Z	12:43:00.8	79.9	8.3	0.8	24	5.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	14:51:40.1	51.679N	179.174E	33.0N	5.3	4.8		SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 15:03:12.9	74.0	7.2	1.0	49	5.5		
NRDL	e P	Z 15:03:20.7	75.4	7.0	1.2	36	5.4		
IBBN	e P	Z 15:03:23.0	75.8	5.5	1.0	70	5.7		
CLZ	e P	Z 15:03:24.8	76.0	7.1	1.4	63	5.6		
CLL	e P	Z 15:03:25.6	76.4	8.8	0.9	15	5.1		
BUG	e P	Z 15:03:27.5	76.7	5.1	0.7	31	5.5		
BRG	e P	Z 15:03:27.7	76.7	9.3	0.8	12	5.1		
UBBA	e P	Z 15:03:30.3	77.1	6.9	1.8	52	5.4		
MOX	e P	Z 15:03:30.4	77.1	7.9	1.1	18	5.1		
TANN	e P	Z 15:03:31.5	77.3	8.4	1.5	37	5.3		
MANZ	e P	Z 15:03:33.8	77.7	8.2	1.5	31	5.2		
TNS	e P	Z 15:03:34.1	77.8	5.9	0.8	17	5.3		
ROTZ	e P	Z 15:03:35.3	78.0	8.2					
GRA1	e P	Z 15:03:36.3	78.1	7.6					
	e L	Z 15:35:20.7			21.7	478		4.8	
WLF	e P	Z 15:03:38.1	78.5	4.4					
WET	e P	Z 15:03:38.3	78.5	8.6					
GEC2	e P	Z 15:03:39.2	78.7	9.1					
STU	e P	Z 15:03:41.6	79.2	6.3					
FUR	e P	Z 15:03:44.1	79.6	7.6					
BFO	e P	Z 15:03:44.2	79.7	5.8					
RJOB	e P	Z 15:03:45.8	79.9	8.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/19	23:21:25.1	35.843N	73.141E	33.0N	4.9			SZGRF

Northwestern Kashmir

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:29:30.6	44.3	86.1	0.7	15	4.8		
CLL	e P	Z	23:29:34.6	44.8	85.8	0.9	13	4.9		
WET	e P	Z	23:29:37.6	45.1	83.6	1.4	12	4.6		
TANN	e P	Z	23:29:38.5	45.2	84.6	1.0	9	4.7		
RJOB	e P	Z	23:29:40.1	45.3	82.2	1.0	10	4.7		
ROTZ	e P	Z	23:29:41.3	45.5	83.8	1.0	9	4.8		
MANZ	e P	Z	23:29:41.0	45.5	83.9	1.0	8	4.7		
MOX	e P	Z	23:29:42.5	45.7	84.2	1.0	11	4.8		
GRA1	e P	Z	23:29:46.3	46.1	83.0	1.3	27	5.1		
BSEG	e P	Z	23:29:46.4	46.3	86.4	0.8	24	5.3		
FUR	e P	Z	23:29:47.1	46.3	81.6	1.1	27	5.2		
CLZ	e P	Z	23:29:47.5	46.4	84.4	1.0	9	4.8		
STU	e P	Z	23:29:57.2	47.5	80.8	1.1	14	5.0		
TNS	e P	Z	23:29:58.7	47.8	81.6	1.1	9	4.8		
IBBN	e P	Z	23:29:59.7	47.9	83.0	0.8	16	5.2		
BFO	e P	Z	23:30:01.7	48.2	79.8	1.4	12	4.8		
BUG	e P	Z	23:30:03.3	48.4	81.9	0.7	15	5.1		
WLF	e P	Z	23:30:11.1	49.3	79.6	0.9	19	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/20	00:37: 3.4	49.300N	153.810E	33.0N	5.4	4.5		SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	00:48:28.3	72.3	24.0	0.9	32	5.4		
RUE	e P	Z	00:48:30.7	72.7	26.0	1.0	64	5.7		
NRDL	e P	Z	00:48:36.1	73.7	23.7	1.0	26	5.2		
CLL	e P	Z	00:48:37.6	74.0	25.4	1.0	72	5.7		
BRG	e P	Z	00:48:38.5	74.1	25.9	1.2	34	5.3		
CLZ	e P	Z	00:48:39.6	74.2	23.8	1.2	72	5.6		
FBE	e P	Z	00:48:39.9	74.2	25.6	1.0	47	5.5		
IBBN	e P	Z	00:48:40.7	74.4	22.2	1.0	50	5.5		
TANN	e P	Z	00:48:43.6	74.9	24.9	1.7	43	5.2		
WERD	e P	Z	00:48:43.7	75.0	24.9	1.2	41	5.3		
MOX	e P	Z	00:48:43.6	75.0	24.5	1.1	39	5.3		
GUNZ	e P	Z	00:48:44.1	75.0	24.9	1.0	32	5.3		
WERN	e P	Z	00:48:44.5	75.1	24.9	0.9	37	5.4		
UBBA	e P	Z	00:48:44.7	75.2	23.5	1.4	29	5.2		
BUG	e P	Z	00:48:45.9	75.3	21.8	1.2	51	5.5		
MANZ	e P	Z	00:48:46.3	75.4	24.7	1.1	31	5.4		

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ROTZ	e P	Z	00:48:47.7	75.6	24.7	1.0	37	5.5	
GRA1	e P	Z	00:48:49.6	75.9	24.1	1.0	72	5.8	
	e L	Z	01:26:15.8			20.9	272		4.5
WET	e P	Z	00:48:49.9	76.0	25.1	1.1	59	5.6	
GEC2	e P	Z	00:48:49.5	76.0	25.5	1.1	27	5.3	
TNS	e P	Z	00:48:50.4	76.2	22.4	0.9	34	5.5	
RJOB	e P	Z	00:48:57.1	77.3	24.9	0.9	24	5.3	
STU	e P	Z	00:48:56.8	77.3	22.8	1.2	39	5.4	
FUR	e P	Z	00:48:57.5	77.3	24.0	1.0	56	5.6	
BFO	e P	Z	00:49:00.2	77.9	22.2	1.2	37	5.4	

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/20 02:18:25.0 51.361N 179.805W 33.0N 5.0
 Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	02:30:00.0	74.4	6.5	1.0	22	5.2		
NRDL	e P	Z	02:30:08.0	75.8	6.4	1.1	24	5.2		
IBBN	e P	Z	02:30:10.1	76.1	4.9	1.2	47	5.5		
CLZ	e P	Z	02:30:11.9	76.4	6.5	1.1	29	5.3		
CLL	e P	Z	02:30:12.7	76.8	8.2	1.0	8	4.8		
BRG	e P	Z	02:30:14.8	77.1	8.8	1.0	6	4.7		
FBE	e P	Z	02:30:15.1	77.1	8.4	1.0	16	5.1		
MOX	e P	Z	02:30:17.5	77.5	7.3	1.1	12	4.9		
WERD	e P	Z	02:30:18.0	77.7	7.7	1.2	10	4.8		
TANN	e P	Z	02:30:18.4	77.7	7.8	2.0	49	5.3		
GUNZ	e P	Z	02:30:18.8	77.8	7.7	1.2	10	4.8		
WERN	e P	Z	02:30:19.3	77.8	7.7	1.0	14	5.0		
MANZ	e P	Z	02:30:21.0	78.1	7.6	0.8	5	4.6		
TNS	e P	Z	02:30:21.3	78.2	5.3	0.8	10	4.9		
ROTZ	e P	Z	02:30:22.4	78.4	7.6	1.5	20	4.9		
GRA1	e P	Z	02:30:23.4	78.5	7.0	1.0	20	5.1		
WLF	e P	Z	02:30:25.5	78.8	3.8	1.0	17	5.0		
WET	e P	Z	02:30:24.5	78.9	8.0	1.7	14	4.7		
GEC2	e P	Z	02:30:26.4	79.1	8.5	1.4	12	4.7		
FUR	e P	Z	02:30:30.9	80.0	7.0	1.2	27	5.2		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/20 07:55:14.9 39.400S 178.420E 56.3 6.8
 Off east coast of North Island, New Zealand

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z	08:15:16.2	163.2	45.0					
BSEG	e PKPdf	Z	08:15:15.4	163.4	33.8					
	e PKPab	Z	08:16:04.5							

BRG	e PKPdf	Z	08:15:16.2	164.2	49.4			
	e PKPab	Z	08:16:08.0					
CLL	e PKPdf	Z	08:15:16.0	164.3	46.1			
	e PKPab	Z	08:16:08.6					
FBE	e PKPdf	Z	08:15:16.1	164.5	48.0			
	e PKPab	Z	08:16:09.0					
NRDL	e PKPdf	Z	08:15:17.6	164.6	36.2			
CLZ	e PKPdf	Z	08:15:17.0	165.1	38.4			
	e PKPab	Z	08:16:11.6					
	e pPKPab	Z	08:16:29.5					
TANN	e PKPdf	Z	08:15:16.9	165.2	47.3			
	e PKPab	Z	08:16:12.4					
	e pPKPab	Z	08:16:29.4					
WERD	e PKPdf	Z	08:15:16.7	165.3	46.8			
	e PKPab	Z	08:16:12.6					
GUNZ	e PKPdf	Z	08:15:16.6	165.3	47.1			
	e PKPab	Z	08:16:13.2					
	e pPKPab	Z	08:16:28.7					
WERN	e PKPdf	Z	08:15:17.3	165.3	47.4			
	e PKPab	Z	08:16:13.4					
	e pPKPab	Z	08:16:28.9					
MOX	e PKPdf	Z	08:15:16.9	165.4	44.5			
	e PKPab	Z	08:16:13.4					
GEC2	e PKPdf	Z	08:15:17.4	165.6	54.8			
IBBN	e PKPdf	Z	08:15:18.6	165.6	30.2			
MANZ	e PKPdf	Z	08:15:17.2	165.7	47.6			
	e PKPab	Z	08:16:14.6					
	e pPKPab	Z	08:16:31.4					
ROTZ	e PKPdf	Z	08:15:18.5	165.8	48.5			
	e PKPab	Z	08:16:15.4					
	e pPKPab	Z	08:16:31.8					
WET	e PKPdf	Z	08:15:18.6	165.8	52.0			
UBBA	e PKPdf	Z	08:15:18.6	166.0	39.9			
GRA1	e PKPdf	Z	08:15:17.1	166.3	46.2			
	e PKPab	Z	08:16:17.9					
	e pPKPab	Z	08:16:33.2					
	e		08:25:01.4					
	e L	Z	09:38:11.0			20.1	13417	6.8
BUG	e PKPab	Z	08:16:19.9	166.5	30.5			
RJOB	e PKPdf	Z	08:15:18.7	166.7	56.5			
	e PKPab	Z	08:16:19.3					
	e pPKPab	Z	08:16:36.3					
TNS	e PKPdf	Z	08:15:18.8	167.1	37.0			
	e PKPab	Z	08:16:20.7					
STU	e PKPdf	Z	08:15:19.2	167.9	43.4			
	e PKPab	Z	08:16:24.6					
	e pPKPab	Z	08:16:40.9					
WLF	e PKPdf	Z	08:15:20.0	168.4	31.0			
	e PKPab	Z	08:16:26.2					

BFO e PKPdf Z 08:15:20.6 168.6 42.2
 e PKPab Z 08:16:27.0
 e pPKPab Z 08:16:43.9

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/20 09:48:18.6 38.682N 34.216E 10.0G 5.1 4.5
 Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 09:52:24.7	17.9	117.0					
WET	e P	Z 09:52:32.4	18.5	116.4					
BRG	e P	Z 09:52:35.0	18.7	122.7					
FUR	e P	Z 09:52:39.4	19.1	111.3					
FBE	e P	Z 09:52:40.0	19.1	121.8					
ROTZ	e P	Z 09:52:40.6	19.2	117.0					
WERN	e P	Z 09:52:43.9	19.3	118.6					
MANZ	e P	Z 09:52:43.3	19.3	117.4					
TANN	e P	Z 09:52:44.4	19.3	119.0					
GUNZ	e P	Z 09:52:45.9	19.4	118.7					
WERD	e P	Z 09:52:46.4	19.4	118.8					
CLL	e P	Z 09:52:44.7	19.5	122.1					
GRA1	e P	Z 09:52:46.9	19.7	115.2					
	e L	Z 10:00:16.8			20.9	6967		4.5	
RUE	e P	Z 09:52:47.4	19.7	126.2	1.3	195	5.2		
MOX	e P	Z 09:52:52.0	19.9	118.2	1.8	61	4.5		
STU	e P	Z 09:52:56.5	20.6	110.0	0.9	53	4.9		
UBBA	e P	Z 09:53:01.2	20.9	116.1	1.4	118	5.0		
BFO	e P	Z 09:53:01.3	21.0	107.7	1.7	361	5.4		
CLZ	e P	Z 09:53:03.2	21.2	119.0	1.0	81	5.0		
RGN	e P	Z 09:53:04.4	21.2	129.8	1.0	276	5.5		
TNS	e P	Z 09:53:08.1	21.5	112.5	1.1	28	4.6		
NRDL	e P	Z 09:53:07.1	21.6	120.1	1.1	80	5.1		
BSEG	e P	Z 09:53:13.5	22.3	123.5	0.9	74	5.1		
BUG	e P	Z 09:53:20.4	22.7	113.6	1.2	84	5.1		
IBBN	e P	Z 09:53:21.4	22.8	116.2	1.0	147	5.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/20 16:55:57.6 51.693N 179.331E 33.0N 5.2
 Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
HLG	e P	Z 17:07:28.6	73.9	5.5	1.3	194	6.0		
BSEG	e P	Z 17:07:30.3	74.0	7.1	1.1	41	5.4		
NRDL	e P	Z 17:07:38.0	75.4	6.9	1.0	18	5.1		
IBBN	e P	Z 17:07:40.2	75.8	5.4	1.0	56	5.6		

CLZ	e P	Z	17:07:42.0	76.0	7.0	1.1	40	5.4
CLL	e P	Z	17:07:43.0	76.4	8.7	0.9	13	5.1
BUG	e P	Z	17:07:44.9	76.6	5.0	0.8	23	5.3
BRG	e P	Z	17:07:45.1	76.7	9.2	1.2	20	5.1
FBE	e P	Z	17:07:46.4	76.7	8.9	1.1	26	5.3
MOX	e P	Z	17:07:47.8	77.1	7.8	1.0	14	5.0
WERD	e P	Z	17:07:48.6	77.3	8.2	1.1	10	4.9
TANN	e P	Z	17:07:49.0	77.3	8.3	1.4	15	4.9
WERN	e P	Z	17:07:49.8	77.4	8.2	1.0	21	5.2
MANZ	e P	Z	17:07:51.3	77.7	8.1	1.3	19	5.1
TNS	e P	Z	17:07:51.4	77.8	5.8	1.0	21	5.2
ROTZ	e P	Z	17:07:52.4	78.0	8.1	1.0	10	4.9
GRA1	e P	Z	17:07:53.7	78.1	7.5	1.0	39	5.5
WLF	e P	Z	17:07:55.7	78.5	4.3	0.9	16	5.0
WET	e P	Z	17:07:55.4	78.5	8.5	1.3	17	4.9
GEC2	e P	Z	17:07:56.5	78.7	9.0	1.2	12	4.8
STU	e P	Z	17:07:59.1	79.2	6.2	0.8	16	5.1
FUR	e P	Z	17:08:02.0	79.6	7.5	0.8	17	5.0
BFO	e P	Z	17:08:01.4	79.7	5.7	1.2	16	4.8
RJOB	e P	Z	17:08:03.0	79.9	8.4	0.8	12	4.9

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/21 03:10:57.0 57.732S 141.245W 10.0G 5.1 NEIC
 Pacific-Antarctic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e SS	T 03:55:19.6	159.3	234.6					
	e SSS	T 04:01:48.4							
BFO	e SS	T 03:55:29.1	159.7	231.1					
	e SSS	T 04:01:40.1							
STU	e SS	T 03:55:34.9	160.4	231.7					
	e SSS	T 04:01:54.8							
TNS	e SS	T 03:55:36.7	160.9	235.3					
	e SSS	T 04:01:56.6							
BUG	e SS	T 03:55:36.2	160.9	238.5					
	e SSS	T 04:01:58.4							
FUR	e SS	T 03:55:39.6	161.1	229.4					
	e SSS	T 04:01:57.4							
RJOB	e SSS	T 04:02:01.7	161.5	227.6					
IBBN	e SS	T 03:56:07.6	161.6	240.6					
	e SSS	T 04:02:34.2							
GRA1	e SS	T 03:55:51.9	162.0	233.0					
	e SSS	T 04:02:14.2							
	e L	Z 04:50:09.9			21.1	294		5.1	
UBBA	e SS	T 03:55:51.3	162.0	236.3					
	e SSS	T 04:02:14.0							
WET	e SS	T 03:55:57.2	162.5	230.8					

	e SSS	T	04:02:18.7		
ROTZ	e SS	T	03:55:58.6	162.6	232.7
	e SSS	T	04:02:19.9		
MANZ	e SS	T	03:55:59.4	162.6	233.3
	e SSS	T	04:02:20.7		
GEC2	e SS	T	03:55:58.6	162.7	229.6
	e SSS	T	04:02:19.0		
CLZ	e SS	T	03:55:58.5	162.8	238.9
	e SSS	T	04:02:25.2		
MOX	e SS	T	03:56:00.4	162.8	235.3
	e SSS	T	04:02:22.6		
NRDL	e SS	T	03:55:57.3	162.9	240.8
	e SSS	T	04:02:54.6		
TANN	e SS	T	03:56:03.4	163.1	234.3
	e SSS	T	04:02:24.6		
BSEG	e SS	T	03:56:06.3	163.7	245.0
	e SSS	T	04:02:35.4		
CLL	e SS	T	03:56:11.8	163.9	236.5
	e SSS	T	04:02:35.8		
BRG	e SS	T	03:56:15.4	164.1	234.9
	e SSS	T	04:02:38.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	07:23:41.0	51.732N	179.800E	33.0N	5.6			SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 07:35:09.1	73.1	8.7	0.9	132	6.1		
BSEG	e P	Z 07:35:13.9	74.0	6.8	0.9	111	5.9		
RUE	e P	Z 07:35:20.1	75.1	8.9	0.9	74	5.8		
NRDL	e P	Z 07:35:21.5	75.4	6.6	0.9	58	5.7		
IBBN	e P	Z 07:35:23.8	75.7	5.1	0.9	136	6.1		
CLZ	e P	Z 07:35:25.5	76.0	6.7	0.9	91	5.9		
CLL	e P	Z 07:35:26.5	76.4	8.4	0.8	40	5.6		
BUG	e P	Z 07:35:28.2	76.6	4.7	0.9	51	5.7		
BRG	e P	Z 07:35:28.7	76.7	8.9	0.7	30	5.5		
FBE	e P	Z 07:35:29.1	76.7	8.6	0.8	53	5.7		
UBBA	e P	Z 07:35:30.8	77.1	6.5	0.9	15	5.1		
MOX	e P	Z 07:35:31.2	77.1	7.5	0.9	44	5.6		
WERD	e P	Z 07:35:32.1	77.3	7.9	1.0	26	5.3		
TANN	e P	Z 07:35:32.2	77.3	8.0	2.7	151	5.6		
GUNZ	e P	Z 07:35:32.7	77.4	7.9	0.8	27	5.5		
WERN	e P	Z 07:35:33.2	77.4	7.9	0.8	73	5.9		
MANZ	e P	Z 07:35:34.8	77.7	7.8	1.0	31	5.4		
TNS	e P	Z 07:35:35.0	77.8	5.5	0.8	64	5.8		
ROTZ	e P	Z 07:35:36.3	78.0	7.8	1.0	33	5.4		
GRA1	e P	Z 07:35:37.1	78.1	7.2	0.9	102	6.0		

WLF	e P	Z	07:35:38.9	78.5	4.0	0.9	71	5.7
WET	e P	Z	07:35:39.0	78.5	8.2	0.9	20	5.2
GEC2	e P	Z	07:35:40.1	78.7	8.7	0.8	25	5.3
STU	e P	Z	07:35:42.5	79.2	5.9	0.9	66	5.6
FUR	e P	Z	07:35:45.2	79.6	7.2	0.9	83	5.7
BFO	e P	Z	07:35:45.0	79.7	5.4	0.8	28	5.3
RJOB	e P	Z	07:35:46.7	79.9	8.1	0.8	63	5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	07:24:38.3	51.600N	179.828E	33.0G	6.1	6.1		SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	07:36:07.0	73.3	8.7	0.8	392	6.5		
	e S	T	07:45:33.6							
	e SS	R	07:50:47.0							
HLG	e P	Z	07:36:11.3	74.0	5.2	0.9	263	6.2		
	e S	T	07:45:41.9							
	e SS	R	07:50:55.6							
BSEG	e P	Z	07:36:11.8	74.1	6.8	0.9	310	6.3		
	e S	T	07:45:43.1							
	e SS	R	07:50:55.0							
RUE	e P	Z	07:36:18.1	75.3	8.9	1.1	180	6.1		
	e SS	R	07:51:04.6							
NRDL	e P	Z	07:36:19.6	75.5	6.6	1.0	143	6.1		
	e SS	R	07:51:09.5							
IBBN	e P	Z	07:36:21.8	75.9	5.1	1.1	382	6.4		
	e S	T	07:46:02.7							
	e SS	R	07:51:14.5							
CLZ	e P	Z	07:36:23.7	76.2	6.7	0.9	239	6.3		
	e SS	R	07:51:20.1							
CLL	e P	Z	07:36:24.5	76.5	8.4	1.2	152	6.0		
	e S	T	07:46:09.5							
	e SS	R	07:51:23.0							
BUG	e P	Z	07:36:26.3	76.8	4.7	1.0	167	6.1		
	e S	T	07:46:12.6							
	e SS	R	07:51:28.0							
BRG	e P	Z	07:36:26.7	76.8	8.9	1.5	215	6.1		
	e SS	R	07:51:29.4							
FBE	e P	Z	07:36:27.1	76.8	8.6	1.0	200	6.2		
UBBA	e P	Z	07:36:28.9	77.2	6.5	1.8	293	6.1		
	e S	T	07:46:17.5							
	e SS	R	07:51:34.5							
MOX	e P	Z	07:36:29.3	77.3	7.5	1.2	174	6.1		
	e S	T	07:46:18.0							
	e SS	R	07:51:35.7							
WERD	e P	Z	07:36:30.2	77.4	7.9	1.2	146	6.0		

TANN	e P	Z	07:36:30.3	77.4	8.0	1.6	207	6.0
	e SS	R	07:51:38.4					
GUNZ	e P	Z	07:36:30.7	77.5	7.9	1.3	183	6.1
WERN	e P	Z	07:36:31.2	77.6	7.9	0.9	192	6.2
MANZ	e P	Z	07:36:32.7	77.9	7.8	1.2	110	5.9
	e SS	R	07:51:45.4					
TNS	e P	Z	07:36:32.9	77.9	5.5	0.9	176	6.2
	e SS	R	07:51:46.0					
ROTZ	e P	Z	07:36:34.3	78.1	7.8	1.1	134	6.0
	e SS	R	07:51:48.6					
GRA1	e P	Z	07:36:35.2	78.2	7.2	1.0	328	6.3
	e		07:36:38.3					
	e S	T	07:46:28.5					
	e SS	R	07:51:51.0					
	e L	Z	08:14:11.0			20.4	10286	6.1
GRFO	e S	T	07:46:32.3	78.2	7.2			
	e SS	R	07:51:51.1					
WLF	e P	Z	07:36:36.9	78.6	4.0	1.0	185	6.1
	e S	T	07:46:35.2					
	e SS	R	07:51:57.1					
WET	e P	Z	07:36:37.2	78.6	8.2	1.3	112	5.7
	e SS	R	07:51:56.9					
GEC2	e P	Z	07:36:38.2	78.9	8.7	1.4	148	5.8
	e S	T	07:46:35.1					
	e SS	R	07:51:59.4					
STU	e P	Z	07:36:40.3	79.3	5.9	1.0	193	6.0
	e SS	R	07:52:06.8					
FUR	e P	Z	07:36:43.0	79.8	7.2	1.0	272	6.1
	e SS	R	07:52:13.9					
BFO	e P	Z	07:36:43.0	79.8	5.4	1.7	248	5.9
	e SS	R	07:52:14.4					
RJOB	e P	Z	07:36:44.6	80.0	8.1	0.8	154	6.0
	e S	T	07:46:48.5					
	e SS	R	07:52:20.7					

Date 2007/12/21
 Origin Time 12:40:21.4
 Lat 23.999S
 Long 178.969E
 Depth 33.0N
 mb
 Ms
 ML
 Source SZGRF
 South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	13:00:09.8	150.6	26.9					
BRG	e PKPbc	Z	13:00:10.3	150.7	28.9					
CLZ	e PKPbc	Z	13:00:10.4	150.8	21.7					
FBE	e PKPbc	Z	13:00:10.8	150.9	27.8					
NEUB	e PKPbc	Z	13:00:11.1	151.1	24.7					
TANN	e PKPbc	Z	13:00:12.2	151.6	26.6					

WERD	e	PKPbc	Z	13:00:12.3	151.6	26.3
MOX	e	PKPbc	Z	13:00:11.9	151.6	24.9
GUNZ	e	PKPbc	Z	13:00:12.8	151.7	26.4
WERN	e	PKPbc	Z	13:00:13.0	151.7	26.6
NKC	e	PKPbc	Z	13:00:12.8	151.8	26.7
MANZ	e	PKPbc	Z	13:00:13.3	152.1	26.3
ROTZ	e	PKPbc	Z	13:00:13.6	152.2	26.7
GRA1	e	PKPbc	Z	13:00:14.7	152.6	24.9
GEC2	e	PKPbc	Z	13:00:14.4	152.6	30.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	14:17:14.9	20.138S	174.381W	80.1				SZGRF
Tonga Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 14:36:45.3	146.0	7.9					
	e	pPKPbc	Z 14:37:06.8							
NRDL	e	PKPbc	Z 14:36:49.2	147.5	7.8					
IBBN	e	PKPbc	Z 14:36:50.4	147.8	3.8					
CLZ	e	PKPbc	Z 14:36:51.0	148.1	8.5					
	e	pPKPbc	Z 14:37:13.4							
CLL	e	PKPbc	Z 14:36:51.2	148.3	13.3					
BRG	e	PKPbc	Z 14:36:52.3	148.6	15.1					
BUG	e	PKPbc	Z 14:36:52.7	148.7	3.0					
UBBA	e	PKPbc	Z 14:36:53.3	149.1	8.0					
MOX	e	PKPbc	Z 14:36:53.6	149.1	11.0					
	e	pPKPbc	Z 14:37:16.4							
TANN	e	PKPbc	Z 14:36:54.0	149.2	12.6					
	e	pPKPbc	Z 14:37:17.1							
MANZ	e	PKPbc	Z 14:36:55.2	149.7	12.1					
	e	pPKPbc	Z 14:37:17.8							
TNS	e	PKPbc	Z 14:36:55.7	149.8	5.3					
ROTZ	e	PKPbc	Z 14:36:55.8	149.9	12.4					
	e	pPKPbc	Z 14:37:18.5							
GRA1	e	PKPbc	Z 14:36:56.2	150.1	10.6					
	e	pPKPbc	Z 14:37:18.4							
WET	e	PKPbc	Z 14:36:57.1	150.4	13.9					
	e	pPKPbc	Z 14:37:19.1							
WLF	e	PKPbc	Z 14:36:57.8	150.5	1.0					
	e	pPKPbc	Z 14:37:19.8							
GEC2	e	PKPbc	Z 14:36:57.2	150.6	15.6					
	e	pPKPbc	Z 14:37:19.9							
STU	e	PKPbc	Z 14:36:59.2	151.2	7.0					
FUR	e	PKPbc	Z 14:36:59.9	151.6	11.2					
BFO	e	PKPbc	Z 14:36:59.4	151.7	5.4					
RJOB	e	PKPbc	Z 14:37:00.4	151.8	14.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	15:03:36.8	52.776N	179.410E	33.0N	4.9			SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	15:15:03.5	72.9	6.9	0.9	24	5.3		
NRDL	e P	Z	15:15:11.1	74.3	6.7	1.1	16	5.0		
IBBN	e P	Z	15:15:13.6	74.7	5.2	1.2	42	5.3		
CLZ	e P	Z	15:15:15.4	75.0	6.8	1.0	21	5.1		
CLL	e P	Z	15:15:16.7	75.3	8.5	0.8	6	4.8		
BRG	e P	Z	15:15:18.3	75.6	9.0	1.2	10	4.8		
UBBA	e P	Z	15:15:20.8	76.0	6.6	1.4	10	4.7		
MOX	e P	Z	15:15:21.2	76.1	7.6	1.1	11	4.9		
TANN	e P	Z	15:15:22.2	76.2	8.1	1.8	17	4.9		
MANZ	e P	Z	15:15:24.9	76.7	7.9	1.1	7	4.7		
TNS	e P	Z	15:15:24.7	76.7	5.6	0.7	7	4.9		
ROTZ	e P	Z	15:15:26.2	76.9	7.9	1.1	7	4.7		
GRA1	e P	Z	15:15:27.0	77.0	7.3	1.1	20	5.2		
WLF	e P	Z	15:15:28.7	77.4	4.2	1.0	10	4.9		
WET	e P	Z	15:15:29.1	77.4	8.3	1.4	11	4.8		
GEC2	e P	Z	15:15:30.1	77.7	8.8	1.2	8	4.7		
BFO	e P	Z	15:15:35.1	78.6	5.5	1.6	13	4.7		
RJOB	e P	Z	15:15:36.8	78.8	8.2	0.9	7	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	15:16:34.0	51.600N	179.828E	33.0N	4.6			SZGRF
Rat Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	15:28:30.9	78.2	7.2	1.1	7	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z	19:22:34.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/21	22:04:55.4	25.884N	128.585E	33.0N	5.5	4.4		SZGRF
Ryukyu Islands, Japan								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	22:17:23.4	84.1	52.8	1.8	160	6.0		
BRG	e P	Z	22:17:22.7	84.1	55.3	1.3	31	5.4		
CLL	e P	Z	22:17:24.2	84.4	54.6	1.0	26	5.4		
NRDL	e P	Z	22:17:28.3	85.1	52.5	1.7	96	5.8		
TANN	e P	Z	22:17:28.5	85.2	54.2	1.4	43	5.5		
CLZ	e P	Z	22:17:29.9	85.4	52.7	1.1	108	5.9		
GEC2	e P	Z	22:17:29.6	85.4	55.0	1.0	26	5.3		
MOX	e P	Z	22:17:29.9	85.5	53.5	1.5	42	5.4		
MANZ	e P	Z	22:17:30.7	85.6	53.9	1.1	36	5.4		
ROTZ	e P	Z	22:17:31.4	85.7	53.9	1.2	59	5.6		
WET	e P	Z	22:17:31.2	85.7	54.4	1.5	41	5.3		
UBBA	e P	Z	22:17:33.5	86.2	52.4	1.0	24	5.3		
GRA1	e P	Z	22:17:34.1	86.3	53.2	1.4	129	5.9		
	e L	Z	22:52:39.9			19.4	149		4.4	
IBBN	e P	Z	22:17:34.3	86.4	50.7	0.9	105	6.0		
RJOB	e P	Z	22:17:35.3	86.6	54.2	0.9	33	5.4		
FUR	e P	Z	22:17:38.4	87.1	53.2	1.2	129	5.9		
BUG	e P	Z	22:17:38.1	87.1	50.3	1.1	46	5.5		
TNS	e P	Z	22:17:39.3	87.3	51.2	1.0	17	5.3		
STU	e P	Z	22:17:41.4	87.9	51.7	0.9	34	5.7		
BFO	e P	Z	22:17:45.0	88.6	51.0	1.1	15	5.1		
WLF	e P	Z	22:17:46.1	88.8	49.4	0.7	20	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/22 02:22: 7.0 22.987S 114.178W 10.0G 4.9 ML NEIC
 Easter Island region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
STU	e PKPdf	Z	02:41:15.7	128.9	279.1					
CLZ	e PKPdf	Z	02:41:17.2	129.0	282.6					
GRA1	e PKPdf	Z	02:41:18.3	130.0	281.6					
	e L	Z	03:37:56.0			18.6	232		4.9	
MANZ	e PKPdf	Z	02:41:19.7	130.5	282.6					
WERD	e PKPdf	Z	02:41:19.8	130.5	283.2					
GUNZ	e PKPdf	Z	02:41:19.6	130.6	283.1					
WERN	e PKPdf	Z	02:41:19.7	130.6	283.1					
TANN	e PKPdf	Z	02:41:19.5	130.6	283.3					
CLL	e PKPdf	Z	02:41:19.3	130.7	284.5					
WET	e PKPdf	Z	02:41:20.1	131.2	282.6					

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/22 04:50:47.1 16.487S 173.478W 93.4 SZGRF
 Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	05:10:09.2	144.2	2.0					
CLZ	e PKPbc	Z	05:10:10.4	144.5	6.4					
CLL	e PKPbc	Z	05:10:10.9	144.8	10.8					
BRG	e PKPbc	Z	05:10:11.9	145.1	12.5					
	e pPKPbc	Z	05:10:37.5							
UBBA	e PKPbc	Z	05:10:13.8	145.6	5.9					
MOX	e PKPbc	Z	05:10:13.8	145.6	8.7					
	e pPKPbc	Z	05:10:39.3							
TANN	e PKPbc	Z	05:10:14.6	145.7	10.2					
	e pPKPbc	Z	05:10:39.9							
MANZ	e PKPbc	Z	05:10:15.8	146.2	9.7					
ROTZ	e PKPbc	Z	05:10:16.5	146.4	9.9					
	e pPKPbc	Z	05:10:41.6							
GRA1	e PKPbc	Z	05:10:16.8	146.6	8.2					
	e pPKPbc	Z	05:10:42.2							
WLF	e PKPbc	Z	05:10:17.9	146.8	359.4					
	e pPKPbc	Z	05:10:44.2							
WET	e PKPbc	Z	05:10:18.0	146.9	11.2					
GEC2	e PKPbc	Z	05:10:18.2	147.1	12.8					
STU	e PKPbc	Z	05:10:20.2	147.6	4.8					
FUR	e PKPbc	Z	05:10:20.8	148.1	8.6					
BFO	e PKPbc	Z	05:10:20.8	148.1	3.3					
RJOB	e PKPbc	Z	05:10:21.2	148.3	11.5					

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/22

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z	06:15:53.8							

Date Origin Time Lat Long Depth mb Ms ML Source
2007/12/22 07:11:11.0 2.541S 139.089E 35.0G 6.3 NEIC
Near north coast of Irian Jaya, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PP	Z	07:30:41.1	113.4	62.9					
	e SP	Z	07:40:03.4							
CLL	e PP	Z	07:30:41.9	113.7	61.9					
	e SP	Z	07:40:06.7							
BSEG	e PP	Z	07:30:43.6	113.8	58.4					
TANN	e PP	Z	07:30:49.4	114.5	61.7					
	e SP	Z	07:40:13.9							
GEC2	e PP	Z	07:30:47.8	114.5	63.5					
	e SP	Z	07:40:11.7							

NRDL	e PP	Z	07:30:51.5	114.7	58.7			
	e SP	Z	07:40:16.3					
WET	e PP	Z	07:30:50.7	114.8	62.6			
	e SP	Z	07:40:17.4					
MOX	e PP	Z	07:30:51.5	114.8	60.9			
	e SP	Z	07:40:14.3					
MANZ	e PP	Z	07:30:51.5	114.9	61.6			
	e SP	Z	07:40:14.7					
CLZ	e PP	Z	07:30:52.4	114.9	59.2			
	e SP	Z	07:40:18.3					
ROTZ	e PP	Z	07:30:51.9	114.9	61.8			
	e SP	Z	07:40:14.7					
GRA1	e Pdiff	Z	07:26:03.8	115.5	60.9			
	e PP	Z	07:30:55.3					
	e SP	Z	07:40:19.6					
	e SP	R	07:40:27.9					
	e SS	R	07:46:50.4					
	e L	Z	08:24:23.7			19.4	7753	6.3
RJOB	e PP	Z	07:30:56.5	115.5	63.1			
	e SP	Z	07:40:23.9					
UBBA	e PP	Z	07:30:56.5	115.6	59.3			
	e SP	Z	07:40:21.9					
IBBN	e PP	Z	07:30:59.5	116.0	56.6			
	e SP	Z	07:40:28.6					
FUR	e PP	Z	07:31:02.0	116.2	61.6			
	e SP	Z	07:40:30.4					
BUG	e PP	Z	07:31:04.8	116.7	56.5			
	e SP	Z	07:40:35.3					
TNS	e PP	Z	07:31:06.2	116.8	58.1			
	e SP	Z	07:40:35.6					
STU	e PP	Z	07:31:07.8	117.1	59.4			
	e SP	Z	07:40:35.5					
BFO	e PP	Z	07:31:11.6	117.8	58.8			
	e SP	Z	07:40:45.3					
WLF	e PP	Z	07:31:16.6	118.3	56.2			
	e SP	Z	07:40:49.7					

Date 2007/12/22 Origin Time 12:26:20.6 Lat 2.132N Long 96.212E Depth 33.0N mb 5.5 Ms 5.5 ML Source SZGRF
Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	12:38:44.9	83.5	94.2	1.3	80	5.8		
BRG	e P	Z	12:38:44.7	83.5	94.7	1.7	61	5.6		
RJOB	e P	Z	12:38:47.3	84.0	93.4	1.0	35	5.5		
WET	e P	Z	12:38:47.7	84.0	93.7	1.0	31	5.5		
CLL	e P	Z	12:38:48.1	84.1	94.0	1.2	30	5.4		

TANN	e P	Z	12:38:49.8	84.4	93.5	1.2	21	5.2		
ROTZ	e P	Z	12:38:50.7	84.5	93.2	0.9	29	5.5		
MANZ	e P	Z	12:38:51.0	84.6	93.1	1.1	64	5.8		
MOX	e P	Z	12:38:52.4	84.9	92.8	1.4	22	5.2		
GRA1	e P	Z	12:38:53.8	85.1	92.4	0.9	50	5.7		
	e S	T	12:49:24.9							
	e ScS	N	12:49:31.4							
	e SS	T	12:54:59.6							
	e SSS	T	12:58:36.6							
	e L	Z	13:23:51.4			20.6	1976		5.5	
CLZ	e P	Z	12:38:56.2	85.8	92.0	1.3	36	5.4		
BSEG	e P	Z	12:38:56.9	85.9	92.1	1.2	58	5.6		
NRDL	e P	Z	12:38:57.5	85.9	91.8	1.2	49	5.5		
UBBA	e P	Z	12:38:57.9	86.0	91.6	0.8	7	4.8		
TNS	e P	Z	12:39:02.4	86.9	90.4	1.1	40	5.4		
BFO	e P	Z	12:39:02.3	87.0	90.2	1.0	27	5.3		
IBBN	e P	Z	12:39:04.8	87.4	89.9	1.5	118	5.8		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/22 17:49:10.0 31.568N 131.577E 31.4 4.9 5.1
 Kyushu, Japan SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:01:32.6	83.1	47.8	1.0	7	4.9		
	e pP	Z 18:01:41.7							
	e L	Z 18:42:59.7			19.0	827		5.1	

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/22 20:26:23.7 75.996N 1.272E 33.0N 4.2
 Greenland Sea SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:31:59.5	26.6	354.6	1.1	6	4.2		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/23 12:56:10.4 3.980S 40.320E 33.0N 4.8
 Kenya SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:06:09.1	59.3	145.6	1.8	19	4.8		

./2007/bul0712.txt

Thu Apr 23 08:38:25 2020

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/23	13:10:29.0	8.941S	123.730E	117.9G				NEIC

Kenya

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 13:29:28.8	111.3	78.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/23	13:45:32.1	2.000S	37.350E	11.9		4.1		SZGRF

Kenya

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z 13:54:52.8	54.2	149.2	1.6	57			
GEC2	e P	Z 13:54:58.3	54.8	150.6	1.3	81			
	e PP	Z 13:57:05.2							
FUR	e P	Z 13:54:59.3	55.1	147.6	1.9	114			
WET	e P	Z 13:55:01.4	55.3	149.8	1.5	45			
	e PcP	Z 13:56:02.4							
ROTZ	e P	Z 13:55:07.1	56.1	149.2	1.6	65			
BFO	e P	Z 13:55:08.4	56.3	144.4	1.7	86			
MANZ	e P	Z 13:55:08.5	56.3	149.2	1.4	50			
STU	e P	Z 13:55:08.9	56.3	145.5	1.9	136			
GRA1	e P	Z 13:55:09.0	56.4	148.1	1.7	98			
	e pP	Z 13:55:12.3							
	e PcP	Z 13:56:07.0							
	e PP	Z 13:57:16.4							
	e L	Z 14:18:57.2			21.5	175		4.1	
BRG	e P	Z 13:55:10.0	56.5	151.6	1.9	45			
	e PcP	Z 13:56:08.0							
TANN	e P	Z 13:55:10.8	56.6	149.7	2.1	130			
MOX	e P	Z 13:55:13.9	57.1	148.9	1.8	67			
	e PcP	Z 13:56:09.9							
CLL	e P	Z 13:55:14.6	57.2	150.6	1.6	50			
TNS	e P	Z 13:55:19.1	57.8	145.2	1.6	88			
WLF	e P	Z 13:55:22.0	58.2	142.5	1.8	135			
CLZ	e P	Z 13:55:24.1	58.5	147.9	2.0	50			
	e PcP	Z 13:56:14.8							
NRDL	e P	Z 13:55:29.0	59.1	147.8	1.7	101			
BUG	e P	Z 13:55:29.4	59.2	144.3	1.5	102			
IBBN	e P	Z 13:55:33.3	59.8	145.2	1.5	94			
BSEG	e P	Z 13:55:36.6	60.3	148.5	1.6	98			
	e PcP	Z 13:56:22.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/24	07:42: 3.2	52.952N	160.590E	41.6	5.1			SZGRF

Off east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 07:53:13.0	70.3	18.5	1.1	17	5.1		
NRDL	e P	Z 07:53:21.8	71.7	18.2	1.3	18	5.0		
CLL	e P	Z 07:53:24.7	72.2	19.8	1.1	34	5.4		
CLZ	e P	Z 07:53:25.6	72.3	18.3	1.2	39	5.4		
BRG	e P	Z 07:53:25.8	72.4	20.3	1.3	24	5.2		
MOX	e P	Z 07:53:30.6	73.2	18.9	1.2	20	5.0		
TANN	e P	Z 07:53:30.8	73.2	19.4	1.3	12	4.8		
MANZ	e P	Z 07:53:33.6	73.7	19.2	1.4	16	4.9		
ROTZ	e P	Z 07:53:35.2	73.9	19.2	1.3	25	5.1		
GRA1	e P	Z 07:53:36.8	74.1	18.6	1.5	32	5.1		
	e pP	Z 07:53:48.7							
WET	e P	Z 07:53:37.5	74.3	19.5	1.2	19	5.0		
GEC2	e P	Z 07:53:38.0	74.4	20.0	1.2	13	4.8		
RJOB	e P	Z 07:53:46.0	75.7	19.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/24	10:43:48.0	26.676S	176.118W	44.5G				NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 11:04:06.8	156.3	16.5					
	e	11:04:13.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/24	18:36:37.7	49.240N	154.840E	33.0N	4.9			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 18:48:11.4	74.3	24.8	0.7	9	5.0		
BRG	e P	Z 18:48:12.3	74.5	25.3	0.9	4	4.6		
CLZ	e P	Z 18:48:13.2	74.5	23.2	1.0	10	4.9		
WERN	e P	Z 18:48:18.4	75.4	24.3	0.7	8	5.1		
MANZ	e P	Z 18:48:20.3	75.8	24.1	0.8	4	4.6		
ROTZ	e P	Z 18:48:21.3	75.9	24.1	1.0	5	4.7		
GRA1	e P	Z 18:48:23.4	76.3	23.5	0.8	9	5.1		
WET	e P	Z 18:48:23.7	76.3	24.5	0.8	9	5.0		
GEC2	e P	Z 18:48:23.4	76.4	24.9	0.8	5	4.8		
TNS	e P	Z 18:48:24.7	76.5	21.8	0.7	7	5.0		
STU	e P	Z 18:48:34.9	77.6	22.2	0.3	13	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/24	20:56:21.0	4.456S	101.072E	35.0G				NEIC

Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 21:09:25.8	91.6	94.9					
	e pP	Z 21:09:33.7			1.4	16			
BRG	e pP	Z 21:09:34.2	91.6	95.0	5.3	543			
	e P	Z 21:09:27.5	92.0	94.6					
WET	e P	Z 21:09:28.0	92.2	94.3					
	e pP	Z 21:09:36.3			1.2	9			
CLL	e pP	Z 21:09:37.0	92.3	94.3	3.4	186			
ROTZ	e pP	Z 21:09:38.9	92.7	93.7	1.1	6			
MANZ	e P	Z 21:09:30.9	92.7	93.7	1.3	14			
	e pP	Z 21:09:39.5							
MOX	e pP	Z 21:09:41.1	93.1	93.2					
GRA1	e P	Z 21:09:32.9	93.3	93.0	1.6	22			
	e pP	Z 21:09:41.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/24	21:22: 2.1	2.170S	101.020E	28.3	5.2			SZGRF

Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 21:34:58.0	89.8	93.6	1.8	21	5.1		
	e pP	Z 21:35:05.8			1.0	7			
GEC2	e P	Z 21:34:57.9	89.9	93.4	1.4	14	5.0		
	e pP	Z 21:35:06.1			1.0	7			
RJOB	e P	Z 21:35:00.3	90.4	92.8	1.5	12	4.9		
	e pP	Z 21:35:08.8			0.8	2			
WET	e P	Z 21:35:00.1	90.4	92.8	1.1	6	4.8		
	e pP	Z 21:35:08.8			0.9	6			
CLL	e P	Z 21:35:00.3	90.5	92.9	1.2	15	5.1		
	e pP	Z 21:35:08.9			1.0	6			
TANN	e P	Z 21:35:02.1	90.8	92.5	6.2	777	6.2		
	e pP	Z 21:35:10.3			1.0	4			
ROTZ	e P	Z 21:35:02.9	90.9	92.3	1.4	18	5.2		
	e pP	Z 21:35:11.1			1.0	4			
MANZ	e P	Z 21:35:03.4	91.0	92.2	1.3	20	5.3		
	e pP	Z 21:35:11.6			1.0	7			
MOX	e P	Z 21:35:04.4	91.3	91.8	1.5	18	5.2		
	e pP	Z 21:35:12.8			1.2	7			
GRA1	e P	Z 21:35:05.7	91.5	91.6	1.1	17	5.3		
	e pP	Z 21:35:14.1			0.9	8			
CLZ	e P	Z 21:35:08.1	92.1	90.8	1.3	13	5.1		
TNS	e P	Z 21:35:13.9	93.3	89.4	1.2	10	5.1		
	e pP	Z 21:35:21.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/25	01:47:54.7	17.986S	177.798W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	02:07:22.8	143.5	13.0					
NRDL	e PKPbc	Z	02:07:27.0	144.9	13.2					
IBBN	e PKPbc	Z	02:07:28.8	145.4	9.3					
CLZ	e PKPbc	Z	02:07:29.4	145.5	13.8					
CLL	e PKPbc	Z	02:07:29.1	145.6	18.4					
BRG	e PKPbc	Z	02:07:30.0	145.8	20.1					
MOX	e PKPbc	Z	02:07:31.9	146.5	16.4					
TANN	e PKPbc	Z	02:07:31.9	146.5	17.9					
MANZ	e PKPbc	Z	02:07:33.6	147.0	17.5					
ROTZ	e PKPbc	Z	02:07:34.3	147.2	17.8					
TNS	e PKPbc	Z	02:07:34.5	147.4	11.1					
GRA1	e PKPbc	Z	02:07:34.9	147.5	16.1					
	e PKPab	Z	02:07:38.4							
WET	e PKPbc	Z	02:07:34.7	147.7	19.2					
GEC2	e PKPbc	Z	02:07:35.4	147.8	20.8					
WLF	e PKPbc	Z	02:07:37.1	148.2	7.1					
STU	e PKPbc	Z	02:07:38.0	148.7	12.9					
	e PKPab	Z	02:07:42.9							
FUR	e PKPbc	Z	02:07:38.6	148.9	16.9					
RJOB	e PKPbc	Z	02:07:38.4	149.0	19.9					
	e PKPab	Z	02:07:44.8							
BFO	e PKPbc	Z	02:07:39.2	149.2	11.5					
	e PKPab	Z	02:07:44.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/25	02:04:34.6	47.608N	152.714E	33.0N	5.0			SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	02:16:25.5	77.2	25.5	1.8	21	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/25	14:04:33.4	38.680N	143.390E	49.5	5.5	6.1		SZGRF

Off east coast of Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	14:16:32.5	78.9	37.8	1.1	66	5.6		

BSEG	e P	Z	14:16:33.2	79.0	35.5	1.0	67	5.6
BRG	e P	Z	14:16:38.6	80.1	37.7	0.9	32	5.2
CLL	e P	Z	14:16:38.6	80.1	37.1	1.0	62	5.5
NRDL	e P	Z	14:16:39.3	80.2	35.2	1.9	81	5.4
FBE	e P	Z	14:16:39.8	80.3	37.3	0.9	62	5.6
	e pP	Z	14:16:54.0					
CLZ	e P	Z	14:16:42.3	80.7	35.3	1.3	93	5.7
TANN	e P	Z	14:16:44.0	81.0	36.7	1.8	68	5.4
WERD	e P	Z	14:16:44.0	81.1	36.6	1.2	33	5.2
GUNZ	e P	Z	14:16:44.3	81.1	36.6	1.0	32	5.3
MOX	e P	Z	14:16:44.6	81.2	36.1	1.0	31	5.3
WERN	e P	Z	14:16:44.7	81.2	36.6	1.1	36	5.3
IBBN	e P	Z	14:16:44.7	81.2	33.5	1.0	65	5.7
	e pP	Z	14:16:58.9					
MANZ	e P	Z	14:16:46.2	81.5	36.4	1.0	24	5.3
	e pP	Z	14:17:00.9					
ROTZ	e P	Z	14:16:47.8	81.7	36.4	1.3	41	5.4
GEC2	e P	Z	14:16:47.6	81.8	37.4	1.1	28	5.3
WET	e P	Z	14:16:48.7	81.9	36.8	1.1	29	5.3
	e pP	Z	14:17:02.9					
BUG	e P	Z	14:16:49.1	82.1	33.1	1.3	57	5.5
	e pP	Z	14:17:03.6					
GRA1	e P	Z	14:16:50.0	82.1	35.7	1.0	70	5.7
	e pP	Z	14:17:04.1					
	e S	T	14:27:05.9					
	e L	Z	14:56:24.4			19.1	8244	6.1
TNS	e P	Z	14:16:52.4	82.7	33.9	1.5	59	5.6
	e pP	Z	14:17:06.8					
RJOB	e P	Z	14:16:54.6	83.1	36.7	1.1	55	5.7
	e pP	Z	14:17:08.7					
FUR	e P	Z	14:16:55.7	83.3	35.7	0.9	65	5.8
STU	e P	Z	14:16:57.1	83.6	34.3	1.1	52	5.7
BFO	e P	Z	14:17:00.8	84.3	33.7	1.3	80	5.8
	e pP	Z	14:17:15.1					

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/25 16:20:44.2 19.940S 67.580W 33.0N 4.9 SZGRF
 Southern Bolivia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z 16:34:05.5	95.1	245.0					
	e SKSac	R 16:44:28.2							
BFO	e Pdiff	Z 16:34:11.2	95.9	246.4					
	e PP	Z 16:37:59.7							
	e SKSac	R 16:44:31.9							
BUG	e Pdiff	Z 16:34:11.4	96.5	246.0					
	e PP	Z 16:38:04.6							

	e SKSac	R	16:44:35.3									
STU	e Pdiff	Z	16:34:11.4	96.6	247.1							
	e PP	Z	16:38:04.6									
	e SKSac	R	16:44:35.9									
TNS	e Pdiff	Z	16:34:11.5	96.7	246.7							
	e PP	Z	16:38:05.1									
	e SKSac	R	16:44:38.4									
IBBN	e Pdiff	Z	16:34:13.4	97.1	246.4							
	e PP	Z	16:38:08.8									
FUR	e PP	Z	16:38:12.9	97.6	248.5							
	e SKSac	R	16:44:41.2									
GRA1	e Pdiff	Z	16:34:17.3	98.2	248.7							
	e PP	Z	16:38:15.8									
	e SKSac	R	16:44:45.4									
	e L	Z	17:15:40.4			20.5	396			4.9		
RJOB	e PP	Z	16:38:18.0	98.4	249.5							
	e SKSac	R	16:44:44.8									
CLZ	e Pdiff	Z	16:34:19.3	98.4	248.3							
	e PP	Z	16:38:18.7									
	e SKSac	R	16:44:47.2									
NRDL	e PP	Z	16:38:19.0	98.5	248.2							
	e SKSac	R	16:44:45.2									
MOX	e SKSac	R	16:44:49.2	98.7	249.1							
ROTZ	e SKSac	R	16:44:49.6	98.8	249.4							
MANZ	e Pdiff	Z	16:34:22.2	98.8	249.4							
	e PP	Z	16:38:21.0									
	e SKSac	R	16:44:49.8									
WET	e PP	Z	16:38:22.3	99.0	249.8							
	e SKSac	R	16:44:50.3									
TANN	e Pdiff	Z	16:34:22.4	99.2	249.7							
	e PP	Z	16:38:22.6									
	e SKSac	R	16:44:51.6									
BSEG	e PP	Z	16:38:24.5	99.2	248.6							
	e SKSac	R	16:44:48.9									
GEC2	e Pdiff	Z	16:34:23.4	99.4	250.4							
	e SKSac	R	16:44:50.3									
CLL	e Pdiff	Z	16:34:25.8	99.8	250.2							
	e PP	Z	16:38:28.2									
	e SKSac	R	16:44:53.9									
BRG	e PP	Z	16:38:30.4	100.2	250.9							
	e SKSac	R	16:44:56.6									

Date 2007/12/26
 Origin Time 04:45:37.9
 Lat 40.820N
 Long 72.040E
 Depth 18.6
 mb 4.9
 Ms 4.7
 ML
 Source SZGRF
 Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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RUE	e P	Z	04:53:15.2	40.5	82.7	1.6	71	5.1
BRG	e P	Z	04:53:16.3	40.6	81.0	1.0	21	4.8
FBE	e P	Z	04:53:19.3	40.9	80.6	1.0	30	5.0
CLL	e P	Z	04:53:20.4	41.1	80.8	0.9	20	4.8
GEC2	e P	Z	04:53:20.6	41.1	78.5	1.8	82	5.2
WET	e P	Z	04:53:24.6	41.6	78.3	1.8	49	5.0
TANN	e P	Z	04:53:24.6	41.6	79.5	1.8	45	4.9
WERN	e P	Z	04:53:25.2	41.7	79.3	1.6	33	4.8
GUNZ	e P	Z	04:53:25.3	41.7	79.3	1.2	20	4.7
WERD	e P	Z	04:53:25.1	41.7	79.4	1.6	28	4.8
ROTZ	e P	Z	04:53:26.7	41.9	78.6	1.5	20	4.6
MANZ	e P	Z	04:53:27.3	41.9	78.8	1.2	11	4.5
MOX	e P	Z	04:53:28.1	42.1	79.2	1.1	15	4.6
BSEG	e P	Z	04:53:30.9	42.3	81.9	0.9	60	5.3
GRA1	e P	Z	04:53:32.7	42.5	77.9	1.1	32	5.0
	e pP	Z	04:53:37.7					
	e L	Z	05:13:51.4			21.0	1137	4.7
CLZ	e P	Z	04:53:32.7	42.6	79.7	1.6	44	4.9
NRDL	e P	Z	04:53:33.4	42.7	80.2	1.1	51	5.2
FUR	e P	Z	04:53:35.0	42.8	76.3	1.6	71	5.1
STU	e P	Z	04:53:44.1	44.0	75.7	1.2	24	4.8
IBBN	e P	Z	04:53:44.6	44.1	78.4	1.3	61	5.2
TNS	e P	Z	04:53:45.6	44.1	76.8	1.9	45	4.9
BUG	e P	Z	04:53:48.9	44.6	77.2	1.1	38	5.3
BFO	e P	Z	04:53:48.9	44.7	74.8	1.1	13	4.8
WLF	e P	Z	04:53:58.0	45.7	74.8	1.3	46	5.3

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/26 05:06: 2.3 22.070S 176.200W 157.3 SZGRF
 South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	05:25:34.6	147.8	11.4					
	e pPKPbc	Z	05:26:15.7							
RUE	e pPKPbc	Z	05:26:18.7	148.6	18.0					
NRDL	e PKPbc	Z	05:25:38.4	149.2	11.5					
IBBN	e PKPbc	Z	05:25:39.7	149.6	7.3					
	e PKPab	Z	05:25:45.2							
CLZ	e PKPbc	Z	05:25:40.3	149.8	12.2					
	e pPKPbc	Z	05:26:21.2							
CLL	e PKPbc	Z	05:25:40.1	149.9	17.2					
	e pPKPbc	Z	05:26:21.8							
BRG	e PKPbc	Z	05:25:40.5	150.1	19.1					
	e PKPab	Z	05:25:46.2							
	e pPKPbc	Z	05:26:22.5							
FBE	e PKPbc	Z	05:25:41.3	150.2	18.0					
	e PKPab	Z	05:25:47.3							

	e pPKPbc	Z	05:26:22.6		
BUG	e PKPbc	Z	05:25:41.6	150.5	6.5
MOX	e PKPbc	Z	05:25:42.3	150.8	15.0
WERD	e PKPbc	Z	05:25:42.8	150.8	16.3
	e pPKPbc	Z	05:26:24.7		
TANN	e PKPbc	Z	05:25:42.8	150.9	16.7
GUNZ	e PKPbc	Z	05:25:43.1	150.9	16.4
	e PKPab	Z	05:25:50.4		
WERN	e PKPbc	Z	05:25:43.4	151.0	16.6
	e PKPab	Z	05:25:50.8		
MANZ	e PKPbc	Z	05:25:43.8	151.3	16.2
ROTZ	e PKPbc	Z	05:25:44.2	151.5	16.5
	e PKPab	Z	05:25:52.9		
TNS	e PKPbc	Z	05:25:44.6	151.6	9.1
	e PKPab	Z	05:25:53.0		
GRA1	e PKPbc	Z	05:25:44.4	151.8	14.7
	e PKPab	Z	05:25:54.0		
WET	e PKPbc	Z	05:25:46.2	152.0	18.1
	e PKPab	Z	05:25:55.0		
GEC2	e PKPbc	Z	05:25:45.4	152.1	19.9
	e PKPab	Z	05:25:55.2		
	e pPKPbc	Z	05:26:27.1		
WLF	e PKPbc	Z	05:25:46.3	152.3	4.7
STU	e PKPbc	Z	05:25:47.4	153.0	11.0
	e PKPab	Z	05:25:58.6		
FUR	e PKPbc	Z	05:25:47.6	153.2	15.5
	e PKPab	Z	05:25:59.9		
RJOB	e PKPbc	Z	05:25:48.2	153.3	18.8
	e PKPab	Z	05:26:00.8		
BFO	e PKPbc	Z	05:25:47.8	153.5	9.4
	e PKPab	Z	05:26:00.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	14:56:12.8	22.483S	176.967W	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	15:16:00.3	150.2	18.8					
BRG	e PKPbc	Z	15:16:00.9	150.4	20.7					
FBE	e PKPbc	Z	15:16:01.2	150.4	19.6					
NEUB	e PKPbc	Z	15:16:01.2	150.5	16.6					
WERD	e PKPbc	Z	15:16:02.6	151.1	18.0					
TANN	e PKPbc	Z	15:16:02.6	151.1	18.3					
GRA1	e PKPbc	Z	15:16:04.4	152.0	16.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	22:04:56.0	52.690N	168.120W	33.0N	6.2	5.9		SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	22:16:24.5	72.8	0.9	1.1	303	6.3		
BSEG	e P	Z	22:16:27.2	73.4	359.0	1.0	114	5.8		
	e S	T	22:26:08.7							
NRDL	e P	Z	22:16:35.1	74.8	358.9	1.1	99	5.7		
	e S	T	22:26:18.6							
RUE	e P	Z	22:16:35.5	74.8	1.2	1.2	281	6.2		
IBBN	e P	Z	22:16:36.3	74.9	357.4	1.2	196	6.0		
	e S	T	22:26:24.0							
CLZ	e P	Z	22:16:39.4	75.5	359.1	1.2	214	6.2		
	e S	T	22:26:31.9							
CLL	e P	Z	22:16:41.7	76.0	0.7	1.4	151	5.9		
	e S	T	22:26:39.1							
FBE	e P	Z	22:16:44.4	76.4	0.9	2.0	808	6.5		
BRG	e P	Z	22:16:44.4	76.4	1.3	1.4	198	6.1		
	e S	T	22:26:41.2							
MOX	e P	Z	22:16:46.0	76.7	359.8	1.4	228	6.1		
	e S	T	22:26:44.1							
WERD	e P	Z	22:16:47.3	76.9	0.3	2.3	518	6.3		
TANN	e P	Z	22:16:47.3	76.9	0.4	2.1	489	6.3		
	e S	T	22:26:46.6							
GUNZ	e P	Z	22:16:47.8	76.9	0.3	2.3	772	6.4		
WERN	e P	Z	22:16:48.4	77.0	0.3	2.5	935	6.5		
TNS	e P	Z	22:16:48.1	77.0	357.9	1.3	166	6.0		
MANZ	e P	Z	22:16:49.8	77.3	0.1	2.2	415	6.2		
	e S	T	22:26:51.2							
WLF	e P	Z	22:16:51.3	77.5	356.4	2.3	837	6.5		
ROTZ	e P	Z	22:16:51.5	77.5	0.2	2.5	904	6.5		
	e S	T	22:26:55.5							
GRA1	e P	Z	22:16:51.7	77.6	359.6	2.0	1073	6.6		
	e S	T	22:26:54.1							
	e L	Z	22:50:46.9			21.8	6756		5.9	
WET	e P	Z	22:16:54.7	78.2	0.6	2.4	746	6.3		
	e S	T	22:27:00.1							
GEC2	e P	Z	22:16:56.1	78.5	1.1	2.3	717	6.3		
	e S	T	22:27:04.5							
STU	e P	Z	22:16:56.4	78.5	358.3	1.7	308	6.1		
	e S	T	22:27:05.7							
BFO	e P	Z	22:16:58.5	78.9	357.8	1.6	267	6.0		
FUR	e P	Z	22:17:00.2	79.1	359.6	2.2	1556	6.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	22:09:56.5	52.619N	167.830W	33.0N	5.2			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e P	Z	22:21:35.5	75.0	357.2	1.5	58	5.4		
CLZ	e P	Z	22:21:38.7	75.5	358.9	1.3	36	5.3		
BUG	e P	Z	22:21:40.0	75.9	356.9	1.4	52	5.5		
BRG	e P	Z	22:21:43.8	76.5	1.1	1.3	18	5.0		
MOX	e P	Z	22:21:44.9	76.7	359.7	1.5	26	5.2		
TANN	e P	Z	22:21:46.8	77.0	0.2	1.7	21	5.0		
TNS	e P	Z	22:21:47.3	77.1	357.7	1.4	24	5.1		
ROTZ	e P	Z	22:21:50.1	77.6	0.0	1.5	24	5.1		
GRA1	e P	Z	22:21:50.3	77.7	359.4	1.4	48	5.4		
WET	e P	Z	22:21:53.5	78.2	0.4	1.5	28	5.1		
GEC2	e P	Z	22:21:54.1	78.5	0.9	1.4	32	5.2		
STU	e P	Z	22:21:55.0	78.6	358.2	1.1	25	5.2		
BFO	e P	Z	22:21:57.2	79.0	357.6	1.5	34	5.2		
FUR	e P	Z	22:21:57.5	79.2	359.4	1.3	44	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	22:49:41.8	52.443N	167.668W	33.0N	4.9			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	23:01:36.6	77.9	359.3	1.1	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	23:26:29.2	52.231N	167.878W	33.0N	4.7			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z	23:38:09.1	75.3	358.7	0.8	4	4.5		
IBBN	e P	Z	23:38:10.6	75.4	357.2	1.5	21	5.0		
CLZ	e P	Z	23:38:13.4	75.9	358.9	1.3	14	4.9		
CLL	e P	Z	23:38:15.5	76.5	0.6	0.9	5	4.6		
MOX	e P	Z	23:38:19.6	77.1	359.7	1.2	10	4.8		
MANZ	e P	Z	23:38:23.7	77.8	360.0	1.1	3	4.4		
ROTZ	e P	Z	23:38:25.1	78.0	0.1	1.6	14	4.8		
GRA1	e P	Z	23:38:25.2	78.1	359.4	1.4	16	4.9		
WET	e P	Z	23:38:28.4	78.6	0.5	2.5	34	4.9		
GEC2	e P	Z	23:38:29.6	78.9	1.0	1.1	6	4.6		
STU	e P	Z	23:38:30.2	79.0	358.2	0.7	7	4.8		
BFO	e P	Z	23:38:32.4	79.4	357.6	1.3	13	4.7		
FUR	e P	Z	23:38:34.6	79.6	359.5	1.0	10	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/26	23:47: 7.6	39.089N	33.877E	33.0G		5.1		SZGRF

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	23:51:05.7	17.4	116.5	1.4	80			
WET	e P	Z	23:51:13.3	18.0	116.0					
BRG	e P	Z	23:51:15.9	18.3	122.4					
FUR	e P	Z	23:51:20.9	18.6	110.8					
FBE	e P	Z	23:51:21.0	18.6	121.5					
ROTZ	e P	Z	23:51:22.1	18.7	116.6					
WERN	e P	Z	23:51:25.3	18.8	118.2					
TANN	e P	Z	23:51:24.6	18.8	118.7					
MANZ	e P	Z	23:51:25.2	18.8	117.0					
GUNZ	e P	Z	23:51:25.7	18.9	118.3					
WERD	e P	Z	23:51:26.6	19.0	118.5					
CLL	e P	Z	23:51:26.1	19.0	121.9					
GRA1	e P	Z	23:51:28.0	19.2	114.8					
	e L	Z	23:59:07.6			20.4	9172		5.1	
RUE	e P	Z	23:51:28.2	19.3	126.0					
MOX	e P	Z	23:51:31.8	19.4	117.9					
STU	e P	Z	23:51:38.6	20.1	109.5					
RGN	e P	Z	23:51:44.7	20.7	129.7					
TNS	e P	Z	23:51:49.3	21.1	112.1					
NRDL	e P	Z	23:51:49.7	21.1	119.9					
BSEG	e P	Z	23:51:56.6	21.8	123.3					
BUG	e P	Z	23:52:00.5	22.2	113.3					
WLF	e P	Z	23:52:01.1	22.3	107.8					
IBBN	e P	Z	23:52:02.6	22.3	115.9	1.2	222			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	01:17:24.2	52.335N	167.663W	33.0N	4.9			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	01:29:19.6	78.0	359.3	1.0	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	01:20:24.7	52.020N	167.902W	33.0N	4.9			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e P	Z	01:32:06.4	75.6	357.2	1.2	27	5.3		
CLZ	e P	Z	01:32:09.4	76.1	358.9	1.2	16	5.0		

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BRG	e P	Z	01:32:14.6	77.1	1.2	1.2	12	4.9
MOX	e P	Z	01:32:16.0	77.3	359.7	1.2	15	5.0
GRA1	e P	Z	01:32:21.8	78.3	359.4	1.0	13	4.9
GEC2	e P	Z	01:32:26.2	79.1	1.0	1.2	10	4.6
STU	e P	Z	01:32:26.4	79.2	358.2	1.4	20	4.8
BFO	e P	Z	01:32:28.8	79.6	357.6	1.2	11	4.7
RJOB	e P	Z	01:32:32.8	80.2	0.4	1.1	10	4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	11:44:28.7	63.184S	149.620E	10.0G				NEIC
Balleny Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e PKPbc	Z 12:04:23.4	151.9	139.1					
GEC2	e PKPbc	Z 12:04:24.9	152.3	137.6					
WET	e PKPbc	Z 12:04:27.5	152.9	137.3					
GRA1	e PKPbc	Z 12:04:29.5	154.0	136.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	13:27:0.9	19.754S	177.825W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 13:46:41.0	147.3	19.1					
BRG	e PKPbc	Z 13:46:41.5	147.5	20.9					
FBE	e PKPbc	Z 13:46:42.1	147.6	19.9					
NEUB	e PKPbc	Z 13:46:42.4	147.7	17.1					
TANN	e PKPbc	Z 13:46:43.6	148.3	18.6					
WERD	e PKPbc	Z 13:46:43.4	148.3	18.3					
GUNZ	e PKPbc	Z 13:46:44.0	148.3	18.4					
WERN	e PKPbc	Z 13:46:43.9	148.4	18.6					
MANZ	e PKPbc	Z 13:46:44.6	148.8	18.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	13:47:59.0	39.460N	33.210E	6.0G	4.2			NEIC
Turkey								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:52:22.4	18.6	115.0	1.4	15	4.0		
BFO	e P	Z 13:52:34.7	19.9	107.2	1.1	27	4.4		
CLZ	e P	Z 13:52:33.6	20.1	119.1	1.6	34	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	14:44:29.3	52.559N	168.914W	33.0G	5.3	5.0		SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 14:56:00.0	73.5	359.5	1.2	29	5.2		
NRDL	e P	Z 14:56:06.8	74.9	359.4	1.5	55	5.4		
IBBN	e P	Z 14:56:08.4	75.1	357.9	1.3	63	5.5		
CLZ	e P	Z 14:56:11.1	75.6	359.6	1.4	69	5.6		
BUG	e P	Z 14:56:12.3	76.0	357.6	1.1	48	5.5		
CLL	e P	Z 14:56:13.4	76.1	1.2	1.3	25	5.2		
BRG	e P	Z 14:56:16.0	76.5	1.8	1.2	34	5.3		
MOX	e P	Z 14:56:17.6	76.8	0.3	1.4	51	5.5		
TANN	e P	Z 14:56:18.1	77.0	0.9	1.3	21	5.1		
TNS	e P	Z 14:56:19.8	77.2	358.4	1.3	29	5.2		
MANZ	e P	Z 14:56:21.3	77.5	0.6	1.3	17	5.0		
ROTZ	e P	Z 14:56:23.0	77.7	0.7	1.4	38	5.3		
GRA1	e P	Z 14:56:23.4	77.7	0.1	1.4	82	5.7		
	e S	T 15:06:30.4							
	e SS	R 15:11:44.8							
	e L	Z 15:35:50.8			21.4	769		5.0	
WET	e P	Z 14:56:26.3	78.3	1.1	1.5	43	5.3		
GEC2	e P	Z 14:56:27.7	78.6	1.6	1.0	23	5.1		
STU	e P	Z 14:56:28.1	78.7	358.8	1.3	52	5.4		
BFO	e P	Z 14:56:30.2	79.1	358.3	1.2	32	5.2		
FUR	e P	Z 14:56:31.6	79.3	0.1	0.7	32	5.3		
RJOB	e P	Z 14:56:33.8	79.7	1.1	0.8	24	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	14:45:53.7	52.728N	168.133W	33.0N	5.4			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:57:46.9	77.6	359.6	1.1	34	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	15:13:10.2	52.373N	168.375W	33.0N	5.4			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 15:24:40.7	73.7	359.2	0.9	42	5.5		
NRDL	e P	Z 15:24:48.8	75.1	359.0	1.0	32	5.3		
IBBN	e P	Z 15:24:49.9	75.3	357.6	1.0	70	5.7		
CLZ	e P	Z 15:24:53.1	75.8	359.2	1.0	54	5.6		

BUG	e P	Z	15:24:54.4	76.1	357.3	0.9	28	5.4
CLL	e P	Z	15:24:55.3	76.3	0.9	1.0	29	5.3
BRG	e P	Z	15:24:58.0	76.7	1.5	1.0	33	5.4
MOX	e P	Z	15:24:59.6	77.0	360.0	1.0	42	5.5
TANN	e P	Z	15:25:00.9	77.2	0.5	1.3	26	5.2
TNS	e P	Z	15:25:01.7	77.4	358.0	1.0	34	5.4
MANZ	e P	Z	15:25:03.3	77.6	0.3	1.1	20	5.2
WLF	e P	Z	15:25:04.8	77.9	356.6	1.1	36	5.4
ROTZ	e P	Z	15:25:05.0	77.9	0.4	1.4	38	5.3
GRA1	e P	Z	15:25:05.4	77.9	359.7	1.0	59	5.7
WET	e P	Z	15:25:08.3	78.5	0.8	1.2	33	5.2
GEC2	e P	Z	15:25:09.7	78.8	1.3	1.0	34	5.3
STU	e P	Z	15:25:09.8	78.8	358.5	0.9	36	5.4
BFO	e P	Z	15:25:12.2	79.3	358.0	1.0	37	5.3
FUR	e P	Z	15:25:13.6	79.5	359.8	1.0	74	5.6
RJOB	e P	Z	15:25:15.8	79.9	0.7	0.9	54	5.5

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/27 15:27: 4.3 52.340N 168.363W 33.0N 5.5
 Fox Islands, Aleutian Islands, United States SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 15:38:34.9	73.7	359.2	1.0	43	5.4		
NRDL	e P	Z 15:38:43.0	75.2	359.0	1.3	52	5.5		
IBBN	e P	Z 15:38:44.2	75.3	357.6	1.0	77	5.8		
CLZ	e P	Z 15:38:47.4	75.8	359.2	1.0	58	5.7		
BUG	e P	Z 15:38:48.5	76.2	357.3	0.9	42	5.6		
CLL	e P	Z 15:38:49.6	76.3	0.9	1.0	31	5.4		
BRG	e P	Z 15:38:52.3	76.8	1.4	1.1	38	5.5		
MOX	e P	Z 15:38:53.8	77.0	360.0	1.0	44	5.6		
TANN	e P	Z 15:38:55.3	77.2	0.5	2.7	238	5.8		
TNS	e P	Z 15:38:56.0	77.4	358.0	1.1	38	5.4		
MANZ	e P	Z 15:38:57.6	77.7	0.3	1.2	29	5.3		
WLF	e P	Z 15:38:59.1	77.9	356.6	1.0	41	5.5		
ROTZ	e P	Z 15:38:59.3	77.9	0.4	1.2	33	5.3		
GRA1	e P	Z 15:38:59.7	78.0	359.7	1.0	70	5.8		
WET	e P	Z 15:39:02.7	78.5	0.8	1.3	36	5.3		
GEC2	e P	Z 15:39:04.0	78.8	1.3	1.1	40	5.3		
STU	e P	Z 15:39:04.1	78.9	358.5	1.0	47	5.5		
BFO	e P	Z 15:39:06.5	79.3	357.9	1.0	37	5.3		
FUR	e P	Z 15:39:07.9	79.5	359.8	1.2	84	5.5		
RJOB	e P	Z 15:39:10.1	79.9	0.7	0.9	40	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/27 15:54: 3.5 51.547N 179.204E 33.0N 4.8
 SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:06:00.4	78.2	7.6	1.5	14	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	16:16:51.4	52.322N	168.497W	33.0N	5.0			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:28:46.8	78.0	359.8	1.2	15	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	16:49:32.2	46.677N	153.016E	33.0N	5.3			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 17:01:08.0	74.5	25.6	1.0	26	5.2		
NRDL	e P	Z 17:01:15.5	75.9	25.3	1.2	38	5.4		
CLL	e P	Z 17:01:17.0	76.2	27.0	1.1	60	5.7		
BRG	e P	Z 17:01:17.6	76.3	27.6	1.3	36	5.3		
CLZ	e P	Z 17:01:18.7	76.4	25.4	1.2	86	5.7		
IBBN	e P	Z 17:01:19.7	76.6	23.7	1.1	62	5.7		
TANN	e P	Z 17:01:22.6	77.1	26.6	1.7	36	5.2		
MOX	e P	Z 17:01:22.6	77.1	26.0	1.2	40	5.4		
BUG	e P	Z 17:01:25.2	77.6	23.3	1.5	55	5.5		
MANZ	e P	Z 17:01:25.4	77.6	26.3	1.1	20	5.2		
ROTZ	e P	Z 17:01:26.5	77.8	26.3	1.2	29	5.3		
GRA1	e P	Z 17:01:28.4	78.1	25.7	1.1	48	5.6		
WET	e P	Z 17:01:28.5	78.1	26.7	1.2	39	5.4		
GEC2	e P	Z 17:01:28.2	78.1	27.2	0.9	10	4.9		
TNS	e P	Z 17:01:29.5	78.4	24.0	1.1	33	5.3		
WLF	e P	Z 17:01:36.0	79.5	22.4	1.4	43	5.2		
FUR	e P	Z 17:01:35.7	79.5	25.6	1.0	30	5.2		
STU	e P	Z 17:01:35.5	79.5	24.3	0.9	26	5.2		
BFO	e P	Z 17:01:38.9	80.1	23.7	1.2	34	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27	17:52:16.1	9.467N	126.234E	70.0G				NEIC

Mindanao, Philippine Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z 18:05:36.1	96.2	66.6					

CLL	e Pdiff	Z	18:05:37.6	96.6	65.8
BSEG	e Pdiff	Z	18:05:39.3	96.9	63.3
GEC2	e Pdiff	Z	18:05:40.7	97.2	66.7
TANN	e Pdiff	Z	18:05:41.3	97.3	65.5
WET	e Pdiff	Z	18:05:42.3	97.6	66.0
MOX	e Pdiff	Z	18:05:42.6	97.7	64.8
ROTZ	e Pdiff	Z	18:05:43.2	97.7	65.4
NRDL	e Pdiff	Z	18:05:43.1	97.7	63.3
CLZ	e Pdiff	Z	18:05:43.6	97.8	63.6
RJOB	e Pdiff	Z	18:05:45.3	98.2	66.1
GRA1	e Pdiff	Z	18:05:45.6	98.3	64.6
FUR	e Pdiff	Z	18:05:48.9	98.9	64.9
IBBN	e Pdiff	Z	18:05:49.3	99.1	61.4
STU	e Pdiff	Z	18:05:53.2	99.9	63.1
WLF	e Pdiff	Z	18:05:59.7	101.2	60.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/27								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:22:57.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28	03:34:13.0	19.200N	64.700W	14.0G	4.6			NEIC
Caribbean Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:45:11.7	66.5	272.3	1.0	4	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28	04:05:45.2	44.680N	10.182E	10.0G			4.6	SZGRF
Northern Italy								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z 04:06:41.8	3.6	211.6					4.7
FUR	e Pn	Z 04:06:41.1	3.6	192.6					4.8
	e Sn	E 04:07:22.9							
BFO	e Pn	Z 04:06:45.2	3.9	160.1					4.6
	e Sn	E 04:07:28.6							
STU	e Pn	Z 04:06:48.8	4.1	170.2					4.8
	e Sn	E 04:07:34.9							
GEC2	e Pn	Z 04:06:57.0	4.8	211.4					4.5
	e Sn	N 04:07:52.6							

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WET	e Sn	Z	04:07:51.7	4.8	203.4							4.5
GRA1	e Pn	Z	04:06:59.8	5.1	188.4							
	e Sn	E	04:07:58.0									
	e Sn	N	04:07:58.4									
ROTZ	e Pn	Z	04:07:02.7	5.3	195.9							
	e Sn	E	04:08:01.8									
MANZ	e Sn	E	04:08:06.5	5.5	194.5							
TNS	e Pn	Z	04:07:09.6	5.7	167.4							
	e Sn	E	04:08:13.1									
WERN	e Sn	E	04:08:14.7	5.8	195.6							
TANN	e Pn	Z	04:07:11.9	5.9	195.9							
MOX	e Pn	Z	04:07:13.7	6.0	189.7							
	e Sn	E	04:08:20.8									
BRG	e Pn	Z	04:07:23.1	6.7	203.6							
CLL	e Pn	Z	04:07:24.5	6.9	197.0							
CLZ	e Pn	Z	04:07:29.0	7.2	181.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 04:30:38.9							
BSEG	e PKP	Z 04:30:36.3							
CLL	e PKP	Z 04:30:38.5							
CLZ	e PKP	Z 04:30:40.3							
FBE	e PKP	Z 04:30:39.3							
GEC2	e PKP	Z 04:30:42.2							
GRA1	e PKP	Z 04:30:44.3							
MANZ	e PKP	Z 04:30:41.4							
NRDL	e PKP	Z 04:30:39.3							
TANN	e PKP	Z 04:30:40.5							
TNS	e PKP	Z 04:30:43.7							
WERD	e PKP	Z 04:30:41.8							
WET	e PKP	Z 04:30:41.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 04:34:17.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28	05:24:16.3	5.400N	95.500E	21.0G	4.7			NEIC

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:36:35.1	82.2	90.9	0.7	4	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/28	21:59:44.2	19.150S	173.930W	38.2		5.3		SZGRF

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e L	Z 23:24:41.1	144.2	11.8	21.4	481		5.2	
HLG	e L	Z 23:27:07.6	144.9	3.0	19.5	534		5.3	
BSEG	e PKPbc	Z 22:19:17.4	145.1	7.0					
	e pPKPbc	Z 22:19:28.6							
	e L	Z 23:25:20.0			19.6	525		5.3	
RUE	e L	Z 23:29:50.5	146.1	13.1	20.9	595		5.3	
NRDL	e PKPbc	Z 22:19:21.9	146.5	6.9					
	e L	Z 23:26:39.3			20.6	740		5.5	
IBBN	e PKPbc	Z 22:19:22.8	146.8	2.9					
	e L	Z 23:26:38.8			21.3	483		5.3	
CLZ	e PKPbc	Z 22:19:24.0	147.1	7.5					
	e L	Z 23:27:25.9			20.3	467		5.3	
CLL	e PKPbc	Z 22:19:24.1	147.4	12.2					
	e L	Z 23:33:15.1			19.1	550		5.4	
BRG	e PKPbc	Z 22:19:25.1	147.7	14.0					
	e L	Z 23:28:46.7			21.6	524		5.3	
BUG	e L	Z 23:27:27.8	147.7	2.1	19.8	575		5.4	
FBE	e PKPbc	Z 22:19:25.6	147.7	13.0					
MOX	e PKPbc	Z 22:19:26.7	148.2	10.0					
	e PKPab	Z 22:19:29.4							
	e L	Z 23:30:53.6			21.5	463		5.2	
WERD	e PKPbc	Z 22:19:26.9	148.3	11.3					
TANN	e PKPbc	Z 22:19:26.9	148.3	11.6					
	e PKPab	Z 22:19:30.1							
	e L	Z 23:28:41.4			19.7	658		5.4	
GUNZ	e PKPbc	Z 22:19:27.4	148.4	11.3					
	e PKPab	Z 22:19:30.4							
	e pPKPbc	Z 22:19:38.7							
WERN	e PKPbc	Z 22:19:27.7	148.5	11.4					
	e PKPab	Z 22:19:30.7							
MANZ	e PKPbc	Z 22:19:28.2	148.8	11.1					
	e pPKPbc	Z 22:19:39.9							
	e L	Z 23:28:14.4			20.7	636		5.4	
TNS	e L	Z 23:31:48.4	148.9	4.3	21.7	421		5.2	
ROTZ	e PKPbc	Z 22:19:28.8	149.0	11.3					
	e L	Z 23:28:41.1			21.7	681		5.4	
GRA1	e PKPbc	Z 22:19:29.3	149.2	9.5					

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	e L	Z	23:27:11.2			20.8	480	5.3
GRFO	e L	Z	23:27:11.3	149.2	9.5	20.8	462	5.3
WET	e PKPbc	Z	22:19:30.1	149.5	12.8			
	e PKPab	Z	22:19:35.0					
	e L	Z	23:30:42.0			20.2	617	5.4
GEC2	e PKPbc	Z	22:19:30.3	149.7	14.4			
	e PKPab	Z	22:19:35.5					
	e L	Z	23:26:56.8			20.7	644	5.4
STU	e PKPbc	Z	22:19:31.7	150.3	6.0			
	e L	Z	23:27:00.8			21.2	503	5.3
FUR	e PKPbc	Z	22:19:32.5	150.7	10.1			
	e pPKPbc	Z	22:19:44.3					
	e L	Z	23:30:54.1			21.0	521	5.3
BFO	e PKPbc	Z	22:19:32.7	150.8	4.4			
	e L	Z	23:24:11.0			22.0	417	5.2
RJOB	e PKPbc	Z	22:19:32.8	150.9	13.1			
	e PKPab	Z	22:19:41.2					
	e L	Z	23:29:06.1			21.0	669	5.4

Date Origin Time Lat Long Depth mb Ms ML Source
 2007/12/29 20:55:21.8 21.280S 172.550W 33.0N SZGRF
 Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 21:15:01.4	147.3	4.9					
RUE	e PKPbc	Z 21:15:04.5	148.4	11.3					
NRDL	e PKPbc	Z 21:15:05.2	148.7	4.8					
IBBN	e PKPbc	Z 21:15:06.4	149.0	0.6					
CLZ	e PKPbc	Z 21:15:07.4	149.4	5.3					
CLL	e PKPbc	Z 21:15:08.0	149.7	10.3					
BRG	e PKPbc	Z 21:15:08.9	150.0	12.2					
FBE	e PKPbc	Z 21:15:09.3	150.0	11.1					
MOX	e PKPbc	Z 21:15:10.2	150.5	7.9					
WERD	e PKPbc	Z 21:15:10.6	150.6	9.2					
TANN	e PKPbc	Z 21:15:10.5	150.6	9.5					
GUNZ	e PKPbc	Z 21:15:11.0	150.7	9.3					
WERN	e PKPbc	Z 21:15:11.2	150.7	9.4					
TNS	e PKPbc	Z 21:15:11.6	151.0	1.9					
MANZ	e PKPbc	Z 21:15:11.8	151.1	9.0					
ROTZ	e PKPbc	Z 21:15:12.1	151.3	9.2					
GRA1	e PKPbc	Z 21:15:12.3	151.4	7.4					
WET	e PKPbc	Z 21:15:13.2	151.8	10.8					
GEC2	e PKPbc	Z 21:15:13.7	152.0	12.5					
STU	e PKPbc	Z 21:15:15.1	152.5	3.5					
BFO	e PKPbc	Z 21:15:15.9	152.9	1.8					
FUR	e PKPbc	Z 21:15:16.1	152.9	7.9					
RJOB	e PKPbc	Z 21:15:16.3	153.2	11.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/29	22:58:12.5	53.710N	168.010W	33.0N	5.7	5.6		SZGRF
Fox Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e L	Z	23:41:33.7	71.7	0.8	20.4	3542		5.6	
HLG	e L	Z	23:42:21.1	72.1	357.4	21.1	2155		5.4	
BSEG	e P	Z	23:09:37.8	72.3	359.0	1.1	96	5.8		
	e L	Z	23:51:29.4			18.6	3710		5.7	
NRDL	e P	Z	23:09:45.7	73.8	358.8	1.1	68	5.6		
	e L	Z	23:42:16.4			21.9	3016		5.5	
RUE	e P	Z	23:09:46.3	73.8	1.1	1.2	130	5.8		
	e L	Z	23:45:41.6			19.9	3250		5.6	
IBBN	e P	Z	23:09:47.1	73.9	357.4	1.1	109	5.8		
	e L	Z	23:48:08.0			19.9	3012		5.6	
CLZ	e P	Z	23:09:50.2	74.4	359.0	1.1	111	5.8		
	e L	Z	23:48:39.1			18.4	4502		5.8	
BUG	e P	Z	23:09:51.7	74.8	357.1	1.1	85	5.7		
	e L	Z	23:49:48.8			19.3	3616		5.7	
CLL	e P	Z	23:09:52.4	75.0	0.6	1.1	50	5.5		
	e L	Z	23:51:15.5			19.1	3469		5.7	
FBE	e P	Z	23:09:55.0	75.4	0.8	1.3	120	5.9		
BRG	e P	Z	23:09:55.0	75.4	1.2	1.1	64	5.6		
	e L	Z	23:50:02.8			19.8	3384		5.7	
UBBA	e P	Z	23:09:55.4	75.5	358.8	1.5	67	5.5		
	e L	Z	23:50:03.2			18.1	2897		5.6	
MOX	e P	Z	23:09:56.7	75.6	359.8	1.1	79	5.8		
	e L	Z	23:49:32.9			21.4	2235		5.4	
WERD	e P	Z	23:09:58.0	75.8	0.2	1.2	39	5.4		
TANN	e P	Z	23:09:58.2	75.9	0.3	1.7	98	5.7		
	e L	Z	23:48:29.8			20.2	2451		5.5	
GUNZ	e P	Z	23:09:58.3	75.9	0.2	1.2	47	5.5		
WERN	e P	Z	23:09:59.0	76.0	0.2	1.1	71	5.7		
TNS	e P	Z	23:09:58.8	76.0	357.8	1.2	72	5.7		
	e L	Z	23:48:45.4			18.9	3826		5.7	
MANZ	e P	Z	23:10:00.4	76.3	0.1	1.2	44	5.5		
	e L	Z	23:44:24.3			20.6	2055		5.4	
ROTZ	e P	Z	23:10:02.1	76.5	0.1	1.2	60	5.6		
	e L	Z	23:59:47.8			18.6	2407		5.5	
GRA1	e P	Z	23:10:02.7	76.6	359.5	1.1	132	6.0		
	e L	Z	23:52:45.9			18.2	2370		5.5	
GRFO	e P	Z	23:10:02.7	76.6	359.5	1.2	124	5.9		
	e L	Z	23:52:46.0			18.2	2270		5.5	
WET	e P	Z	23:10:05.3	77.1	0.5	1.2	64	5.6		
	e L	Z	23:52:38.9			18.1	2872		5.6	
GEC2	e P	Z	23:10:06.7	77.4	1.0	1.3	84	5.7		

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	e L	Z	23:51:46.6			19.5	3926		5.7
STU	e P	Z	23:10:07.0	77.5	358.3	1.1	92	5.8	
	e L	Z	23:45:59.4			20.5	2253		5.5
BFO	e P	Z	23:10:09.1	77.9	357.8	1.3	92	5.8	
	e L	Z	23:50:51.3			19.4	2517		5.6
FUR	e P	Z	23:10:10.7	78.1	359.6	1.2	150	5.9	
	e L	Z	23:44:27.0			21.5	2217		5.5
RJOB	e P	Z	23:10:13.1	78.6	0.5	0.9	58	5.6	
	e L	Z	23:53:41.8			18.4	3024		5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/29	23:06:18.6	53.640N	167.970W	33.0N	5.2			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z 23:17:52.0	73.9	358.8	1.1	18	5.0		
RUE	e P	Z 23:17:52.4	73.9	1.1	1.1	34	5.3		
IBBN	e P	Z 23:17:52.9	74.0	357.4	1.2	57	5.5		
CLZ	e P	Z 23:17:56.3	74.5	359.0	1.2	38	5.3		
CLL	e P	Z 23:17:58.6	75.0	0.6	1.0	16	5.0		
FBE	e P	Z 23:18:01.2	75.4	0.8	1.1	32	5.3		
BRG	e P	Z 23:18:01.3	75.5	1.2	1.1	18	5.1		
UBBA	e P	Z 23:18:01.2	75.5	358.8	1.9	50	5.3		
MOX	e P	Z 23:18:02.7	75.7	359.7	1.1	23	5.2		
WERD	e P	Z 23:18:03.7	75.9	0.2	1.4	21	5.1		
WERN	e P	Z 23:18:05.1	76.1	0.2	1.1	20	5.2		
TNS	e P	Z 23:18:04.9	76.1	357.8	1.1	22	5.2		
GRA1	e P	Z 23:18:08.6	76.7	359.5	1.0	28	5.4		
WET	e P	Z 23:18:11.5	77.2	0.5	1.2	16	5.0		
GEC2	e P	Z 23:18:12.8	77.5	1.0	1.2	26	5.2		
STU	e P	Z 23:18:13.3	77.6	358.3	0.9	23	5.3		
BFO	e P	Z 23:18:15.4	78.0	357.8	1.1	22	5.2		
FUR	e P	Z 23:18:16.7	78.2	359.5	1.4	50	5.4		
RJOB	e P	Z 23:18:19.1	78.6	0.5	0.9	20	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/30	06:23:59.7	20.450S	172.500W	33.0N		5.4		SZGRF

Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 06:43:36.9	146.4	4.8					
NRDL	e PKPbc	Z 06:43:41.1	147.9	4.6					
IBBN	e PKPbc	Z 06:43:42.2	148.1	0.5					
CLZ	e PKPbc	Z 06:43:43.2	148.5	5.2					
CLL	e PKPbc	Z 06:43:43.7	148.8	10.0					

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BRG	e	PKPbc	Z	06:43:44.5	149.2	11.8					
MOX	e	PKPbc	Z	06:43:45.7	149.6	7.6					
TANN	e	PKPbc	Z	06:43:46.5	149.8	9.3					
TNS	e	PKPbc	Z	06:43:47.0	150.2	1.8					
ROTZ	e	PKPbc	Z	06:43:48.3	150.4	9.0					
GRA1	e	PKPbc	Z	06:43:48.6	150.6	7.1					
	e	L	Z	07:51:29.8			20.9	589		5.4	
WET	e	PKPbc	Z	06:43:49.6	151.0	10.4					
GEC2	e	PKPbc	Z	06:43:49.7	151.2	12.1					
STU	e	PKPbc	Z	06:43:50.9	151.6	3.3					
BFO	e	PKPbc	Z	06:43:52.1	152.1	1.7					
FUR	e	PKPbc	Z	06:43:52.0	152.1	7.6					
RJOB	e	PKPbc	Z	06:43:52.4	152.4	10.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/30	06:42:11.9	35.390N	22.870E	10.0G		4.5		SZGRF
Central Mediterranean Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z 06:45:28.7	14.4	145.1					
GEC2	e Pn	Z 06:45:36.1	15.1	150.0					
FUR	e Pn	Z 06:45:41.8	15.4	141.9					
	e P	Z 06:45:54.0							
WET	e Pn	Z 06:45:43.5	15.6	148.2					
GRA1	e Pn	Z 06:46:00.0	16.6	144.9					
	e P	Z 06:46:08.0							
	e L	Z 06:52:30.0			10.2	2126		4.5	
STU	e Pn	Z 06:45:59.5	16.7	138.0					
BRG	e Pn	Z 06:45:59.7	16.8	154.0					
MOX	e Pn	Z 06:46:06.6	17.3	147.6					
	e P	Z 06:46:15.5							
CLL	e P	Z 06:46:16.7	17.4	152.2					
UBBA	e P	Z 06:46:23.2	18.0	144.0					
TNS	e Pn	Z 06:46:18.1	18.2	139.3					
	e P	Z 06:46:25.0							
CLZ	e Pn	Z 06:46:26.3	18.7	146.6					
	e P	Z 06:46:31.2							
NRDL	e Pn	Z 06:46:34.9	19.4	147.1					
	e P	Z 06:46:39.0							
IBBN	e Pn	Z 06:46:44.4	20.0	141.7					
BSEG	e Pn	Z 06:46:48.7	20.5	149.6					
	e P	Z 06:46:50.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/30	12:47: 6.7	28.177N	140.273E	33.0	5.4			SZGRF

Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 12:59:50.0	87.2	42.6	0.9	20	5.4		
BRG	e P	Z 12:59:53.0	87.9	45.3	1.7	40	5.5		
CLL	e P	Z 12:59:53.3	88.0	44.6	1.2	22	5.4		
CLZ	e P	Z 12:59:57.3	88.7	42.6	0.8	10	5.1		
MOX	e P	Z 12:59:58.7	89.1	43.5	1.1	12	5.0		
GEC2	e P	Z 13:00:00.2	89.4	45.1	1.0	19	5.3		
ROTZ	e P	Z 13:00:00.8	89.5	44.0	0.9	18	5.3		
IBBN	e P	Z 13:00:00.3	89.5	40.5	1.0	35	5.5		
WET	e P	Z 13:00:01.1	89.6	44.5	1.1	12	5.0		
GRA1	e P	Z 13:00:03.0	90.0	43.2	1.0	22	5.4		
RJOB	e P	Z 13:00:05.9	90.6	44.4	0.9	31	5.6		
TNS	e P	Z 13:00:06.6	90.8	41.1	1.6	25	5.3		
FUR	e P	Z 13:00:08.1	91.0	43.3	0.9	57	5.9		
STU	e P	Z 13:00:10.0	91.5	41.7	1.1	35	5.6		
BFO	e P	Z 13:00:13.1	92.2	41.0	1.2	26	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	03:46:25.3	52.413N	167.232W	33.0N	5.3			SZGRF

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:58:20.2	77.9	359.0	1.2	28	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	10:04:57.8	44.416N	10.186E	10.0G			3.6	SZGRF

Northern Italy

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e Pn	Z 10:05:56.7	3.8	209.5					3.7
FUR	e Pn	Z 10:05:56.5	3.8	191.8					
BFO	e Pn	Z 10:06:00.5	4.1	161.2					3.5
	e Sn	N 10:06:44.9							
GRC2	e Pn	Z 10:06:04.8	4.5	190.8					
	e Sn	E 10:06:54.8							
GRC3	e Sn	N 10:06:55.6	4.6	192.6					
GRB5	e Pn	Z 10:06:08.3	4.8	192.8					
GRB2	e Pn	Z 10:06:10.8	5.0	192.4					
GEC2	e Pn	Z 10:06:12.4	5.0	209.9					
	e Sn	N 10:07:06.9							
GRB3	e Pn	E 10:06:12.1	5.1	193.3					
GRB4	e Sn	E 10:07:09.1	5.1	191.0					
GRA1	e Pn	Z 10:06:15.4	5.3	188.0					

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MANZ	e Pn	Z	10:06:20.5	5.7	193.9
MOX	e Pn	Z	10:06:28.9	6.3	189.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	10:39:53.2	13.414S	74.111W	33.0N	5.6			SZGRF

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:53:22.8	97.2	257.8	2.3	35	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	14:39:25.4	27.848N	141.126E	33.0N	5.2			SZGRF

Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:52:24.8	90.6	42.7	0.9	12	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	16:05:48.3	43.782N	18.673E	10.0G			3.8	SZGRF

Northwestern Balkan Peninsula

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ARSA	e Pn	Z 16:06:49.2	4.1	146.4					3.8
	e Sn	Z 16:07:33.6							
KBA	e Pn	Z 16:07:03.4	5.0	129.5					
MOA	e Pn	Z 16:07:03.9	5.1	141.3					
	e Sn	Z 16:08:00.5							
RJOB	e Pn	Z 16:07:12.3	5.7	131.8					
	e Sn	N 16:08:12.7							
WTTA	e Pn	Z 16:07:18.2	6.0	122.7					
GEC2	e Pn	Z 16:07:17.6	6.1	144.0					
WET	e Pn	Z 16:07:26.3	6.7	141.2					
GRC1	e Pn	Z 16:07:31.1	7.2	133.9					
ROTZ	e Pn	Z 16:07:36.0	7.4	141.1					
MANZ	e Pn	Z 16:07:39.9	7.7	141.7					
GRA1	e Pn	Z 16:07:40.5	7.8	136.4					
STU	e Pn	Z 16:07:46.1	8.2	123.8					
MOX	e Pn	Z 16:07:48.0	8.4	142.4					
BFO	e Pn	Z 16:07:49.2	8.5	118.6					
TNS	e Pn	Z 16:08:03.9	9.5	128.9					

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	17:07:24.5	22.830S	179.760E	507.6				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 17:26:11.9	147.9	18.5					
NRDL	e PKPbc	Z 17:26:15.3	149.3	18.9					
CLL	e PKPbc	Z 17:26:16.7	149.7	24.8					
	e pPKPbc	Z 17:28:15.6							
CLZ	e PKPbc	Z 17:26:17.1	149.9	19.8					
	e pPKPbc	Z 17:28:15.6							
BRG	e PKPbc	Z 17:26:17.0	149.9	26.7					
TANN	e PKPbc	Z 17:26:18.8	150.7	24.5					
GRA1	e pPKPbc	Z 17:26:22.8	151.7	22.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	18:23:37.1	40.891N	72.407E	33.0N	4.9			SZGRF

Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:31:14.7	40.8	80.6	1.5	40	4.9		
CLL	e P	Z 18:31:18.6	41.3	80.5	1.4	30	4.8		
GEC2	e P	Z 18:31:19.6	41.3	78.2	1.5	57	5.1		
WET	e P	Z 18:31:23.2	41.8	78.0	1.3	27	4.8		
TANN	e P	Z 18:31:23.1	41.8	79.2					
ROTZ	e P	Z 18:31:25.7	42.1	78.3					
RJOB	e P	Z 18:31:25.6	42.1	76.4					
MOX	e P	Z 18:31:27.3	42.3	78.9	1.2	21	4.7		
GRA1	e P	Z 18:31:31.2	42.7	77.6	1.4	44	5.0		
CLZ	e P	Z 18:31:31.1	42.8	79.3					
NRDL	e P	Z 18:31:31.5	42.8	79.9	1.7	42	4.9		
UBBA	e P	Z 18:31:34.9	43.2	78.0	1.8	51	4.9		
IBBN	e P	Z 18:31:43.1	44.3	78.1					
BFO	e P	Z 18:31:48.0	44.9	74.5	1.7	50	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/12/31	19:26:30.5	40.518N	71.373E	19.5	4.5			SZGRF

Tajikistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:34:04.5	40.3	81.8					
GEC2	e P	Z 19:34:09.1	40.8	79.3	1.4	17	4.6		
	e pP	Z 19:34:14.2							
CLL	e P	Z 19:34:08.6	40.9	81.7					
WET	e P	Z 19:34:12.8	41.3	79.1	1.8	22	4.6		

	e pP	Z	19:34:18.0					
TANN	e P	Z	19:34:12.8	41.3	80.3	0.6	2	4.1
BSEG	e P	Z	19:34:18.4	42.1	82.7			
GRA1	e P	Z	19:34:21.0	42.3	78.7	0.6	11	4.7
	e pP	Z	19:34:26.2					
CLZ	e P	Z	19:34:21.8	42.4	80.5			
NRDL	e P	Z	19:34:21.7	42.4	81.0			
FUR	e P	Z	19:34:23.5	42.5	77.1	0.7	12	4.7
UBBA	e P	Z	19:34:24.7	42.8	79.1			
IBBN	e P	Z	19:34:33.2	43.9	79.2	0.7	5	4.3
BFO	e P	Z	19:34:37.6	44.4	75.6			

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