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

(produced by SZGRF/BGR - HANNOVER)

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

(Format desciption at the end of the bulletin)

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	08:35: 8.5	36.109N	70.974E	33.0N	4.7			SZGRF

Hindu Kush, Afghanistan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	08:43:01.8	42.7	87.4	0.7	7	4.5		
CLL	e P	Z	08:43:05.3	43.3	87.2	0.8	4	4.2		
WET	e PcP	Z	08:44:59.3	43.5	84.8					
RJOB	e P	Z	08:43:10.2	43.7	83.3	0.7	5	4.3		
GRA1	e P	Z	08:43:17.5	44.5	84.2	1.8	34	5.0		
BSEG	e P	Z	08:43:18.1	44.8	87.8	0.9	10	4.7		
NRDL	e P	Z	08:43:19.7	45.0	86.2	1.5	14	4.7		
UBBA	e P	Z	08:43:21.2	45.2	84.5	2.8	46	4.9		
BFO	e P	Z	08:43:32.6	46.6	80.9	1.5	10	4.7		
WLF	e PcP	Z	08:45:10.4	47.8	80.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	09:11:29.0	35.144N	85.826E	33.0N	4.5			SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	09:20:44.4	53.2	76.3	1.3	6	4.4		
ROTZ	e P	Z	09:20:50.0	54.0	76.0	1.1	5	4.4		
CLZ	e P	Z	09:20:54.0	54.6	76.2	0.8	5	4.5		
NRDL	e P	Z	09:20:54.3	54.6	76.5	0.8	4	4.5		
GRA1	e P	Z	09:20:54.5	54.6	75.3	1.3	11	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	09:20:43.2	38.285N	139.661E	33.0G	4.8			SZGRF

Near west coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:32:38.7	78.0	38.4	0.9	8	4.9		
BRG	e P	Z	09:32:43.5	79.0	40.5	1.2	6	4.5		
CLL	e P	Z	09:32:43.5	79.0	39.9	1.1	10	4.8		
NRDL	e P	Z	09:32:44.9	79.2	38.0	1.0	6	4.5		
CLZ	e P	Z	09:32:47.6	79.6	38.1	1.1	13	4.7		
TANN	e P	Z	09:32:48.8	79.9	39.4	1.4	4	4.2		
MOX	e P	Z	09:32:49.5	80.1	38.9	1.2	7	4.5		
IBBN	e P	Z	09:32:50.5	80.2	36.4	0.9	10	4.8		
ROTZ	e P	Z	09:32:52.5	80.5	39.2	1.3	13	4.8		
GEC2	e P	Z	09:32:52.2	80.6	40.1	1.0	5	4.5		
WET	e P	Z	09:32:53.2	80.7	39.6	1.3	9	4.6		
GRA1	e P	Z	09:32:55.0	81.0	38.5	1.3	27	5.1		
BUG	e P	Z	09:32:55.0	81.1	35.9	1.3	14	4.8		
TNS	e P	Z	09:32:58.1	81.6	36.6	0.9	5	4.7		
RJOB	e P	Z	09:32:59.4	81.8	39.4	1.1	9	4.8		
FUR	e P	Z	09:33:00.8	82.2	38.4	1.1	20	5.2		
STU	e P	Z	09:33:02.7	82.5	37.0	1.0	17	5.2		
BFO	e P	Z	09:33:06.0	83.2	36.4	1.3	24	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	12:36:39.3	53.294N	163.396W	33.0N	4.4			SZGRF

Unimak Island, Alaska, United States, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	12:48:28.7	76.9	356.7	0.9	3	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	18:27:19.0	38.406N	20.412E	10.0G				SZGRF

Greece

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	18:29:28.9	9.2	149.9					
	e Sn	N	18:31:07.9							
ARSA	e Pn	Z	18:29:33.9	9.5	156.2					
KBA	e Pn	Z	18:29:41.8	10.1	146.6					
	e Sn	E	18:31:32.1							
MOA	e Pn	Z	18:29:46.7	10.4	152.4					
	e Sn	E	18:31:38.7							
RJOB	e Pn	Z	18:29:53.2	10.9	146.5					
	e Sn	E	18:31:50.6							

WTTA	e Pn	Z	18:29:55.0	10.9	140.9
	e Sn	E	18:31:53.4		
GEC2	e Pn	Z	18:30:00.8	11.5	152.7
DAVA	e Sn	N	18:32:10.5	11.7	135.3
WET	e Pn	Z	18:30:08.3	12.0	150.4
	e Sn	E	18:32:16.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	18:53: 6.8	13.105N	56.017E	33.0G	5.0	3.5		SZGRF

Socotra region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z	19:01:57.3	49.8	119.2	2.5	54	5.0		
GEC2	e P	Z	19:01:57.4	49.9	120.9	1.6	14	4.6		
WET	e P	Z	19:02:01.4	50.5	120.3	2.7	40	4.9		
BRG	e P	Z	19:02:04.4	50.8	122.6	1.7	25	4.9		
FUR	e P	Z	19:02:05.6	50.9	118.0	1.3	85	5.5		
ROTZ	e P	Z	19:02:07.3	51.2	120.1	1.5	18	4.8		
TANN	e P	Z	19:02:08.9	51.4	120.8	1.8	42	5.1		
CLL	e P	Z	19:02:10.1	51.5	121.9	1.7	50	5.2		
GRA1	e P	Z	19:02:10.9	51.7	119.0	1.5	40	5.1		
	e L	Z	19:26:42.4			21.3	61		3.6	
MOX	e P	Z	19:02:13.1	51.9	120.1	2.2	56	5.1		
	e L	Z	19:27:13.2			21.4	53		3.5	
STU	e P	Z	19:02:16.1	52.4	116.3	1.3	17	4.8		
BFO	e P	Z	19:02:19.3	52.8	115.2	1.5	25	4.9		
UBBA	e P	Z	19:02:20.1	52.9	118.5	1.9	34	5.0		
CLZ	e P	Z	19:02:22.8	53.2	119.6	1.6	44	5.1		
TNS	e P	Z	19:02:24.5	53.5	116.6	1.6	25	4.9		
NRDL	e P	Z	19:02:26.2	53.7	119.7	1.5	52	5.3		
BSEG	e P	Z	19:02:29.5	54.3	120.9	1.8	34	5.1		
WLF	e P	Z	19:02:33.2	54.6	114.0	1.5	33	5.2		
BUG	e P	Z	19:02:33.7	54.7	116.2	1.4	22	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	21:18:55.9	12.760N	92.912E	55.5	5.1			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	21:30:20.8	73.2	90.3	0.9	17	5.2		
RUE	e P	Z	21:30:21.2	73.3	90.7	1.0	44	5.6		
GEC2	e P	Z	21:30:21.8	73.4	89.5	0.8	19	5.3		
FBE	e P	Z	21:30:23.2	73.6	89.9	0.9	31	5.3		
CLL	e P	Z	21:30:23.8	73.8	89.7	1.0	11	4.8		
WET	e P	Z	21:30:25.0	73.9	89.0	1.2	17	4.9		

RJOB	e P	Z	21:30:24.8	74.0	88.5	0.9	12	4.9
TANN	e P	Z	21:30:26.2	74.1	89.0	1.2	13	4.9
WERD	e pP	Z	21:30:42.4	74.2	88.9			
ROTZ	e P	Z	21:30:28.0	74.3	88.7	1.1	22	5.1
	e pP	Z	21:30:43.6					
PLN	e P	Z	21:30:27.4	74.3	88.8	0.9	10	4.9
MANZ	e P	Z	21:30:28.2	74.4	88.7	1.2	24	5.1
NEUB	e P	Z	21:30:28.5	74.6	88.7	1.1	20	5.1
MOX	e P	Z	21:30:29.4	74.7	88.5	0.9	13	5.0
GRA1	e P	Z	21:30:31.6	75.0	87.9	0.8	16	5.1
FUR	e P	Z	21:30:31.1	75.0	87.5	0.7	15	5.1
BSEG	e P	Z	21:30:33.6	75.4	88.3	1.1	34	5.3
CLZ	e P	Z	21:30:33.7	75.4	87.8	0.7	16	5.1
NRDL	e P	Z	21:30:34.6	75.5	87.8	1.5	26	5.2
TNS	e P	Z	21:30:41.1	76.7	85.9	0.9	12	5.0
IBBN	e P	Z	21:30:43.0	77.0	85.9	1.4	50	5.5
BUG	e P	Z	21:30:44.9	77.4	85.3	0.8	15	5.2
WLF	e P	Z	21:30:49.9	78.2	84.1	1.4	20	5.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	22:36:39.1	30.502N	79.537E	33.0G	4.4			SZGRF

Western Xizang-India border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	22:45:57.6	53.6	83.9	1.0	4	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/01	23:57:19.0	14.900N	145.400E	162.0				NEIC

Mariana Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e pPdiff	Z	00:11:39.9	101.9	46.8					
	e PP	Z	00:15:07.2							
CLZ	e pPdiff	Z	00:11:43.8	102.7	44.4					
	e PP	Z	00:15:13.7							
TANN	e PP	Z	00:15:14.5	102.8	46.5					
MOX	e pPdiff	Z	00:11:45.9	103.0	45.7					
GEC2	e pPdiff	Z	00:11:48.6	103.3	47.8					
	e PP	Z	00:15:17.9							
ROTZ	e Pdiff	Z	00:10:59.8	103.4	46.4					
	e pPdiff	Z	00:11:49.4							
WET	e PP	Z	00:15:19.8	103.5	47.1					
IBBN	e pPdiff	Z	00:11:46.3	103.5	42.0					
UBBA	e PP	Z	00:15:20.0	103.6	44.3					
GRA1	e pPdiff	Z	00:11:51.1	103.9	45.5					

	e PP	Z	00:15:23.1		
BUG	e PP	Z	00:15:24.9	104.3	41.7
RJOB	e pPdiff	Z	00:11:55.6	104.5	47.3
	e PP	Z	00:15:27.8		
TNS	e PP	Z	00:15:28.9	104.7	43.0
FUR	e Pdiff	Z	00:11:04.7	104.9	45.9
	e pPdiff	Z	00:11:56.9		
	e PP	Z	00:15:30.8		
STU	e pPdiff	Z	00:11:58.6	105.4	43.9
	e PP	Z	00:15:34.0		
WLF	e PP	Z	00:15:38.3	106.1	41.0
BFO	e pPdiff	Z	00:12:01.8	106.2	43.3
	e PP	Z	00:15:39.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	01:44:51.6	6.733N	92.207E	33.0G	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	01:56:43.5	77.4	94.2	1.0	5	4.6		
BRG	e P	Z	01:56:43.1	77.4	94.9					
FBE	e P	Z	01:56:45.8	77.8	94.4	1.2	7	4.7		
RJOB	e P	Z	01:56:45.8	77.9	93.3	1.0	5	4.6		
WET	e P	Z	01:56:46.5	77.9	93.7	1.0	4	4.5		
ROTZ	e P	Z	01:56:49.5	78.4	93.3	1.3	8	4.7		
MANZ	e P	Z	01:56:49.8	78.5	93.2	1.2	10	4.7		
GRA1	e P	Z	01:56:52.8	79.0	92.5	1.3	10	4.7		
CLZ	e P	Z	01:56:55.5	79.7	92.2	1.2	6	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	01:46:40.4	17.792S	178.882W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	02:06:07.7	143.2	14.7					
IBBN	e PKPbc	Z	02:06:15.0	145.1	11.1					
CLZ	e PKPbc	Z	02:06:14.8	145.2	15.6					
CLL	e PKPbc	Z	02:06:14.5	145.2	20.1					
ROTZ	e PKPbc	Z	02:06:19.5	146.8	19.5					
TNS	e PKPbc	Z	02:06:19.8	147.0	12.9					
GRA1	e PKPbc	Z	02:06:19.5	147.1	17.9					
GEC2	e PKPbc	Z	02:06:20.7	147.3	22.6					
WLF	e PKPbc	Z	02:06:22.4	147.9	9.0					
FUR	e PKPbc	Z	02:06:23.6	148.5	18.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	05:53:43.1	13.756N	93.329E	43.8	4.7			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:05:06.8	72.7	89.3	0.8	4	4.6		
GEC2	e P	Z	06:05:08.0	72.9	88.5	1.1	7	4.7		
	e pP	Z	06:05:20.7							
WET	e P	Z	06:05:11.0	73.4	88.0	3.6	96	5.3		
RJOB	e P	Z	06:05:12.0	73.5	87.5	0.9	3	4.4		
MOX	e P	Z	06:05:15.6	74.2	87.5	1.8	14	4.7		
GRA1	e P	Z	06:05:17.3	74.5	86.9	2.1	30	4.9		
	e pP	Z	06:05:29.5							
CLZ	e P	Z	06:05:19.8	74.9	86.8	1.1	5	4.5		
TNS	e P	Z	06:05:27.4	76.2	84.9	1.1	6	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	06:23:28.3	57.848N	161.756E	33.0G	5.9	5.1		SZGRF

Kamchatka Peninsula, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	06:34:11.0	65.8	16.2	1.8	162	6.0		
HLG	e P	Z	06:34:12.6	66.0	14.9	1.4	292	6.3		
RUE	e P	Z	06:34:15.7	66.6	17.9	1.6	154	6.0		
NRDL	e P	Z	06:34:19.5	67.3	15.9	1.9	117	5.8		
IBBN	e P	Z	06:34:23.2	67.8	14.6	1.9	215	6.1		
CLZ	e P	Z	06:34:23.7	67.8	16.0	1.9	227	6.1		
CLL	e P	Z	06:34:23.2	67.9	17.3	1.9	186	6.0		
BRG	e P	Z	06:34:24.9	68.1	17.8	2.0	126	5.8		
	e PP	Z	06:36:58.6							
FBE	e P	Z	06:34:25.5	68.2	17.5	2.0	222	6.0		
BUG	e P	Z	06:34:28.7	68.7	14.2	1.9	175	6.0		
MOX	e P	Z	06:34:29.1	68.8	16.5	2.0	161	5.9		
	e L	Z	07:06:27.7			21.3	924		5.0	
PLN	e P	Z	06:34:29.6	68.8	16.8	1.8	147	5.9		
TANN	e P	Z	06:34:29.7	68.8	16.9	2.0	176	5.9		
UBBA	e P	Z	06:34:29.5	68.9	15.7	1.9	128	5.8		
MANZ	e P	Z	06:34:32.6	69.3	16.7	2.1	142	5.7		
ROTZ	e P	Z	06:34:34.1	69.5	16.7	1.8	148	5.8		
TNS	e P	Z	06:34:35.1	69.7	14.8	1.7	89	5.6		
GRA1	e P	Z	06:34:35.6	69.8	16.2	1.1	88	5.8		
	e L	Z	07:07:08.2			20.9	1016		5.1	
WET	e P	Z	06:34:37.1	70.0	17.0	1.9	199	5.9		
GEC2	e P	Z	06:34:37.5	70.1	17.4	2.0	154	5.8		
WLF	e P	Z	06:34:40.6	70.6	13.5	2.0	107	5.6		

STU	e P	Z	06:34:42.5	71.0	15.0	1.6	76	5.6
FUR	e P	Z	06:34:44.1	71.2	16.1	1.9	186	5.9
RJOB	e P	Z	06:34:45.4	71.3	16.8	2.0	141	5.8
BFO	e P	Z	06:34:45.8	71.6	14.5	2.0	120	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	09:17:27.7	73.800N	8.700E	10.0	4.3			NEIC

Greenland Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
MOX	e P	Z	09:22:35.1	23.2	357.9	1.0	8	4.2		
GRA1	e P	Z	09:22:43.9	24.1	358.3	1.3	15	4.4		
GEC2	e P	Z	09:22:53.1	25.0	356.7	1.2	7	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	12:24:38.2	35.800N	24.500E	48.0	4.0			NEIC

Crete, Greece

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	12:28:13.1	15.3	144.7	0.7	5			
FUR	e P	Z	12:28:18.9	15.7	136.9	1.1	18	4.1		
WET	e P	Z	12:28:19.0	15.8	143.2	0.7	4			
GRA1	e P	Z	12:28:32.1	16.9	140.2	1.1	15			
BFO	e P	Z	12:28:37.2	17.3	130.5	0.6	5	3.8		
BSEG	e P	Z	12:29:10.4	20.6	145.7	1.0	10	4.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	14:08:21.9	23.241S	178.492W	33.0G				SZGRF

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	14:28:06.0	148.6	15.7					
NRDL	e PKPbc	Z	14:28:09.3	150.0	16.0					
CLL	e PKPbc	Z	14:28:10.4	150.6	21.9					
CLZ	e PKPbc	Z	14:28:11.0	150.6	16.8					
BRG	e PKPbc	Z	14:28:10.9	150.7	23.9					
FBE	e PKPbc	Z	14:28:11.5	150.8	22.8					
PLN	e PKPbc	Z	14:28:12.8	151.5	20.9					
WERD	e PKPbc	Z	14:28:12.7	151.5	21.2					
MANZ	e PKPbc	Z	14:28:13.6	152.0	21.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	14:52:42.8	34.200S	71.800W	28.0		5.8		NEIC

Near coast of central Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PP	Z	15:11:35.4	109.0	239.5					
UBBA	e PP	Z	15:11:51.8	111.2	241.4					
RJOB	e PP	Z	15:11:51.5	111.3	242.1					
GRA1	e PP	Z	15:11:53.8	111.3	241.8					
	e L	Z	15:57:00.1			20.3	2127		5.7	
MOX	e L	Z	15:56:10.5	112.0	242.4	21.5	2846		5.8	
TANN	e PKiKP	Z	15:11:16.0	112.4	242.9					
	e PP	Z	15:12:00.0							
GEC2	e PKiKP	Z	15:11:15.7	112.4	243.1					
BSEG	e PKiKP	Z	15:11:16.9	112.8	242.7					
	e PP	Z	15:12:00.4							
CLL	e PKiKP	Z	15:11:17.1	113.1	243.5					
	e PP	Z	15:12:03.1							
BRG	e PKiKP	Z	15:11:17.9	113.4	244.0					
	e PP	Z	15:12:07.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	21:10:36.4	52.086N	177.073W	33.0G	4.9			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	21:22:08.1	73.8	4.7	0.9	16	5.1		
NRDL	e P	Z	21:22:16.0	75.2	4.6	0.9	8	4.8		
IBBN	e P	Z	21:22:17.8	75.5	3.1	1.1	38	5.4		
CLZ	e P	Z	21:22:20.1	75.9	4.7	0.9	19	5.2		
CLL	e P	Z	21:22:21.5	76.3	6.4	0.7	11	5.1		
BUG	e P	Z	21:22:22.5	76.4	2.7	0.9	13	5.0		
BRG	e P	Z	21:22:23.8	76.6	6.9	0.7	10	5.0		
UBBA	e P	Z	21:22:25.2	76.9	4.5	1.7	17	4.9		
MOX	e P	Z	21:22:26.0	77.0	5.5	1.0	11	4.9		
TANN	e P	Z	21:22:27.0	77.2	6.0	0.9	5	4.6		
TNS	e P	Z	21:22:29.2	77.6	3.5	0.9	12	5.0		
ROTZ	e P	Z	21:22:30.9	77.8	5.8	1.0	7	4.7		
GRA1	e P	Z	21:22:31.8	78.0	5.2	0.8	13	5.1		
WLF	e P	Z	21:22:32.9	78.2	2.0	1.0	11	4.8		
WET	e P	Z	21:22:34.0	78.4	6.2	0.8	3	4.4		
GEC2	e P	Z	21:22:35.2	78.7	6.7	0.9	4	4.5		
STU	e P	Z	21:22:36.8	79.0	3.9	0.8	6	4.7		
BFO	e P	Z	21:22:39.4	79.5	3.4	1.5	17	4.7		
FUR	e P	Z	21:22:39.7	79.5	5.2	0.9	9	4.7		
RJOB	e P	Z	21:22:41.7	79.8	6.1	0.8	4	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/02	21:17:18.1	23.540S	168.470E	33.0G				SZGRF

New Caledonia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	21:36:52.7	145.5	37.0					
BRG	e PKPbc	Z	21:36:55.5	146.3	45.3					
CLL	e PKPbc	Z	21:36:55.5	146.4	43.5					
CLZ	e PKPbc	Z	21:36:57.2	147.1	39.0					
TANN	e PKPbc	Z	21:36:57.9	147.3	43.6					
IBBN	e PKPbc	Z	21:36:58.9	147.7	34.5					
	e PKPab	Z	21:37:01.9							
GEC2	e PKPbc	Z	21:36:59.8	147.8	47.2					
BUG	e PKPab	Z	21:37:05.0	148.6	34.5					
RJOB	e PKPbc	Z	21:37:02.4	149.0	47.2					
STU	e PKPbc	Z	21:37:04.8	149.9	40.4					
	e PKPab	Z	21:37:09.8							
BFO	e PKPbc	Z	21:37:06.1	150.6	39.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/03	00:51:24.8	17.131S	178.912W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	01:10:56.6	144.5	19.9					
BRG	e PKPbc	Z	01:10:57.4	144.7	21.6					
NEUB	e PKPbc	Z	01:10:57.7	144.9	17.9					
TANN	e PKPbc	Z	01:10:59.7	145.5	19.4					
ROTZ	e PKPbc	Z	01:11:01.7	146.2	19.3					
GEC2	e PKPbc	Z	01:11:02.7	146.7	22.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/03	10:27:51.8	29.051N	139.692E	128.4	6.2			SZGRF

Southeast of Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	10:40:10.4	84.6	45.0	1.4	540	6.6		
	e pP	Z	10:40:43.9							
RUE	e P	Z	10:40:16.6	85.8	45.2	1.8	717	6.5		
BSEG	e P	Z	10:40:18.1	86.2	42.6	1.2	251	6.2		
BRG	e P	Z	10:40:21.5	86.9	45.3	2.0	502	6.3		
HLG	e P	Z	10:40:24.7	87.0	40.7	1.8	1264	6.8		
CLL	e P	Z	10:40:21.8	87.0	44.6	1.4	207	6.1		

FBE	e PP	Z	10:43:52.2	87.1	44.8				
NRDL	e P	Z	10:40:23.2	87.4	42.4	1.4	115	6.0	
CLZ	e P	Z	10:40:25.5	87.7	42.6	1.3	230	6.3	
	e PP	Z	10:43:56.2						
TANN	e P	Z	10:40:26.0	87.9	44.1	2.1	280	6.2	
	e PP	Z	10:43:57.7						
WERD	e PP	Z	10:43:58.3	87.9	44.0				
PLN	e PP	Z	10:43:58.9	88.0	43.9				
GUNZ	e PP	Z	10:43:59.1	88.0	44.0				
MOX	e P	Z	10:40:27.0	88.1	43.5	1.8	230	6.2	
	e PP	Z	10:43:59.4						
MANZ	e PP	Z	10:44:01.5	88.3	43.9				
GEC2	e P	Z	10:40:29.1	88.4	45.0	0.9	40	5.6	
	e pP	Z	10:41:01.9						
	e PP	Z	10:44:03.1						
ROTZ	e PP	Z	10:44:03.2	88.4	43.9				
IBBN	e P	Z	10:40:28.8	88.5	40.6	1.2	335	6.4	
WET	e P	Z	10:40:30.1	88.6	44.4	2.0	304	6.2	
	e PP	Z	10:44:04.1						
GRA1	e P	Z	10:40:31.8	88.9	43.2	1.4	304	6.3	
	e PP	Z	10:44:06.2						
BUG	e P	Z	10:40:32.2	89.3	40.2	1.5	235	6.2	
	e PP	Z	10:44:07.1						
RJOB	e P	Z	10:40:35.2	89.6	44.4	0.9	124	6.2	
TNS	e P	Z	10:40:34.9	89.7	41.1	1.6	156	6.0	
	e PP	Z	10:44:11.3						
FUR	e P	Z	10:40:37.1	90.0	43.2	1.7	550	6.5	
	e pP	Z	10:41:09.6						
	e PP	Z	10:44:15.0						
STU	e P	Z	10:40:38.6	90.5	41.7	1.5	299	6.4	
	e pP	Z	10:41:11.6						
	e PP	Z	10:44:17.8						
WLF	e P	Z	10:40:41.8	91.1	39.3	1.3	262	6.4	
	e PP	Z	10:44:22.1						
BFO	e P	Z	10:40:41.9	91.2	41.0	1.1	192	6.3	
	e pP	Z	10:41:14.8						
	e PP	Z	10:44:23.3						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/03	14:04:32.8	53.837N	163.998W	33.0G	5.8	4.6		SZGRF

Unimak Island, Alaska, United States, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	14:15:54.8	72.1	356.5	1.4	142	5.9		
NRDL	e P	Z	14:16:02.8	73.6	356.4	1.3	117	5.7		
IBBN	e P	Z	14:16:03.6	73.6	354.9	1.3	156	5.9		
CLZ	e P	Z	14:16:07.0	74.2	356.6	1.6	236	6.0		

BUG	e P	Z	14:16:07.9	74.5	354.7	1.7	244	6.0	
CLL	e P	Z	14:16:10.0	74.8	358.2	1.6	135	5.7	
NEUB	e P	Z	14:16:10.7	74.9	357.4	1.6	246	6.0	
FBE	e P	Z	14:16:12.6	75.2	358.4	1.3	145	5.9	
UBBA	e P	Z	14:16:12.0	75.2	356.3	1.6	83	5.6	
BRG	e P	Z	14:16:12.7	75.3	358.7	1.7	142	5.8	
MOX	e P	Z	14:16:13.9	75.5	357.3	1.7	174	5.9	
	e L	Z	14:51:37.6			22.0	345		4.6
PLN	e P	Z	14:16:14.8	75.6	357.7	1.4	62	5.5	
TANN	e P	Z	14:16:15.4	75.7	357.8	1.8	138	5.8	
TNS	e P	Z	14:16:15.4	75.7	355.4	1.3	69	5.6	
MANZ	e P	Z	14:16:17.5	76.1	357.6	1.7	118	5.7	
WLF	e P	Z	14:16:18.1	76.2	354.0	1.4	119	5.8	
ROTZ	e P	Z	14:16:19.1	76.3	357.7	1.5	121	5.8	
GRA1	e P	Z	14:16:19.3	76.4	357.1	1.8	232	6.0	
	e L	Z	14:55:32.9			20.1	359		4.7
WET	e P	Z	14:16:22.6	77.0	358.1	1.5	116	5.8	
STU	e P	Z	14:16:23.7	77.2	355.9	1.2	84	5.7	
GEC2	e P	Z	14:16:24.3	77.3	358.6	1.5	82	5.7	
BFO	e P	Z	14:16:25.7	77.6	355.4	1.8	116	5.7	
FUR	e P	Z	14:16:27.6	77.9	357.1	1.4	173	6.0	
RJOB	e P	Z	14:16:30.3	78.4	358.1	1.0	59	5.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/03	23:09:45.6	38.100S	73.600W	20.0		6.6		NEIC

Near coast of central Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKiKP	Z	23:28:31.3	115.1	240.0					
	e PP	Z	23:29:29.0							
	e L	Z	00:17:53.1			18.8	13672		6.6	
MOX	e L	Z	00:17:46.4	115.8	240.6	19.7	12635		6.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/04	12:26:51.7	44.282N	11.489E	10.0G			3.5	SZGRF

Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WTTA	e Pn	Z	12:27:40.0	3.0	182.0					3.6
	e Pg	Z	12:27:48.5							
KBA	e Pn	Z	12:27:39.5	3.1	205.5					3.2
	e Sn	N	12:28:15.7							
OBKA	e Pn	Z	12:27:39.0	3.1	225.1					3.5
PLONS	e Pn	Z	12:27:42.2	3.1	151.2					3.5
	e Sn	E	12:28:20.8							

DAVA	e Pn	Z	12:27:43.2	3.2	158.9			3.5
	e Sn	N	12:28:22.9					
RJOB	e Pn	Z	12:27:47.5	3.6	195.2			3.4
	e Sn	E	12:28:30.2					
WILA	e Pn	Z	12:27:47.8	3.6	149.2			3.9
	e Sn	E	12:28:27.7					
SULZ	e Sn	E	12:28:38.4	4.0	142.9			
BALST	e Pn	Z	12:27:54.3	4.0	137.7			
	e Sn	N	12:28:38.4					
SLE	e Pn	Z	12:27:52.8	4.1	148.1			3.6
	e Sn	N	12:28:39.2					
ARSA	e Pn	Z	12:27:53.7	4.1	224.9			
BFO	e Pn	Z	12:28:00.9	4.6	150.5			
	e Sn	N	12:28:50.8					
GEC2	e Pn	Z	12:28:02.0	4.8	199.2			
	e Pg	Z	12:28:23.3					
	e Sn	N	12:28:56.6					
WET	e Pn	Z	12:28:04.7	5.0	191.6			
	e Sn	E	12:28:59.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/04	16:09:10.0	15.400S	173.100W	10.0				NEIC

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ROTZ	e PKP	Z	16:28:50.2	145.4	9.0					
GRA1	e PKP	Z	16:28:50.9	145.5	7.4					
WET	e PKP	Z	16:28:51.9	145.9	10.3					
GEC2	e PKP	Z	16:28:52.2	146.1	11.8					
BFO	e PKP	Z	16:28:55.9	147.0	2.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/05	00:59:21.2	55.811N	163.772E	33.0G	4.8			SZGRF

Off east coast of Kamchatka Peninsula, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e P	Z	01:10:30.2	70.1	15.5	1.2	15	5.0		
CLL	e P	Z	01:10:29.9	70.2	17.0	1.2	9	4.8		
BUG	e P	Z	01:10:35.4	71.0	13.7	1.0	8	4.8		
MOX	e P	Z	01:10:35.8	71.1	16.1	1.3	8	4.7		
TANN	e P	Z	01:10:36.3	71.1	16.6	1.2	6	4.6		
GRA1	e P	Z	01:10:42.4	72.0	15.8	1.2	14	5.0		
WET	e P	Z	01:10:43.7	72.3	16.7	1.3	12	4.8		
GEC2	e P	Z	01:10:44.2	72.4	17.1	1.1	6	4.6		
WLF	e P	Z	01:10:46.5	72.9	12.9	1.7	35	5.2		

RJOB	e P	Z	01:10:50.5	73.6	16.5	0.9	8	4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/05	16:28:57.8	5.041S	102.229E	33.0G	5.8	6.4		SZGRF

Southern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	16:42:08.0	92.8	94.4	1.6	115	6.0		
BRG	e P	Z	16:42:08.2	92.8	94.5	1.7	94	6.0		
RJOB	e P	Z	16:42:09.5	93.3	93.8	1.1	36	5.7		
WET	e P	Z	16:42:10.4	93.4	93.8	1.1	40	5.8		
CLL	e P	Z	16:42:10.5	93.4	93.8	2.5	172	6.0		
TANN	e P	Z	16:42:12.0	93.7	93.4	2.5	116	5.8		
ROTZ	e P	Z	16:42:13.2	93.9	93.2	1.3	38	5.6		
MOX	e P	Z	16:42:14.5	94.3	92.7	2.8	176	5.9		
	e L	Z	17:29:30.6			22.0	15725		6.4	
GRA1	e P	Z	16:42:15.9	94.5	92.5	1.7	112	5.9		
	e PP	Z	16:46:00.9							
	e L	Z	17:33:42.7			19.3	16802		6.5	
CLZ	e P	Z	16:42:18.2	95.1	91.7	1.6	53	5.7		
BSEG	e P	Z	16:42:18.5	95.2	91.4	1.1	27	5.6		
NRDL	e P	Z	16:42:19.3	95.3	91.4	1.4	59	5.8		
UBBA	e P	Z	16:42:18.8	95.3	91.5	2.3	84	5.8		
TNS	e P	Z	16:42:23.9	96.3	90.3	1.0	32	5.8		
IBBN	e P	Z	16:42:25.7	96.7	89.6	1.8	65	6.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/05	17:09: 8.6	6.300S	154.800E	58.0				NEIC

Bougainville - Solomon Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	17:28:00.8	124.4	44.4					
	e pPKPdf	Z	17:28:17.1							
BRG	e PKPdf	Z	17:28:01.5	124.9	49.9					
	e pPKPdf	Z	17:28:17.7							
CLL	e PKPdf	Z	17:28:01.6	125.0	48.6					
	e pPKPdf	Z	17:28:17.6							
NRDL	e PKPdf	Z	17:28:03.0	125.5	44.9					
	e pPKPdf	Z	17:28:19.1							
CLZ	e PKPdf	Z	17:28:03.7	125.9	45.5					
	e pPKPdf	Z	17:28:19.8							
TANN	e PKPdf	Z	17:28:03.5	125.9	48.5					
	e pPKPdf	Z	17:28:19.8							
MOX	e PKPdf	Z	17:28:03.8	126.1	47.5					
	e pPKPdf	Z	17:28:20.1							

GEC2	e PKPdf	Z	17:28:04.2	126.3	50.7
	e pPKPdf	Z	17:28:20.3		
ROTZ	e pPKPdf	Z	17:28:20.7	126.4	48.6
WET	e PKPdf	Z	17:28:04.9	126.5	49.7
	e pPKPdf	Z	17:28:21.1		
IBBN	e PKPdf	Z	17:28:05.0	126.6	42.4
	e pPKPdf	Z	17:28:21.2		
GRA1	e PKPdf	Z	17:28:04.9	126.9	47.6
	e pPKPdf	Z	17:28:21.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	02:42:47.9	18.000S	70.500W	35.0	6.7	6.1		NEIC

Near coast of northern Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	02:56:08.3	95.4	248.3	1.6	753	6.9		
	e PXPXdf	Z	03:21:14.6							
BFO	e P	Z	02:56:11.6	96.2	249.8	2.8	897	6.8		
	e PP	Z	03:00:03.6							
	e PKKPdf	Z	03:12:58.7							
	e PKKPab	Z	03:13:30.5							
	e PXPXdf	Z	03:21:12.7							
BUG	e P	Z	02:56:14.1	96.7	249.4	1.7	746	7.0		
	e PKKPab	Z	03:13:29.5							
	e PXPXdf	Z	03:21:11.8							
STU	e P	Z	02:56:15.2	96.9	250.5	1.1	241	6.8		
	e PP	Z	03:00:09.7							
	e PKKPdf	Z	03:12:57.1							
	e PKKPab	Z	03:13:28.2							
	e PXPXdf	Z	03:21:11.0							
TNS	e P	Z	02:56:15.4	96.9	250.1	1.2	212	6.7		
	e PP	Z	03:00:10.8							
	e PKKPdf	Z	03:12:57.8							
	e PKKPab	Z	03:13:28.1							
	e PXPXdf	Z	03:21:11.5							
IBBN	e P	Z	02:56:17.1	97.2	249.8	2.2	1342	7.2		
	e PP	Z	03:00:12.6							
	e PKKPab	Z	03:13:27.1							
	e PXPXdf	Z	03:21:10.8							
FUR	e P	Z	02:56:20.6	98.0	251.9	1.1	242	6.8		
	e PP	Z	03:00:18.0							
	e PXPXdf	Z	03:21:09.1							
UBBA	e P	Z	02:56:20.6	98.1	251.3	1.8	322	6.8		
	e PP	Z	03:00:18.2							
	e PXPXdf	Z	03:21:08.9							
GRA1	e P	Z	02:56:22.6	98.5	252.1	1.5	279	6.8		
	e PP	Z	03:00:21.4							

	e	PKKPab	Z	03:13:21.2						
	e	PXPXdf	Z	03:21:08.7						
	e	L	Z	03:37:01.7			21.8	6738		6.1
CLZ	e	P	Z	02:56:23.3	98.6	251.8	1.4	256	6.8	
	e	PP	Z	03:00:24.0						
	e	PKKPab	Z	03:13:20.7						
	e	PXPXdf	Z	03:21:08.4						
NRDL	e	P	Z	02:56:23.7	98.7	251.6	2.1	704	7.0	
	e	PP	Z	03:00:23.5						
	e	PKKPdf	Z	03:12:52.7						
	e	PKKPab	Z	03:13:20.8						
	e	PXPXdf	Z	03:21:08.2						
RJOB	e	P	Z	02:56:24.1	98.9	252.9	3.0	913	7.0	
	e	PP	Z	03:00:23.8						
	e	PKKPdf	Z	03:12:49.6						
	e	PKKPab	Z	03:13:18.6						
	e	PXPXdf	Z	03:21:07.4						
MOX	e	P	Z	02:56:24.9	99.0	252.5	1.6	151	6.5	
	e	PP	Z	03:00:25.1						
	e	PKKPdf	Z	03:12:51.7						
	e	PKKPab	Z	03:13:18.6						
	e	PXPXdf	Z	03:21:07.3						
	e	L	Z	03:37:08.5			21.7	5816		6.0
ROTZ	e	P	Z	02:56:25.6	99.1	252.8	1.2	131	6.5	
	e	PP	Z	03:00:25.7						
	e	PKKPab	Z	03:13:18.6						
	e	PXPXdf	Z	03:21:07.3						
BSEG	e	P	Z	02:56:25.8	99.2	252.0	1.0	167	6.7	
	e	PP	Z	03:00:27.6						
	e	PKKPdf	Z	03:12:51.3						
	e	PKKPab	Z	03:13:18.2						
	e	PXPXdf	Z	03:21:07.3						
WET	e	P	Z	02:56:26.2	99.3	253.2	1.1	109	6.5	
	e	PP	Z	03:00:27.6						
	e	PKKPab	Z	03:13:17.3						
	e	PXPXdf	Z	03:21:07.0						
TANN	e	P	Z	02:56:27.2	99.4	253.1	1.4	204	6.7	
	e	PP	Z	03:00:28.6						
	e	PKKPab	Z	03:13:16.6						
	e	PXPXdf	Z	03:21:06.7						
GEC2	e	P	Z	02:56:27.9	99.8	253.8	1.0	75	6.3	
	e	PP	Z	03:00:30.9						
	e	PKKPdf	Z	03:12:49.4						
	e	PKKPab	Z	03:13:15.3						
	e	PXPXdf	Z	03:21:05.9						
CLL	e	P	Z	02:56:29.5	100.0	253.7	1.3	126	6.4	
	e	PP	Z	03:00:33.8						
	e	PKKPab	Z	03:13:13.8						
	e	PXPXdf	Z	03:21:05.2						

FBE	e PKKPab	Z	03:13:14.1	100.1	253.8				
	e PXPXdf	Z	03:21:05.4						
BRG	e P	Z	02:56:31.4	100.5	254.3	1.5	178	6.5	
	e PP	Z	03:00:37.6						
	e PKKPab	Z	03:13:12.0						
	e PXPXdf	Z	03:21:04.6						
RUE	e P	Z	02:56:33.1	100.8	254.4	1.6	174	6.3	
	e PP	Z	03:00:39.3						
	e PKKPab	Z	03:13:10.9						
	e PXPXdf	Z	03:21:04.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	08:08:25.3	30.967N	140.540E	33.0N	5.1			SZGRF

Southeast of Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	08:20:55.8	84.8	41.1	0.9	49	5.7		
BRG	e P	Z	08:20:59.3	85.6	43.7	0.8	10	5.0		
CLL	e P	Z	08:20:59.5	85.7	43.0	0.7	12	5.2		
CLZ	e P	Z	08:21:03.4	86.4	41.0	1.1	12	4.9		
IBBN	e P	Z	08:21:06.4	87.1	39.1	1.4	45	5.4		
ROTZ	e P	Z	08:21:07.2	87.2	42.3	1.4	11	4.8		
GEC2	e P	Z	08:21:06.7	87.2	43.4	0.7	4	4.6		
GRA1	e P	Z	08:21:10.8	87.7	41.6	1.8	42	5.5		
RJOB	e P	Z	08:21:12.8	88.4	42.7	0.7	6	4.9		
BFO	e P	Z	08:21:19.6	89.9	39.4	1.0	11	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	09:13: 8.7	4.300S	100.938E	33.0G	5.1	4.5		SZGRF

Southwest of Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	09:26:12.0	91.4	94.9	0.8	8	5.1		
BRG	e P	Z	09:26:12.1	91.4	95.0	1.0	7	5.0		
RJOB	e P	Z	09:26:13.7	91.9	94.3	1.2	10	5.0		
WET	e P	Z	09:26:14.6	92.0	94.3	0.8	8	5.1		
CLL	e P	Z	09:26:14.5	92.1	94.3	1.1	5	4.8		
ROTZ	e P	Z	09:26:17.1	92.5	93.7	0.9	5	4.9		
MOX	e P	Z	09:26:18.6	92.9	93.3	2.1	17	5.1		
	e L	Z	10:15:23.9			20.0	196		4.6	
GRA1	e P	Z	09:26:19.8	93.1	93.0	0.8	8	5.2		
	e L	Z	10:17:38.0			21.2	152		4.4	
NRDL	e P	Z	09:26:23.2	93.9	92.0	2.5	65	5.5		
TNS	e P	Z	09:26:27.9	94.9	90.8	1.0	7	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	11:24:18.9	20.741S	169.309E	33.0G				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
MOX	e PKPbc	Z	11:43:53.0	145.3	38.6					
ROTZ	e PKPbc	Z	11:43:54.2	145.8	40.3					
GEC2	e PKPbc	Z	11:43:54.8	145.8	43.4					
WET	e PKPbc	Z	11:43:54.6	146.0	41.9					
GRA1	e PKPbc	Z	11:43:55.5	146.2	38.9					
TNS	e PKPbc	Z	11:43:57.6	146.9	34.1					
RJOB	e PKPbc	Z	11:43:58.2	147.0	43.2					
FUR	e PKPbc	Z	11:43:59.6	147.4	40.5					
STU	e PKPbc	Z	11:44:00.7	147.8	36.6					
WLF	e PKPbc	Z	11:44:02.2	148.1	30.9					
BFO	e PKPbc	Z	11:44:02.4	148.5	35.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	11:35:31.2	55.500S	127.900W	10.0		5.8		NEIC

Pacific-Antarctic Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
UBBA	e PKPdf	Z	11:55:25.6	154.7	242.8					
GRA1	e L	Z	13:15:04.5	154.9	240.9	20.2	1336		5.8	
CLZ	e PKPdf	Z	11:55:23.8	155.4	244.9					
ROTZ	e PKPdf	Z	11:55:22.7	155.5	241.1					
WET	e PKPdf	Z	11:55:24.3	155.6	239.9					
MOX	e L	Z	13:12:24.5	155.6	242.7	19.3	1012		5.7	
GEC2	e PKPdf	Z	11:55:24.3	155.9	239.4					
TANN	e PKPdf	Z	11:55:24.9	155.9	242.4					
CLL	e PKPdf	Z	11:55:25.6	156.6	244.3					
BRG	e PKPdf	Z	11:55:26.2	157.0	243.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	13:06: 8.2	40.947N	20.202E	10.0G			4.3	SZGRF

Greece-Albania border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	13:07:47.8	6.9	141.7					4.4
	e Sn	E	13:09:02.6							
ARSA	e Pn	Z	13:07:51.0	7.1	150.3					3.9
KBA	e Pn	Z	13:08:00.9	7.9	138.8					4.2
	e Sn	E	13:09:27.7							

	MOA	e Pn	Z	13:08:06.1	8.1	146.3				4.2
		e Sn	E	13:09:33.0						
	JAVC	e Pn	Z	13:08:07.1	8.1	166.3				4.0
	RJOB	e Pn	Z	13:08:11.9	8.6	139.4				4.5
	WTTA	e Pn	Z	13:08:14.2	8.8	132.7				4.6
		e Sn	N	13:09:49.1						
	MORC	e Pn	Z	13:08:20.0	9.0	167.1				
	GEC2	e Pn	Z	13:08:17.8	9.1	147.4				
	DAVA	e Pn	Z	13:08:27.1	9.7	126.9				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/06	16:02:51.3	18.063S	177.782W	33.0G				SZGRF

Fiji Islands region

	Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	NRDL	e PKPbc	Z	16:22:24.5	145.0	13.2					
	IBBN	e PKPbc	Z	16:22:26.7	145.5	9.3					
	CLZ	e PKPbc	Z	16:22:27.2	145.6	13.8					
	CLL	e PKPbc	Z	16:22:26.9	145.7	18.4					
	BRG	e PKPbc	Z	16:22:27.7	145.9	20.2					
	MOX	e PKPbc	Z	16:22:29.3	146.6	16.4					
	ROTZ	e PKPbc	Z	16:22:32.0	147.3	17.8					
	TNS	e PKPbc	Z	16:22:32.4	147.5	11.1					
	GEC2	e PKPbc	Z	16:22:33.1	147.8	20.8					
	WLF	e PKPbc	Z	16:22:35.1	148.2	7.1					
	RJOB	e PKPbc	Z	16:22:37.0	149.1	19.9					
	BFO	e PKPbc	Z	16:22:36.6	149.3	11.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	02:19:18.8	42.861N	18.436E	10.0G			4.1	SZGRF

Northwestern Balkan Peninsula

	Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	OBKA	e Pn	Z	02:20:27.4	4.6	141.5					4.2
		e Sn	E	02:21:17.5							
	KBA	e Pn	Z	02:20:40.3	5.5	137.7					3.8
		e Sn	E	02:21:39.6							
	MOA	e Pn	Z	02:20:44.3	5.8	148.1					4.2
		e Sn	E	02:21:46.2							
	RJOB	e Pn	Z	02:20:50.4	6.3	138.8					3.9
	WTTA	e Pn	Z	02:20:53.4	6.5	130.1					4.3
		e Sn	E	02:22:04.0							
	GEC2	e Pn	Z	02:20:58.1	6.8	149.4					4.0
	WET	e Sn	N	02:22:22.6	7.4	146.4					
	DAVA	e Pn	Z	02:21:07.3	7.5	123.1					

ROTZ	e Sn	E	02:22:39.5	8.1	145.8	
TANN	e Sn	N	02:22:52.0	8.6	149.3	
BFO	e Pn	Z	02:21:25.4	8.9	124.0	
	e Sn	E	02:23:00.4			
MOX	e Sn	N	02:23:04.7	9.1	146.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	07:39:28.3	3.500N	128.000E	127.0				NEIC

North of Halmahera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PP	Z	07:57:28.4	102.9	65.1					
GEC2	e PP	Z	07:57:28.4	103.0	69.0					
TANN	e PP	Z	07:57:29.7	103.1	67.6					
WET	e PP	Z	07:57:32.2	103.4	68.3					
ROTZ	e PP	Z	07:57:34.3	103.5	67.6					
MOX	e PP	Z	07:57:32.8	103.5	66.9					
RJOB	e PP	Z	07:57:36.5	103.9	68.5					
GRA1	e PP	Z	07:57:39.4	104.1	66.8					
FUR	e PP	Z	07:57:41.5	104.7	67.2					
BFO	e PP	Z	07:57:53.1	106.4	64.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	10:38:13.5	24.900S	70.000E	10.0	4.9			NEIC

Mid-Indian Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z	10:51:05.7	88.9	130.3	0.9	15	5.2		
GEC2	e P	Z	10:51:06.9	89.2	131.0	1.1	8	4.9		
WET	e P	Z	10:51:09.6	89.8	130.4	1.0	7	4.8		
BRG	e P	Z	10:51:13.6	90.4	131.2	0.9	6	4.8		
ROTZ	e P	Z	10:51:13.4	90.5	129.9	1.1	4	4.5		
TANN	e P	Z	10:51:15.1	90.8	130.1	1.2	6	4.8		
GRA1	e P	Z	10:51:16.1	91.0	129.1	0.8	12	5.3		
CLL	e P	Z	10:51:17.0	91.1	130.5	1.1	4	4.7		
MOX	e P	Z	10:51:18.0	91.4	129.4	2.0	20	5.1		
BFO	e P	Z	10:51:19.2	91.6	127.0	1.1	6	4.9		
CLZ	e P	Z	10:51:25.8	92.7	128.4	1.1	13	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	12:35:21.8	23.936S	179.736E	533.9				SZGRF

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	12:54:13.7	150.8	25.5					
	e pPKPbc	Z	12:56:18.8							
BRG	e PKPbc	Z	12:54:14.1	150.9	27.5					
CLZ	e PKPbc	Z	12:54:14.3	150.9	20.3					
FBE	e PKPbc	Z	12:54:14.4	151.0	26.4					
WERD	e PKPbc	Z	12:54:15.9	151.8	24.9					
PLN	e PKPbc	Z	12:54:15.9	151.8	24.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	17:46:19.4	44.883N	130.337W	33.0G	4.9	4.8		SZGRF

Off coast of Oregon, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	17:58:01.7	75.6	332.4	1.4	26	5.2		
	e S	T	18:07:52.5							
IBBN	e P	Z	17:58:05.6	76.4	330.9	1.6	44	5.3		
	e S	T	18:07:57.7							
NRDL	e P	Z	17:58:08.4	76.9	332.4	1.3	17	5.0		
	e S	T	18:08:03.9							
BUG	e P	Z	17:58:08.5	77.0	330.6	1.2	16	5.0		
	e S	T	18:08:05.0							
CLZ	e P	Z	17:58:12.6	77.5	332.6	1.1	16	5.1		
	e S	T	18:08:11.5							
WLF	e P	Z	17:58:15.6	78.2	330.1	2.0	47	5.2		
	e S	T	18:08:18.8							
UBBA	e P	Z	17:58:16.5	78.3	332.5	1.5	15	4.8		
TNS	e P	Z	17:58:16.8	78.4	331.5	1.3	14	4.9		
	e S	T	18:08:20.9							
CLL	e P	Z	17:58:18.5	78.7	334.4	1.1	13	4.9		
	e S	T	18:08:23.2							
MOX	e P	Z	17:58:19.7	78.9	333.6	1.2	10	4.6		
	e S	T	18:08:26.2							
	e L	Z	18:34:49.8			20.6	424		4.8	
BRG	e P	Z	17:58:22.3	79.4	335.1	1.0	13	4.8		
	e S	T	18:08:30.4							
TANN	e P	Z	17:58:22.2	79.4	334.2	1.2	7	4.4		
	e S	T	18:08:31.1							
GRA1	e P	Z	17:58:24.1	79.7	333.4	1.2	20	4.9		
	e S	T	18:08:35.2							
	e L	Z	18:33:18.8			21.9	521		4.8	
STU	e P	Z	17:58:24.8	79.9	332.2	0.5	10	5.1		
	e S	T	18:08:35.9							
ROTZ	e P	Z	17:58:25.1	79.9	334.0	1.1	6	4.5		
	e S	T	18:08:37.1							
BFO	e P	Z	17:58:25.5	80.0	331.6	1.3	16	4.9		
	e S	T	18:08:36.6							

WET	e P	Z	17:58:29.0	80.6	334.5	1.1	6	4.6
	e S	T	18:08:45.3					
FUR	e P	Z	17:58:31.5	81.1	333.6	0.7	14	5.2
	e S	T	18:08:48.4					
GEC2	e P	Z	17:58:31.6	81.1	335.1	1.6	17	4.9
	e S	T	18:08:49.7					
RJOB	e P	Z	17:58:35.5	81.9	334.6	0.9	7	4.9
	e S	T	18:08:57.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	17:58:37.9	9.936N	92.865E	42.4	4.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	18:10:16.8	75.4	91.5	0.8	4	4.5		
	e PcP	Z	18:10:29.3							
	e pP	Z	18:10:30.5							
WET	e P	Z	18:10:20.1	76.0	91.0	1.0	4	4.4		
	e pP	Z	18:10:32.8							
GRA1	e P	Z	18:10:26.8	77.0	89.9	1.3	7	4.6		
	e pP	Z	18:10:39.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/07	23:12:13.9	16.400N	61.100W	66.0	5.0			NEIC

Leeward Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	23:22:34.3	62.9	263.6	1.0	13	5.0		
BUG	e P	Z	23:22:40.1	63.8	263.6					
BFO	e P	Z	23:22:42.2	64.2	265.9	1.5	10	4.8		
IBBN	e P	Z	23:22:42.9	64.2	263.6	1.2	23	5.3		
TNS	e P	Z	23:22:44.5	64.4	265.1	1.1	12	5.0		
STU	e P	Z	23:22:46.3	64.8	266.4	0.8	9	5.1		
NRDL	e P	Z	23:22:53.2	65.7	265.4	1.2	10	5.0		
CLZ	e P	Z	23:22:53.1	65.8	265.9	1.4	21	5.2		
BSEG	e P	Z	23:22:53.8	65.9	264.9	1.7	39	5.4		
GRA1	e P	Z	23:22:55.7	66.2	267.5	1.6	25	5.2		
MOX	e P	Z	23:22:57.6	66.5	267.4	1.4	6	4.6		
ROTZ	e P	Z	23:22:58.1	66.8	268.3	1.5	7	4.7		
TANN	e P	Z	23:23:00.9	67.0	268.2	1.2	10	4.9		
WET	e P	Z	23:23:01.6	67.2	269.0	1.2	9	4.9		
CLL	e P	Z	23:23:02.4	67.4	268.2	1.2	12	5.0		
BRG	e P	Z	23:23:06.5	68.0	269.1	1.2	7	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	03:22:11.8	8.100S	118.200E	20.0		5.6		NEIC

Sumbawa, Indonesia, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PP	Z	03:40:36.1	105.3	84.0					
	e SKSac	R	03:46:50.1							
GEC2	e SKSac	R	03:46:52.3	105.6	84.4					
	e PS	R	03:49:52.4							
CLL	e PP	Z	03:40:39.9	105.8	83.2					
	e SKSac	R	03:46:52.1							
WET	e PP	Z	03:40:41.9	106.1	83.7					
	e SKSac	R	03:46:55.3							
TANN	e PP	Z	03:40:43.2	106.2	83.0					
	e SKSac	R	03:46:56.2							
RJOB	e SKSac	R	03:46:53.5	106.3	84.0					
	e PS	R	03:49:57.5							
ROTZ	e PP	Z	03:40:45.0	106.5	83.0					
	e SKSac	R	03:46:57.8							
MOX	e PP	Z	03:40:47.2	106.7	82.2					
	e SKSac	R	03:46:58.3							
	e L	Z	04:30:04.3			21.2	1451		5.5	
BSEG	e PP	Z	03:40:51.6	107.0	80.2					
	e SKSac	R	03:46:59.5							
	e PS	R	03:50:11.0							
GRA1	e PP	Z	03:40:49.6	107.1	82.2					
	e SKSac	R	03:47:00.3							
	e L	Z	04:30:23.7			21.5	1782		5.6	
FUR	e PP	Z	03:40:49.3	107.3	82.7					
	e SKSac	R	03:46:58.8							
CLZ	e PP	Z	03:40:52.3	107.3	80.9					
	e SKSac	R	03:47:00.1							
	e PS	R	03:50:12.3							
NRDL	e PP	Z	03:40:53.2	107.4	80.5					
	e SKSac	R	03:46:59.9							
	e PS	R	03:50:13.4							
UBBA	e PP	Z	03:40:54.4	107.7	80.9					
STU	e PP	Z	03:40:58.8	108.6	80.9					
	e SKSac	R	03:47:05.2							
TNS	e PP	Z	03:41:02.3	108.8	79.8					
	e SKSac	R	03:47:08.2							
	e PS	R	03:50:27.3							
IBBN	e PP	Z	03:41:03.4	108.8	78.6					
	e SKSac	R	03:47:07.5							
	e PS	R	03:50:27.2							
BFO	e PP	Z	03:41:03.2	109.2	80.4					
	e SKSac	R	03:47:07.8							
BUG	e PP	Z	03:41:06.4	109.3	78.5					

	e SKSac	R	03:47:09.8			
	e PS	R	03:50:32.0			
WLF	e PP	Z	03:41:13.6	110.4	78.2	
	e SKSac	R	03:47:14.1			
	e PS	R	03:50:42.3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	05:39:33.4	0.700S	122.500E	59.0		5.2		NEIC

Minahassa Peninsula, Sulawesi, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PP	Z	05:57:38.2	102.8	76.1					
MOX	e PP	Z	05:57:49.8	103.6	74.0					
	e L	Z	06:50:24.6			20.7	709		5.2	
NRDL	e PP	Z	05:57:52.3	104.0	72.3					
GRA1	e PP	Z	05:57:53.1	104.1	73.9					
	e L	Z	06:48:09.4			21.3	811		5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPab	Z	14:35:24.4							
BRG	e PKPab	Z	14:35:05.5							
BSEG	e PKPab	Z	14:35:01.0							
CLL	e PKPab	Z	14:35:05.6							
FBE	e PKPab	Z	14:35:06.9							
FUR	e PKPab	Z	14:35:19.9							
GRA1	e PKPab	Z	14:35:15.1							
GUNZ	e PKPab	Z	14:35:10.5							
HKWD	e PKPab	Z	14:35:09.0							
IBBN	e PKPab	Z	14:35:10.8							
LEIB	e PKPab	Z	14:35:11.7							
MULD	e PKPab	Z	14:35:10.1							
NEUB	e PKPab	Z	14:35:08.5							
NKC	e PKPab	Z	14:35:10.8							
ROHR	e PKPab	Z	14:35:11.0							
ROTZ	e PKPab	Z	14:35:12.8							
SCHF	e PKPab	Z	14:35:09.3							
TANN	e PKPab	Z	14:35:09.9							
TAUT	e PKPab	Z	14:35:09.5							
TRIB	e PKPab	Z	14:35:10.8							
WERD	e PKPab	Z	14:35:10.2							
WERN	e PKPab	Z	14:35:11.0							
WIMM	e PKPab	Z	14:35:07.8							

WLF	e PKPab	Z	14:35:23.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	14:46:49.9	17.870S	175.090W	239.9				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e PKPbc	Z	15:05:57.8	145.1	8.7					
IBBN	e PKPbc	Z	15:05:59.2	145.5	4.8					
CLZ	e PKPbc	Z	15:06:00.3	145.8	9.3					
CLL	e PKPbc	Z	15:06:00.5	146.0	13.8					
	e pPKPbc	Z	15:07:01.0							
BRG	e PKPbc	Z	15:06:01.5	146.2	15.6					
BUG	e PKPbc	Z	15:06:01.7	146.4	4.1					
MOX	e PKPbc	Z	15:06:03.1	146.8	11.7					
UBBA	e PKPbc	Z	15:06:03.2	146.8	8.9					
TANN	e PKPbc	Z	15:06:03.5	146.9	13.2					
TNS	e PKPbc	Z	15:06:05.1	147.5	6.3					
ROTZ	e PKPbc	Z	15:06:05.7	147.6	13.0					
WET	e PKPbc	Z	15:06:06.9	148.1	14.4					
WLF	e PKPbc	Z	15:06:07.5	148.2	2.2					
GEC2	e PKPbc	Z	15:06:07.2	148.2	16.0					
BFO	e PKPbc	Z	15:06:09.9	149.4	6.4					
RJOB	e PKPbc	Z	15:06:10.0	149.4	14.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	16:22: 4.5	16.738S	177.871W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	16:41:34.7	144.2	9.2					
CLL	e PKPbc	Z	16:41:35.2	144.4	18.1					
BRG	e PKPbc	Z	16:41:36.1	144.6	19.8					
WERD	e PKPbc	Z	16:41:38.1	145.3	17.3					
ROTZ	e PKPbc	Z	16:41:40.3	146.0	17.4					
GEC2	e PKPbc	Z	16:41:42.0	146.5	20.4					
BFO	e PKPbc	Z	16:41:45.0	148.0	11.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	17:42:40.7	18.200S	175.400W	228.0				NEIC

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML

CLL	e PKPab	Z	18:01:53.5	146.2	14.5
BRG	e PKPab	Z	18:01:56.5	146.5	16.2
FBE	e pPKPab	Z	18:03:04.1	146.5	15.2
PLN	e PKPab	Z	18:01:58.0	147.2	13.3
WERD	e PKPab	Z	18:01:58.3	147.2	13.6
GUNZ	e PKPab	Z	18:01:58.8	147.2	13.7
WERN	e PKPab	Z	18:01:59.0	147.3	13.8
ROHR	e PKPab	Z	18:01:59.2	147.4	13.7
GRA1	e PKPab	Z	18:02:02.5	148.1	12.0
GEC2	e PKPab	Z	18:02:04.9	148.5	16.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/08	20:03:26.0	46.950N	149.950E	33.0G	4.9	4.2		SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	20:15:06.1	75.0	28.8	1.0	19	5.1		
BRG	e P	Z	20:15:06.9	75.1	29.4	0.6	4	4.6		
CLZ	e P	Z	20:15:08.7	75.3	27.2	1.4	18	5.0		
IBBN	e P	Z	20:15:10.1	75.6	25.6	0.6	12	5.2		
TANN	e P	Z	20:15:11.7	76.0	28.4	0.8	3	4.4		
MOX	e P	Z	20:15:12.2	76.0	27.9	1.3	12	4.9		
	e L	Z	20:52:12.4			20.4	131		4.2	
UBBA	e P	Z	20:15:13.7	76.3	26.9	0.6	3	4.6		
BUG	e P	Z	20:15:15.1	76.5	25.2	1.0	15	5.0		
ROTZ	e P	Z	20:15:16.0	76.6	28.2	0.8	7	4.9		
WET	e P	Z	20:15:18.0	77.0	28.5	1.0	16	5.1		
GEC2	e P	Z	20:15:17.3	77.0	29.0	0.7	7	4.9		
GRA1	e P	Z	20:15:18.0	77.0	27.5	0.9	20	5.2		
	e L	Z	20:52:52.3			20.6	121		4.2	
GRFO	e P	Z	20:15:18.0	77.0	27.5					
TNS	e P	Z	20:15:19.5	77.3	25.8	0.7	9	5.0		
RJOB	e P	Z	20:15:24.8	78.2	28.3	1.0	10	4.8		
FUR	e P	Z	20:15:25.1	78.3	27.4	0.9	17	5.1		
BFO	e P	Z	20:15:28.6	79.0	25.6	1.0	9	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/09								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z	02:21:09.4							
CLL	e PKPdf	Z	02:21:09.6							
CLZ	e PKPdf	Z	02:21:13.2							
FUR	e PKPdf	Z	02:21:14.0							
RJOB	e PKPdf	Z	02:21:11.4							

	STU	e	PKPdf	Z	02:21:15.3						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/09	05:59:43.1	3.830N	95.580E	33.0G	6.7	6.8		SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:11:59.1	81.8	94.1	1.5	1117	6.8		
	e S	R	06:22:10.7							
RUE	e P	Z	06:12:00.0	82.0	94.2	1.7	3832	7.2		
FBE	e P	Z	06:12:01.3	82.1	93.6	1.3	257	6.2		
RJOB	e P	Z	06:12:01.5	82.3	92.8	1.1	396	6.5		
	e S	R	06:22:15.9							
WET	e P	Z	06:12:02.2	82.3	93.0	1.4	699	6.6		
	e S	R	06:22:14.3							
CLL	e P	Z	06:12:01.8	82.4	93.4	1.4	542	6.5		
	e S	R	06:22:16.5							
RGN	e P	Z	06:12:02.3	82.4	94.1	1.4	1418	6.9		
TANN	e P	Z	06:12:03.8	82.7	92.9	1.4	382	6.4		
	e S	R	06:22:18.9							
WERN	e P	Z	06:12:04.2	82.7	92.8	1.3	415	6.5		
GUNZ	e P	Z	06:12:04.2	82.7	92.8	1.3	508	6.6		
WERD	e P	Z	06:12:04.2	82.8	92.7	1.4	440	6.5		
ROTZ	e P	Z	06:12:05.0	82.8	92.6	1.2	546	6.6		
	e S	R	06:22:19.6							
PLN	e P	Z	06:12:04.8	82.9	92.6	1.6	571	6.6		
MANZ	e P	Z	06:12:05.3	82.9	92.5	1.2	911	6.9		
NEUB	e P	Z	06:12:05.9	83.1	92.4	1.2	631	6.7		
MOX	e P	Z	06:12:06.6	83.2	92.2	1.3	427	6.5		
	e S	R	06:22:23.0							
	e L	Z	06:55:59.3			22.0	45729		6.8	
FUR	e P	Z	06:12:06.9	83.3	91.7	1.2	841	6.8		
	e S	R	06:22:24.1							
GRA1	e P	Z	06:12:08.1	83.4	91.8	1.2	1009	6.9		
	e S	R	06:22:26.4							
	e L	Z	06:56:59.5			19.2	41257		6.8	
CLZ	e P	Z	06:12:10.7	84.0	91.4	1.0	580	6.7		
	e S	R	06:22:33.8							
BSEG	e P	Z	06:12:11.2	84.1	91.6					
	e S	R	06:22:35.3							
NRDL	e P	Z	06:12:11.8	84.2	91.3	1.6	1344	6.9		
UBBA	e P	Z	06:12:11.8	84.2	91.0	1.7	460	6.4		
STU	e P	Z	06:12:14.2	84.7	90.2	1.7	1004	6.8		
	e S	R	06:22:44.3							
TNS	e P	Z	06:12:16.9	85.2	89.7	1.4	621	6.7		
	e S	R	06:22:46.8							
BFO	e P	Z	06:12:16.7	85.3	89.5	1.1	403	6.6		

	e S	R	06:22:44.7						
HLG	e P	Z	06:12:18.5	85.5	89.6	1.5	916	6.7	
IBBN	e P	Z	06:12:18.9	85.6	89.4	1.2	1119	6.9	
	e S	R	06:22:46.8						
BUG	e P	Z	06:12:20.4	86.0	88.9	1.2	652	6.6	
	e S	R	06:22:49.2						
WLF	e P	Z	06:12:24.5	86.7	88.0	1.4	877	6.7	
	e S	R	06:22:57.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/10	07:03:54.8	22.010S	178.690W	600.0G				SZGRF

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	07:22:31.9	147.4	15.6					
	e PKPab	Z	07:22:35.7							
NRDL	e PKPbc	Z	07:22:35.4	148.8	15.9					
	e PKPab	Z	07:22:41.3							
IBBN	e PKPbc	Z	07:22:36.9	149.3	11.8					
	e PKPab	Z	07:22:43.7							
CLL	e PKPbc	Z	07:22:36.7	149.3	21.6					
	e PKPab	Z	07:22:43.6							
CLZ	e PKPbc	Z	07:22:37.0	149.4	16.6					
	e PKPab	Z	07:22:44.4							
BRG	e PKPbc	Z	07:22:37.1	149.5	23.5					
BUG	e PKPbc	Z	07:22:38.7	150.2	11.2					
MOX	e PKPbc	Z	07:22:38.8	150.3	19.5					
	e PKPab	Z	07:22:47.6							
TANN	e PKPbc	Z	07:22:39.0	150.3	21.2					
	e PKPab	Z	07:22:48.2							
UBBA	e PKPbc	Z	07:22:38.8	150.4	16.5					
GRA1	e PKPab	Z	07:22:52.4	151.2	19.4					
TNS	e PKPbc	Z	07:22:41.1	151.2	13.8					
	e PKPab	Z	07:22:52.1							
WET	e PKPbc	Z	07:22:41.5	151.4	22.8					
	e PKPab	Z	07:22:52.8							
GEC2	e PKPbc	Z	07:22:41.4	151.4	24.6					
	e PKPab	Z	07:22:52.9							
WLF	e PKPbc	Z	07:22:43.6	152.1	9.6					
STU	e PKPbc	Z	07:22:43.9	152.5	16.0					
FUR	e PKPab	Z	07:22:58.7	152.7	20.4					
RJOB	e PKPab	Z	07:22:58.6	152.7	23.7					
BFO	e PKPab	Z	07:22:59.8	153.1	14.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source

2010/05/10

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPbc	Z	14:18:09.3							
BRG	e PKPbc	Z	14:18:01.0							
BSEG	e PKPbc	Z	14:17:54.4							
CLL	e PKPbc	Z	14:18:00.5							
GEC2	e PKPbc	Z	14:18:06.0							
ROTZ	e PKPbc	Z	14:18:05.1							
TANN	e PKPbc	Z	14:18:03.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/10	15:00:47.6	17.772S	177.034W	33.0G				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	15:20:15.4	143.4	11.8					
NRDL	e PKPbc	Z	15:20:20.1	144.8	11.9					
IBBN	e PKPbc	Z	15:20:21.8	145.3	8.0					
CLZ	e PKPbc	Z	15:20:21.6	145.4	12.5					
CLL	e PKPbc	Z	15:20:22.0	145.5	17.1					
BRG	e PKPbc	Z	15:20:22.9	145.8	18.8					
TANN	e PKPbc	Z	15:20:25.1	146.5	16.5					
ROTZ	e PKPbc	Z	15:20:27.0	147.2	16.4					
TNS	e PKPbc	Z	15:20:27.2	147.3	9.7					
GRA1	e PKPbc	Z	15:20:27.6	147.4	14.7					
GEC2	e PKPbc	Z	15:20:28.1	147.7	19.4					
WLF	e PKPbc	Z	15:20:29.7	148.0	5.7					
BFO	e PKPbc	Z	15:20:31.8	149.1	10.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/10	22:55: 2.7	19.200N	66.400W	19.0	4.6			NEIC

Puerto Rico region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	23:05:58.7	67.6	273.6	0.9	4	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/11	02:13:44.0	45.707N	9.602E	10.0G			3.6	SZGRF

Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
DAVA	e Pn	Z	02:14:11.9	1.6	187.0					3.5

	e Sg	E	02:14:36.4				
WTTA	e Pn	Z	02:14:19.6	2.1	222.7		3.6
FUR	e Pn	Z	02:14:26.8	2.7	205.6		3.7
	e Sg	N	02:15:09.6				
BFO	e Pn	Z	02:14:26.8	2.8	161.2		3.5
	e Sg	E	02:15:10.4				
KBA	e Pn	Z	02:14:29.7	2.9	243.4		3.2
STU	e Pg	Z	02:14:40.6	3.1	174.7		3.9
	e Sg	N	02:15:21.9				
OBKA	e Pn	Z	02:14:38.2	3.5	258.6		3.6
	e Sg	E	02:15:37.1				
MOA	e Pn	Z	02:14:41.5	3.8	237.9		3.5
	e Sg	E	02:15:45.9				
WET	e Pn	Z	02:14:44.8	4.1	214.0		3.4
GRA1	e Pn	Z	02:14:44.9	4.1	195.9		4.0
	e Sg	E	02:15:54.8				
GEC2	e Pn	Z	02:14:46.0	4.2	223.1		3.4
	e Sg	N	02:15:56.5				
ROTZ	e Pn	Z	02:14:48.8	4.4	204.3		3.6
	e Sg	N	02:16:04.4				
TNS	e Pn	Z	02:14:52.8	4.6	169.9		3.8
	e Sg	N	02:16:09.9				
WLF	e Sg	N	02:16:10.9	4.6	148.3		4.0
MANZ	e Pn	Z	02:14:51.3	4.6	202.4		3.7
	e Sg	N	02:16:09.7				
TANN	e Pn	Z	02:14:57.9	5.1	203.2		
	e Sg	E	02:16:24.9				
MOX	e Sg	E	02:16:27.6	5.1	196.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/11	04:58:34.4	19.894S	171.627E	33.0G				SZGRF

Vanuatu Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	05:18:05.6	144.4	37.8					
CLL	e PKPbc	Z	05:18:05.2	144.4	36.1					
CLZ	e PKPbc	Z	05:18:06.6	144.9	31.7					
IBBN	e PKPbc	Z	05:18:08.0	145.2	27.3					
TANN	e PKPbc	Z	05:18:07.9	145.3	36.0					
	e		05:18:18.6							
WERD	e PKPbc	Z	05:18:07.7	145.3	35.7					
PLN	e PKPbc	Z	05:18:07.9	145.4	35.5					
GUNZ	e PKPbc	Z	05:18:08.1	145.4	35.8					
MOX	e PKPbc	Z	05:18:08.3	145.4	34.5					
WERN	e PKPbc	Z	05:18:08.4	145.4	36.0					
NKC	e PKPbc	Z	05:18:08.5	145.5	36.1					
ROHR	e PKPbc	Z	05:18:08.8	145.5	35.9					

	e		05:18:19.2			
UBBA	e	PKPbc	Z	05:18:09.5	145.8	31.9
ROTZ	e	PKPbc	Z	05:18:10.0	145.9	36.2
GEC2	e	PKPbc	Z	05:18:09.8	146.1	39.3
	e			05:18:21.0		
WET	e	PKPbc	Z	05:18:10.6	146.2	37.7
GRA1	e	PKPbc	Z	05:18:11.3	146.4	34.7
TNS	e	PKPbc	Z	05:18:11.2	146.9	29.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/11	07:16:55.6	36.763N	72.665E	33.0G	4.8			SZGRF

Afghanistan-Tajikistan border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:24:54.2	43.4	85.4	0.8	16	4.8		
GEC2	e P	Z	07:24:58.0	43.7	83.1	0.6	3	4.2		
CLL	e P	Z	07:24:58.3	43.9	85.2	0.9	9	4.5		
WET	e P	Z	07:25:01.4	44.2	82.9	0.8	3	4.1		
TANN	e P	Z	07:25:02.2	44.4	83.9	0.7	4	4.3		
ROTZ	e P	Z	07:25:04.9	44.6	83.0	1.0	5	4.4		
MOX	e P	Z	07:25:06.2	44.9	83.5	0.8	7	4.7		
GRA1	e P	Z	07:25:10.1	45.2	82.3	1.1	19	4.9		
BSEG	e P	Z	07:25:09.9	45.4	85.8	0.6	10	4.9		
FUR	e P	Z	07:25:10.9	45.4	80.8	0.6	22	5.4		
CLZ	e P	Z	07:25:11.0	45.5	83.8	0.7	6	4.7		
NRDL	e P	Z	07:25:12.1	45.6	84.3	0.8	9	4.8		
UBBA	e P	Z	07:25:13.6	45.9	82.6	0.8	5	4.6		
TNS	e P	Z	07:25:22.7	46.9	80.9	1.0	7	4.7		
IBBN	e P	Z	07:25:23.6	47.1	82.4	0.5	12	5.3		
BUG	e P	Z	07:25:26.9	47.5	81.2	0.5	18	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/11	12:17:49.0	3.210N	95.130E	43.9	5.8	4.9		SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	12:30:04.8	81.9	94.4	1.8	259	6.1		
	e S	T	12:40:16.0							
BRG	e P	Z	12:30:04.5	82.0	94.8	2.0	181	5.9		
	e S	T	12:40:15.0							
RJOB	e P	Z	12:30:06.8	82.5	93.5	1.2	36	5.4		
WET	e P	Z	12:30:07.5	82.5	93.8	2.1	232	6.0		
	e S	T	12:40:22.8							
CLL	e P	Z	12:30:07.2	82.6	94.1	1.2	47	5.6		
	e S	T	12:40:20.4							

TANN	e P	Z	12:30:09.1	82.9	93.6	1.9	80	5.6	
ROTZ	e P	Z	12:30:10.3	83.0	93.3	2.2	235	6.0	
MOX	e P	Z	12:30:11.9	83.4	93.0	1.8	92	5.7	
	e S	T	12:40:30.3						
	e L	Z	13:14:54.4			19.2	477		4.9
FUR	e P	Z	12:30:12.2	83.5	92.4	1.2	54	5.7	
	e S	T	12:40:29.6						
GRA1	e P	Z	12:30:13.4	83.6	92.6	1.1	70	5.8	
	e pP	Z	12:30:26.1						
	e S	T	12:40:33.7						
	e L	Z	13:15:13.1			22.0	432		4.8
CLZ	e P	Z	12:30:16.1	84.2	92.1	1.1	63	5.7	
	e S	T	12:40:36.4						
BSEG	e P	Z	12:30:16.7	84.4	92.3	1.3	136	6.0	
	e S	T	12:40:37.8						
NRDL	e P	Z	12:30:17.2	84.4	92.0	1.6	150	6.0	
	e S	T	12:40:38.5						
UBBA	e P	Z	12:30:17.1	84.4	91.7	2.0	82	5.6	
	e S	T	12:40:39.5						
STU	e P	Z	12:30:19.4	84.9	90.9	1.0	34	5.5	
TNS	e P	Z	12:30:22.2	85.4	90.5	1.1	42	5.6	
BFO	e P	Z	12:30:22.0	85.5	90.3	1.0	29	5.5	
	e S	T	12:40:51.4						
IBBN	e P	Z	12:30:24.3	85.9	90.1	2.0	305	6.1	
BUG	e P	Z	12:30:25.8	86.2	89.7	2.0	229	6.0	
	e S	T	12:40:58.2						
WLF	e P	Z	12:30:29.9	86.9	88.7	2.4	262	5.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/11	22:58:36.6	40.515N	70.983E	33.0G	4.4	4.1		SZGRF

Tajikistan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	23:06:25.1	42.0	78.9	1.1	8	4.4		
	e L	Z	23:25:33.5			18.3	257		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/13	04:36:39.5	37.224N	73.381E	33.0G	4.8	3.7		SZGRF

Tajikistan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:44:43.8	43.6	84.4	0.9	14	4.7		
	e L	Z	05:01:01.3			19.6	82		3.6	
GEC2	e P	Z	04:44:47.5	43.9	82.1	1.1	13	4.6		
	e L	Z	04:58:38.3			20.3	58		3.5	

CLL	e P	Z	04:44:47.7	44.1	84.1	0.9	11	4.6	
	e L	Z	05:02:31.2			20.6	97		3.7
WET	e P	Z	04:44:51.6	44.4	81.9	1.0	10	4.7	
	e L	Z	05:02:49.8			20.7	58		3.5
TANN	e P	Z	04:44:52.0	44.5	82.9	1.0	5	4.4	
ROTZ	e P	Z	04:44:54.6	44.8	82.0	1.2	12	4.7	
BSEG	e P	Z	04:44:58.6	45.5	84.8	0.9	16	5.0	
FUR	e L	Z	05:01:39.2	45.6	79.9	19.0	105		3.8
NRDL	e P	Z	04:45:01.1	45.7	83.2				
TNS	e L	Z	05:02:07.3	47.1	80.0	18.8	118		3.9
BFO	e P	Z	04:45:15.5	47.5	78.2	1.2	12	4.9	
	e L	Z	04:58:40.5			21.9	65		3.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/13	12:54:21.0	34.617N	72.474E	10.0G	5.1			SZGRF

Pakistan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:02:34.4	44.6	87.9	0.9	13	4.9		
CLL	e P	Z	13:02:38.5	45.2	87.7	0.8	7	4.7		
TANN	e P	Z	13:02:42.2	45.6	86.4	1.1	6	4.5		
ROTZ	e P	Z	13:02:44.5	45.8	85.6	1.0	6	4.6		
BSEG	e P	Z	13:02:50.8	46.7	88.1	0.7	12	5.1		
CLZ	e P	Z	13:02:51.6	46.8	86.2	5.1	434	5.8		
NRDL	e P	Z	13:02:52.3	46.9	86.6					
IBBN	e P	Z	13:03:03.3	48.4	84.7	0.7	14	5.2		
BUG	e P	Z	13:03:06.8	48.7	83.6					
WLF	e P	Z	13:03:14.9	49.7	81.3	0.8	15	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/13	13:57: 8.1	57.350N	152.498E	33.0G	5.0	3.8		SZGRF

Sea of Okhotsk

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	14:07:45.9	64.5	21.5	1.1	16	5.1		
NRDL	e P	Z	14:07:53.0	65.9	21.1	1.1	14	5.1		
CLL	e P	Z	14:07:56.7	66.4	22.5	1.0	20	5.3		
	e L	Z	14:42:42.2			19.7	48		3.7	
CLZ	e P	Z	14:07:58.3	66.5	21.2	1.5	34	5.4		
BRG	e P	Z	14:07:57.9	66.5	22.9	1.0	8	4.9		
	e L	Z	14:44:22.2			18.6	50		3.8	
IBBN	e P	Z	14:07:58.6	66.6	19.8	0.9	16	5.2		
TANN	e P	Z	14:08:02.9	67.3	22.1	1.7	10	4.8		
UBBA	e P	Z	14:08:03.9	67.5	20.8	1.2	8	4.8		
BUG	e P	Z	14:08:04.1	67.5	19.4	1.7	38	5.3		

ROTZ	e P	Z	14:08:07.3	68.0	21.8	1.2	8	4.8	
WET	e P	Z	14:08:10.0	68.4	22.1	0.9	4	4.7	
TNS	e P	Z	14:08:09.6	68.4	19.9	0.9	5	4.7	
	e L	Z	14:41:52.3			18.5	59		3.9
GEC2	e P	Z	14:08:10.1	68.5	22.5	0.9	3	4.5	
BFO	e L	Z	14:39:26.9	70.2	19.6	20.3	41		3.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/13	15:12:14.5	55.632N	164.848W	30.0G	5.1	4.0		SZGRF

Unimak Island, Alaska, United States, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	15:23:14.8	70.4	357.1	1.1	27	5.3		
NRDL	e P	Z	15:23:22.8	71.8	357.0	1.0	20	5.2		
IBBN	e P	Z	15:23:23.7	71.9	355.6	1.2	41	5.4		
CLZ	e P	Z	15:23:27.3	72.5	357.2	1.0	23	5.3		
CLL	e P	Z	15:23:30.0	73.0	358.7	1.0	17	5.1		
	e L	Z	16:04:19.2			20.3	112		4.1	
BRG	e P	Z	15:23:32.9	73.5	359.3	1.2	14	4.9		
TANN	e P	Z	15:23:35.7	73.9	358.4	1.8	28	5.0		
TNS	e P	Z	15:23:35.8	74.0	356.1	1.1	14	4.9		
	e L	Z	16:06:08.4			19.4	94		4.1	
WLF	e P	Z	15:23:38.6	74.4	354.7	1.2	31	5.2		
ROTZ	e P	Z	15:23:39.6	74.6	358.3	1.3	17	4.9		
WET	e P	Z	15:23:43.1	75.2	358.7	1.2	13	4.9		
	e L	Z	16:05:00.7			21.4	95		4.1	
GEC2	e P	Z	15:23:44.6	75.5	359.2	1.0	8	4.8		
	e L	Z	16:04:24.8			20.9	116		4.2	
BFO	e P	Z	15:23:46.2	75.9	356.0					
	e L	Z	15:57:46.2			21.4	58		3.9	
FUR	e P	Z	15:23:48.2	76.2	357.7	1.1	27	5.3		
	e L	Z	16:08:41.6			19.0	63		3.9	
RJOB	e P	Z	15:23:50.9	76.6	358.6	0.9	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/14	12:29:22.9	35.900N	4.000E	10.0				NEIC

Northern Algeria

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z	12:32:24.5	12.8	196.0					
RJOB	e P	Z	12:32:37.2	13.5	212.0					
TNS	e P	Z	12:32:51.6	14.7	194.4					
WET	e P	Z	12:32:51.6	14.7	209.4					
GEC2	e P	Z	12:32:51.5	14.8	212.4	2.3	398			
ROTZ	e P	Z	12:32:54.2	15.1	206.4					

UBBA	e P	Z	12:33:02.9	15.5	198.4	
BUG	e P	Z	12:33:04.0	15.7	189.8	
TANN	e P	Z	12:33:05.8	15.7	206.1	
BRG	e P	Z	12:33:16.6	16.6	209.3	
IBBN	e P	Z	12:33:19.6	16.6	190.7	
CLL	e P	Z	12:33:18.7	16.7	206.2	
NRDL	e P	Z	12:33:24.6	17.1	197.0	
BSEG	e P	Z	12:33:41.6	18.6	196.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/14	18:50:27.1	31.822N	48.342E	11.0N	5.3			SZGRF

Western Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	18:56:44.9	31.0	110.4	1.2	17	4.8		
RJOB	e P	Z	18:56:47.0	31.2	107.6	0.8	28	5.2		
WET	e P	Z	18:56:49.0	31.6	109.9	1.3	28	5.0		
BRG	e P	Z	18:56:49.2	31.6	113.7	0.8	19	5.1		
ROTZ	e P	Z	18:56:55.3	32.2	110.1	1.2	57	5.4		
FUR	e P	Z	18:56:55.5	32.3	106.7	0.7	120	6.0		
TANN	e P	Z	18:56:54.9	32.3	111.3	2.4	69	5.2		
CLL	e P	Z	18:56:55.5	32.3	113.3	0.9	38	5.3		
UBBA	e P	Z	18:57:09.4	33.9	109.2	1.7	52	5.2		
NRDL	e P	Z	18:57:14.3	34.4	111.6	1.0	75	5.6		
BSEG	e P	Z	18:57:17.3	34.9	113.8	1.5	38	5.1		
IBBN	e P	Z	18:57:25.2	35.7	108.8	1.2	61	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/15	05:09:44.0	46.154N	7.562E	5.0G			3.3	SZGRF

Switzerland

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BALST	e Pg	Z	05:10:06.9	1.2	184.5					3.7
	e Sg	E	05:10:22.8							
SULZ	e Pn	Z	05:10:10.1	1.4	195.5					4.1
	e Pg	Z	05:10:11.6							
	e Sn	N	05:10:28.6							
	e Sg	N	05:10:30.3							
PLONS	e Pn	Z	05:10:10.8	1.5	235.1					3.3
	e Sn	E	05:10:30.7							
	e Sg	E	05:10:34.7							
WILA	e Pn	Z	05:10:12.3	1.6	216.7					4.1
	e Pg	Z	05:10:13.0							
	e Sg	N	05:10:33.0							
SLE	e Pn	Z	05:10:13.8	1.7	201.9					4.0

	e Pg	Z	05:10:16.5					
	e Sn	N	05:10:35.4					
	e Sg	N	05:10:38.7					
BFO	e Pn	Z	05:10:20.5	2.2	193.7			3.3
	e Pg	Z	05:10:26.0					
	e Sn	N	05:10:46.4					
	e Sg	N	05:10:53.8					
TNS	e Pn	Z	05:10:46.8	4.1	188.6			
	e Pg	Z	05:11:02.1					
WET	e Sn	E	05:11:44.0	4.7	232.1			3.7
MANZ	e Pg	Z	05:11:15.7	4.9	220.1			
GEC2	e Pn	Z	05:10:58.7	4.9	239.3			3.5
	e Sn	N	05:11:51.5					
WERN	e Pg	Z	05:11:20.7	5.2	219.6			
GUNZ	e Pg	Z	05:11:21.8	5.3	218.8			
TANN	e Pg	Z	05:11:23.1	5.4	219.3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/15	09:38:22.6	54.763N	173.479W	33.0G	5.0	3.9		SZGRF

Bering Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:49:36.5	71.3	2.3	1.0	15	5.1		
NRDL	e P	Z	09:49:44.2	72.7	2.2	0.9	8	4.8		
IBBN	e P	Z	09:49:46.0	72.9	0.7	1.1	29	5.3		
CLL	e P	Z	09:49:50.5	73.8	3.9	1.0	10	4.8		
BRG	e P	Z	09:49:53.2	74.2	4.4	1.1	14	4.9		
TNS	e P	Z	09:49:57.5	75.0	1.2	0.9	10	4.9		
	e L	Z	10:30:40.1			18.4	85		4.1	
ROTZ	e P	Z	09:50:00.2	75.4	3.4					
WET	e L	Z	10:28:47.8	76.0	3.8	18.7	62		3.9	
GEC2	e P	Z	09:50:04.7	76.2	4.3	1.0	10	4.9		
	e L	Z	10:21:24.4			22.0	49		3.8	
BFO	e L	Z	10:19:18.2	76.9	1.1	20.1	51		3.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/15	15:18: 7.4	23.500S	176.600W	30.0				NEIC

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	15:37:48.2	149.1	12.4					
NRDL	e PKP	Z	15:37:50.6	150.6	12.6					
IBBN	e PKP	Z	15:37:51.2	151.0	8.3					
CLL	e PKP	Z	15:37:51.3	151.2	18.5					
BRG	e PKP	Z	15:37:51.9	151.4	20.5					

BUG	e PKP	Z	15:37:52.6	151.9	7.5	
MOX	e PKP	Z	15:37:53.5	152.1	16.3	
TANN	e PKP	Z	15:37:53.0	152.2	18.0	
UBBA	e PKP	Z	15:37:53.0	152.2	13.1	
WET	e PKP	Z	15:37:54.3	153.3	19.6	
GEC2	e PKP	Z	15:37:54.5	153.4	21.5	
STU	e PKP	Z	15:37:56.1	154.3	12.3	
RJOB	e PKP	Z	15:37:55.9	154.6	20.5	
BFO	e PKP	Z	15:37:56.4	154.9	10.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/15	15:18: 7.4	23.500S	176.600W	30.0		5.1		NEIC

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	15:37:48.2	149.1	12.4					
NRDL	e PKP	Z	15:37:50.5	150.6	12.6					
IBBN	e PKP	Z	15:37:50.8	151.0	8.3					
CLL	e PKP	Z	15:37:51.2	151.2	18.5					
	e L	Z	16:45:13.3			22.0	289		5.0	
BRG	e PKP	Z	15:37:51.8	151.4	20.5					
BUG	e PKP	Z	15:37:52.4	151.9	7.5					
TANN	e PKP	Z	15:37:52.9	152.2	18.0					
UBBA	e PKP	Z	15:37:53.3	152.2	13.1					
ROTZ	e PKP	Z	15:37:53.6	152.8	17.9					
WET	e PKP	Z	15:37:54.4	153.3	19.6					
	e L	Z	16:47:35.9			21.8	402		5.2	
GEC2	e PKP	Z	15:37:54.5	153.4	21.5					
	e L	Z	16:51:26.5			21.5	333		5.1	
STU	e PKP	Z	15:37:56.2	154.3	12.3					
FUR	e L	Z	16:47:02.9	154.6	17.0	22.0	470		5.3	
BFO	e L	Z	16:48:20.4	154.9	10.7	21.9	240		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	00:33: 8.2	0.400N	124.600E	141.0				NEIC

Minahassa Peninsula, Sulawesi, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z	00:46:49.2	102.5	73.4					
CLL	e Pdiff	Z	00:46:50.8	103.0	72.6					
TANN	e Pdiff	Z	00:46:53.8	103.6	72.3					
BSEG	e Pdiff	Z	00:46:54.9	103.7	69.7					
WET	e PP	Z	00:51:14.9	103.7	73.0					
ROTZ	e Pdiff	Z	00:46:56.2	103.9	72.3					
MOX	e PP	Z	00:51:16.6	104.0	71.6					

NRDL	e Pdiff	Z	00:46:57.8	104.3	69.9	
	e PP	Z	00:51:20.1			
IBBN	e Pdiff	Z	00:47:01.8	105.7	67.9	
STU	e PP	Z	00:51:33.7	106.1	70.1	
BUG	e Pdiff	Z	00:47:00.3	106.3	67.8	
BFO	e PP	Z	00:51:38.7	106.8	69.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	05:16:15.5	18.169N	66.051W	121.7N	5.7	4.8		SZGRF

Puerto Rico region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	05:26:41.5	64.8	268.8	1.0	63	5.8		
BUG	e P	Z	05:26:45.8	65.6	268.8	1.5	92	5.8		
IBBN	e P	Z	05:26:47.9	65.9	268.8	1.2	87	5.9		
BFO	e P	Z	05:26:50.1	66.2	271.0	1.8	63	5.6		
TNS	e P	Z	05:26:51.0	66.3	270.3	1.0	46	5.7		
	e L	Z	05:52:21.0			20.2	753		4.9	
STU	e P	Z	05:26:53.8	66.8	271.5	1.5	91	5.8		
UBBA	e P	Z	05:26:56.4	67.3	271.2	1.9	79	5.6		
NRDL	e P	Z	05:26:57.1	67.3	270.6	1.2	48	5.6		
BSEG	e P	Z	05:26:57.4	67.4	270.2	1.7	68	5.6		
FUR	e P	Z	05:27:02.9	68.2	273.3	0.8	41	5.7		
	e L	Z	05:53:33.1			21.6	497		4.7	
MOX	e P	Z	05:27:04.1	68.3	272.5	2.8	204	5.9		
ROTZ	e P	Z	05:27:06.3	68.7	273.3	1.1	43	5.6		
TANN	e P	Z	05:27:06.8	68.8	273.2	1.1	31	5.4		
CLL	e P	Z	05:27:08.3	69.1	273.3	1.2	39	5.5		
WET	e P	Z	05:27:09.1	69.2	274.0	1.6	67	5.6		
	e L	Z	05:52:05.8			21.6	516		4.7	
RJOB	e P	Z	05:27:09.0	69.2	274.5	1.8	64	5.5		
BRG	e P	Z	05:27:12.2	69.8	274.2	0.9	29	5.4		
GEC2	e P	Z	05:27:12.3	69.8	274.8	1.5	52	5.4		
	e L	Z	05:54:10.2			19.4	517		4.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	06:52:35.2	35.500N	4.560E	10.0G		3.9		SZGRF

Northern Algeria

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z	06:55:48.1	13.1	193.6	1.4	48			
	e L	Z	06:59:39.1			20.6	983		3.8	
FUR	e P	Z	06:55:56.0	13.6	203.9	1.4	166			
	e L	Z	07:00:35.9			18.0	1388		4.1	
RJOB	e P	Z	06:55:58.7	13.7	209.5	1.3	35			

STU	e L	Z	07:00:16.9	13.7	196.1	18.2	1549	4.1
GEC2	e P	Z	06:56:13.4	14.9	210.1	1.5	141	
	e L	Z	07:01:10.6			21.6	773	3.8
WET	e P	Z	06:56:11.2	14.9	207.2	1.5	69	
TNS	e P	Z	06:56:12.6	15.0	192.3	1.7	97	
	e L	Z	07:00:48.0			20.5	785	3.8
ROTZ	e P	Z	06:56:16.1	15.3	204.2	1.7	93	
UBBA	e P	Z	06:56:24.8	15.8	196.5	1.9	76	
TANN	e P	Z	06:56:27.2	16.0	204.0	2.0	112	
BRG	e P	Z	06:56:36.6	16.8	207.3			
CLL	e P	Z	06:56:40.8	16.9	204.2	1.7	99	
	e L	Z	07:01:59.8			19.9	730	3.9
IBBN	e P	Z	06:56:39.2	17.0	189.0	1.6	100	
NRDL	e P	Z	06:56:44.6	17.4	195.2	1.5	70	
BSEG	e P	Z	06:57:01.3	18.9	194.6	1.9	180	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	08:55:42.7	12.767N	93.038E	30.0G	5.5	4.5		SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	09:07:07.7	73.3	90.2	0.8	40	5.6		
GEC2	e P	Z	09:07:08.9	73.4	89.4	1.0	54	5.6		
	e L	Z	09:43:34.3			21.0	171		4.3	
CLL	e P	Z	09:07:10.7	73.9	89.6	1.0	30	5.2		
WET	e P	Z	09:07:12.1	74.0	88.9	1.2	50	5.4		
	e L	Z	09:43:29.7			21.7	246		4.5	
RJOB	e P	Z	09:07:12.1	74.1	88.4	0.8	26	5.3		
TANN	e P	Z	09:07:13.3	74.2	88.9	1.2	32	5.2		
	e L	Z	09:43:28.2			21.8	395		4.7	
ROTZ	e P	Z	09:07:14.9	74.4	88.6	1.2	63	5.5		
MOX	e P	Z	09:07:17.1	74.7	88.4	0.9	28	5.3		
FUR	e P	Z	09:07:18.1	75.1	87.4	1.0	37	5.3		
BSEG	e P	Z	09:07:20.3	75.4	88.2	0.9	67	5.8		
NRDL	e P	Z	09:07:21.4	75.6	87.7	1.6	90	5.7		
TNS	e P	Z	09:07:28.2	76.8	85.8	0.9	26	5.4		
	e L	Z	09:45:16.8			21.2	283		4.6	
BFO	e P	Z	09:07:29.2	77.0	85.3	1.4	29	5.2		
	e L	Z	09:46:47.2			20.0	152		4.3	
IBBN	e P	Z	09:07:29.7	77.1	85.8	0.9	46	5.6		
BUG	e P	Z	09:07:31.7	77.4	85.2	1.3	56	5.5		
WLF	e P	Z	09:07:37.1	78.3	84.0	1.9	88	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	15:29:10.9	72.819N	9.359E	10.0G	5.2	4.2		SZGRF

Norwegian Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z	15:33:48.8	20.3	359.4	2.5	323	5.1		
BUG	e P	Z	15:33:58.0	21.4	1.7					
CLL	e P	Z	15:34:02.2	21.6	357.1					
	e L	Z	15:42:41.3			18.0	1336		4.4	
UBBA	e P	Z	15:34:06.4	22.0	359.5					
BRG	e P	Z	15:34:06.9	22.0	356.4					
TANN	e P	Z	15:34:11.6	22.4	357.6	2.6	206	5.2		
	e L	Z	15:43:08.0			18.8	743		4.1	
TNS	e P	Z	15:34:12.8	22.6	0.7	2.9	385	5.4		
ROTZ	e P	Z	15:34:16.8	23.1	357.9	2.8	399	5.4		
WLF	e P	Z	15:34:17.0	23.2	2.4	2.7	439	5.5		
WET	e P	Z	15:34:24.7	23.7	357.4	2.3	145	5.1		
	e L	Z	15:43:57.0			18.6	878		4.3	
GEC2	e P	Z	15:34:26.2	24.1	356.9	2.8	171	5.1		
	e L	Z	15:44:07.3			18.8	1044		4.3	
BFO	e P	Z	15:34:30.6	24.5	0.7	2.8	230	5.4		
FUR	e P	Z	15:34:33.0	24.7	358.6					
	e L	Z	15:46:32.6			19.4	349		3.9	
RJOB	e P	Z	15:34:38.3	25.1	357.6	0.8	21	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	16:39:36.8	73.098N	9.308E	10.0N	5.3	4.2		SZGRF

Greenland Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BUG	e P	Z	16:44:27.0	21.7	1.6	1.0	64	5.0		
CLL	e P	Z	16:44:31.1	21.8	357.1	1.5	154	5.2		
	e L	Z	16:53:01.4			19.4	1357		4.4	
BRG	e P	Z	16:44:35.6	22.3	356.5	1.4	54	4.8		
TANN	e P	Z	16:44:40.1	22.7	357.6	1.7	82	5.0		
TNS	e P	Z	16:44:40.8	22.9	0.6	2.3	430	5.6		
	e L	Z	16:53:23.1			20.7	1026		4.3	
ROTZ	e P	Z	16:44:46.3	23.4	357.9	2.4	435	5.6		
WLF	e P	Z	16:44:46.3	23.5	2.3	2.1	344	5.5		
WET	e P	Z	16:44:51.7	24.0	357.4	1.9	174	5.3		
STU	e L	Z	16:54:06.4	24.3	0.1	21.3	588		4.0	
GEC2	e P	Z	16:44:56.4	24.3	356.9	1.5	83	5.0		
	e L	Z	16:54:37.0			18.8	1152		4.4	
BFO	e P	Z	16:44:59.4	24.8	0.7	3.9	1243	6.0		
	e L	Z	16:54:30.3			21.4	804		4.2	
FUR	e P	Z	16:45:01.4	25.0	358.6	2.2	343	5.7		
	e L	Z	16:56:54.0			18.1	530		4.1	
RJOB	e P	Z	16:45:06.0	25.4	357.6	0.9	26	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/16	20:23: 7.4	72.929N	8.800E	10.0N	5.0			SZGRF

Norwegian Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BUG	e P	Z	20:27:55.8	21.5	1.2	2.6	193	5.1		
CLL	e L	Z	20:36:40.2	21.7	356.7	18.1	561			
BRG	e P	Z	20:28:03.9	22.2	356.0	1.5	20	4.3		
TNS	e P	Z	20:28:09.7	22.7	0.3	2.3	141	5.1		
	e L	Z	20:36:41.5			21.5	330			
ROTZ	e P	Z	20:28:15.4	23.2	357.5	2.3	155	5.1		
WET	e P	Z	20:28:21.4	23.9	357.0	2.0	60	4.8		
	e L	Z	20:37:25.7			19.8	282			
GEC2	e P	Z	20:28:24.7	24.2	356.5	1.1	13	4.4		
	e L	Z	20:38:05.9			18.8	443			
BFO	e P	Z	20:28:27.9	24.6	0.3	3.6	345	5.5		
	e L	Z	20:37:48.3			21.8	281			
FUR	e P	Z	20:28:31.2	24.8	358.3	0.9	23	4.9		
	e L	Z	20:40:31.5			19.9	184			
RJOB	e P	Z	20:28:36.6	25.3	357.3	0.9	12	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/17	14:17:12.3	21.600S	177.900W	388.0				NEIC

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	14:36:09.7	147.1	14.1					
NRDL	e PKP	Z	14:36:13.3	148.5	14.4					
CLL	e PKP	Z	14:36:15.0	149.1	20.0					
BRG	e PKP	Z	14:36:15.6	149.3	21.9					
TANN	e PKP	Z	14:36:17.5	150.1	19.6					
ROTZ	e PKP	Z	14:36:19.1	150.7	19.5					
TNS	e PKP	Z	14:36:19.5	150.9	12.2					
GEC2	e PKP	Z	14:36:20.0	151.2	22.9					
FUR	e PKP	Z	14:36:22.7	152.4	18.7					
BFO	e PKP	Z	14:36:23.5	152.8	12.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/17	22:03:50.9	47.323N	151.796E	33.0G	6.2	4.8		SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	22:15:21.2	73.6	26.1	1.0	293	6.3		

NRDL	e	P	Z	22:15:28.8	75.0	25.8	1.0	233	6.2	
CLL	e	P	Z	22:15:29.9	75.2	27.5	0.8	545	6.8	
BRG	e	P	Z	22:15:30.6	75.3	28.0	1.2	238	6.2	
IBBN	e	P	Z	22:15:33.3	75.7	24.3	1.0	327	6.4	
TANN	e	P	Z	22:15:35.6	76.2	27.1	1.7	270	6.1	
UBBA	e	P	Z	22:15:37.2	76.5	25.5	1.5	294	6.2	
BUG	e	P	Z	22:15:38.2	76.7	23.8	1.0	274	6.3	
ROTZ	e	P	Z	22:15:39.6	76.8	26.8	1.2	259	6.2	
GRA1	e	P	Z	22:15:41.8	77.2	26.2	1.4	104	5.8	
	e	L	Z	22:56:03.0			20.3	273		4.6
WET	e	P	Z	22:15:41.6	77.2	27.2	1.1	281	6.3	
GEC2	e	P	Z	22:15:41.3	77.2	27.7	0.9	90	5.9	
	e	L	Z	22:53:00.9			21.9	480		4.8
TNS	e	P	Z	22:15:43.0	77.5	24.5	1.5	351	6.3	
	e	L	Z	22:54:04.4			21.2	461		4.8
RJOB	e	P	Z	22:15:48.6	78.5	27.0	2.1	464	6.1	
FUR	e	P	Z	22:15:48.8	78.5	26.1	2.0	806	6.4	
WLF	e	P	Z	22:15:49.0	78.6	23.0	2.0	499	6.2	
STU	e	P	Z	22:15:48.9	78.6	24.8	1.8	406	6.1	
BFO	e	P	Z	22:15:52.3	79.2	24.3	2.3	667	6.2	
	e	L	Z	22:54:05.9			21.3	477		4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/19	01:36:32.9	13.100S	167.100E	204.0				NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	01:55:28.5	135.2	33.0					
	e SKPbc	Z	01:58:42.9							
BRG	e PKPdf	Z	01:55:31.1	136.4	39.6					
	e SKPbc	Z	01:58:46.2							
CLL	e PKPdf	Z	01:55:30.8	136.4	38.1					
	e SKPbc	Z	01:58:46.0							
NRDL	e PKPdf	Z	01:55:31.3	136.5	33.6					
	e SKPbc	Z	01:58:46.6							
CLZ	e PKPdf	Z	01:55:32.5	137.0	34.3					
	e SKPbc	Z	01:58:46.8							
TANN	e PKPdf	Z	01:55:32.9	137.3	38.0					
	e SKPbc	Z	01:58:48.8							
IBBN	e PKPdf	Z	01:55:33.1	137.4	30.5					
	e SKPbc	Z	01:58:49.1							
UBBA	e PKPdf	Z	01:55:33.8	137.9	34.5					
ROTZ	e PKPdf	Z	01:55:34.1	138.0	38.1					
	e SKPbc	Z	01:58:50.7							
GEC2	e PKPdf	Z	01:55:34.2	138.1	40.7					
	e SKPbc	Z	01:58:51.0							
WET	e PKPdf	Z	01:55:34.7	138.2	39.4					

	e SKPbc	Z	01:58:51.1		
BUG	e PKPdf	Z	01:55:34.7	138.3	30.3
	e SKPbc	Z	01:58:52.1		
GRA1	e PKPdf	Z	01:55:34.8	138.4	36.8
	e SKPbc	Z	01:58:52.3		
TNS	e PKPdf	Z	01:55:36.0	139.0	32.7
	e SKPbc	Z	01:58:53.9		
RJOB	e PKPdf	Z	01:55:36.4	139.3	40.3
	e SKPbc	Z	01:58:54.4		
FUR	e PKPdf	Z	01:55:37.0	139.6	38.0
	e SKPbc	Z	01:58:55.6		
STU	e PKPdf	Z	01:55:37.6	139.9	34.7
	e SKPbc	Z	01:58:56.3		
WLF	e PKPdf	Z	01:55:38.7	140.2	29.8
	e SKPbc	Z	01:58:56.7		
BFO	e SKPbc	Z	01:58:57.3	140.6	33.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/19	04:15:44.7	4.790S	75.200W	79.6	5.9			SZGRF

Northern Peru

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	04:28:27.2	88.1	260.3	0.9	216	6.5		
BUG	e P	Z	04:28:31.4	89.1	261.1	0.9	100	6.1		
	e pP	Z	04:28:53.0							
BFO	e P	Z	04:28:32.2	89.3	262.0	1.3	66	5.7		
IBBN	e P	Z	04:28:33.4	89.5	261.5	0.9	89	6.0		
	e pP	Z	04:28:55.4							
	e		04:29:07.6							
TNS	e P	Z	04:28:34.2	89.6	262.1	0.9	64	5.8		
STU	e P	Z	04:28:35.5	89.9	262.6	1.2	104	5.9		
UBBA	e P	Z	04:28:39.3	90.7	263.3	1.9	107	5.8		
	e pP	Z	04:29:00.7							
	e		04:29:13.5							
NRDL	e P	Z	04:28:40.5	91.0	263.4	2.0	247	6.2		
	e		04:29:14.8							
CLZ	e P	Z	04:28:41.0	91.0	263.6	1.5	142	6.1		
	e pP	Z	04:29:02.4							
FUR	e P	Z	04:28:41.7	91.2	264.2	1.0	61	5.9		
BSEG	e P	Z	04:28:41.4	91.2	263.6	0.9	79	6.0		
GRA1	e P	Z	04:28:42.6	91.3	264.2	1.7	111	5.9		
	e pP	Z	04:29:03.7							
ROTZ	e P	Z	04:28:45.6	92.0	264.9	0.9	54	5.9		
	e		04:29:20.0							
RJOB	e P	Z	04:28:46.1	92.2	265.3	0.9	32	5.6		
TANN	e P	Z	04:28:46.3	92.2	265.1	1.2	107	6.1		
	e pP	Z	04:29:08.2							

WET	e	P	Z	04:28:46.8	92.4	265.4	1.0	38	5.7
	e			04:29:21.7					
CLL	e	P	Z	04:28:48.0	92.6	265.6	0.9	39	5.8
GEC2	e	P	Z	04:28:49.2	92.9	266.0	0.9	27	5.7
	e	pP	Z	04:29:11.0					
	e			04:29:24.2					
BRG	e	P	Z	04:28:50.8	93.2	266.3	0.9	56	6.0
	e	pP	Z	04:29:12.3					
	e			04:29:25.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/19	10:51: 4.0	54.800S	135.500W	10.0				NEIC

Pacific-Antarctic Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e SS	T	11:34:55.8	156.3	242.7					
BFO	e SS	T	11:35:04.4	156.9	240.1					
STU	e SS	T	11:35:09.1	157.6	241.0					
UBBA	e SS	T	11:35:26.7	159.0	245.6					
RJOB	e SS	T	11:35:27.1	159.2	238.4					
GRA1	e PKPdf	Z	11:11:03.3	159.2	243.0					
	e SS	T	11:35:28.1							
ROTZ	e SS	T	11:35:35.7	159.8	243.2					
WET	e SS	T	11:35:35.3	159.9	241.6					
GEC2	e SS	T	11:35:39.3	160.2	240.8					
TANN	e SS	T	11:35:42.2	160.2	244.8					
CLL	e SS	T	11:35:46.1	160.9	247.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/19	21:31: 5.7	21.380S	178.113W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	21:50:44.3	146.8	14.4					
NRDL	e PKPbc	Z	21:50:47.7	148.2	14.7					
CLZ	e PKPbc	Z	21:50:49.8	148.8	15.4					
CLL	e PKPbc	Z	21:50:49.5	148.8	20.3					
BRG	e PKPbc	Z	21:50:50.2	149.0	22.2					
BUG	e PKPbc	Z	21:50:52.0	149.6	10.0					
TANN	e PKPbc	Z	21:50:52.1	149.8	19.9					
UBBA	e PKPbc	Z	21:50:51.9	149.9	15.2					
ROTZ	e PKPbc	Z	21:50:53.8	150.5	19.8					
TNS	e PKPbc	Z	21:50:54.4	150.7	12.6					
GRA1	e PKPbc	Z	21:50:54.5	150.7	18.0					
WET	e PKPbc	Z	21:50:54.8	150.9	21.4					

GEC2	e PKPbc	Z	21:50:54.7	151.0	23.1
WLF	e PKPbc	Z	21:50:57.0	151.5	8.3
FUR	e PKPbc	Z	21:50:57.6	152.2	19.0
RJOB	e PKPbc	Z	21:50:58.2	152.2	22.2
BFO	e PKPbc	Z	21:50:58.1	152.6	13.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/19	22:55:27.3	18.104S	178.004W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	23:14:55.9	143.6	13.4					
NRDL	e PKPbc	Z	23:15:00.4	145.0	13.5					
IBBN	e PKPbc	Z	23:15:01.6	145.5	9.7					
CLL	e PKPbc	Z	23:15:01.8	145.7	18.8					
BRG	e PKPbc	Z	23:15:02.6	145.9	20.5					
TANN	e PKPbc	Z	23:15:04.9	146.6	18.3					
ROTZ	e PKPbc	Z	23:15:07.1	147.3	18.2					
TNS	e PKPbc	Z	23:15:07.7	147.5	11.5					
GRA1	e PKPbc	Z	23:15:07.7	147.6	16.5					
WET	e PKPbc	Z	23:15:08.2	147.7	19.6					
GEC2	e PKPbc	Z	23:15:08.0	147.8	21.2					
WLF	e PKPbc	Z	23:15:09.9	148.3	7.5					
FUR	e PKPbc	Z	23:15:11.6	149.0	17.3					
RJOB	e PKPbc	Z	23:15:11.5	149.1	20.3					
BFO	e PKPbc	Z	23:15:11.9	149.3	11.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/21	01:05:49.2	20.631S	171.846W	33.0G				SZGRF

Tonga Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	01:25:27.9	146.7	3.7					
RUE	e PKPbc	Z	01:25:30.9	147.9	9.9					
NRDL	e PKPbc	Z	01:25:32.0	148.1	3.5					
IBBN	e PKPbc	Z	01:25:32.8	148.3	359.3					
CLZ	e PKPbc	Z	01:25:34.0	148.7	4.0					
CLL	e PKPbc	Z	01:25:34.4	149.1	8.9					
NEUB	e PKPbc	Z	01:25:35.2	149.3	6.6					
BRG	e PKPbc	Z	01:25:35.4	149.4	10.7					
FBE	e PKPbc	Z	01:25:35.8	149.4	9.6					
UBBA	e PKPbc	Z	01:25:36.4	149.8	3.4					
PLN	e PKPbc	Z	01:25:36.9	150.0	7.5					
WERD	e PKPbc	Z	01:25:37.0	150.0	7.8					
TANN	e PKPbc	Z	01:25:37.0	150.0	8.1					

GUNZ	e PKPbc	Z	01:25:37.3	150.1	7.9	
WERN	e PKPbc	Z	01:25:37.4	150.2	8.0	
TNS	e PKPbc	Z	01:25:38.1	150.4	0.6	
MANZ	e PKPbc	Z	01:25:38.2	150.5	7.5	
ROTZ	e PKPbc	Z	01:25:38.7	150.7	7.8	
WET	e PKPbc	Z	01:25:39.7	151.2	9.2	
GEC2	e PKPbc	Z	01:25:40.3	151.4	10.9	
BFO	e PKPbc	Z	01:25:42.2	152.3	0.4	
FUR	e PKPbc	Z	01:25:42.4	152.4	6.3	
RJOB	e PKPbc	Z	01:25:42.6	152.6	9.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/21	05:48:54.5	20.571S	170.010E	37.9				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	06:08:24.3	144.3	40.7					
CLZ	e PKPbc	Z	06:08:26.9	144.9	34.6					
NEUB	e PKPbc	Z	06:08:26.8	144.9	37.2					
TANN	e PKPbc	Z	06:08:27.8	145.3	38.9					
	e pPKPbc	Z	06:08:39.2							
WERD	e PKPbc	Z	06:08:28.0	145.3	38.7					
	e pPKPbc	Z	06:08:39.4							
PLN	e PKPbc	Z	06:08:28.2	145.4	38.4					
	e pPKPbc	Z	06:08:39.5							
GUNZ	e PKPbc	Z	06:08:28.3	145.4	38.8					
	e pPKPbc	Z	06:08:39.6							
IBBN	e PKPbc	Z	06:08:28.4	145.4	30.2					
WERN	e PKPbc	Z	06:08:28.5	145.4	38.9					
	e pPKPbc	Z	06:08:39.8							
MANZ	e PKPbc	Z	06:08:29.5	145.8	38.8					
	e pPKPbc	Z	06:08:41.0							
ROTZ	e PKPbc	Z	06:08:30.2	145.9	39.1					
	e pPKPbc	Z	06:08:41.5							
UBBA	e PKPbc	Z	06:08:29.9	145.9	34.8					
	e pPKPbc	Z	06:08:41.1							
GEC2	e PKPbc	Z	06:08:29.8	146.0	42.2					
	e pPKPbc	Z	06:08:41.3							
WET	e PKPbc	Z	06:08:30.5	146.1	40.7					
GRA1	e PKPbc	Z	06:08:31.5	146.4	37.7					
TNS	e PKPbc	Z	06:08:33.3	147.0	32.9					
BFO	e PKPbc	Z	06:08:37.2	148.6	34.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/21	05:49:29.2	20.218S	169.900E	38.7				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	06:08:58.2	144.0	40.6					
	e pPKPbc	Z	06:09:11.3							
NRDL	e PKPbc	Z	06:08:58.8	144.1	33.6					
NEUB	e PKPbc	Z	06:09:00.6	144.6	37.1					
TANN	e PKPbc	Z	06:09:01.8	144.9	38.8					
	e pPKPbc	Z	06:09:13.4							
WERD	e PKPbc	Z	06:09:01.9	145.0	38.6					
	e pPKPbc	Z	06:09:13.6							
PLN	e PKPbc	Z	06:09:02.0	145.0	38.3					
	e pPKPbc	Z	06:09:13.4							
GUNZ	e PKPbc	Z	06:09:02.2	145.0	38.7					
	e pPKPbc	Z	06:09:13.7							
IBBN	e PKPbc	Z	06:09:02.3	145.0	30.2					
WERN	e PKPbc	Z	06:09:02.4	145.1	38.8					
	e pPKPbc	Z	06:09:13.8							
MANZ	e PKPbc	Z	06:09:03.4	145.4	38.7					
	e pPKPbc	Z	06:09:14.7							
ROTZ	e PKPbc	Z	06:09:04.0	145.5	39.0					
	e pPKPbc	Z	06:09:15.2							
UBBA	e PKPbc	Z	06:09:03.6	145.6	34.8					
	e pPKPbc	Z	06:09:15.2							
GEC2	e PKPbc	Z	06:09:03.7	145.6	42.1					
	e pPKPbc	Z	06:09:15.1							
WET	e PKPbc	Z	06:09:04.4	145.7	40.6					
TNS	e PKPbc	Z	06:09:07.3	146.6	32.8					
WLF	e PKPbc	Z	06:09:11.1	147.8	29.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/21	05:51: 0.1	20.597S	169.630E	39.9				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	06:10:29.4	144.2	41.2					
	e pPKPbc	Z	06:10:41.0							
FBE	e PKPbc	Z	06:10:30.2	144.4	40.3					
	e pPKPbc	Z	06:10:42.2							
CLZ	e PKPbc	Z	06:10:31.9	144.8	35.1					
TANN	e PKPbc	Z	06:10:32.9	145.2	39.5					
	e pPKPbc	Z	06:10:44.9							
WERD	e PKPbc	Z	06:10:33.0	145.2	39.2					
	e pPKPbc	Z	06:10:45.1							
PLN	e PKPbc	Z	06:10:33.1	145.2	39.0					
	e pPKPbc	Z	06:10:45.1							
GUNZ	e PKPbc	Z	06:10:33.3	145.3	39.3					

	e pPKPbc	Z	06:10:45.4			
WERN	e PKPbc	Z	06:10:33.5	145.3	39.5	
	e pPKPbc	Z	06:10:45.5			
IBBN	e PKPbc	Z	06:10:33.4	145.3	30.8	
	e pPKPbc	Z	06:10:45.4			
MANZ	e PKPbc	Z	06:10:34.6	145.6	39.4	
	e pPKPbc	Z	06:10:46.5			
ROTZ	e PKPbc	Z	06:10:35.3	145.8	39.7	
	e pPKPbc	Z	06:10:47.1			
UBBA	e PKPbc	Z	06:10:34.8	145.8	35.4	
	e pPKPbc	Z	06:10:46.7			
GEC2	e PKPbc	Z	06:10:34.9	145.8	42.8	
	e pPKPbc	Z	06:10:46.8			
WET	e PKPbc	Z	06:10:35.5	146.0	41.3	
BUG	e PKPbc	Z	06:10:36.3	146.2	30.7	
GRA1	e PKPbc	Z	06:10:36.6	146.2	38.3	
TNS	e PKPbc	Z	06:10:38.3	146.9	33.5	
RJOB	e PKPbc	Z	06:10:38.3	147.0	42.6	
STU	e PKPbc	Z	06:10:40.8	147.8	36.0	
WLF	e PKPbc	Z	06:10:42.3	148.1	30.3	
BFO	e PKPbc	Z	06:10:42.2	148.5	35.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/21	08:52:46.8	20.752S	170.035E	40.9				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e PKPbc	Z	09:12:17.6	144.7	33.7					
FBE	e PKPbc	Z	09:12:16.9	144.7	39.9					
CLZ	e PKPbc	Z	09:12:18.5	145.1	34.6					
	e pPKPbc	Z	09:12:30.8							
NEUB	e PKPbc	Z	09:12:18.3	145.1	37.3					
TANN	e PKPbc	Z	09:12:19.4	145.5	39.0					
	e pPKPbc	Z	09:12:31.8							
WERD	e PKPbc	Z	09:12:19.6	145.5	38.7					
	e pPKPbc	Z	09:12:31.9							
PLN	e PKPbc	Z	09:12:19.7	145.5	38.5					
	e pPKPbc	Z	09:12:31.9							
GUNZ	e PKPbc	Z	09:12:19.9	145.6	38.9					
	e pPKPbc	Z	09:12:32.3							
IBBN	e PKPbc	Z	09:12:19.9	145.6	30.2					
	e pPKPbc	Z	09:12:32.2							
WERN	e PKPbc	Z	09:12:20.2	145.6	39.0					
	e pPKPbc	Z	09:12:32.4							
MANZ	e PKPbc	Z	09:12:21.2	146.0	38.9					
	e pPKPbc	Z	09:12:33.4							
ROTZ	e PKPbc	Z	09:12:21.8	146.1	39.2					

	e pPKPbc	Z	09:12:34.1			
UBBA	e PKPbc	Z	09:12:21.4	146.1	34.9	
	e pPKPbc	Z	09:12:33.8			
GEC2	e PKPbc	Z	09:12:21.4	146.1	42.4	
	e pPKPbc	Z	09:12:33.8			
WET	e PKPbc	Z	09:12:22.1	146.3	40.8	
	e pPKPbc	Z	09:12:34.4			
GRA1	e PKPbc	Z	09:12:23.0	146.5	37.8	
TNS	e PKPbc	Z	09:12:24.9	147.1	33.0	
RJOB	e PKPbc	Z	09:12:24.8	147.4	42.1	
FUR	e PKPbc	Z	09:12:26.3	147.7	39.4	
WLF	e PKPbc	Z	09:12:28.7	148.4	29.7	
BFO	e PKPbc	Z	09:12:28.8	148.8	34.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/22	06:15:12.5	55.930S	140.870W	10.0		5.5		NEIC

Pacific-Antarctic Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e PKPdf	Z	06:35:13.9	159.3	239.7					
BFO	e PKPdf	Z	06:35:13.9	159.8	236.3					
BUG	e PKPdf	Z	06:35:14.8	160.8	244.0					
FUR	e PKPdf	Z	06:35:15.4	161.4	235.0					
RJOB	e PKPdf	Z	06:35:15.8	161.9	233.3					
GRA1	e PKPdf	Z	06:35:16.5	162.2	238.9					
	e L	Z	07:54:53.6			21.6	761		5.5	
WET	e PKPdf	Z	06:35:15.0	162.8	236.8					
MANZ	e PKPdf	Z	06:35:16.4	162.8	239.4					
GEC2	e PKPdf	Z	06:35:16.6	163.1	235.7					
PLN	e PKPdf	Z	06:35:16.7	163.1	240.8					
WERN	e PKPdf	Z	06:35:15.4	163.1	240.2					
	e PKPab	Z	06:36:04.6							
GUNZ	e PKPab	Z	06:36:04.8	163.1	240.4					
WERD	e PKPdf	Z	06:35:16.8	163.1	240.7					
	e PKPab	Z	06:36:04.9							
NEUB	e PKPab	Z	06:36:05.0	163.2	243.0					
TANN	e PKPdf	Z	06:35:17.0	163.2	240.5					
	e PKPab	Z	06:36:05.1							
BSEG	e PKPab	Z	06:36:06.3	163.4	251.4					
CLL	e PKPdf	Z	06:35:17.3	163.9	243.1					
	e PKPab	Z	06:36:07.9							
	e PP	Z	06:39:53.1							
FBE	e PKPdf	Z	06:35:17.8	164.0	241.8					
	e PKPab	Z	06:36:08.2							
	e PP	Z	06:39:53.3							
BRG	e PKPdf	Z	06:35:17.5	164.3	241.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/22	07:12:26.1	20.408S	169.469E	37.6				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	07:31:54.1	144.0	41.3					
CLL	e PKPbc	Z	07:31:54.1	144.0	39.6					
FBE	e PKPbc	Z	07:31:54.9	144.2	40.4					
NEUB	e PKPbc	Z	07:31:56.4	144.6	37.9					
CLZ	e PKPbc	Z	07:31:56.7	144.6	35.3					
	e pPKPbc	Z	07:32:07.9							
TANN	e PKPbc	Z	07:31:57.6	144.9	39.6					
	e pPKPbc	Z	07:32:08.9							
WERD	e PKPbc	Z	07:31:57.8	145.0	39.3					
	e pPKPbc	Z	07:32:09.1							
PLN	e PKPbc	Z	07:31:57.9	145.0	39.1					
	e pPKPbc	Z	07:32:09.1							
GUNZ	e PKPbc	Z	07:31:58.2	145.0	39.4					
	e pPKPbc	Z	07:32:09.5							
WERN	e PKPbc	Z	07:31:58.4	145.1	39.6					
	e pPKPbc	Z	07:32:09.7							
IBBN	e PKPbc	Z	07:31:58.2	145.1	30.9					
	e pPKPbc	Z	07:32:09.5							
MANZ	e PKPbc	Z	07:31:59.3	145.4	39.5					
	e pPKPbc	Z	07:32:10.6							
ROTZ	e PKPbc	Z	07:32:00.0	145.5	39.8					
	e pPKPbc	Z	07:32:11.2							
UBBA	e PKPbc	Z	07:31:59.7	145.6	35.5					
GEC2	e PKPbc	Z	07:31:59.7	145.6	42.9					
	e pPKPbc	Z	07:32:10.9							
WET	e PKPbc	Z	07:32:00.4	145.7	41.4					
GRA1	e PKPbc	Z	07:32:01.3	146.0	38.4					
TNS	e PKPbc	Z	07:32:03.2	146.6	33.6					
RJOB	e PKPbc	Z	07:32:03.0	146.8	42.7					
FUR	e PKPbc	Z	07:32:04.5	147.2	39.9					
WLF	e PKPbc	Z	07:32:07.0	147.9	30.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/22	09:55:29.0	20.105S	170.499E	37.7				SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z	10:14:57.5	144.1	39.6					
CLL	e PKPbc	Z	10:14:57.4	144.2	37.9					
CLZ	e PKPbc	Z	10:15:00.1	144.7	33.5					

	e	pPKPbc	Z	10:15:11.3		
TANN	e	PKPbc	Z	10:15:01.1	145.1	37.8
	e	pPKPbc	Z	10:15:12.5		
WERD	e	PKPbc	Z	10:15:01.2	145.1	37.6
	e	pPKPbc	Z	10:15:12.5		
IBBN	e	PKPbc	Z	10:15:01.5	145.1	29.2
	e	pPKPbc	Z	10:15:12.8		
PLN	e	PKPbc	Z	10:15:01.3	145.1	37.3
	e	pPKPbc	Z	10:15:12.7		
GUNZ	e	PKPbc	Z	10:15:01.5	145.2	37.7
	e	pPKPbc	Z	10:15:12.8		
WERN	e	PKPbc	Z	10:15:01.7	145.2	37.8
	e	pPKPbc	Z	10:15:13.1		
MANZ	e	PKPbc	Z	10:15:02.8	145.6	37.7
	e	pPKPbc	Z	10:15:14.1		
UBBA	e	pPKPbc	Z	10:15:14.4	145.7	33.8
ROTZ	e	PKPbc	Z	10:15:03.4	145.7	38.0
	e	pPKPbc	Z	10:15:14.6		
GEC2	e	PKPbc	Z	10:15:03.0	145.8	41.1
	e	pPKPbc	Z	10:15:14.4		
WET	e	PKPbc	Z	10:15:03.8	145.9	39.6
	e	pPKPbc	Z	10:15:15.0		
BUG	e	pPKPbc	Z	10:15:15.6	146.0	29.0
GRA1	e	PKPbc	Z	10:15:04.7	146.1	36.6
	e	pPKPbc	Z	10:15:15.8		
RJOB	e	PKPbc	Z	10:15:06.4	147.0	40.9
WLF	e	PKPbc	Z	10:15:10.4	147.9	28.5
	e	pPKPbc	Z	10:15:21.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/22	09:58:49.4	20.220S	171.521E	39.2				SZGRF

Vanuatu Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e	PKPbc	Z 10:18:24.9	144.6	38.2					
	e	pPKPbc	Z 10:18:36.3							
CLL	e	PKPbc	Z 10:18:24.7	144.6	36.4					
	e	pPKPbc	Z 10:18:36.3							
NRDL	e	PKPbc	Z 10:18:25.2	144.7	31.1					
FBE	e	PKPbc	Z 10:18:25.5	144.8	37.3					
	e	pPKPbc	Z 10:18:37.6							
CLZ	e	PKPbc	Z 10:18:27.1	145.1	32.0					
	e	pPKPbc	Z 10:18:39.0							
NEUB	e	PKPbc	Z 10:18:27.1	145.2	34.7					
IBBN	e	PKPbc	Z 10:18:28.5	145.5	27.6					
	e	pPKPbc	Z 10:18:40.3							
TANN	e	PKPbc	Z 10:18:28.3	145.6	36.4					

WERD	e PKPbc	Z	10:18:28.4	145.6	36.1
	e pPKPbc	Z	10:18:40.2		
PLN	e PKPbc	Z	10:18:28.3	145.6	35.9
GUNZ	e PKPbc	Z	10:18:28.7	145.7	36.2
	e pPKPbc	Z	10:18:40.2		
WERN	e PKPbc	Z	10:18:28.9	145.7	36.4
	e pPKPbc	Z	10:18:40.3		
MANZ	e PKPbc	Z	10:18:29.8	146.1	36.2
UBBA	e PKPbc	Z	10:18:30.3	146.1	32.2
ROTZ	e PKPbc	Z	10:18:30.6	146.2	36.6
GEC2	e PKPbc	Z	10:18:30.3	146.3	39.7
WET	e PKPbc	Z	10:18:30.9	146.4	38.2
BUG	e PKPbc	Z	10:18:31.2	146.4	27.4
	e pPKPbc	Z	10:18:43.0		
GRA1	e PKPbc	Z	10:18:31.9	146.6	35.1
	e pPKPbc	Z	10:18:44.2		
TNS	e PKPbc	Z	10:18:31.5	147.1	30.2
RJOB	e PKPbc	Z	10:18:33.5	147.6	39.4
FUR	e PKPbc	Z	10:18:35.0	147.8	36.6
STU	e PKPbc	Z	10:18:36.1	148.1	32.6
WLF	e PKPbc	Z	10:18:37.7	148.3	26.8
	e pPKPbc	Z	10:18:49.4		
BFO	e PKPbc	Z	10:18:37.4	148.8	31.6
	e pPKPbc	Z	10:18:49.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/23	02:36: 5.9	14.171S	65.446E	10.0G	4.7	4.4		SZGRF

Mid-Indian Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z	02:48:03.9	77.6	127.9	0.9	7	4.8		
GEC2	e P	Z	02:48:04.3	77.8	128.8	1.0	3	4.3		
WET	e P	Z	02:48:07.6	78.4	128.2	1.1	3	4.3		
FUR	e P	Z	02:48:10.2	78.7	126.7	0.8	21	5.3		
FBE	e P	Z	02:48:13.9	79.3	128.9	0.8	6	4.7		
WERN	e P	Z	02:48:14.3	79.4	128.0	0.9	7	4.7		
GUNZ	e P	Z	02:48:14.8	79.5	127.9	0.8	9	4.8		
GRA1	e P	Z	02:48:13.7	79.6	126.9	0.8	8	4.8		
	e L	Z	03:32:03.8			18.6	180		4.4	
CLL	e P	Z	02:48:15.2	79.7	128.6	1.1	6	4.4		
STU	e P	Z	02:48:17.7	80.2	125.1	0.9	8	4.6		
NEUB	e P	Z	02:48:18.9	80.3	127.6	0.8	10	4.8		
BFO	e P	Z	02:48:19.2	80.4	124.3	0.9	4	4.3		
CLZ	e P	Z	02:48:24.6	81.3	126.5	0.9	8	4.8		
BUG	e P	Z	02:48:31.6	82.7	123.8	0.9	5	4.8		
IBBN	e P	Z	02:48:32.5	82.9	124.3	1.6	16	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/23	03:02:25.3	39.381N	77.399E	33.0N	4.6			SZGRF

Southern Xinjiang, China

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:10:34.8	44.8	79.2	1.2	5	4.3		
CLL	e P	Z	03:10:38.5	45.2	79.0	1.1	6	4.5		
GEC2	e P	Z	03:10:40.4	45.3	77.0	0.9	6	4.5		
TANN	e P	Z	03:10:43.0	45.8	77.8	1.1	5	4.4		
WET	e P	Z	03:10:43.5	45.8	76.8	1.5	8	4.5		
PLN	e P	Z	03:10:44.2	45.9	77.6	1.5	8	4.5		
BSEG	e P	Z	03:10:47.5	46.4	79.6	1.1	12	4.9		
GRA1	e P	Z	03:10:51.2	46.7	76.3	0.9	8	4.9		
NRDL	e P	Z	03:10:50.8	46.8	78.2	1.1	11	4.9		
BFO	e P	Z	03:11:07.3	48.9	73.4	1.1	4	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/23	13:28: 9.5	35.456N	4.743E	10.0G				SZGRF

Northern Algeria

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z	13:31:21.2	13.1	192.9	1.3	13			
FUR	e P	Z	13:31:29.4	13.6	203.2	1.1	36			
RJOB	e P	Z	13:31:33.3	13.7	208.9	1.3	30			
STU	e P	Z	13:31:32.3	13.7	195.5	1.7	83			
WLF	e P	Z	13:31:34.2	14.2	184.7	0.7	7			
GEC2	e P	Z	13:31:45.9	14.9	209.5	1.4	38			
WET	e P	Z	13:31:46.7	14.9	206.6	0.9	33			
GRA1	e P	Z	13:31:47.3	15.0	200.8	1.6	82			
TNS	e P	Z	13:31:47.4	15.0	191.7	1.9	46			
ROTZ	e P	Z	13:31:51.7	15.3	203.6	2.2	84			
MANZ	e P	Z	13:31:53.6	15.5	203.0	1.0	26			
UBBA	e P	Z	13:31:59.4	15.8	195.9	2.1	40			
WERN	e P	Z	13:32:00.8	15.8	203.4	1.8	37			
GUNZ	e P	Z	13:32:01.2	15.9	203.1	1.3	23			
PLN	e P	Z	13:32:04.0	16.0	202.5	1.3	22			
WERD	e P	Z	13:32:04.7	16.0	202.9	1.2	17			
TANN	e P	Z	13:32:04.9	16.0	203.4	1.2	25			
FBE	e P	Z	13:32:10.9	16.7	205.2	1.2	21			
BRG	e P	Z	13:32:07.8	16.8	206.8	0.9	10			
CLZ	e P	Z	13:32:09.8	16.9	196.0	1.5	24			
CLL	e P	Z	13:32:13.8	16.9	203.7	1.1	28			
IBBN	e P	Z	13:32:14.6	17.0	188.4	1.6	38			
NRDL	e P	Z	13:32:21.6	17.5	194.7	1.2	29			
RUE	e P	Z	13:32:29.2	18.2	204.2	1.4	44			

BSEG	e P	Z	13:32:36.2	18.9	194.1	1.0	35	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/23	20:19:40.0	17.947S	168.796E	129.0				NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	20:38:53.2	140.4	33.2					
BRG	e PKPdf	Z	20:38:56.2	141.5	40.5					
CLL	e PKPdf	Z	20:39:01.4	141.5	38.8					
FBE	e PKPdf	Z	20:38:59.6	141.7	39.6					
TANN	e PKPdf	Z	20:38:57.0	142.4	38.8					
WERD	e PKPdf	Z	20:38:57.1	142.5	38.5					
PLN	e PKPdf	Z	20:38:55.9	142.5	38.3					
GUNZ	e PKPdf	Z	20:38:57.3	142.5	38.6					
IBBN	e PKPdf	Z	20:38:53.8	142.6	30.6					
WERN	e PKPdf	Z	20:38:55.0	142.6	38.8					
MOX	e PKPdf	Z	20:39:00.9	142.6	37.4					
MANZ	e PKPdf	Z	20:38:57.0	142.9	38.6					
ROTZ	e PKPdf	Z	20:38:57.9	143.0	39.0					
UBBA	e PKPdf	Z	20:38:55.2	143.1	34.9					
GEC2	e PKPdf	Z	20:38:56.5	143.1	41.9					
WET	e PKPdf	Z	20:38:58.9	143.2	40.4					
BUG	e PKPdf	Z	20:38:58.0	143.5	30.4					
GRA1	e PKPdf	Z	20:38:59.4	143.5	37.6					
TNS	e PKPdf	Z	20:39:00.4	144.1	33.1					
RJOB	e PKPdf	Z	20:38:59.5	144.3	41.6					
FUR	e PKPdf	Z	20:39:01.7	144.7	39.0					
STU	e PKPdf	Z	20:39:01.9	145.0	35.3					
WLF	e PKPdf	Z	20:39:03.0	145.3	29.9					
BFO	e PKPdf	Z	20:39:03.5	145.7	34.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/23	22:46:51.3	13.801S	74.245W	94.0				NEIC

Central Peru

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z	23:00:01.3	94.4	253.8					
	e sP	Z	23:00:31.5							
	e SP	Z	23:12:23.4							
	e		23:18:13.3							
BFO	e Pdiff	Z	23:00:05.5	95.4	255.3					
	e sP	Z	23:00:35.5							
	e SP	Z	23:12:34.5							
BUG	e Pdiff	Z	23:00:06.4	95.6	254.8					

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                e sP        Z  23:00:36.1
                e           Z  23:18:07.9
          TNS   e Pdiff     Z  23:00:08.4    96.0  255.6
                e sP        Z  23:00:38.5
                e SP        Z  23:12:40.4
                e           Z  23:18:06.3
          IBBN  e Pdiff     Z  23:00:08.8    96.1  255.3
                e sP        Z  23:00:38.8
                e           Z  23:18:05.9
          STU   e Pdiff     Z  23:00:08.7    96.1  256.0
                e sP        Z  23:00:38.8
                e SP        Z  23:12:42.1
                e           Z  23:18:05.1
          HLG   e Pdiff     Z  23:00:11.1    96.6  255.6
                e           Z  23:18:01.8
          UBBA  e Pdiff     Z  23:00:13.6    97.1  256.8
                e sP        Z  23:00:43.3
                e PP        Z  23:04:09.1
                e           Z  23:18:00.5
          FUR   e Pdiff     Z  23:00:14.5    97.3  257.4
                e sP        Z  23:00:44.7
                e PP        Z  23:04:11.1
                e SP        Z  23:12:55.2
                e           Z  23:18:00.1
          NRDL  e Pdiff     Z  23:00:15.9    97.5  257.1
                e sP        Z  23:00:45.6
                e PP        Z  23:04:12.4
                e SP        Z  23:12:55.8
                e           Z  23:17:59.5
          CLZ   e Pdiff     Z  23:00:15.8    97.5  257.2
                e sP        Z  23:00:45.7
                e PP        Z  23:04:12.8
                e SP        Z  23:12:56.1
                e           Z  23:17:59.3
          GRA1  e Pdiff     Z  23:00:16.0    97.6  257.6
                e PP        Z  23:04:13.0
                e SP        Z  23:12:57.8
                e           Z  23:17:59.3
          BSEG  e Pdiff     Z  23:00:17.2    98.0  257.5
                e sP        Z  23:00:47.2
                e PP        Z  23:04:16.3
                e SP        Z  23:13:01.4
                e           Z  23:17:57.6
          MOX   e Pdiff     Z  23:00:18.6    98.0  258.0
                e sP        Z  23:00:48.2
                e SP        Z  23:13:03.1
                e           Z  23:17:57.1
          RJOB  e Pdiff     Z  23:00:18.6    98.2  258.5
                e sP        Z  23:00:48.8
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	e	SP	Z	23:13:04.2		
	e			23:17:55.7		
MANZ	e	Pdiff	Z	23:00:19.1	98.2	258.3
	e	sP	Z	23:00:49.2		
	e	PP	Z	23:04:17.6		
	e	SP	Z	23:13:03.9		
	e			23:17:56.3		
ROTZ	e	Pdiff	Z	23:00:19.2	98.2	258.3
	e	sP	Z	23:00:49.4		
	e	PP	Z	23:04:18.1		
	e	SP	Z	23:13:04.8		
	e			23:17:56.2		
NEUB	e	Pdiff	Z	23:00:19.1	98.3	258.2
	e	sP	Z	23:00:49.0		
	e	SP	Z	23:13:03.4		
	e			23:17:56.0		
PLN	e	Pdiff	Z	23:00:19.7	98.4	258.4
	e	sP	Z	23:00:49.6		
	e	SP	Z	23:13:04.5		
	e			23:17:55.3		
GUNZ	e	Pdiff	Z	23:00:20.1	98.4	258.5
	e	sP	Z	23:00:50.3		
	e	PP	Z	23:04:19.5		
	e			23:17:55.0		
WERD	e	Pdiff	Z	23:00:20.0	98.4	258.5
	e	sP	Z	23:00:49.7		
	e	PP	Z	23:04:19.6		
	e			23:17:54.7		
WERN	e	Pdiff	Z	23:00:20.3	98.4	258.5
	e	sP	Z	23:00:50.3		
	e	PP	Z	23:04:19.7		
	e			23:17:55.0		
TANN	e	Pdiff	Z	23:00:20.6	98.5	258.6
	e	sP	Z	23:00:50.4		
	e	PP	Z	23:04:20.3		
	e	SP	Z	23:13:06.4		
	e			23:17:54.4		
WET	e	Pdiff	Z	23:00:20.3	98.5	258.8
	e	sP	Z	23:00:50.4		
	e	SP	Z	23:13:07.0		
	e			23:17:54.3		
GEC2	e	Pdiff	Z	23:00:22.1	99.0	259.3
	e	sP	Z	23:00:52.5		
	e	SP	Z	23:13:12.3		
	e			23:17:52.5		
CLL	e	Pdiff	Z	23:00:22.5	99.0	259.2
	e	sP	Z	23:00:52.2		
	e	PP	Z	23:04:23.8		
	e	SP	Z	23:13:12.6		

	e		23:17:52.2			
FBE	e	Pdiff	Z 23:00:23.6	99.2	259.4	
	e	sP	Z 23:00:53.1			
	e		23:17:52.2			
BRG	e	Pdiff	Z 23:00:24.9	99.5	259.8	
	e	sP	Z 23:00:54.4			
	e	PP	Z 23:04:27.8			
	e		23:17:50.1			
RUE	e	Pdiff	Z 23:00:25.4	99.7	260.0	
	e	sP	Z 23:00:55.2			
	e	PP	Z 23:04:29.0			
	e		23:17:49.6			
RGN	e	Pdiff	Z 23:00:26.2	99.8	259.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/24	12:02: 2.1	61.225N	152.597W	72.0	5.2			SZGRF

Southern Alaska, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	12:12:28.5	64.0	351.0	0.9	16	5.3		
	e sP	Z	12:12:55.6							
NRDL	e P	Z	12:12:37.3	65.4	350.9	0.9	16	5.2		
	e sP	Z	12:13:04.2							
RUE	e P	Z	12:12:39.7	65.8	352.9	0.7	43	5.8		
CLZ	e P	Z	12:12:42.2	66.1	351.1	0.7	24	5.5		
BUG	e P	Z	12:12:41.8	66.2	349.6	0.9	20	5.4		
NEUB	e P	Z	12:12:46.4	66.9	351.9	0.7	33	5.7		
CLL	e P	Z	12:12:46.0	66.9	352.5	1.1	15	5.1		
	e sP	Z	12:13:13.3							
UBBA	e P	Z	12:12:47.5	67.1	351.0	0.9	5	4.7		
FBE	e P	Z	12:12:49.2	67.3	352.7	1.0	18	5.2		
BRG	e P	Z	12:12:49.5	67.4	353.0	1.0	16	5.2		
	e sP	Z	12:13:16.9							
MOX	e P	Z	12:12:49.9	67.4	351.8	0.9	23	5.4		
	e sP	Z	12:13:17.1							
TNS	e P	Z	12:12:50.5	67.5	350.3	0.8	8	5.0		
PLN	e P	Z	12:12:51.2	67.6	352.1	0.9	13	5.2		
	e sP	Z	12:13:18.4							
WERD	e P	Z	12:12:51.5	67.7	352.2	1.1	7	4.8		
TANN	e P	Z	12:12:51.7	67.7	352.3	1.0	9	4.9		
	e sP	Z	12:13:19.2							
GUNZ	e P	Z	12:12:52.1	67.8	352.2	0.9	11	5.1		
	e sP	Z	12:13:19.3							
WLF	e P	Z	12:12:52.4	67.8	349.1	1.2	20	5.2		
WERN	e P	Z	12:12:52.7	67.8	352.3	0.7	11	5.2		
	e sP	Z	12:13:19.9							
MANZ	e P	Z	12:12:54.1	68.1	352.1	0.9	6	4.9		

	e sP	Z	12:13:21.3					
GRA1	e P	Z	12:12:55.6	68.3	351.7	0.8	12	5.2
ROTZ	e P	Z	12:12:55.9	68.3	352.2	0.8	15	5.3
	e sP	Z	12:13:23.2					
WET	e P	Z	12:13:00.0	69.0	352.6	1.0	8	4.9
STU	e P	Z	12:12:59.8	69.0	350.7	1.3	18	5.1
BFO	e P	Z	12:13:01.5	69.4	350.3	1.1	11	4.9
GEC2	e P	Z	12:13:02.0	69.4	353.0	0.8	7	4.9
	e sP	Z	12:13:29.3					
FUR	e P	Z	12:13:04.9	69.8	351.8	1.0	25	5.3
RJOB	e P	Z	12:13:08.2	70.4	352.6	0.7	19	5.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/24	13:40:46.2	20.071S	174.176W	143.1				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	14:00:11.2	146.0	7.6					
NRDL	e PKPbc	Z	14:00:15.3	147.4	7.5					
IBBN	e PKPbc	Z	14:00:16.5	147.7	3.4					
CLZ	e PKPbc	Z	14:00:17.4	148.0	8.1					
	e pPKPbc	Z	14:00:55.1							
CLL	e PKPbc	Z	14:00:17.5	148.3	12.9					
NEUB	e PKPbc	Z	14:00:18.4	148.5	10.7					
BRG	e PKPbc	Z	14:00:18.4	148.5	14.7					
FBE	e PKPbc	Z	14:00:18.9	148.6	13.7					
BUG	e PKPbc	Z	14:00:18.6	148.6	2.6					
UBBA	e PKPbc	Z	14:00:19.7	149.1	7.7					
MOX	e PKPbc	Z	14:00:20.2	149.1	10.6					
PLN	e PKPbc	Z	14:00:20.1	149.2	11.7					
WERD	e PKPbc	Z	14:00:20.1	149.2	11.9					
TANN	e PKPbc	Z	14:00:20.2	149.2	12.2					
GUNZ	e PKPbc	Z	14:00:20.5	149.3	12.0					
	e pPKPbc	Z	14:00:58.2							
WERN	e PKPbc	Z	14:00:20.8	149.3	12.1					
	e pPKPbc	Z	14:00:58.6							
MANZ	e PKPbc	Z	14:00:21.5	149.7	11.7					
TNS	e PKPbc	Z	14:00:21.8	149.8	4.9					
ROTZ	e PKPbc	Z	14:00:22.1	149.9	12.0					
GRA1	e PKPbc	Z	14:00:22.5	150.1	10.2					
WET	e PKPbc	Z	14:00:23.2	150.4	13.5					
WLF	e PKPbc	Z	14:00:23.9	150.4	0.6					
	e pPKPbc	Z	14:01:01.7							
GEC2	e PKPbc	Z	14:00:23.3	150.5	15.2					
	e pPKPbc	Z	14:01:01.2							
STU	e PKPbc	Z	14:00:25.0	151.2	6.6					
FUR	e PKPbc	Z	14:00:25.7	151.6	10.8					

BFO	e PKPbc	Z	14:00:26.1	151.7	5.0
RJOB	e PKPbc	Z	14:00:25.9	151.8	13.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/24	14:02: 9.2	46.446N	149.562E	33.0N	5.1			SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	14:13:42.4	74.1	30.0	0.7	21	5.3		
NRDL	e P	Z	14:13:48.4	75.2	27.6	1.0	10	4.9		
CLL	e P	Z	14:13:49.1	75.4	29.3	0.6	27	5.5		
BRG	e P	Z	14:13:49.7	75.4	29.9	0.9	6	4.7		
FBE	e P	Z	14:13:50.8	75.6	29.5	0.7	17	5.3		
CLZ	e P	Z	14:13:51.6	75.7	27.7	0.9	15	5.1		
NEUB	e P	Z	14:13:51.9	75.8	28.5	0.7	14	5.2		
TANN	e P	Z	14:13:54.8	76.3	28.9	0.7	4	4.7		
WERD	e P	Z	14:13:54.8	76.3	28.8	1.0	12	5.0		
PLN	e P	Z	14:13:55.0	76.3	28.7	1.2	11	4.9		
MOX	e P	Z	14:13:55.5	76.4	28.4	1.3	16	5.0		
GUNZ	e P	Z	14:13:55.3	76.4	28.8	0.7	10	5.1		
WERN	e P	Z	14:13:55.7	76.4	28.8	0.6	14	5.2		
UBBA	e P	Z	14:13:56.8	76.7	27.3	1.8	28	5.1		
MANZ	e P	Z	14:13:57.5	76.8	28.6	0.9	7	4.8		
BUG	e P	Z	14:13:58.1	76.9	25.6	1.0	16	5.1		
ROTZ	e P	Z	14:13:58.8	76.9	28.6	1.2	17	5.0		
GEC2	e P	Z	14:14:00.1	77.3	29.5	0.7	9	5.0		
WET	e P	Z	14:14:00.7	77.3	29.0	1.0	22	5.2		
GRA1	e P	Z	14:14:00.9	77.3	28.0	0.7	30	5.5		
TNS	e P	Z	14:14:02.4	77.7	26.3	0.8	11	5.0		
RJOB	e P	Z	14:14:07.5	78.5	28.8	1.1	13	4.9		
FUR	e P	Z	14:14:08.0	78.6	27.9	1.1	37	5.3		
STU	e P	Z	14:14:08.1	78.7	26.6	1.2	20	5.0		
BFO	e P	Z	14:14:11.6	79.4	26.0	1.0	13	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/24	16:18:32.4	7.510S	71.600W	589.7	6.4			SZGRF

Western Brazil

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	16:30:19.7	87.9	255.8	1.1	532	6.8		
	e pP	Z	16:32:26.0							
BFO	e P	Z	16:30:24.0	89.0	257.5	1.1	107	6.0		
	e pP	Z	16:32:30.6							
	e PKKPdf	Z	16:47:56.9							
BUG	e P	Z	16:30:24.8	89.0	256.6	1.5	579	6.6		

	e pP	Z	16:32:31.1					
	e PKKPdf	Z	16:47:56.9					
TNS	e P	Z	16:30:26.9	89.5	257.6	1.3	271	6.3
	e pP	Z	16:32:33.4					
	e PKKPdf	Z	16:47:55.4					
IBBN	e P	Z	16:30:27.3	89.5	257.0	1.7	745	6.6
	e pP	Z	16:32:33.3					
	e PKKPdf	Z	16:47:54.8					
STU	e P	Z	16:30:27.4	89.6	258.1	1.2	369	6.5
	e pP	Z	16:32:33.7					
HLG	e P	Z	16:30:29.6	90.0	257.1	1.1	444	6.6
UBBA	e P	Z	16:30:32.3	90.6	258.8	1.7	297	6.2
	e pP	Z	16:32:38.5					
	e PKKPdf	Z	16:47:53.0					
FUR	e P	Z	16:30:33.5	90.9	259.7	1.2	375	6.6
	e pP	Z	16:32:40.0					
NRDL	e P	Z	16:30:34.6	91.0	258.9	2.5	877	6.6
	e pP	Z	16:32:40.5					
	e PKKPdf	Z	16:47:53.2					
CLZ	e P	Z	16:30:34.4	91.0	259.1	1.6	275	6.3
	e pP	Z	16:32:40.8					
	e PKKPdf	Z	16:47:51.8					
	e		16:55:54.1					
GRA1	e P	Z	16:30:34.9	91.1	259.7	1.6	320	6.4
	e pP	Z	16:32:41.3					
BSEG	e P	Z	16:30:35.5	91.4	259.1	0.9	121	6.2
	e pP	Z	16:32:42.2					
	e PKKPdf	Z	16:47:51.0					
MOX	e P	Z	16:30:37.8	91.5	260.0	2.1	481	6.5
	e pP	Z	16:32:42.8					
	e PKKPdf	Z	16:47:51.1					
NEUB	e P	Z	16:30:37.8	91.7	260.1	1.7	430	6.5
	e pP	Z	16:32:44.4					
	e PKKPdf	Z	16:47:50.8					
MANZ	e P	Z	16:30:38.0	91.7	260.4	1.9	471	6.5
	e pP	Z	16:32:44.3					
	e PKKPdf	Z	16:47:50.6					
	e		16:55:55.1					
ROTZ	e P	Z	16:30:38.0	91.8	260.4	1.3	200	6.3
	e pP	Z	16:32:44.5					
RJOB	e P	Z	16:30:37.7	91.8	260.8	1.2	206	6.3
	e pP	Z	16:32:44.4					
	e PKKPdf	Z	16:47:49.4					
	e		16:55:52.9					
PLN	e P	Z	16:30:38.6	91.8	260.4	1.8	319	6.4
	e pP	Z	16:32:45.1					
	e PKKPdf	Z	16:47:49.7					
WERD	e P	Z	16:30:38.9	91.9	260.5	2.0	388	6.4
	e pP	Z	16:32:45.5					

	e PKKPdf	Z	16:47:49.4						
	e		16:55:54.4						
GUNZ	e P	Z	16:30:39.0	91.9	260.6	2.0	381	6.4	
	e pP	Z	16:32:45.6						
	e PKKPdf	Z	16:47:49.6						
	e		16:55:54.1						
WERN	e P	Z	16:30:39.4	92.0	260.6	2.4	750	6.6	
	e pP	Z	16:32:45.6						
	e PKKPdf	Z	16:47:49.7						
	e		16:55:54.0						
TANN	e P	Z	16:30:39.4	92.0	260.7	1.6	310	6.4	
	e pP	Z	16:32:46.0						
	e PKKPdf	Z	16:47:49.3						
	e		16:55:52.9						
WET	e P	Z	16:30:39.3	92.1	260.9	1.2	185	6.3	
	e pP	Z	16:32:45.9						
	e PKKPdf	Z	16:47:49.2						
	e		16:55:52.4						
CLL	e P	Z	16:30:41.2	92.5	261.1	1.7	215	6.2	
	e pP	Z	16:32:48.1						
	e PKKPdf	Z	16:47:47.5						
GEC2	e P	Z	16:30:41.1	92.6	261.5	1.0	109	6.2	
	e pP	Z	16:32:47.8						
	e PKKPdf	Z	16:47:48.0						
FBE	e P	Z	16:30:42.3	92.7	261.4	1.6	310	6.5	
	e pP	Z	16:32:48.9						
	e PKKPdf	Z	16:47:47.7						
BRG	e P	Z	16:30:43.7	93.0	261.8	1.5	224	6.4	
	e pP	Z	16:32:50.5						
	e PKKPdf	Z	16:47:46.6						
RUE	e P	Z	16:30:43.8	93.2	261.8	1.2	116	6.2	
	e pP	Z	16:32:50.4						
RGN	e P	Z	16:30:44.5	93.2	261.5	1.0	276	6.6	
	e pP	Z	16:32:51.5						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/25	00:27:18.0	23.020S	177.070W	33.0G				SZGRF

South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	00:47:01.5	148.6	13.1					
RUE	e PKPbc	Z	00:47:03.5	149.4	19.9					
NRDL	e PKPbc	Z	00:47:05.1	150.0	13.3					
	e PKPab	Z	00:47:10.7							
CLZ	e PKPbc	Z	00:47:07.1	150.6	14.1					
	e PKPab	Z	00:47:13.6							
CLL	e PKPbc	Z	00:47:06.6	150.7	19.2					

	e PKPab	Z	00:47:13.1			
BRG	e PKPbc	Z	00:47:07.1	150.9	21.2	
	e PKPab	Z	00:47:14.2			
FBE	e PKPbc	Z	00:47:07.8	150.9	20.1	
	e PKPab	Z	00:47:14.8			
NEUB	e PKPbc	Z	00:47:07.6	151.0	17.0	
	e PKPab	Z	00:47:14.7			
BUG	e PKPbc	Z	00:47:08.5	151.4	8.4	
	e PKPab	Z	00:47:15.4			
MOX	e PKPbc	Z	00:47:09.6	151.6	17.0	
	e PKPab	Z	00:47:17.8			
PLN	e PKPbc	Z	00:47:09.0	151.6	18.1	
	e PKPab	Z	00:47:17.4			
TANN	e PKPbc	Z	00:47:09.2	151.6	18.7	
	e PKPab	Z	00:47:17.5			
WERD	e PKPbc	Z	00:47:09.1	151.6	18.4	
	e PKPab	Z	00:47:17.5			
UBBA	e PKPbc	Z	00:47:08.9	151.7	13.8	
	e PKPab	Z	00:47:17.4			
GUNZ	e PKPbc	Z	00:47:09.4	151.7	18.5	
	e PKPab	Z	00:47:17.9			
WERN	e PKPbc	Z	00:47:09.6	151.8	18.6	
	e PKPab	Z	00:47:18.3			
MANZ	e PKPbc	Z	00:47:10.2	152.1	18.3	
	e PKPab	Z	00:47:19.6			
ROTZ	e PKPbc	Z	00:47:10.6	152.3	18.6	
	e PKPab	Z	00:47:20.6			
TNS	e PKPbc	Z	00:47:11.3	152.5	11.0	
	e PKPab	Z	00:47:21.3			
GRA1	e PKPbc	Z	00:47:11.3	152.5	16.7	
	e PKPab	Z	00:47:21.7			
WET	e PKPbc	Z	00:47:11.3	152.7	20.3	
	e PKPab	Z	00:47:22.3			
GEC2	e PKPbc	Z	00:47:11.4	152.8	22.1	
	e PKPab	Z	00:47:22.3			
WLF	e PKPbc	Z	00:47:13.6	153.2	6.6	
	e PKPab	Z	00:47:25.2			
STU	e PKPbc	Z	00:47:13.9	153.8	13.1	
	e PKPab	Z	00:47:26.7			
FUR	e PKPbc	Z	00:47:14.2	154.0	17.7	
	e PKPab	Z	00:47:27.8			
RJOB	e PKPbc	Z	00:47:13.8	154.1	21.1	
	e PKPab	Z	00:47:28.2			
BFO	e PKPbc	Z	00:47:15.0	154.3	11.5	
	e PKPab	Z	00:47:29.0			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source

2010/05/25 06:11:57.0 31.620N 103.350E 22.2 5.3 4.9 SZGRF
Sichuan, China

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:22:41.2	65.7	69.2	1.3	23	5.3		
FBE	e P	Z	06:22:43.4	66.0	68.8	1.7	49	5.5		
	e pP	Z	06:22:49.8							
CLL	e P	Z	06:22:43.4	66.0	68.7	1.3	20	5.2		
GEC2	e P	Z	06:22:46.9	66.5	68.2	1.3	24	5.3		
BSEG	e P	Z	06:22:47.8	66.6	67.9	1.1	37	5.5		
TANN	e P	Z	06:22:47.7	66.7	68.0	1.5	26	5.2		
WERD	e P	Z	06:22:48.2	66.8	67.9	1.6	26	5.2		
GUNZ	e P	Z	06:22:48.5	66.8	67.9	0.9	17	5.3		
WERN	e P	Z	06:22:48.6	66.8	67.9	1.4	25	5.3		
NEUB	e P	Z	06:22:48.5	66.8	67.8	1.5	68	5.7		
PLN	e P	Z	06:22:48.8	66.8	67.8	0.9	10	5.0		
	e pP	Z	06:22:55.2							
WET	e P	Z	06:22:49.3	66.9	67.8	1.3	17	5.1		
	e pP	Z	06:22:55.8							
MANZ	e P	Z	06:22:50.2	67.1	67.6	1.1	14	5.1		
	e pP	Z	06:22:56.7							
ROTZ	e P	Z	06:22:50.9	67.1	67.6	1.4	45	5.5		
	e pP	Z	06:22:57.3							
MOX	e P	Z	06:22:51.0	67.1	67.5	1.1	13	5.1		
	e L	Z	06:54:03.5			18.7	583		4.8	
NRDL	e P	Z	06:22:51.7	67.3	67.2	1.0	24	5.4		
	e pP	Z	06:22:58.0							
CLZ	e P	Z	06:22:52.3	67.4	67.1	1.2	38	5.5		
RJOB	e P	Z	06:22:53.1	67.5	67.2	1.3	20	5.2		
	e pP	Z	06:22:59.4							
GRA1	e P	Z	06:22:54.6	67.7	66.9	1.5	59	5.6		
	e L	Z	06:54:23.7			18.0	806		5.0	
UBBA	e P	Z	06:22:55.6	68.0	66.5	1.2	10	4.9		
	e pP	Z	06:23:01.9							
FUR	e P	Z	06:22:58.3	68.3	66.3	1.5	133	5.9		
TNS	e P	Z	06:23:03.1	69.1	65.2	1.4	17	5.0		
STU	e P	Z	06:23:04.0	69.3	65.2	1.5	55	5.5		
BFO	e P	Z	06:23:07.9	70.0	64.5	1.3	21	5.1		
WLF	e P	Z	06:23:13.2	70.7	63.5	1.3	79	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/25	10:09: 1.1	34.211N	35.852W	10.0G	5.4	6.1		SZGRF

Northern Mid-Atlantic Ridge

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	10:15:47.1	34.3	259.3	1.9	205	5.7		
BUG	e P	Z	10:15:56.0	35.3	257.9	1.7	171	5.7		

BFO	e	P	Z	10:15:58.1	35.5	263.2	1.9	186	5.6	
IBBN	e	P	Z	10:16:00.0	35.8	257.2	1.4	132	5.6	
TNS	e	P	Z	10:16:01.1	35.8	260.6	1.7	129	5.5	
STU	e	P	Z	10:16:03.1	36.1	263.3	2.0	134	5.4	
UBBA	e	P	Z	10:16:09.8	36.9	261.3	1.9	100	5.2	
NRDL	e	P	Z	10:16:12.7	37.2	259.2	1.5	136	5.4	
CLZ	e	P	Z	10:16:13.1	37.3	260.3	1.6	133	5.4	
FUR	e	P	Z	10:16:14.7	37.4	265.8	2.1	201	5.5	
GRA1	e	P	Z	10:16:15.3	37.5	263.8	1.7	125	5.4	
	e	L	Z	10:28:14.6			22.0	20086		5.9
BSEG	e	P	Z	10:16:15.5	37.7	257.5	1.9	540	5.9	
MOX	e	P	Z	10:16:19.0	37.9	262.9	1.8	89	5.2	
	e	L	Z	10:28:29.9			22.0	37293		6.2
NEUB	e	P	Z	10:16:19.6	38.1	262.3	1.9	158	5.4	
MANZ	e	P	Z	10:16:20.6	38.1	264.2	2.4	190	5.4	
ROTZ	e	P	Z	10:16:20.8	38.2	264.5	2.0	89	5.1	
PLN	e	P	Z	10:16:20.9	38.2	263.6	2.2	144	5.3	
WERD	e	P	Z	10:16:21.6	38.3	263.8	2.1	104	5.2	
GUNZ	e	P	Z	10:16:22.0	38.3	263.9	1.8	81	5.1	
WERN	e	P	Z	10:16:22.2	38.3	264.0	1.9	142	5.4	
TANN	e	P	Z	10:16:22.5	38.4	263.9	1.8	70	5.1	
RJOB	e	P	Z	10:16:23.4	38.4	267.6	1.9	96	5.1	
WET	e	P	Z	10:16:23.9	38.5	265.9	2.0	91	5.1	
CLL	e	P	Z	10:16:26.0	38.8	263.3	1.9	99	5.1	
FBE	e	P	Z	10:16:27.7	39.0	264.1	1.9	133	5.3	
GEC2	e	P	Z	10:16:28.6	39.1	266.9	1.9	83	5.0	
BRG	e	P	Z	10:16:30.6	39.4	264.6	1.9	127	5.2	
RUE	e	P	Z	10:16:31.1	39.5	262.6	1.5	189	5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/25	22:37:47.0	33.028N	136.327E	33.0G	5.0			SZGRF

Near south coast of western Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e	P	Z 22:49:59.1	80.9	45.7	1.1	22	5.1		
BSEG	e	P	Z 22:50:01.0	81.3	43.3	0.9	18	5.2		
BRG	e	P	Z 22:50:04.3	82.0	45.6	0.9	13	5.1		
CLL	e	P	Z 22:50:04.6	82.1	45.0	0.7	20	5.4		
FBE	e	P	Z 22:50:05.8	82.2	45.2	0.8	24	5.4		
NEUB	e	P	Z 22:50:07.9	82.7	44.1	1.2	34	5.5		
CLZ	e	P	Z 22:50:08.8	82.9	43.2	1.1	23	5.3		
TANN	e	P	Z 22:50:09.2	83.0	44.5	0.9	3	4.6		
WERD	e	P	Z 22:50:09.4	83.0	44.4	1.1	8	4.8		
PLN	e	P	Z 22:50:09.6	83.1	44.3	0.8	6	4.9		
GUNZ	e	P	Z 22:50:09.8	83.1	44.4	1.0	14	5.1		
WERN	e	P	Z 22:50:10.1	83.1	44.5	1.2	17	5.1		
MOX	e	P	Z 22:50:10.8	83.2	44.0	1.0	7	4.8		

MANZ	e P	Z	22:50:11.5	83.4	44.3	0.9	7	4.9
GEC2	e P	Z	22:50:11.6	83.5	45.3	1.0	7	4.8
ROTZ	e P	Z	22:50:12.5	83.5	44.3	1.6	24	5.2
WET	e P	Z	22:50:12.7	83.7	44.7	1.2	5	4.6
GRA1	e P	Z	22:50:14.7	84.0	43.6	1.1	12	5.0
STU	e P	Z	22:50:22.9	85.6	42.1	0.7	5	4.8
WLF	e P	Z	22:50:26.1	86.3	39.9	1.1	7	4.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/26	08:53:11.4	26.140N	129.190E	33.0G	6.1	6.5		NEIC

Ryukyu Islands, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z	09:05:36.3	82.4	54.6	1.4	890	6.8		
	e S	E	09:15:58.0							
RUE	e P	Z	09:05:41.4	83.4	54.7	1.2	751	6.8		
	e S	E	09:16:07.0							
BSEG	e P	Z	09:05:45.2	84.2	52.2	1.3	334	6.4		
	e S	E	09:16:15.9							
BRG	e P	Z	09:05:45.5	84.3	54.7	1.4	225	6.2		
	e S	E	09:16:16.5							
CLL	e P	Z	09:05:45.8	84.5	54.0	1.3	266	6.3		
	e S	E	09:16:16.5							
NEUB	e P	Z	09:05:49.7	85.2	53.1	1.8	364	6.3		
	e S	E	09:16:23.6							
HLG	e P	Z	09:05:49.4	85.2	50.3					
	e S	E	09:16:21.9							
NRDL	e P	Z	09:05:50.0	85.2	51.9	1.8	207	6.1		
	e S	N	09:16:27.1							
TANN	e P	Z	09:05:49.7	85.3	53.6	1.5	122	5.8		
	e S	E	09:16:26.0							
CLZ	e P	Z	09:05:51.2	85.5	52.1	1.1	84	5.8		
	e S	E	09:16:27.2							
GEC2	e P	Z	09:05:52.8	85.6	54.4	1.4	191	6.0		
MOX	e P	Z	09:05:52.0	85.6	53.0	1.2	61	5.6		
	e S	E	09:16:27.2							
	e L	Z	09:49:46.1			18.5	14565		6.4	
MANZ	e P	Z	09:05:52.0	85.7	53.3	1.5	143	5.9		
	e S	E	09:16:27.8							
ROTZ	e P	Z	09:05:52.3	85.8	53.3	1.4	213	6.1		
	e S	E	09:16:29.0							
WET	e P	Z	09:05:52.6	85.8	53.8	1.5	117	5.8		
	e S	E	09:16:29.6							
UBBA	e P	Z	09:05:54.7	86.3	51.8	1.2	66	5.6		
	e S	E	09:16:31.9							
GRA1	e P	Z	09:05:55.3	86.4	52.6	1.6	294	6.2		
	e S	E	09:16:32.5							

	e L	Z	09:49:32.4			18.9	20498		6.6
IBBN	e P	Z	09:05:55.3	86.4	50.1	1.5	211	6.1	
	e S	E	09:16:31.3						
RJOB	e P	Z	09:05:57.1	86.7	53.7	1.1	142	6.0	
	e S	E	09:16:36.1						
BUG	e P	Z	09:05:58.9	87.2	49.7	1.2	144	6.0	
	e S	E	09:16:38.4						
FUR	e P	Z	09:06:00.0	87.3	52.6	1.3	379	6.4	
	e S	E	09:16:37.9						
TNS	e P	Z	09:06:00.6	87.4	50.6	1.3	56	5.7	
	e S	E	09:16:40.2						
STU	e P	Z	09:06:03.0	88.0	51.1	1.4	101	6.0	
	e S	E	09:16:40.8						
BFO	e P	Z	09:06:06.3	88.7	50.4	1.4	83	5.8	
	e S	E	09:16:43.8						
WLF	e P	Z	09:06:07.7	88.9	48.8	1.4	218	6.2	
	e S	E	09:16:46.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/26	09:20:59.9	18.729S	174.848W	33.0N				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	09:40:32.0	144.6	8.5					
NRDL	e PKPbc	Z	09:40:36.4	146.0	8.4					
CLZ	e PKPbc	Z	09:40:38.6	146.6	9.0					
CLL	e PKPbc	Z	09:40:38.5	146.8	13.7					
BRG	e PKPbc	Z	09:40:39.0	147.1	15.5					
FBE	e PKPbc	Z	09:40:39.7	147.2	14.4					
MOX	e PKPbc	Z	09:40:41.5	147.7	11.5					
UBBA	e PKPbc	Z	09:40:40.8	147.7	8.6					
WERD	e PKPbc	Z	09:40:41.2	147.8	12.8					
TANN	e PKPbc	Z	09:40:41.1	147.8	13.1					
GUNZ	e PKPbc	Z	09:40:41.5	147.9	12.9					
WERN	e PKPbc	Z	09:40:41.8	147.9	13.0					
MANZ	e PKPbc	Z	09:40:42.5	148.3	12.6					
TNS	e PKPbc	Z	09:40:43.4	148.4	6.0					
ROTZ	e PKPbc	Z	09:40:43.2	148.5	12.8					
GRA1	e PKPbc	Z	09:40:43.3	148.7	11.1					
BFO	e PKPbc	Z	09:40:47.5	150.3	6.1					
RJOB	e PKPbc	Z	09:40:47.9	150.3	14.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/27	17:14:48.7	14.020S	166.910E	44.1		7.1		SZGRF

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PKPdf	Z	17:34:02.5	134.5	37.3					
	e sPKPdf	Z	17:34:21.5							
	e PP	Z	17:36:35.2							
RUE	e PKPdf	Z	17:34:05.2	136.0	39.1					
	e PP	Z	17:36:41.2							
BSEG	e PKPdf	Z	17:34:05.4	136.1	33.7					
	e PP	Z	17:36:45.7							
HLG	e PKPdf	Z	17:34:06.5	136.6	30.4					
	e sPKPdf	Z	17:34:25.7							
BRG	e PKPdf	Z	17:34:07.6	137.2	40.4					
CLL	e PKPdf	Z	17:34:07.4	137.2	38.9					
NRDL	e PKPdf	Z	17:34:07.5	137.3	34.3					
	e PP	Z	17:36:53.1							
FBE	e PKPdf	Z	17:34:08.1	137.4	39.6					
	e sPKPdf	Z	17:34:25.8							
	e PP	Z	17:36:53.3							
NEUB	e PKPdf	Z	17:34:08.5	137.8	37.4					
	e sPKPdf	Z	17:34:26.8							
	e PP	Z	17:36:55.3							
CLZ	e PKPdf	Z	17:34:08.7	137.8	35.1					
	e PP	Z	17:36:56.2							
TANN	e PKPdf	Z	17:34:09.2	138.1	38.8					
	e sPKPdf	Z	17:34:26.8							
	e PP	Z	17:36:57.9							
WERD	e PKPdf	Z	17:34:09.4	138.2	38.6					
	e PP	Z	17:36:58.5							
PLN	e PKPdf	Z	17:34:09.5	138.2	38.4					
	e PP	Z	17:36:58.5							
GUNZ	e PKPdf	Z	17:34:09.7	138.2	38.7					
	e PP	Z	17:36:58.5							
WERN	e PKPdf	Z	17:34:09.7	138.2	38.8					
	e PP	Z	17:36:58.9							
IBBN	e PKPdf	Z	17:34:09.3	138.3	31.2					
	e sPKPdf	Z	17:34:27.6							
MOX	e PKPdf	Z	17:34:10.2	138.3	37.5					
	e L	Z	18:36:55.7			20.6	34581		7.1	
MANZ	e PKPdf	Z	17:34:10.1	138.6	38.6					
ROTZ	e PKPdf	Z	17:34:10.3	138.7	38.9					
	e PP	Z	17:37:02.1							
UBBA	e PKPdf	Z	17:34:09.9	138.7	35.2					
	e sPKPdf	Z	17:34:30.3							
	e PP	Z	17:37:01.5							
WET	e PKPdf	Z	17:34:10.9	138.9	40.3					
	e PP	Z	17:37:03.1							
BUG	e PKPdf	Z	17:34:10.8	139.1	31.1					
	e PP	Z	17:37:04.1							
GRA1	e PKPdf	Z	17:34:11.1	139.2	37.7					

	e PP	Z	17:37:06.7						
	e L	Z	18:37:25.1			21.5	40702		7.1
TNS	e PKPdf	Z	17:34:12.0	139.8	33.5				
	e PP	Z	17:37:08.7						
RJOB	e PKPdf	Z	17:34:12.0	140.0	41.2				
	e PP	Z	17:37:09.7						
STU	e PKPdf	Z	17:34:14.1	140.7	35.5				
WLF	e PKPdf	Z	17:34:14.9	141.0	30.6				
	e sPKPdf	Z	17:34:32.0						
	e PP	Z	17:37:16.3						
BFO	e PKPdf	Z	17:34:15.0	141.4	34.6				
	e sPKPdf	Z	17:34:33.5						
	e PP	Z	17:37:18.6						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/27	20:48: 0.3	13.715S	166.667E	32.2G		5.4		NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z	21:07:17.3	135.6	39.3					
	e SKPdf	Z	21:10:48.0							
BSEG	e PKPdf	Z	21:07:17.5	135.7	33.9					
	e SKPdf	Z	21:10:48.1							
HLG	e SKPdf	Z	21:10:49.8	136.2	30.6					
BRG	e PKPdf	Z	21:07:19.5	136.8	40.6					
	e SKPdf	Z	21:10:51.5							
CLL	e PKPdf	Z	21:07:19.4	136.8	39.0					
	e SKPdf	Z	21:10:51.4							
NRDL	e PKPdf	Z	21:07:19.7	136.9	34.5					
	e SKPdf	Z	21:10:51.7							
FBE	e PKPdf	Z	21:07:20.1	137.0	39.8					
	e SKPdf	Z	21:10:52.0							
NEUB	e PKPdf	Z	21:07:20.6	137.4	37.5					
	e SKPdf	Z	21:10:53.2							
CLZ	e PKPdf	Z	21:07:20.8	137.4	35.2					
	e SKPdf	Z	21:10:53.4							
TANN	e PKPdf	Z	21:07:21.4	137.7	38.9					
	e SKPdf	Z	21:10:54.2							
WERD	e PKPdf	Z	21:07:21.4	137.8	38.7					
	e SKPdf	Z	21:10:54.4							
PLN	e PKPdf	Z	21:07:21.4	137.8	38.5					
	e SKPdf	Z	21:10:54.5							
GUNZ	e PKPdf	Z	21:07:21.6	137.8	38.8					
	e SKPdf	Z	21:10:54.6							
WERN	e PKPdf	Z	21:07:21.6	137.9	38.9					
	e SKPdf	Z	21:10:54.8							
IBBN	e PKPdf	Z	21:07:21.5	137.9	31.4					

	e SKPdf	Z	21:10:54.6						
MOX	e PKPdf	Z	21:07:22.1	137.9	37.7				
	e SKPdf	Z	21:10:55.0						
	e L	Z	22:15:36.0			20.8	840	5.5	
MANZ	e PKPdf	Z	21:07:22.2	138.2	38.8				
	e SKPdf	Z	21:10:55.6						
ROTZ	e PKPdf	Z	21:07:22.4	138.3	39.1				
	e SKPdf	Z	21:10:56.2						
UBBA	e PKPdf	Z	21:07:22.1	138.4	35.4				
	e SKPdf	Z	21:10:55.9						
WET	e PKPdf	Z	21:07:22.8	138.5	40.4				
	e SKPdf	Z	21:10:56.7						
BUG	e PKPdf	Z	21:07:22.8	138.8	31.3				
GRA1	e PKPdf	Z	21:07:23.1	138.8	37.8				
	e SKPdf	Z	21:10:57.3						
	e L	Z	22:10:29.4			21.8	684	5.4	
TNS	e PKPdf	Z	21:07:24.6	139.4	33.6				
	e SKPdf	Z	21:10:59.0						
RJOB	e PKPdf	Z	21:07:24.5	139.6	41.4				
	e SKPdf	Z	21:10:59.0						
FUR	e PKPdf	Z	21:07:25.2	140.0	39.0				
STU	e PKPdf	Z	21:07:26.0	140.3	35.7				
WLF	e PKPdf	Z	21:07:27.0	140.7	30.8				
	e SKPdf	Z	21:11:02.5						
BFO	e PKPdf	Z	21:07:27.0	141.0	34.8				
	e SKPdf	Z	21:11:02.5						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/28	01:51: 0.8	28.300N	56.900E	58.0	4.6			NEIC

Southern Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	01:58:29.9	39.9	108.0	1.0	12	4.5		
ROTZ	e P	Z	01:58:30.5	40.0	105.5	1.1	8	4.3		
GRB3	e P	Z	01:58:31.0	40.1	104.6	1.3	18	4.6		
GRB4	e P	Z	01:58:32.8	40.3	104.5	1.0	19	4.6		
GRA2	e P	Z	01:58:34.7	40.5	104.5	1.1	20	4.8		
GRA1	e P	Z	01:58:35.2	40.6	104.5	1.1	19	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/28	03:05:12.8	33.137N	101.693E	33.0N	5.1			SZGRF

Qinghai, China

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	03:15:42.7	64.0	68.7	1.3	8	4.8		

BSEG	e P	Z	03:15:46.7	64.5	68.0	1.0	12	5.1
TANN	e P	Z	03:15:47.5	64.6	67.9	1.5	14	5.0
GUNZ	e P	Z	03:15:48.0	64.7	67.8	1.4	12	4.9
WET	e P	Z	03:15:48.9	64.9	67.6	1.3	8	4.8
ROTZ	e P	Z	03:15:50.4	65.0	67.5	1.3	16	5.1
NRDL	e P	Z	03:15:51.5	65.2	67.2	2.1	40	5.3
CLZ	e P	Z	03:15:51.7	65.3	67.1	0.9	8	5.0
GRA1	e P	Z	03:15:54.1	65.6	66.8	1.1	11	5.0
FUR	e P	Z	03:15:58.2	66.2	66.2	1.3	36	5.5
WLF	e P	Z	03:16:13.1	68.6	63.5			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/28	04:25:59.7	14.000S	166.600E	35.0				NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z	04:45:18.6	137.1	39.3					
NEUB	e PKPdf	Z	04:45:24.5	137.6	37.8					
	e PP	Z	04:48:50.8							
CLZ	e PKPdf	Z	04:45:21.2	137.6	35.5					
TANN	e PP	Z	04:48:52.1	138.0	39.2					
GUNZ	e PKPdf	Z	04:45:23.2	138.1	39.1					
	e PP	Z	04:48:52.7							
ROHR	e PKPdf	Z	04:45:21.9	138.2	39.1					
	e PP	Z	04:48:53.1							
ROTZ	e PKPdf	Z	04:45:22.6	138.6	39.3					
UBBA	e PKPdf	Z	04:45:23.0	138.6	35.6					
GEC2	e PKPdf	Z	04:45:23.1	138.6	42.0					
WET	e PKPdf	Z	04:45:21.9	138.8	40.7					
GRA1	e PKPdf	Z	04:45:24.4	139.0	38.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/28	10:07:59.4	55.481N	163.496W	33.0G	5.6	4.9		SZGRF

Unimak Island, Alaska, United States, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:19:11.2	70.5	356.3	1.3	79	5.7		
	e PP	Z	10:21:19.2							
NRDL	e P	Z	10:19:19.1	71.9	356.2	1.2	63	5.6		
	e PP	Z	10:21:27.3							
IBBN	e P	Z	10:19:19.9	72.0	354.8	1.0	83	5.8		
CLZ	e P	Z	10:19:23.7	72.6	356.4	1.4	111	5.8		
	e PP	Z	10:21:31.7							
BUG	e P	Z	10:19:24.3	72.8	354.5	1.1	73	5.7		
	e PP	Z	10:21:32.6							

CLL	e P	Z	10:19:26.6	73.2	357.9	1.2	50	5.4	
	e PP	Z	10:21:34.5						
UBBA	e P	Z	10:19:28.9	73.6	356.2	1.7	59	5.3	
BRG	e P	Z	10:19:29.3	73.6	358.5	1.0	39	5.4	
	e PP	Z	10:21:37.0						
MOX	e P	Z	10:19:31.4	73.8	357.1	1.3	74	5.6	
	e PP	Z	10:21:39.3						
	e L	N	11:02:09.1			18.0	481		4.8
TANN	e P	Z	10:19:32.2	74.1	357.6	2.1	123	5.6	
TNS	e P	Z	10:19:32.3	74.1	355.3	1.3	50	5.4	
	e PP	Z	10:21:40.2						
WLF	e P	Z	10:19:34.9	74.5	353.9	1.4	72	5.5	
ROTZ	e P	Z	10:19:36.0	74.7	357.5	1.2	44	5.4	
	e PP	Z	10:21:44.0						
GRA1	e P	Z	10:19:36.4	74.7	356.9	1.2	72	5.6	
	e L	N	11:03:03.7			18.8	691		5.0
WET	e P	Z	10:19:39.7	75.3	357.9	1.4	50	5.4	
	e PP	Z	10:21:47.7						
STU	e P	Z	10:19:40.6	75.6	355.7	1.1	41	5.5	
GEC2	e P	Z	10:19:41.3	75.6	358.4	1.1	28	5.3	
	e PP	Z	10:21:49.1						
BFO	e P	Z	10:19:42.7	76.0	355.2	2.0	100	5.6	
FUR	e P	Z	10:19:44.8	76.3	357.0	1.3	80	5.7	
RJOB	e P	Z	10:19:47.3	76.7	357.8	0.9	31	5.5	
	e PP	Z	10:21:55.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/29	02:29:52.2	32.936N	95.466E	10.0N	5.7	6.2		SZGRF

Xizang

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:39:58.7	60.0	73.4	0.9	68	5.7		
CLL	e P	Z	02:40:01.2	60.5	73.0	1.0	78	5.5		
GEC2	e P	Z	02:40:04.2	60.8	72.2	1.0	35	5.2		
TANN	e P	Z	02:40:05.7	61.0	72.2	1.0	52	5.3		
WERD	e P	Z	02:40:06.4	61.1	72.1	1.0	50	5.3		
WERN	e P	Z	02:40:06.5	61.1	72.1	1.0	59	5.4		
GUNZ	e P	Z	02:40:06.5	61.1	72.1	0.9	82	5.5		
WET	e P	Z	02:40:06.8	61.2	71.8	1.2	63	5.3		
PLN	e P	Z	02:40:06.8	61.2	72.0	1.1	50	5.2		
NEUB	e P	Z	02:40:06.9	61.2	72.1	1.0	145	5.8		
BSEG	e P	Z	02:40:07.3	61.2	72.6	1.0	118	5.7		
ROTZ	e P	Z	02:40:08.8	61.4	71.7	1.0	129	6.1		
RJOB	e P	Z	02:40:10.4	61.7	71.0	1.3	83	5.8		
NRDL	e P	Z	02:40:11.0	61.8	71.7	1.0	156	6.2		
CLZ	e P	Z	02:40:11.5	61.8	71.5	1.0	149	6.2		
GRA1	e P	Z	02:40:12.9	62.0	71.0	0.9	109	6.1		

	e	L	N	03:04:57.8			19.3	15193	6.2
FUR	e	P	Z	02:40:16.3	62.5	70.3			
IBBN	e	P	Z	02:40:20.3	63.2	70.0	1.1	81	5.8
TNS	e	P	Z	02:40:22.3	63.5	69.4	1.0	54	5.7
BUG	e	P	Z	02:40:24.3	63.8	69.2	1.1	52	5.7
BFO	e	P	Z	02:40:27.1	64.3	68.5	1.0	67	5.8
WLF	e	P	Z	02:40:33.4	65.1	67.7	1.0	209	6.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/29	18:02:35.0	19.500S	169.200E	167.0				NEIC

Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
TANN	e PKPdf	Z	18:21:48.8	144.0	39.3					
IBBN	e PKPdf	Z	18:21:49.2	144.1	30.8					
ROTZ	e PKPdf	Z	18:21:50.9	144.6	39.5					
	e pPKPdf	Z	18:22:28.9							
UBBA	e pPKPdf	Z	18:22:28.9	144.6	35.3					
GEC2	e PKPdf	Z	18:21:50.8	144.7	42.5					
	e pPKPdf	Z	18:22:29.1							
GRA1	e pPKPdf	Z	18:22:29.4	145.1	38.1					
TNS	e pPKPdf	Z	18:22:31.5	145.7	33.4					
RJOB	e PKPdf	Z	18:21:55.0	145.9	42.3					
	e pPKPdf	Z	18:22:33.4							
FUR	e PKPdf	Z	18:21:56.4	146.2	39.6					
STU	e PKPdf	Z	18:21:56.6	146.6	35.8					
WLF	e PKPdf	Z	18:21:58.6	146.9	30.3					
BFO	e PKPdf	Z	18:21:58.5	147.3	34.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/29	19:05:14.3	37.800N	21.300E	50.0G				NEIC

Southern Greece

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z	19:08:10.1	12.3	150.7	0.9	12			
GRA1	e Pn	Z	19:08:38.0	13.9	144.9	1.7	114			
STU	e Pn	Z	19:08:41.2	14.0	136.9	1.0	30			
CLL	e Pn	Z	19:08:46.6	14.7	153.3	1.1	26			
UBBA	e Pn	Z	19:08:53.1	15.3	144.0	1.8	24			
TNS	e Pn	Z	19:08:55.2	15.4	138.7	1.0	49			
CLZ	e Pn	Z	19:09:01.4	16.0	147.1	1.2	30			
WLF	e Pn	Z	19:09:03.9	16.1	131.8	1.0	57			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/30	13:53:47.9	36.169N	71.013E	33.0N	4.6			SZGRF

Afghanistan-Tajikistan border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRB3	e P	Z	14:01:54.5	44.2	84.2	1.0	14	4.6		
GRA1	e P	Z	14:01:56.8	44.5	84.1	1.5	14	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/31	10:16: 2.7	6.900N	124.000E	33.0				NEIC

Mindanao, Philippine Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z	10:29:30.8	97.0	70.0					
CLL	e Pdiff	Z	10:29:32.2	97.4	69.2					
GEC2	e Pdiff	Z	10:29:34.2	97.8	70.0					
BSEG	e Pdiff	Z	10:29:35.0	97.9	66.6					
TANN	e Pdiff	Z	10:29:35.3	98.0	68.8					
WET	e Pdiff	Z	10:29:36.5	98.2	69.3					
ROTZ	e Pdiff	Z	10:29:37.6	98.4	68.7					
MOX	e Pdiff	Z	10:29:37.4	98.4	68.1					
NRDL	e Pdiff	Z	10:29:38.4	98.6	66.6					
CLZ	e Pdiff	Z	10:29:38.9	98.7	66.9					
RJOB	e PP	Z	10:33:44.2	98.8	69.5					
GRA1	e PP	Z	10:33:44.8	99.0	67.9					
IBBN	e Pdiff	Z	10:29:44.8	100.0	64.7					
TNS	e Pdiff	Z	10:29:46.4	100.5	65.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/31	19:51:50.5	12.080N	94.220E	132.9	6.1			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:03:14.8	74.5	89.8	1.0	163	6.0		
	e S	N	20:12:39.4							
RUE	e S	N	20:12:38.6	74.6	90.1					
	e ScS	N	20:13:12.6							
GEC2	e P	Z	20:03:15.8	74.7	89.0	1.0	166	6.0		
	e PP	Z	20:06:09.5							
	e S	E	20:12:40.1							
	e ScS	N	20:13:14.3							
FBE	e P	Z	20:03:17.4	74.9	89.3					
RGN	e S	E	20:12:44.5	74.9	90.3					
CLL	e P	Z	20:03:17.8	75.1	89.2	1.6	241	6.0		
	e S	E	20:12:43.6							

WET	e P	Z	20:03:18.7	75.3	88.5	1.6	247	6.0
	e PP	Z	20:06:13.0					
	e S	E	20:12:43.6					
	e ScS	N	20:13:21.0					
RJOB	e P	Z	20:03:18.5	75.3	88.1	1.6	201	5.9
	e PP	Z	20:06:15.5					
	e S	E	20:12:43.5					
TANN	e P	Z	20:03:20.0	75.5	88.5	1.6	171	5.9
	e S	N	20:12:49.6					
ROTZ	e P	Z	20:03:21.7	75.7	88.1	1.4	238	6.1
	e pP	Z	20:03:55.0					
	e PP	Z	20:06:17.0					
	e S	N	20:12:51.7					
	e ScS	N	20:13:25.1					
PLN	e P	Z	20:03:21.0	75.7	88.3			
MANZ	e P	Z	20:03:21.8	75.7	88.1			
	e PP	Z	20:06:18.2					
	e S	N	20:12:52.7					
NEUB	e P	Z	20:03:22.3	75.9	88.2			
	e S	N	20:12:52.8					
	e ScS	N	20:13:23.2					
MOX	e P	Z	20:03:23.1	76.0	87.9	1.6	214	6.0
	e S	N	20:12:53.6					
	e ScS	N	20:13:26.5					
GRA1	e PP	Z	20:06:23.5	76.3	87.4			
	e S	N	20:12:59.0					
GRFO	e P	Z	20:03:25.2	76.3	87.4			
FUR	e P	Z	20:03:24.4	76.3	87.0	1.1	156	6.1
	e S	E	20:12:54.4					
BSEG	e P	Z	20:03:27.4	76.7	87.7	1.2	300	6.3
	e PP	Z	20:06:24.8					
	e S	N	20:13:03.0					
CLZ	e P	Z	20:03:27.5	76.7	87.2	1.0	168	6.1
	e S	N	20:13:02.1					
NRDL	e P	Z	20:03:28.3	76.9	87.2	1.9	739	6.5
	e S	N	20:13:04.1					
UBBA	e P	Z	20:03:28.5	77.0	86.7	2.7	610	6.3
	e S	E	20:13:04.0					
STU	e P	Z	20:03:32.1	77.7	85.6	1.9	406	6.2
	e PP	Z	20:06:34.6					
	e S	N	20:13:11.0					
TNS	e P	Z	20:03:34.6	78.1	85.4	1.6	184	5.9
	e S	N	20:13:16.7					
HLG	e S	N	20:13:17.9	78.1	85.8			
BFO	e P	Z	20:03:35.0	78.3	84.9	1.6	134	5.8
	e PP	Z	20:06:39.6					
	e S	N	20:13:14.8					
	e SS	N	20:18:41.2					
IBBN	e P	Z	20:03:36.4	78.3	85.3	1.1	298	6.3

	e S	N	20:13:18.8						
BUG	e P	Z	20:03:38.2	78.7	84.7	1.1	217	6.1	
	e S	N	20:13:24.3						
WLF	e P	Z	20:03:43.1	79.6	83.6	2.0	525	6.1	
	e pP	Z	20:04:15.9						
	e S	N	20:13:33.1						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2010/05/31	20:14:20.9	40.532S	121.483W	33.0N				SZGRF

South Pacific Ocean

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e PKPbc	Z	20:33:46.0	142.7	263.7					
TNS	e PKPbc	Z	20:33:50.9	144.2	266.0					
UBBA	e PKPbc	Z	20:33:53.8	145.3	268.0					
BSEG	e PKPbc	Z	20:33:55.2	145.4	272.7					
CLZ	e PKPbc	Z	20:33:54.7	145.5	269.7					
GRA1	e PKPbc	Z	20:33:56.8	146.0	267.2					
MOX	e PKPbc	Z	20:33:56.8	146.3	268.9					
ROTZ	e PKPbc	Z	20:33:58.1	146.6	268.0					
WERD	e PKPbc	Z	20:33:58.3	146.7	269.1					
TANN	e PKPbc	Z	20:33:58.7	146.8	269.2					
WET	e PKPbc	Z	20:33:59.1	147.1	267.6					
CLL	e PKPbc	Z	20:33:59.4	147.2	271.0					
FBE	e PKPbc	Z	20:34:00.4	147.4	270.7					
GEC2	e PKPbc	Z	20:34:00.5	147.6	267.7					
BRG	e PKPbc	Z	20:34:02.3	147.8	271.1					

Format description
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(T. Plenefisch, Email: plene@szgrf.bgr.de)

In general all regional and teleseismic events clearly recorded with stations of the Gräfenberg-Array (GRF) and stronger events recorded with stations of the German Regional Seismological Network (GRSN) are included in this bulletin. Each event is reported by an EPICENTER LINE, a REGION LINE and a block of PHASE LINES.

EPICENTER LINE:

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)

REGION LINE:

The region name of the epicenter location.

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 to the station in degree
BAz	Backazimuth from the epicenter location 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