



Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:49:01.6	78.9	6.8	1.4	14	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/01	21:29:3.7	44.438N	147.259E	33.0N	4.5			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:41:01.3	78.4	30.4	1.1	6	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/01	21:45:40.2	6.700S	154.700E	56.0		5.1		NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 22:04:38.7	127.2	47.9					
	e L	Z 23:06:42.1			21.1	397		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/02	00:45:37.3	48.436N	153.123E	33.0N	4.8			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 00:57:12.6	74.6	26.2	0.8	9	5.0		
BRG	e P	Z 00:57:13.1	74.7	26.7	0.9	4	4.6		
CLZ	e P	Z 00:57:14.1	74.8	24.6	0.9	8	4.9		
IBBN	e P	Z 00:57:15.7	75.0	23.0	0.5	7	5.0		
TANN	e P	Z 00:57:18.7	75.5	25.7	1.0	6	4.7		
UBBA	e P	Z 00:57:20.7	75.8	24.2	0.8	5	4.7		
ROTZ	e P	Z 00:57:22.6	76.2	25.5	0.8	4	4.6		
GRA1	e P	Z 00:57:24.7	76.5	24.9	0.8	10	5.0		
WET	e P	Z 00:57:24.7	76.6	25.9	0.7	6	4.8		
GEC2	e P	Z 00:57:24.9	76.6	26.3	0.7	6	4.8		
WLF	e P	Z 00:57:32.7	77.9	21.7	1.7	31	5.2		
RJOB	e P	Z 00:57:32.3	77.9	25.7	0.9	9	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/02	12:40:9.7	15.818S	172.435W	33.0G		5.6		SZGRF

Samoa Islands region

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Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKPbc	Z	12:59:42.8	143.9	4.6					
UBBA	e PKPbc	Z	12:59:44.9	144.9	4.1					
MOX	e PKPbc	Z	12:59:45.3	145.0	6.8					
TANN	e PKPbc	Z	12:59:46.1	145.2	8.3					
TNS	e PKPbc	Z	12:59:47.3	145.6	1.5					
MANZ	e PKPbc	Z	12:59:47.9	145.6	7.8					
ROTZ	e PKPbc	Z	12:59:48.6	145.8	8.0					
GRA1	e PKPbc	Z	12:59:49.0	146.0	6.3					
	e PP	Z	13:03:12.3							
	e SS	R	13:22:04.6							
	e L	Z	14:08:27.3			19.9	931		5.6	
WLF	e PKPbc	Z	12:59:49.9	146.1	357.6					
WET	e PKPbc	Z	12:59:50.6	146.4	9.3					
GEC2	e PKPbc	Z	12:59:50.8	146.6	10.8					
STU	e PKPbc	Z	12:59:52.1	147.0	2.9					
BFO	e PKPbc	Z	12:59:52.6	147.5	1.4					
FUR	e PKPbc	Z	12:59:53.8	147.5	6.7					
RJOB	e PKPbc	Z	12:59:54.3	147.8	9.5					

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/02

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z	13:07:34.0							

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/02 13:30:40.7 16.840S 172.560W 10.0 5.8 SZGRF  
Samoa Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKPbc	Z	13:50:17.8	144.9	4.9					
CLL	e PKPbc	Z	13:50:18.4	145.2	9.4					
BUG	e PKPbc	Z	13:50:17.2	145.4	359.7					
BRG	e PKPbc	Z	13:50:18.3	145.6	11.1					
UBBA	e PKPbc	Z	13:50:18.6	146.0	4.4					
MOX	e PKPbc	Z	13:50:19.6	146.0	7.2					
WERD	e PKPbc	Z	13:50:19.9	146.2	8.4					
TANN	e PKPbc	Z	13:50:20.2	146.2	8.7					
WERN	e PKPbc	Z	13:50:21.1	146.3	8.5					
TNS	e PKPbc	Z	13:50:21.9	146.6	1.8					
MANZ	e PKPbc	Z	13:50:22.0	146.6	8.1					
ROTZ	e PKPbc	Z	13:50:22.9	146.8	8.4					
GRA1	e PKPbc	Z	13:50:23.4	147.0	6.7					
	e PP	Z	13:53:47.0							

	e L	Z	15:01:00.0				19.4	1580	5.8
WLF	e PKPbc	Z	13:50:24.2	147.2	357.7				
WET	e PKPbc	Z	13:50:24.7	147.4	9.7				
GEC2	e PKPbc	Z	13:50:25.0	147.6	11.2				
STU	e PKPbc	Z	13:50:27.6	148.0	3.2				
BFO	e PKPbc	Z	13:50:27.3	148.5	1.6				
FUR	e PKPbc	Z	13:50:28.9	148.5	7.0				
RJOB	e PKPbc	Z	13:50:28.7	148.8	9.9				

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/02

	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	GRA1	e PKP	Z 15:12:58.7							

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/02

	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	GRA1	e P	Z 22:05:08.2							

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/02 22:31:40.2  
Pacific-Antarctic Ridge

	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	BFO	e PP	Z 22:55:24.7	153.5	237.4					
	IBBN	e PP	Z 22:55:33.1	155.1	244.6					
	GRA1	e PKPdf	Z 22:51:36.1	155.8	240.0					
		e SS	T 23:15:21.4							
	CLZ	e PKPdf	Z 22:51:36.8	156.3	244.2					
	MANZ	e PKPdf	Z 22:51:36.6	156.4	240.6					
	WET	e PKPdf	Z 22:51:36.7	156.5	239.0					
		e PP	Z 22:55:40.8							
	MOX	e PKPdf	Z 22:51:36.7	156.5	241.9					
	GEC2	e PKPdf	Z 22:51:36.8	156.8	238.3					
	TANN	e PKPdf	Z 22:51:37.2	156.8	241.5					
		e PP	Z 22:55:44.8							
	CLL	e PKPdf	Z 22:51:37.6	157.6	243.4					
	BRG	e PKPdf	Z 22:51:38.7	157.9	242.6					
	GRA1	e L	Z 00:04:55.5	155.8	240.0	21.0	3188		6.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/02	23:31:2.7	53.035N	160.568E	33.0N	4.4			SZGRF

Near east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:42:35.8	74.1	18.6	0.8	3	4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/03	13:15:49.7	39.550N	140.762E	40.6	5.0			SZGRF

Eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:27:57.9	80.3	37.1	1.4	23	5.0		
	e pP	Z 13:28:09.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/03								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 15:51:29.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/03	18:06:21.8	22.987S	171.912E	33.0N				SZGRF

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 18:25:58.8	146.1	31.4					
BRG	e PKPbc	Z 18:26:02.1	147.3	39.7					
CLL	e PKPbc	Z 18:26:02.1	147.3	37.9					
CLZ	e PKPbc	Z 18:26:04.2	147.8	33.2					
TANN	e PKPbc	Z 18:26:05.0	148.2	37.9					
IBBN	e PKPbc	Z 18:26:05.0	148.3	28.6					
MOX	e PKPbc	Z 18:26:05.1	148.4	36.3					
UBBA	e PKPbc	Z 18:26:06.1	148.8	33.5					
ROTZ	e PKPbc	Z 18:26:06.6	148.9	38.1					
GEC2	e PKPbc	Z 18:26:06.6	148.9	41.5					
WET	e PKPbc	Z 18:26:07.0	149.1	39.8					
BUG	e PKPbc	Z 18:26:07.6	149.2	28.4					
GRA1	e PKPbc	Z 18:26:07.4	149.3	36.6					
TNS	e PKPbc	Z 18:26:09.1	149.9	31.5					
RJOB	e PKPbc	Z 18:26:09.3	150.2	41.3					
FUR	e PKPbc	Z 18:26:10.6	150.5	38.3					

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STU	e	PKPbc	Z	18:26:11.7	150.8	34.1
WLF	e	PKPbc	Z	18:26:12.7	151.1	27.9
BFO	e	PKPbc	Z	18:26:12.8	151.5	33.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/03	18:51:57.7	23.741S	179.647W	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z	19:11:42.4	148.9	17.9			
CLL	e	PKPbc	Z	19:11:47.0	150.8	24.2			
CLZ	e	PKPbc	Z	19:11:47.7	150.9	19.1			
IBBN	e	PKPbc	Z	19:11:47.5	150.9	14.0			
BRG	e	PKPbc	Z	19:11:47.3	150.9	26.2			
MOX	e	PKPbc	Z	19:11:49.0	151.7	22.2			
TANN	e	PKPbc	Z	19:11:49.4	151.7	23.9			
BUG	e	PKPbc	Z	19:11:49.4	151.8	13.5			
UBBA	e	PKPbc	Z	19:11:49.3	151.9	19.0			
ROTZ	e	PKPbc	Z	19:11:50.8	152.4	23.9			
GRA1	e	PKPbc	Z	19:11:51.2	152.7	22.1			
TNS	e	PKPbc	Z	19:11:51.6	152.8	16.4			
GEC2	e	PKPbc	Z	19:11:51.2	152.8	27.5			
WLF	e	PKPbc	Z	19:11:54.1	153.7	12.0			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/03	22:08:39.5	43.113N	10.503E	10.0G			3.6	SZGRF

Central Italy

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e	Pn	Z	22:09:52.6	4.9	200.0			3.7
	e	Sn	E	22:10:49.0					
BFO	e	Pn	Z	22:10:01.1	5.4	163.0			3.5
	e	Sn	N	22:10:59.6					
GEC2	e	Pn	Z	22:10:08.3	6.1	202.4			
WET	e	Pn	Z	22:10:11.4	6.3	196.1			
GRA1	e	Pn	Z	22:10:18.4	6.6	184.6			
ROTZ	e	Pn	Z	22:10:16.8	6.8	190.6			
TNS	e	Pn	Z	22:10:24.5	7.2	168.0			
TANN	e	Pn	Z	22:10:26.7	7.4	191.1			
MOX	e	Pn	Z	22:10:30.4	7.6	186.2			
BRG	e	Pn	Z	22:10:35.5	8.1	198.1			
CLL	e	Pn	Z	22:10:38.3	8.4	192.6			

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/04

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:24:20.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/04

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:55:04.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/04	21:06:21.5	13.106N	38.808E	33.0N	4.5			SZGRF

Ethiopia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z 21:14:00.6	40.8	139.2					
GEC2	e P	Z 21:14:04.6	41.3	141.2					
WET	e P	Z 21:14:09.0	41.9	140.4					
ROTZ	e P	Z 21:14:15.5	42.6	139.9					
BRG	e P	Z 21:14:16.5	42.8	142.9	1.0	6	4.3		
GRA1	e P	Z 21:14:17.2	43.0	138.6	1.2	11	4.4		
TANN	e P	Z 21:14:17.8	43.0	140.7					
BFO	e P	Z 21:14:20.3	43.3	134.0					
CLL	e P	Z 21:14:21.7	43.5	142.0	1.5	13	4.5		
MOX	e P	Z 21:14:23.1	43.6	139.8	2.4	47	4.8		
TNS	e P	Z 21:14:31.2	44.6	135.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/04

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z 23:15:59.5							
BSEG	e PKP	Z 23:15:51.7							
CLL	e PKP	Z 23:15:53.3							
CLZ	e PKP	Z 23:15:53.6							
GRA1	e PKP	Z 23:15:53.8							
RJOB	e PKP	Z 23:15:55.8							
STU	e PKP	Z 23:15:58.6							
WLF	e PKP	Z 23:15:58.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/04	23:56:18.0	19.282S	177.943E	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 00:15:53.0	145.8	25.9					
BRG	e PKPbc	Z 00:15:54.2	146.0	27.7					
FBE	e PKPbc	Z 00:15:54.5	146.1	26.7					
TANN	e PKPbc	Z 00:15:56.7	146.8	25.6					
WERD	e PKPbc	Z 00:15:56.1	146.8	25.3					
WERN	e PKPbc	Z 00:15:56.7	146.9	25.5					
GRA1	e PKPbc	Z 00:15:59.1	147.8	24.0					
GEC2	e PKPbc	Z 00:15:59.0	147.8	28.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/05	00:23:27.8	47.271N	154.512E	33.0N	4.7			SZGRF

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 00:35:11.5	76.0	25.8	0.9	10	4.9		
BRG	e P	Z 00:35:12.7	76.2	26.3	1.4	8	4.6		
CLZ	e P	Z 00:35:13.3	76.2	24.2	0.9	7	4.8		
MOX	e P	Z 00:35:17.2	77.0	24.8	0.9	4	4.5		
MANZ	e P	Z 00:35:20.3	77.5	25.1	1.1	4	4.5		
ROTZ	e P	Z 00:35:21.6	77.6	25.1	1.0	5	4.6		
GRA1	e P	Z 00:35:23.2	78.0	24.5	0.9	10	5.0		
WET	e P	Z 00:35:23.4	78.0	25.5	1.0	7	4.7		
GEC2	e P	Z 00:35:23.2	78.1	26.0	1.2	5	4.6		
TNS	e P	Z 00:35:24.7	78.2	22.8	1.6	23	5.0		
STU	e P	Z 00:35:31.2	79.4	23.1	1.1	10	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/05								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 02:10:57.9							
CLL	e P	Z 02:10:58.1							
GRA1	e P	Z 02:11:07.4							
RJOB	e P	Z 02:11:03.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/05	04:17:13.4	52.424N	170.537E	33.0N	4.6			SZGRF



Near Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:28:59.8	76.4	12.8	1.6	9	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/05	11:51:50.5	20.524S	170.442E	33.0N				SZGRF

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z 12:11:21.1	144.5	40.0					
CLL	e PKPbc	Z 12:11:21.0	144.5	38.2					
CLZ	e PKPbc	Z 12:11:23.3	145.0	33.9					
TANN	e PKPbc	Z 12:11:24.2	145.4	38.2					
IBBN	e PKPbc	Z 12:11:24.6	145.5	29.5					
MOX	e PKPbc	Z 12:11:25.0	145.6	36.8					
MANZ	e PKPbc	Z 12:11:25.9	145.9	38.1					
UBBA	e PKPbc	Z 12:11:25.9	146.0	34.1					
ROTZ	e PKPbc	Z 12:11:26.3	146.0	38.4					
GEC2	e PKPbc	Z 12:11:26.1	146.1	41.6					
WET	e PKPbc	Z 12:11:26.8	146.2	40.0					
BUG	e PKPab	Z 12:11:29.0	146.4	29.3					
GRA1	e PKPbc	Z 12:11:27.8	146.5	37.0					
	e PKPab	Z 12:11:29.0							
TNS	e PKPbc	Z 12:11:29.6	147.1	32.2					
	e PKPab	Z 12:11:31.3							
STU	e PKPab	Z 12:11:35.1	148.0	34.6					
WLF	e PKPbc	Z 12:11:33.3	148.3	28.9					
	e PKPab	Z 12:11:36.6							
BFO	e PKPbc	Z 12:11:33.3	148.7	33.6					
	e PKPab	Z 12:11:37.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/05	14:08:36.1	1.900N	126.400E	10.0		4.7		NEIC

Northern Molucca Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z 14:22:32.6	102.4	71.1					
MOX	e Pdiff	Z 14:22:39.8	103.9	69.2					
GRA1	e Pdiff	Z 14:22:44.6	104.5	69.1					
	e L	Z 15:14:28.8			20.4	218		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/06 02:15:42.0 38.020N 74.200E 131.4 5.2 SZGRF  
Tajikistan-Xinjiang border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 02:23:32.4	43.5	84.4	1.0	48	5.2		
BRG	e P	Z 02:23:33.1	43.6	82.9	1.0	38	5.1		
	e pP	Z 02:24:03.0							
FBE	e P	Z 02:23:36.1	43.9	82.5	0.9	46	5.2		
GEC2	e P	Z 02:23:36.8	44.0	80.6	1.5	43	5.0		
CLL	e P	Z 02:23:37.0	44.1	82.7	0.8	28	5.0		
	e pP	Z 02:24:06.8							
WET	e P	Z 02:23:40.6	44.5	80.4	1.1	20	5.0		
TANN	e P	Z 02:23:41.2	44.6	81.4	1.8	61	5.2		
	e pP	Z 02:24:10.7							
WERN	e P	Z 02:23:41.9	44.6	81.2	1.9	65	5.2		
GUNZ	e P	Z 02:23:41.8	44.7	81.3	1.1	24	5.0		
WERD	e P	Z 02:23:41.8	44.7	81.3	1.0	18	4.9		
	e pP	Z 02:24:11.6							
RJOB	e P	Z 02:23:42.8	44.8	78.9	1.0	18	4.9		
ROTZ	e P	Z 02:23:43.8	44.8	80.6	1.2	26	5.0		
MANZ	e P	Z 02:23:43.7	44.9	80.7	1.1	18	4.9		
MOX	e P	Z 02:23:44.8	45.1	81.1	1.1	22	5.0		
	e pP	Z 02:24:14.9							
BSEG	e P	Z 02:23:47.9	45.4	83.4	0.9	54	5.6		
GRA1	e P	Z 02:23:49.0	45.5	79.9	1.1	49	5.5		
	e pP	Z 02:24:19.2							
FUR	e P	Z 02:23:50.4	45.7	78.4	1.2	62	5.5		
STU	e P	Z 02:23:59.9	47.0	77.7	1.5	46	5.4		
IBBN	e P	Z 02:24:01.6	47.2	80.0	1.0	50	5.6		
BFO	e P	Z 02:24:04.6	47.6	76.8	1.0	13	5.0		
BUG	e P	Z 02:24:05.2	47.6	78.9	1.2	45	5.5		
WLF	e P	Z 02:24:13.7	48.7	76.6	1.1	48	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/06 02:50:49.6 42.867N 148.448E 33.0N 4.6 SZGRF  
Off southeast coast of Hokkaido, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:02:57.0	80.2	30.3	0.8	5	4.6		

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/06 06:35:49.0 17.734N 99.261W 32.9 5.3 4.8 SZGRF  
Guerrero, Mexico

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

BUG	e P	Z	06:48:26.1	86.0	293.7	0.7	12	5.2		
BSEG	e P	Z	06:48:29.1	86.7	296.0	1.8	97	5.7		
TNS	e P	Z	06:48:31.3	87.2	294.7	1.4	35	5.3		
BFO	e P	Z	06:48:32.2	87.9	294.7	2.2	33	5.1		
GRA1	e P	Z	06:48:41.0	89.0	296.8	0.7	18	5.5		
	e pP	Z	06:48:50.6							
	e L	Z	07:28:40.6			21.7	383		4.8	
CLL	e P	Z	06:48:41.4	89.3	298.2	1.8	33	5.4		
GUNZ	e P	Z	06:48:41.9	89.4	297.7	1.1	14	5.2		
MANZ	e P	Z	06:48:41.1	89.4	297.5	2.2	45	5.4		
WERN	e P	Z	06:48:42.5	89.4	297.7	1.7	27	5.3		
ROTZ	e P	Z	06:48:42.9	89.6	297.6	1.8	20	5.1		
FBE	e P	Z	06:48:43.5	89.7	298.4	2.3	66	5.6		
BRG	e P	Z	06:48:44.4	90.0	298.9	2.0	46	5.4		
WET	e P	Z	06:48:46.7	90.3	298.1	1.8	31	5.2		
GEC2	e P	Z	06:48:49.0	90.9	298.7	1.4	15	5.0		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/06 09:38: 6.7 21.200N 70.600E 10.0 4.8 4.5 ML Source  
 Southern India NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 09:47:19.5	52.6	100.5	1.1	9	4.7		
BRG	e P	Z 09:47:22.4	52.8	102.3	1.0	11	4.9		
FBE	e P	Z 09:47:25.2	53.2	101.8	0.9	12	4.9		
GRA1	e P	Z 09:47:33.4	54.3	99.1	0.8	10	4.9		
	e L	Z 10:16:25.5			19.4	354		4.5	

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/06 13:53:29.3 15.600S 167.700E 150.0 ML Source  
 Vanuatu Islands NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z 14:12:37.7	138.9	40.4					
CLL	e PKPdf	Z 14:12:38.4	139.0	38.8					
FBE	e PKPdf	Z 14:12:39.3	139.1	39.6					
	e pPKPdf	Z 14:13:21.0							
GUNZ	e PKPdf	Z 14:12:36.3	140.0	38.6					
WERN	e PKPdf	Z 14:12:37.6	140.0	38.7					
MANZ	e PKPdf	Z 14:12:41.1	140.3	38.6					
GEC2	e PKPdf	Z 14:12:41.0	140.5	41.6					
	e pPKPdf	Z 14:13:19.2							
WET	e PKPdf	Z 14:12:41.5	140.7	40.3					
GRA1	e PKPdf	Z 14:12:42.2	140.9	37.6					
	e pPKPdf	Z 14:13:26.4							

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WLF	e PKPdf	Z	14:12:41.9	142.8	30.3
BFO	e PKPdf	Z	14:12:43.2	143.1	34.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/06	16:48:31.2	50.899N	177.032W	33.0N	5.1			SZGRF
Andreanof Islands, Aleutian Islands, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 17:00:10.1	75.0	4.8	0.9	36	5.4		
IBBN	e P	Z 17:00:20.3	76.7	3.1	1.2	58	5.6		
CLL	e P	Z 17:00:22.8	77.4	6.5	1.2	14	4.9		
BUG	e P	Z 17:00:24.7	77.6	2.8	0.8	15	5.2		
BRG	e P	Z 17:00:25.3	77.8	7.1	1.4	22	5.1		
UBBA	e P	Z 17:00:27.0	78.1	4.5	1.8	28	5.1		
MOX	e P	Z 17:00:27.1	78.2	5.6	1.3	22	5.0		
TANN	e P	Z 17:00:28.2	78.4	6.1	0.6	11	5.1		
TNS	e P	Z 17:00:30.2	78.8	3.5	1.9	57	5.3		
MANZ	e P	Z 17:00:30.7	78.8	5.9	1.3	14	4.8		
ROTZ	e P	Z 17:00:32.2	79.0	5.9	1.3	15	4.8		
GRA1	e P	Z 17:00:33.1	79.2	5.3	1.6	64	5.3		
WET	e P	Z 17:00:35.1	79.6	6.3	0.3	8	5.0		
GEC2	e P	Z 17:00:34.8	79.8	6.9	1.2	10	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/07	07:10:22.7	22.062N	92.454E	39.2	5.7	5.2		SZGRF
India-Bangladesh border region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:21:17.7	67.8	81.6	2.3	122	5.7		
	e pP	Z 07:21:28.8							
	e L	Z 07:55:21.1			18.9	1438		5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/07	13:38: 5.0	48.637N	151.844E	33.0N	5.1			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 13:49:28.6	72.4	25.5	0.9	15	5.1		
CLL	e P	Z 13:49:37.8	74.1	26.9	0.8	23	5.2		
BRG	e P	Z 13:49:38.7	74.2	27.4					
MOX	e P	Z 13:49:43.7	75.0	26.0	1.1	14	4.9		
UBBA	e P	Z 13:49:46.0	75.3	25.0					
BUG	e P	Z 13:49:46.1	75.4	23.3	0.9	9	4.9		

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MANZ	e P	Z	13:49:46.5	75.5	26.2			
ROTZ	e P	Z	13:49:47.7	75.7	26.2	1.0	12	5.0
GRA1	e P	Z	13:49:49.3	76.0	25.6	0.9	41	5.5
WET	e P	Z	13:49:49.6	76.0	26.6			
GEC2	e P	Z	13:49:49.3	76.0	27.0			
TNS	e P	Z	13:49:51.0	76.3	23.9	1.3	23	5.2
BFO	e P	Z	13:50:00.3	78.0	23.7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/07	22:28: 1.7	18.270S	175.040W	33.0N				SZGRF

Tonga Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	22:47:37.5	145.9	4.7					
CLL	e PKPbc	Z	22:47:38.7	146.4	13.9					
BRG	e PKPbc	Z	22:47:39.6	146.6	15.6					
MOX	e PKPbc	Z	22:47:41.0	147.2	11.7					
	e PKPab	Z	22:47:43.8							
MANZ	e PKPbc	Z	22:47:43.1	147.8	12.8					
TNS	e PKPbc	Z	22:47:43.4	147.9	6.2					
	e PKPab	Z	22:47:46.1							
ROTZ	e PKPbc	Z	22:47:43.4	148.0	13.1					
	e PKPab	Z	22:47:47.1							
GRA1	e PKPab	Z	22:47:47.3	148.2	11.3					
WLF	e PKPbc	Z	22:47:45.8	148.6	2.2					
	e PKPab	Z	22:47:48.9							
GEC2	e PKPbc	Z	22:47:45.2	148.6	16.1					
BFO	e PKPbc	Z	22:47:47.9	149.8	6.4					
	e PKPab	Z	22:47:53.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/08	06:16: 7.5	21.410S	178.730W	33.0G				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z	06:35:51.4	148.7	21.4					
	e PKPab	Z	06:35:56.8							
BRG	e PKPbc	Z	06:35:52.0	148.9	23.3					
	e PKPab	Z	06:35:58.5							
MOX	e PKPbc	Z	06:35:53.6	149.7	19.3					
TANN	e PKPbc	Z	06:35:53.8	149.7	21.0					
GUNZ	e PKPab	Z	06:36:02.0	149.8	20.8					
WERN	e PKPab	Z	06:36:02.2	149.8	20.9					
MANZ	e PKPbc	Z	06:35:55.0	150.2	20.6					
ROTZ	e PKPbc	Z	06:35:55.3	150.4	20.9					

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TNS	e	PKPbc	Z	06:35:55.8	150.6	13.7
GRA1	e	PKPbc	Z	06:35:56.4	150.6	19.2
	e	PKPab	Z	06:36:05.4		
WET	e	PKPab	Z	06:36:06.7	150.8	22.6
GEC2	e	PKPbc	Z	06:35:56.5	150.8	24.3
WLF	e	PKPbc	Z	06:35:58.7	151.5	9.6
	e	PKPab	Z	06:36:09.0		
FUR	e	PKPab	Z	06:36:12.5	152.1	20.2
RJOB	e	PKPab	Z	06:36:12.6	152.1	23.4
BFO	e	PKPab	Z	06:36:12.9	152.5	14.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/08	06:28:29.0	19.610S	178.650W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 06:48:01.6	145.0	14.8					
CLL	e	PKPbc	Z 06:48:07.7	147.0	20.4					
BRG	e	PKPbc	Z 06:48:08.7	147.2	22.3					
MOX	e	PKPbc	Z 06:48:10.3	147.9	18.4					
TANN	e	PKPbc	Z 06:48:10.2	148.0	20.0					
MANZ	e	PKPbc	Z 06:48:12.1	148.4	19.6					
ROTZ	e	PKPbc	Z 06:48:12.7	148.6	19.9					
TNS	e	PKPbc	Z 06:48:12.8	148.9	13.0					
GRA1	e	PKPbc	Z 06:48:13.2	148.9	18.2					
GEC2	e	PKPbc	Z 06:48:14.0	149.1	23.1					
WLF	e	PKPbc	Z 06:48:15.9	149.7	9.0					
RJOB	e	PKPbc	Z 06:48:16.9	150.4	22.2					
BFO	e	PKPbc	Z 06:48:17.7	150.7	13.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09	01:11:15.5	51.288N	179.000W	33.0N	4.9			SZGRF
Andreanof Islands, Aleutian Islands, United States								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e	P	Z 01:22:57.2	75.7	8.2	0.7	16	5.2		
CLZ	e	P	Z 01:23:02.7	76.6	6.0	1.1	21	5.2		
CLL	e	P	Z 01:23:03.6	76.9	7.7	1.2	12	4.9		
NEUB	e	P	Z 01:23:05.2	77.1	6.9					
BRG	e	P	Z 01:23:05.6	77.3	8.3	1.0	8	4.8		
FBE	e	P	Z 01:23:06.4	77.3	7.9	1.0	10	4.9		
MOX	e	P	Z 01:23:08.4	77.7	6.8	1.4	16	5.0		
WERD	e	P	Z 01:23:09.2	77.8	7.2	1.2	5	4.5		
TANN	e	P	Z 01:23:08.6	77.8	7.3	1.4	14	4.9		
WERN	e	P	Z 01:23:09.6	78.0	7.2	1.0	13	5.0		

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TNS	e P	Z	01:23:11.0	78.3	4.7	0.9	11	4.9
ROTZ	e P	Z	01:23:13.8	78.5	7.1	1.1	8	4.6
GRA1	e P	Z	01:23:14.8	78.6	6.5	1.3	44	5.3
WET	e P	Z	01:23:16.1	79.1	7.5	1.3	6	4.5
GEC2	e P	Z	01:23:17.2	79.3	8.0	1.4	8	4.5
STU	e P	Z	01:23:19.0	79.7	5.2	0.8	11	4.8
FUR	e P	Z	01:23:22.0	80.2	6.5	1.1	20	5.1
BFO	e P	Z	01:23:22.1	80.2	4.6	1.3	19	5.0
RJOB	e P	Z	01:23:23.7	80.5	7.4	0.9	8	4.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09	01:43: 3.1	38.682N	25.531E	33.0G	4.3	4.1		SZGRF

Aegean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z 01:46:10.3	12.9	129.8	0.9	32			
GEC2	e P	Z 01:46:13.6	13.2	135.7	1.8	49			
WET	e P	Z 01:46:21.5	13.8	134.4	1.6	88			
ROTZ	e P	Z 01:46:30.9	14.6	134.4	1.9	33			
BRG	e P	Z 01:46:30.3	14.7	141.7	1.3	36			
MANZ	e P	Z 01:46:33.4	14.8	134.8	1.9	77			
TANN	e P	Z 01:46:37.8	14.9	136.8	1.9	87			
GRA1	e P	Z 01:46:38.3	15.0	131.8	1.4	64			
	e L	Z 01:52:43.3			19.2	1302		4.1	
CLL	e P	Z 01:46:41.2	15.4	140.3	1.2	27			
STU	e P	Z 01:46:42.9	15.5	124.6	1.1	42			
MOX	e P	Z 01:46:45.7	15.5	135.3	1.6	67			
BFO	e P	Z 01:46:45.2	15.7	121.5	1.0	22	4.3		
TNS	e P	Z 01:47:01.0	16.7	127.1	1.5	97			
CLZ	e P	Z 01:47:02.8	16.9	135.3	1.5	82			
WLF	e P	Z 01:47:12.1	17.6	121.2	1.2	60			
BSEG	e P	Z 01:47:22.4	18.4	139.6	1.5	48			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 03:16:21.4							
	e Sn	N 03:17:29.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09								

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Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 03:31:10.7							
	e Sn	N 03:32:08.8							
WET	e Pn	Z 03:31:18.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09	09:09:0.3	37.340N	44.011E	10.0G	4.6			SZGRF

Turkey-Iran border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 09:14:22.4	24.7	106.3	1.5	16	4.5		
WET	e P	Z 09:14:26.1	25.3	106.0	1.3	12	4.5		
ROTZ	e P	Z 09:14:33.0	25.9	106.5	1.1	15	4.5		
CLL	e P	Z 09:14:34.1	25.9	110.4	2.0	54	4.8		
WERN	e P	Z 09:14:35.1	26.0	107.7	1.2	13	4.5		
GRA1	e P	Z 09:14:38.1	26.5	105.2	1.1	18	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/09	18:13:24.3	22.600S	179.260W	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 18:33:05.7	147.8	16.8					
CLL	e PKPbc	Z 18:33:10.7	149.8	22.9					
	e PKPab	Z 18:33:16.2							
IBBN	e PKPab	Z 18:33:15.8	149.8	13.0					
CLZ	e PKPbc	Z 18:33:11.1	149.8	17.9					
BRG	e PKPbc	Z 18:33:11.3	149.9	24.9					
	e PKPab	Z 18:33:17.0							
MOX	e PKPbc	Z 18:33:13.0	150.7	20.9					
TANN	e PKPbc	Z 18:33:13.4	150.7	22.5					
	e PKPab	Z 18:33:20.1							
GUNZ	e PKPbc	Z 18:33:13.6	150.8	22.3					
MANZ	e PKPbc	Z 18:33:14.4	151.2	22.2					
ROTZ	e PKPbc	Z 18:33:15.0	151.4	22.5					
GRA1	e PKPbc	Z 18:33:15.1	151.7	20.7					
TNS	e PKPbc	Z 18:33:15.5	151.7	15.2					
WET	e PKPbc	Z 18:33:15.7	151.8	24.2					
GEC2	e PKPbc	Z 18:33:15.9	151.8	26.0					
WLF	e PKPbc	Z 18:33:18.0	152.6	10.9					
STU	e PKPbc	Z 18:33:18.5	153.0	17.4					
BFO	e PKPbc	Z 18:33:19.6	153.6	15.9					
	e PKPab	Z 18:33:31.8							



Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	23:19:45.8	2.950S	100.790E	30.1	5.5	5.5		SZGRF

Southern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:32:43.7	90.3	94.3	1.3	39	5.5		
	e S	T	23:43:36.2							
GEC2	e P	Z	23:32:43.7	90.3	94.1	1.5	63	5.6		
	e S	T	23:43:34.4							
RJOB	e P	Z	23:32:46.1	90.8	93.5	1.3	14	5.2		
WET	e P	Z	23:32:46.2	90.9	93.5	1.3	36	5.5		
	e pP	Z	23:32:54.7							
CLL	e S	T	23:43:41.1							
	e P	Z	23:32:46.1	90.9	93.6	1.4	33	5.5		
TANN	e pP	Z	23:32:55.5							
	e S	T	23:43:40.8							
ROTZ	e P	Z	23:32:47.8	91.2	93.2	1.4	21	5.3		
	e S	T	23:43:45.1							
MANZ	e P	Z	23:32:48.9	91.3	93.0	1.4	32	5.5		
	e S	T	23:43:46.2							
MOX	e P	Z	23:32:49.2	91.4	92.9	1.5	60	5.7		
	e S	T	23:43:46.8							
FUR	e P	Z	23:32:50.4	91.8	92.5	1.6	33	5.4		
	e S	T	23:43:49.7							
GRA1	e P	Z	23:32:50.2	91.9	92.3	1.5	52	5.7		
	e S	T	23:43:48.4							
CLZ	e P	Z	23:32:51.4	92.0	92.2	1.1	19	5.3		
	e pP	Z	23:33:00.0							
	e PP	R	23:36:35.8							
BSEG	e S	T	23:43:51.6							
	e P	Z	23:32:54.2	92.6	91.5	1.5	44	5.7		
STU	e pP	Z	23:33:03.2							
	e S	T	23:43:54.5							
TNS	e P	Z	23:32:54.6	92.7	91.4	2.1	89	5.8		
	e S	T	23:43:55.9							
BFO	e P	Z	23:32:57.0	93.3	90.7	1.2	11	5.2		
	e S	T	23:44:01.9							
IBBN	e P	Z	23:32:59.6	93.8	90.1	1.0	16	5.3		
	e S	T	23:44:07.1							
BUG	e P	Z	23:32:59.2	93.8	90.1	1.4	15	5.1		
	e S	T	23:44:06.8							
WLF	e P	Z	23:33:02.1	94.2	89.4	1.5	52	5.6		
	e S	T	23:44:11.0							
GRA1	e S	T	23:44:12.7	94.5	89.1					
	e P	Z	23:33:06.2	95.2	88.4	1.0	12	5.3		
GRA1	e S	T	23:44:20.6							
	e L	Z	00:22:33.8	92.0	92.2	19.9	1673		5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	01:13:42.4	51.500S	160.500E	10.0		6.4		NEIC
North of Macquarie Island								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKPab	Z	01:34:14.2	158.8	109.8					
	e PP	Z	01:37:55.8							
	e SS	T	01:57:59.3							
BRG	e SS	T	01:58:05.1	159.2	104.8					
	e PKPab	Z	01:34:18.4	159.4	108.9					
WET	e SS	T	01:58:08.0							
	e PKPab	Z	01:34:20.4	159.9	103.4					
	e PP	Z	01:37:59.3							
CLL	e SS	T	01:58:10.1							
	e PKPab	Z	01:34:20.0	160.0	107.2					
	e SS	T	01:58:11.6							
TANN	e SS	T	01:58:13.0	160.0	105.5					
MANZ	e PKPab	Z	01:34:20.8	160.1	106.6					
	e SS	T	01:58:15.2							
GRA1	e PKPdf	Z	01:33:35.8	160.6	107.2					
	e PP	Z	01:37:57.7							
	e SS	T	01:58:18.8							
	e L	Z	02:56:04.9			21.6	6237		6.4	
MOX	e SS	T	01:58:18.8	160.6	104.7					
CLZ	e SS	T	01:58:28.1	161.6	100.8					
BSEG	e PKPab	Z	01:34:31.0	161.9	94.5					
BFO	e SS	T	01:58:29.6	161.9	110.6					
TNS	e PKPab	Z	01:34:32.4	162.4	105.0					
WLF	e SS	T	01:58:53.3	163.7	106.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	13:34:18.0	49.600N	147.300E	590.0	4.7			GSRC
Sea of Okhotsk								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	13:44:45.4	71.9	29.2	0.6	8	5.1		
CLZ	e P	Z	13:44:47.9	72.2	27.7	0.7	5	4.7		
GEC2	e P	Z	13:44:56.6	73.8	29.3	0.6	3	4.5		
WET	e P	Z	13:44:57.0	73.8	28.8	0.6	4	4.6		
GRA1	e P	Z	13:44:57.2	73.8	27.9	0.6	7	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	13:46:48.2	53.355N	161.165E	33.0N	4.6			SZGRF

Off east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:58:20.2	73.9	18.1	0.8	5	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	16:11:15.3	12.258S	168.691E	33.0N		5.1		SZGRF

Santa Cruz Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PP	Z 16:33:04.9	134.9	30.6					
CLL	e PP	Z 16:33:14.3	136.3	35.6					
BRG	e PP	Z 16:33:14.1	136.3	37.1					
CLZ	e PP	Z 16:33:18.0	136.7	31.8					
IBBN	e PP	Z 16:33:19.7	137.1	28.0					
TANN	e PP	Z 16:33:20.8	137.2	35.4					
MOX	e PP	Z 16:33:21.1	137.3	34.1					
MANZ	e PP	Z 16:33:23.0	137.7	35.2					
ROTZ	e PP	Z 16:33:24.2	137.8	35.5					
GEC2	e PP	Z 16:33:23.3	138.0	38.1					
BUG	e PP	Z 16:33:25.3	138.0	27.7					
WET	e PP	Z 16:33:25.4	138.0	36.8					
GRA1	e PP	Z 16:33:26.6	138.2	34.2					
	e L	Z 17:35:18.9			20.2	395		5.1	
TNS	e PP	Z 16:33:29.2	138.7	30.1					
RJOB	e PP	Z 16:33:32.2	139.2	37.6					
FUR	e PP	Z 16:33:32.6	139.5	35.3					
STU	e PP	Z 16:33:36.3	139.7	32.0					
WLF	e PP	Z 16:33:37.5	139.9	27.1					
BFO	e PP	Z 16:33:39.8	140.4	31.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	19:36:43.7	30.990N	93.010E	41.2	4.9			SZGRF

Xizang

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 19:46:45.6	59.6	77.5	0.7	22	5.3		
BRG	e P	Z 19:46:47.3	59.9	76.7	1.0	9	4.7		
	e PP	Z 19:48:59.0							
FBE	e P	Z 19:46:50.0	60.2	76.3	1.1	14	4.9		
CLL	e P	Z 19:46:49.8	60.3	76.3	1.5	21	4.8		
	e pP	Z 19:47:01.8							
GEC2	e P	Z 19:46:51.6	60.5	75.4	1.0	8	4.5		
TANN	e P	Z 19:46:54.3	60.9	75.4	1.2	8	4.4		
	e pP	Z 19:47:05.4							

	e PP	Z	19:49:08.3						
WET	e P	Z	19:46:55.2	61.0	75.0	1.3	14	4.6	
	e PP	Z	19:49:11.6						
WERN	e P	Z	19:46:55.4	61.0	75.3	1.1	8	4.5	
WERD	e P	Z	19:46:54.8	61.0	75.4	1.2	12	4.6	
GUNZ	e P	Z	19:46:54.9	61.0	75.3	1.1	15	4.7	
	e pP	Z	19:47:06.5						
ROTZ	e P	Z	19:46:56.7	61.2	74.9	0.9	14	4.8	
	e pP	Z	19:47:08.1						
MANZ	e P	Z	19:46:57.3	61.2	75.0	1.4	10	4.5	
BSEG	e P	Z	19:46:57.8	61.3	75.8	1.2	34	5.1	
CLZ	e P	Z	19:47:00.4	61.8	74.8	0.8	23	5.4	
	e pP	Z	19:47:11.6						
GRA1	e P	Z	19:47:00.9	61.8	74.2	1.2	21	5.2	
FUR	e P	Z	19:47:03.5	62.2	73.5	1.4	44	5.5	
STU	e P	Z	19:47:11.2	63.4	72.4	1.3	16	5.1	
WLF	e P	Z	19:47:21.6	65.0	70.8	1.1	29	5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/10	23:42:44.7	0.872S	98.421E	51.9	5.6			SZGRF
Southern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 23:55:27.6	87.2	94.6	1.6	51	5.4		
BRG	e P	Z 23:55:27.6	87.2	94.8	1.9	70	5.5		
	e pP	Z 23:55:42.6							
RJOB	e P	Z 23:55:30.0	87.7	93.8	2.5	84	5.6		
WET	e P	Z 23:55:30.2	87.7	93.9	1.9	77	5.7		
	e pP	Z 23:55:45.1							
CLL	e P	Z 23:55:30.0	87.8	94.1	1.6	35	5.4		
	e pP	Z 23:55:45.4							
TANN	e P	Z 23:55:31.9	88.1	93.7	1.8	36	5.4		
	e pP	Z 23:55:46.9							
ROTZ	e P	Z 23:55:33.0	88.2	93.5	1.9	61	5.6		
MANZ	e P	Z 23:55:33.3	88.3	93.4	1.9	104	5.8		
	e pP	Z 23:55:48.1							
MOX	e P	Z 23:55:34.5	88.6	93.0	1.7	47	5.4		
	e pP	Z 23:55:49.8							
FUR	e P	Z 23:55:34.5	88.7	92.7	1.5	28	5.3		
	e pP	Z 23:55:49.7							
GRA1	e P	Z 23:55:35.8	88.9	92.7	1.8	97	5.7		
CLZ	e P	Z 23:55:38.5	89.5	92.1	1.9	90	5.7		
	e pP	Z 23:55:53.4							
BSEG	e P	Z 23:55:38.8	89.6	92.0	1.8	77	5.6		
	e pP	Z 23:55:54.2							
STU	e P	Z 23:55:41.5	90.1	91.2	1.6	48	5.5		
TNS	e P	Z 23:55:44.1	90.7	90.6	2.0	77	5.7		

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BFO	e P	Z	23:55:43.8	90.7	90.5	1.2	14	5.2
	e pP	Z	23:55:58.8					
IBBN	e P	Z	23:55:46.0	91.1	90.0	1.8	85	5.8
BUG	e P	Z	23:55:47.4	91.4	89.6	0.9	26	5.6
WLF	e P	Z	23:55:51.2	92.1	88.8	2.1	82	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/11	07:37:37.0	21.500S	175.200E	35.0				NEIC
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKP	Z 07:57:15.4	147.1	31.6					
BRG	e PKP	Z 07:57:16.0	147.2	33.5					
FBE	e PKP	Z 07:57:16.6	147.3	32.5					
GUNZ	e PKP	Z 07:57:18.9	148.2	31.3					
WERN	e PKP	Z 07:57:19.2	148.2	31.4					
MANZ	e PKP	Z 07:57:19.7	148.5	31.2					
ROTZ	e PKP	Z 07:57:20.4	148.7	31.6					
GEC2	e PKP	Z 07:57:20.5	148.9	34.9					
GRA1	e PKP	Z 07:57:20.8	149.1	30.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/11	08:22: 4.8	29.143N	131.650E	33.0N	5.2			SZGRF
Southeast of Ryukyu Islands, Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:34:37.8	85.1	49.1	1.2	21	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/11	21:21:34.1	11.517N	41.873E	33.0N	4.8			SZGRF
Ethiopia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 21:29:40.0	44.0	138.3	1.4	21	4.7		
TANN	e P	Z 21:29:53.8	45.7	137.8	2.0	40	5.1		
GRA1	e P	Z 21:29:52.7	45.8	135.8	1.2	10	4.7		
WERD	e P	Z 21:29:54.1	45.8	137.6	1.5	19	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/11	23:23:51.0	28.509N	53.955E	14.0G	4.1			THR
Southern Iran								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	23:30:55.7	36.8	108.6	1.0	3	3.9		
RJOB	e P	Z	23:31:00.6	37.0	106.3	0.8	4	4.2		
BRG	e P	Z	23:31:00.7	37.3	111.4	0.8	2	4.0		
WET	e P	Z	23:31:01.0	37.4	108.1	0.7	1	3.8		
ROTZ	e P	Z	23:31:07.0	38.0	108.2	0.8	3	4.0		
CLL	e P	Z	23:31:07.4	38.1	110.9	0.9	5	4.2		
MANZ	e P	Z	23:31:07.7	38.1	108.4	1.0	2	3.8		
GRA1	e P	Z	23:31:11.3	38.6	107.1	0.8	6	4.3		
NEUB	e P	Z	23:31:12.8	38.7	109.5					
CLZ	e P	Z	23:31:21.7	39.8	108.7	0.8	7	4.3		
BSEG	e P	Z	23:31:28.7	40.5	111.0	0.8	3	4.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/12	00:25:44.5	10.500N	145.700E	10.0		5.7		NEIC

South of Mariana Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PP	Z	00:44:16.1	105.8	49.7					
CLL	e PP	Z	00:44:19.1	105.9	48.7					
TANN	e PP	Z	00:44:23.5	106.8	48.4					
MOX	e PP	Z	00:44:27.0	107.0	47.6					
MANZ	e PP	Z	00:44:28.5	107.2	48.2					
GRA1	e PP	Z	00:44:32.5	107.9	47.5					
	e SP	Z	00:53:49.9							
	e L	Z	01:34:15.7			18.8	1891		5.7	
RJOB	e PP	Z	00:44:39.6	108.4	49.4					
FUR	e PP	Z	00:44:40.8	108.9	47.9					
STU	e PP	Z	00:44:45.9	109.5	45.9					
BFO	e PP	Z	00:44:51.5	110.2	45.2					
WLF	e PP	Z	00:44:49.7	110.2	42.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/12	04:56:53.3	33.300N	73.277E	33.0N	5.1			SZGRF

Pakistan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:05:12.1	46.0	88.7	1.1	12	4.8		
GRA1	e P	Z	05:05:27.2	47.8	85.6	0.8	10	5.0		
BSEG	e P	Z	05:05:29.0	48.1	88.8	1.0	31	5.4		
CLZ	e P	Z	05:05:28.9	48.2	86.9	1.1	20	5.1		

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/12	18:12:25.3	14.500S	167.200E	187.0				NEIC

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PP	Z 18:34:08.6	136.6	33.6					
BRG	e PKPdf	Z 18:31:27.3	137.7	40.4					
CLL	e PKPdf	Z 18:31:27.2	137.8	38.8					
CLZ	e PKPdf	Z 18:31:29.0	138.3	34.9					
	e PP	Z 18:34:17.1							
IBBN	e PKPdf	Z 18:31:30.7	138.8	31.1					
	e PP	Z 18:34:22.3							
MANZ	e PKPdf	Z 18:31:31.1	139.1	38.6					
GEC2	e PKPdf	Z 18:31:30.9	139.4	41.5					
	e PP	Z 18:34:26.0							
WET	e PKPdf	Z 18:31:30.0	139.5	40.2					
GRA1	e PKPdf	Z 18:31:28.8	139.7	37.6					
	e PP	Z 18:34:29.9							
TNS	e PKPdf	Z 18:31:30.1	140.3	33.3					
	e PP	Z 18:34:32.8							
WLF	e PP	Z 18:34:39.8	141.6	30.4					
BFO	e PKPdf	Z 18:31:30.8	141.9	34.5					
	e PP	Z 18:34:41.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/13	05:57:51.1	40.230N	79.670E	33.0N	4.9			SZGRF

Southern Xinjiang, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:06:10.4	45.6	76.7	1.4	13	4.8		
FBE	e P	Z 06:06:13.2	46.0	76.4	0.9	8	4.7		
CLL	e P	Z 06:06:12.9	46.1	76.5	0.9	6	4.6		
GEC2	e P	Z 06:06:14.8	46.3	74.7	1.3	20	5.0		
TANN	e P	Z 06:06:18.1	46.7	75.4	1.6	17	4.9		
WET	e P	Z 06:06:18.6	46.7	74.5	1.2	10	4.8		
ROTZ	e P	Z 06:06:21.2	47.0	74.6	1.6	24	5.1		
MOX	e P	Z 06:06:21.6	47.1	75.1	1.4	15	4.9		
GRA1	e P	Z 06:06:25.4	47.6	74.0	1.3	22	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/13	18:48:39.9	18.000N	146.400E	83.0				NEIC

Mariana Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PP	Z 19:06:17.9	99.5	45.4					

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CLL	e PP	Z	19:06:19.6	99.6	44.5
TANN	e PP	Z	19:06:26.5	100.5	44.1
GUNZ	e PP	Z	19:06:27.0	100.6	44.0
MANZ	e PP	Z	19:06:29.7	101.0	43.9
GEC2	e PP	Z	19:06:30.7	101.1	45.4
WET	e PP	Z	19:06:32.7	101.2	44.7
GRA1	e PP	Z	19:06:34.1	101.6	43.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/14	04:29:30.8	0.310S	128.990E	33.0N	5.1			SZGRF
Halmahera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PP	Z	04:48:01.7	105.7	70.3	1.2	25			
CLL	e PP	Z	04:48:04.9	106.1	69.4	1.2	27			
GEC2	e PP	Z	04:48:07.1	106.6	70.6	1.5	21			
TANN	e PP	Z	04:48:09.7	106.8	69.1	1.1	14			
ROTZ	e PP	Z	04:48:11.0	107.2	69.1	1.4	35			
MOX	e PP	Z	04:48:12.0	107.2	68.4	1.0	10			
CLZ	e PP	Z	04:48:14.1	107.5	67.0	2.2	64			
GRA1	e PP	Z	04:48:17.5	107.8	68.3	1.2	41			
FUR	e PP	Z	04:48:21.2	108.3	68.8	1.1	60			
STU	e PP	Z	04:48:27.6	109.4	66.9	0.8	18			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/14	15:40:35.4	24.000S	69.200W	33.0G		7.6		SZGRF
Northern Chile								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z	15:54:23.1	99.2	243.6					
	e PP	Z	15:58:11.8							
	e PS	R	16:05:22.0							
	e SKSac	R	16:07:27.7							
	e SS	T	16:12:40.5							
BFO	e Pdiff	Z	15:54:26.3	99.9	244.9					
	e PP	Z	15:58:15.3							
	e PS	R	16:05:25.5							
	e SKSac	R	16:07:34.8							
	e SS	T	16:12:44.5							
STU	e Pdiff	Z	15:54:30.2	100.6	245.6					
	e PP	Z	15:58:21.1							
	e PS	R	16:05:29.6							
	e SKSac	R	16:07:42.2							
	e SS	T	16:12:55.0							
BUG	e Pdiff	Z	15:54:29.8	100.7	244.7					



	e PP	Z	15:58:26.9				
	e PS	R	16:05:28.6				
	e SKSac	R	16:07:40.9				
	e SS	T	16:12:52.9				
TNS	e Pdiff	Z	15:54:30.8	100.8	245.3		
	e PP	Z	15:58:24.1				
	e PS	R	16:05:31.5				
	e SKSac	R	16:07:44.1				
	e SS	T	16:12:56.5				
IBBN	e Pdiff	Z	15:54:33.0	101.3	245.2		
	e PP	Z	15:58:30.4				
	e PS	R	16:05:32.0				
	e SKSac	R	16:07:46.0				
	e SS	T	16:13:00.3				
FUR	e Pdiff	Z	15:54:35.6	101.7	246.9		
	e PP	Z	15:58:27.8				
	e PS	R	16:05:34.0				
	e SKSac	R	16:07:52.9				
	e SS	T	16:13:08.9				
UBBA	e Pdiff	Z	15:54:35.2	102.0	246.5		
HLG	e Pdiff	Z	15:54:37.7	102.1	245.6		
	e PS	R	16:05:36.1				
	e SKSac	R	16:07:54.7				
GRFO	e PP	Z	15:58:33.8	102.2	247.2		
	e PS	R	16:05:38.5				
	e SKSac	R	16:07:59.3				
	e SS	T	16:13:16.8				
GRA1	e Pdiff	Z	15:54:36.8	102.2	247.2		
	e PP	Z	15:58:33.9				
	e PKPPKPdf	Z	16:19:04.0				
	e L	Z	16:37:19.7			21.8	210992 7.6
RJOB	e Pdiff	Z	15:54:38.4	102.4	247.9		
	e PP	Z	15:58:33.1				
	e PS	R	16:05:36.7				
	e SKSac	R	16:08:00.6				
	e SS	T	16:13:18.3				
CLZ	e Pdiff	Z	15:54:38.1	102.6	247.0		
	e PP	Z	15:58:39.1				
	e PS	R	16:05:40.4				
	e SKSac	R	16:08:01.4				
MOX	e Pdiff	Z	15:54:39.4	102.8	247.7		
	e PP	Z	15:58:39.4				
	e PS	R	16:05:42.2				
	e SKSac	R	16:08:05.7				
	e SS	T	16:13:24.9				
ROTZ	e Pdiff	Z	15:54:39.5	102.8	247.9		
	e PP	Z	15:58:38.5				
	e PS	R	16:05:42.1				
	e SKSac	R	16:08:06.2				

	e SS	T	16:13:25.7				
MANZ	e Pdiff	Z	15:54:39.5	102.9	247.9		
	e PP	Z	15:58:38.9				
	e PS	R	16:05:42.3				
	e SKSac	R	16:08:06.5				
	e SS	T	16:13:25.6				
WET	e Pdiff	Z	15:54:40.9	103.0	248.2		
	e PP	Z	15:58:39.6				
	e PS	R	16:05:41.7				
	e SKSac	R	16:08:07.1				
	e SS	T	16:13:27.3				
WERN	e Pdiff	Z	15:54:40.9	103.1	248.1		
	e PP	Z	15:58:40.1				
WERD	e Pdiff	Z	15:54:41.0	103.2	248.1		
	e PP	Z	15:58:42.3				
TANN	e Pdiff	Z	15:54:40.6	103.2	248.2		
	e PP	Z	15:58:42.2				
	e PS	R	16:05:44.2				
	e SKSac	R	16:08:10.3				
	e SS	T	16:13:30.8				
BSEG	e Pdiff	Z	15:54:41.4	103.4	247.4		
	e PP	Z	15:58:47.8				
	e PS	R	16:05:42.5				
	e SKSac	R	16:08:07.4				
GEC2	e Pdiff	Z	15:54:41.8	103.4	248.7		
	e PP	Z	15:58:41.5				
	e PS	R	16:05:42.6				
	e SKSac	R	16:08:10.6				
	e SS	T	16:13:32.1				
CLL	e Pdiff	Z	15:54:44.1	103.9	248.8		
	e PP	Z	15:58:48.0				
	e PS	R	16:05:45.7				
	e SKSac	R	16:08:16.3				
	e SS	T	16:13:38.6				
	e L	Z	16:37:08.8			21.9	176306
FBE	e Pdiff	Z	15:54:44.9	104.0	249.0		7.6
BRG	e Pdiff	Z	15:54:46.3	104.3	249.4		
	e PP	Z	15:58:50.4				
	e PS	R	16:05:48.4				
	e SKSac	R	16:08:16.1				
	e SS	T	16:13:44.7				
RUE	e Pdiff	Z	15:54:49.1	104.7	249.7		
	e PP	Z	15:58:55.8				
	e PS	R	16:05:48.7				
	e SKSac	R	16:08:24.1				
	e SS	T	16:13:45.1				
RGN	e PP	Z	15:58:54.5	105.2	249.8		
	e PS	R	16:05:51.8				
	e SKSac	R	16:08:28.4				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/14	17:35:36.4	14.130N	91.186W	33.0N	4.9			SZGRF
Guatemala								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:48:19.0	87.1	288.5	1.1	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/14	17:44: 4.3	23.200S	70.500W	38.0				NEIC
Near coast of northern Chile								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 18:02:12.2	102.4	248.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	05:10: 9.5	31.000S	59.400E	10.0	4.9			NEIC
Southwest Indian Ridge								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:23:15.0	91.3	140.3	1.2	8	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	15:03: 8.7	22.800S	70.300W	27.0				NEIC
Near coast of northern Chile								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z 15:17:00.2	102.0	248.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	15:06: 0.1	22.030S	71.780W	35.0		6.6		NEIC
Off coast of northern Chile								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e Pdiff	Z 15:19:36.9	99.2	246.7					
BFO	e Pdiff	Z 15:19:41.3	100.0	248.0					
BUG	e Pdiff	Z 15:19:43.5	100.6	247.8					
IBBN	e Pdiff	Z 15:19:45.6	101.2	248.3					
FUR	e Pdiff	Z 15:19:48.4	101.8	250.1					

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UBBA	e Pdiff	Z	15:19:48.8	101.9	249.7				
GRA1	e Pdiff	Z	15:19:50.6	102.3	250.3				
	e PP	Z	15:24:07.2						
	e SKSac	R	15:30:46.8						
	e Sdiff	T	15:31:41.0						
	e PS	R	15:33:11.6						
	e PKKPbc	Z	15:36:34.5						
	e SS	T	15:38:48.2						
	e L	Z	16:07:41.6			19.1	17641		6.6
MOX	e PP	Z	15:24:07.5	102.9	250.8				
ROTZ	e Pdiff	Z	15:19:53.9	102.9	251.1				
	e PP	Z	15:24:06.4						
MANZ	e Pdiff	Z	15:19:53.3	102.9	251.0				
	e PP	Z	15:24:06.9						
BSEG	e PP	Z	15:24:10.0	103.2	250.6				
WERN	e Pdiff	Z	15:19:52.9	103.2	251.3				
TANN	e Pdiff	Z	15:19:55.2	103.3	251.4				
GEC2	e Pdiff	Z	15:19:53.8	103.6	251.9				
CLL	e Pdiff	Z	15:19:56.8	103.9	252.0				
	e PP	Z	15:24:14.1						
FBE	e Pdiff	Z	15:19:57.3	104.0	252.1				
	e PP	Z	15:24:15.8						
BRG	e Pdiff	Z	15:19:59.1	104.3	252.6				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	15:32:40.4	48.110N	16.123E	10.0G			2.7	SZGRF
Austria								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ARSA	e Pg	Z	15:32:57.3	0.9	24.9					2.0
	e Sg	N	15:33:09.9							
MOA	e Pg	E	15:33:03.9	1.3	77.5					
	e Sg	N	15:33:21.3							2.2
GEC2	e Pn	Z	15:33:12.0	1.8	113.7					2.6
	e Sg	E	15:33:35.9							
WET	e Sg	N	15:33:54.9	2.4	114.5					2.6
BRG	e Sg	N	15:34:19.4	3.1	152.0					2.9
MANZ	e Sg	E	15:34:23.3	3.2	124.0					3.0
FBE	e Sg	E	15:34:26.0	3.3	146.3					3.0
WERD	e Sg	N	15:34:28.4	3.4	131.7					3.1
GRA1	e Sg	Z	15:34:36.1	3.6	114.3					3.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	17:18:19.8	23.260S	173.850W	33.0N		5.6		SZGRF
Tonga Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
HLG	e PKPbc	Z	17:38:05.1	149.0	3.1					
BSEG	e PKPdf	Z	17:38:00.8	149.2	7.5					
	e PKPbc	Z	17:38:05.1							
RUE	e PKPdf	Z	17:38:02.7	150.2	14.2					
	e PKPbc	Z	17:38:07.5							
IBBN	e PKPdf	Z	17:38:03.6	150.9	3.0					
	e PKPbc	Z	17:38:09.4							
	e PKPab	Z	17:38:16.4							
CLL	e PKPdf	Z	17:38:04.4	151.5	13.3					
	e PKPbc	Z	17:38:10.4							
	e PKPab	Z	17:38:18.6							
	e PP	Z	17:41:44.4							
BRG	e PKPdf	Z	17:38:03.8	151.7	15.3					
	e PKPbc	Z	17:38:11.1							
	e PKPab	Z	17:38:19.7							
FBE	e PKPdf	Z	17:38:04.3	151.8	14.1					
	e PKPbc	Z	17:38:11.5							
	e PKPab	Z	17:38:19.9							
	e PP	Z	17:41:46.6							
BUG	e PKPbc	Z	17:38:11.4	151.8	2.2					
	e PKPab	Z	17:38:20.0							
UBBA	e PKPdf	Z	17:38:05.0	152.3	7.6					
	e PKPbc	Z	17:38:12.0							
	e PP	Z	17:41:50.6							
MOX	e PKPdf	Z	17:38:05.3	152.3	10.8					
	e PKPbc	Z	17:38:12.3							
	e PKPab	Z	17:38:20.9							
WERD	e PKPdf	Z	17:38:05.8	152.4	12.3					
	e PKPbc	Z	17:38:12.7							
TANN	e PKPdf	Z	17:38:05.1	152.4	12.6					
	e PKPbc	Z	17:38:12.7							
	e PP	Z	17:41:51.1							
GUNZ	e PKPdf	Z	17:38:05.2	152.5	12.4					
	e PKPbc	Z	17:38:13.1							
WERN	e PKPdf	Z	17:38:06.3	152.5	12.5					
	e PKPbc	Z	17:38:13.3							
	e PP	Z	17:41:51.7							
MANZ	e PKPdf	Z	17:38:06.5	152.9	12.1					
	e PKPbc	Z	17:38:13.9							
TNS	e PKPdf	Z	17:38:06.2	153.0	4.6					
	e PKPbc	Z	17:38:14.2							
	e PKPab	Z	17:38:25.0							
ROTZ	e PKPdf	Z	17:38:06.8	153.1	12.4					
	e PKPbc	Z	17:38:14.3							
	e PKPab	Z	17:38:25.4							
	e PP	Z	17:41:54.7							
GRA1	e PKPdf	Z	17:38:06.7	153.3	10.4					

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	e	PKPbc	Z	17:38:14.6							
	e	PKPab	Z	17:38:26.2							
	e	PP	Z	17:41:55.4							
	e	L	Z	18:53:23.3			20.3	867	5.6		
WET	e	PKPdf	Z	17:38:07.0	153.6	14.0					
	e	PKPbc	Z	17:38:14.9							
WLF	e	PKPbc	Z	17:38:16.1	153.6	0.0					
GEC2	e	PKPdf	Z	17:38:07.3	153.7	15.8					
	e	PKPbc	Z	17:38:15.3							
STU	e	PKPdf	Z	17:38:08.7	154.4	6.5					
	e	PKPbc	Z	17:38:17.1							
	e	PKPab	Z	17:38:30.9							
FUR	e	PKPdf	Z	17:38:09.0	154.8	11.1					
	e	PKPbc	Z	17:38:17.8							
	e	PKPab	Z	17:38:32.6							
BFO	e	PKPdf	Z	17:38:08.9	154.9	4.7					
	e	PKPbc	Z	17:38:18.1							
	e	PKPab	Z	17:38:33.0							
	e	PP	Z	17:42:07.3							
RJOB	e	PKPdf	Z	17:38:08.9	155.0	14.5					
	e	PKPbc	Z	17:38:17.8							
	e	PKPab	Z	17:38:33.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/15	23:26:47.9	36.500N	29.500E	31.0	4.0			KAN
Turkey								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 23:30:43.6	16.9	131.1	1.6	10	3.7		
WET	e P	Z 23:30:51.2	17.5	130.1	1.4	10	3.8		
TANN	e P	Z 23:31:02.0	18.5	132.2	1.3	10	3.9		
GRA1	e P	Z 23:31:02.3	18.7	128.0	1.5	18	4.1		
MOX	e P	Z 23:31:08.1	19.1	131.0	0.9	13	4.2		
STU	e P	Z 23:31:09.1	19.2	122.1	0.9	18	4.3		
BFO	e P	Z 23:31:12.1	19.5	119.5	2.0	31	4.2		
BSEG	e P	Z 23:31:38.1	21.9	134.9	1.2	10	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	01:38:44.1	35.710N	88.556E	33.0N	4.5			SZGRF
Xizang								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:48:19.3	55.9	73.0	0.9	5	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	03:13: 1.0	2.620S	77.300W	119.8	6.4			SZGRF
Peru-Ecuador border region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	03:25:36.1	87.8	263.3	1.0	847	7.0		
	e SKSac	R	03:35:54.1							
	e S	R	03:36:09.0							
BUG	e P	Z	03:25:40.1	88.7	264.1	1.1	441	6.6		
	e S	R	03:36:17.4							
BFO	e P	Z	03:25:41.7	89.1	265.0	1.2	155	6.1		
	e PP	Z	03:29:12.0							
	e SKSac	R	03:35:59.6							
IBBN	e P	Z	03:25:42.0	89.1	264.5	1.7	934	6.7		
	e S	R	03:36:21.0							
TNS	e P	Z	03:25:43.2	89.3	265.1	1.0	287	6.5		
	e SKSac	R	03:36:02.9							
	e S	R	03:36:23.2							
HLG	e P	Z	03:25:43.5	89.3	264.6	1.3	1172	6.9		
STU	e P	Z	03:25:44.7	89.7	265.6	0.9	348	6.6		
	e PP	Z	03:29:19.6							
	e SKSac	R	03:36:05.4							
UBBA	e P	Z	03:25:48.0	90.3	266.3	1.1	70	5.8		
	e pP	Z	03:26:18.3							
	e PP	Z	03:29:23.2							
	e SKSac	R	03:36:10.1							
	e S	R	03:36:32.7							
BSEG	e P	Z	03:25:50.2	90.7	266.5	1.1	113	6.1		
	e SKSac	R	03:36:10.3							
	e S	R	03:36:36.2							
FUR	e P	Z	03:25:51.2	91.0	267.2	1.0	265	6.5		
	e SKSac	R	03:36:15.5							
	e S	R	03:36:38.8							
GRA1	e P	Z	03:25:51.6	91.0	267.2	1.0	206	6.4		
	e PP	R	03:29:29.4							
	e SKSac	R	03:36:16.8							
	e S	R	03:36:39.2							
	e SS	R	03:42:46.7							
	e PKKPdf	Z	03:43:13.3							
	e pPKKPbc	Z	03:43:54.7							
e PKPPKPdf	Z	03:51:20.4								
MOX	e P	Z	03:25:52.9	91.3	267.5	1.7	243	6.3		
	e PP	Z	03:29:30.0							
	e SKSac	R	03:36:16.9							
MANZ	e S	R	03:36:41.8	91.6	267.9	1.0	162	6.3		
	e P	Z	03:25:54.6							
	e SKSac	R	03:36:18.7							

	e S	R	03:36:44.4					
ROTZ	e P	Z	03:25:55.0	91.7	267.9	1.0	194	6.4
	e SKSac	R	03:36:19.5					
	e S	R	03:36:44.9					
WERD	e P	Z	03:25:55.0	91.8	268.0	1.0	145	6.3
	e pP	Z	03:26:25.7					
	e PP	Z	03:29:33.5					
	e SKSac	R	03:36:21.1					
	e S	R	03:36:45.7					
GUNZ	e P	Z	03:25:55.2	91.8	268.0	1.8	419	6.5
	e pP	Z	03:26:25.7					
	e SKSac	R	03:36:21.1					
	e S	R	03:36:45.8					
WERN	e P	Z	03:25:55.4	91.8	268.1	1.2	246	6.4
	e pP	Z	03:26:26.3					
	e PP	Z	03:29:38.1					
	e SKSac	R	03:36:20.0					
	e S	R	03:36:46.0					
TANN	e P	Z	03:25:55.8	91.9	268.1	1.2	276	6.5
	e pP	Z	03:26:26.6					
	e SKSac	R	03:36:19.4					
	e S	R	03:36:46.5					
RJOB	e P	Z	03:25:55.8	92.0	268.3	0.9	145	6.3
	e PP	Z	03:29:37.4					
	e SKSac	R	03:36:19.4					
	e S	R	03:36:47.7					
WET	e P	Z	03:25:56.8	92.1	268.4	1.1	175	6.3
	e pP	Z	03:26:27.5					
	e PP	Z	03:29:37.5					
	e SKSac	R	03:36:19.6					
	e S	R	03:36:48.6					
CLL	e P	Z	03:25:57.0	92.2	268.6	1.0	166	6.3
	e pP	Z	03:26:28.2					
	e SKSac	R	03:36:20.1					
	e S	R	03:36:49.8					
FBE	e P	Z	03:25:58.3	92.4	268.9	1.1	279	6.5
	e SKSac	R	03:36:22.5					
	e S	R	03:36:51.6					
RGN	e P	Z	03:25:58.8	92.5	269.0	1.5	705	6.8
GEC2	e P	Z	03:25:58.7	92.6	269.0	0.9	72	6.1
	e pP	Z	03:26:30.0					
	e PP	Z	03:29:41.9					
	e SKSac	R	03:36:21.9					
RUE	e P	Z	03:25:59.4	92.7	269.3	1.2	286	6.6
	e pP	Z	03:26:30.6					
	e PP	Z	03:29:41.3					
BRG	e P	Z	03:26:00.0	92.8	269.3	1.0	242	6.6
	e SKSac	R	03:36:23.3					
	e S	R	03:36:55.7					



Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	07:52:21.8	5.500S	151.700E	45.0				NEIC
New Britain, Papua New Guinea, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	08:11:12.1	122.4	47.3					
BRG	e PKPdf	Z	08:11:12.5	122.6	52.6					
CLL	e PKPdf	Z	08:11:12.7	122.8	51.4					
FBE	e PKPdf	Z	08:11:13.3	122.9	52.0					
TANN	e PKPdf	Z	08:11:14.5	123.7	51.3					
WERD	e PKPdf	Z	08:11:14.1	123.7	51.2					
GUNZ	e PKPdf	Z	08:11:14.7	123.8	51.2					
WERN	e PKPdf	Z	08:11:15.0	123.8	51.3					
GEC2	e PKPdf	Z	08:11:15.1	124.0	53.4					
MANZ	e PKPdf	Z	08:11:15.4	124.1	51.2					
WET	e PKPdf	Z	08:11:15.8	124.2	52.4					
UBBA	e PKPdf	Z	08:11:16.0	124.6	48.5					
IBBN	e PKPdf	Z	08:11:16.8	124.6	45.4					
GRA1	e PKPdf	Z	08:11:16.5	124.7	50.4					
GRFO	e PKPdf	Z	08:11:16.3	124.7	50.4					
RJOB	e PKPdf	Z	08:11:17.0	125.1	53.1					
FUR	e PKPdf	Z	08:11:18.5	125.7	51.3					
TNS	e PKPdf	Z	08:11:18.7	125.7	47.2					
STU	e PKPdf	Z	08:11:19.8	126.3	48.8					
WLF	e PKPdf	Z	08:11:22.2	127.2	45.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	07:53:57.7	23.017S	164.665W	33.0N				SZGRF
Cook Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	08:13:42.3	148.9	351.0					
CLL	e PKPbc	Z	08:13:48.3	151.7	355.5					
FBE	e PKPbc	Z	08:13:49.9	152.1	356.1					
BRG	e PKPbc	Z	08:13:49.3	152.1	357.3					
MOX	e PKPbc	Z	08:13:50.5	152.2	352.6					
WERD	e PKPbc	Z	08:13:50.9	152.5	354.0					
TANN	e PKPbc	Z	08:13:50.8	152.5	354.3					
GUNZ	e PKPbc	Z	08:13:51.1	152.6	354.0					
WERN	e PKPbc	Z	08:13:51.4	152.6	354.1					
MANZ	e PKPbc	Z	08:13:52.0	152.9	353.5					
GRA1	e PKPbc	Z	08:13:52.2	153.1	351.6					
ROTZ	e PKPbc	Z	08:13:53.1	153.1	353.6					
WET	e PKPbc	Z	08:13:53.8	153.8	354.9					

BFO	e	PKPbc	Z	08:13:54.0	154.1	345.1
GEC2	e	PKPbc	Z	08:13:54.1	154.1	356.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	09:08:26.4	36.900N	29.500E	23.0	4.5	4.3		NEIC

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RJOB	e P	Z 09:12:17.5	16.4	125.3	2.2	59	4.3		
GEC2	e P	Z 09:12:20.0	16.6	130.2	1.7	58	4.4		
WET	e P	Z 09:12:26.6	17.2	129.2	1.4	42	4.4		
BRG	e P	Z 09:12:34.1	17.8	135.6	1.5	44	4.4		
ROTZ	e P	Z 09:12:34.7	17.9	129.4	1.7	60	4.4		
MANZ	e P	Z 09:12:36.0	18.1	129.7	1.9	63	4.4		
FBE	e P	Z 09:12:36.3	18.1	134.4	1.8	85	4.6		
WERN	e P	Z 09:12:36.6	18.2	130.9	1.6	28	4.1		
TANN	e P	Z 09:12:38.8	18.2	131.4	1.4	28	4.2		
GUNZ	e P	Z 09:12:39.1	18.2	131.0	2.8	154	4.6		
WERD	e P	Z 09:12:39.7	18.3	131.2	1.6	24	4.1		
GRA1	e P	Z 09:12:40.7	18.4	127.2	2.2	150	4.7		
	e L	Z 09:20:09.7			20.1	1568		4.3	
CLL	e P	Z 09:12:42.9	18.6	134.5	1.9	46	4.4		
MOX	e P	Z 09:12:44.4	18.8	130.2	2.0	77	4.6		
STU	e P	Z 09:12:46.3	18.9	121.2	1.0	29	4.5		
BFO	e P	Z 09:12:49.4	19.2	118.7	3.1	660	5.3		
TNS	e P	Z 09:12:58.2	20.1	123.4	1.5	68	4.7		
WLF	e P	Z 09:13:10.7	21.1	118.4	2.2	199	5.1		
BUG	e P	Z 09:13:12.6	21.4	124.1	0.8	18	4.4		
BSEG	e P	Z 09:13:14.4	21.6	134.4	2.2	79	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	21:23:28.2	3.138N	94.761E	31.0	5.0			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 21:35:44.1	81.8	94.7	1.2	22	5.2		
	e pP	Z 21:35:52.7							
BRG	e P	Z 21:35:43.9	81.8	95.2	1.9	40	5.2		
RJOB	e P	Z 21:35:46.0	82.3	93.8	0.9	6	4.8		
	e pP	Z 21:35:55.5							
WET	e P	Z 21:35:46.7	82.3	94.1	1.6	22	5.1		
	e pP	Z 21:35:55.6							
CLL	e P	Z 21:35:46.8	82.4	94.5	1.3	10	4.8		
	e pP	Z 21:35:56.0							
ROTZ	e P	Z 21:35:49.7	82.8	93.7	1.1	6	4.8		

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	e pP	Z	21:35:58.4						
MANZ	e P	Z	21:35:50.1	82.9	93.6	1.2	17	5.1	
	e pP	Z	21:35:58.7						
MOX	e P	Z	21:35:51.4	83.2	93.3	1.0	4	4.6	
GRA1	e P	Z	21:35:52.7	83.4	92.9	1.4	22	5.2	
BSEG	e P	Z	21:35:56.3	84.2	92.6	1.3	21	5.2	
TNS	e P	Z	21:36:01.6	85.2	90.8	1.2	9	4.9	
	e pP	Z	21:36:10.9						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/16	22:11:18.9	25.190S	179.510W	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPbc	Z	22:31:08.8	150.9	25.3					
CLL	e PKPbc	Z	22:31:11.2	152.2	24.8					
	e PKPab	Z	22:31:20.7							
BRG	e PKPbc	Z	22:31:11.7	152.3	26.9					
	e PKPab	Z	22:31:21.5							
NEUB	e PKPbc	Z	22:31:12.3	152.6	22.6					
TANN	e PKPbc	Z	22:31:13.4	153.1	24.5					
MOX	e PKPbc	Z	22:31:13.2	153.1	22.7					
	e PKPab	Z	22:31:24.7							
WERD	e PKPbc	Z	22:31:13.5	153.1	24.2					
GUNZ	e PKPbc	Z	22:31:13.8	153.2	24.3					
	e PKPab	Z	22:31:26.0							
WERN	e PKPbc	Z	22:31:14.1	153.3	24.5					
	e PKPab	Z	22:31:26.1							
MANZ	e PKPbc	Z	22:31:14.4	153.6	24.2					
GRA1	e PKPbc	Z	22:31:15.7	154.1	22.7					
	e PKPab	Z	22:31:27.8							
WET	e PKPab	Z	22:31:29.9	154.2	26.5					
TNS	e PKPbc	Z	22:31:16.1	154.2	16.7					
	e PKPab	Z	22:31:29.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/17	10:09:29.1	44.094N	147.792E	33.0N	4.8			SZGRF
Kuril Islands, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	10:21:29.4	78.9	30.2	0.9	10	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/17 15:03: 2.1 11.240N 122.480E 33.0N 5.6 SZGRF  
Panay, Philippine Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	15:16:11.3	92.6	68.6	0.9	62	6.0		
CLL	e P	Z	15:16:12.6	93.0	67.8	1.0	36	5.8		
BSEG	e P	Z	15:16:14.9	93.5	65.5	0.9	18	5.4		
GEC2	e P	Z	15:16:15.3	93.5	68.5	1.0	29	5.5		
TANN	e P	Z	15:16:15.9	93.7	67.4					
WET	e P	Z	15:16:17.3	93.9	67.8	1.2	22	5.4		
ROTZ	e P	Z	15:16:18.2	94.1	67.3					
MOX	e P	Z	15:16:17.8	94.1	66.8	0.9	28	5.6		
RJOB	e P	Z	15:16:19.2	94.5	67.9					
GRA1	e P	Z	15:16:20.8	94.7	66.5	1.0	23	5.6		
FUR	e P	Z	15:16:23.2	95.2	66.7					
IBBN	e P	Z	15:16:24.4	95.5	63.5					
TNS	e P	Z	15:16:27.2	96.1	64.3	1.3	25	5.6		
STU	e P	Z	15:16:27.6	96.3	65.0					
BFO	e P	Z	15:16:30.6	97.0	64.4	2.0	23	5.5		
WLF	e P	Z	15:16:34.5	97.6	62.5					

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/17 15:03:29.1 18.690S 177.033W 33.0N 5.6 4.7 SZGRF  
Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	15:23:00.6	144.3	12.0					
CLL	e PKPbc	Z	15:23:06.9	146.4	17.4					
BRG	e PKPbc	Z	15:23:07.6	146.7	19.2					
MOX	e PKPbc	Z	15:23:09.2	147.3	15.3					
TANN	e PKPbc	Z	15:23:09.5	147.4	16.9					
ROTZ	e PKPbc	Z	15:23:11.7	148.1	16.7					
TNS	e PKPbc	Z	15:23:12.1	148.2	9.9					
GRA1	e PKPbc	Z	15:23:13.3	148.3	15.0					
WLF	e PKPbc	Z	15:23:14.4	148.9	5.9					
FUR	e PKPbc	Z	15:23:15.6	149.8	15.8					
BFO	e PKPbc	Z	15:23:16.4	150.0	10.2					

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/17 17:16:49.6 53.166N 158.765E 33.0N 5.5 4.7 SZGRF  
Near east coast of Kamchatka Peninsula, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	17:27:56.9	69.7	19.5	1.1	66	5.7		
CLL	e P	Z	17:28:07.5	71.6	20.8	0.9	69	5.8		

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IBBN	e P	Z	17:28:08.8	71.8	17.8						
BRG	e P	Z	17:28:08.8	71.8	21.3	1.2	26	5.3			
MOX	e P	Z	17:28:13.5	72.6	19.9	1.0	32	5.4			
TANN	e P	Z	17:28:13.8	72.6	20.4						
ROTZ	e P	Z	17:28:18.0	73.3	20.2						
GRA1	e P	Z	17:28:19.7	73.6	19.6	0.9	61	5.6			
	e L	Z	18:05:56.5			18.6	382		4.7		
TNS	e P	Z	17:28:19.9	73.6	18.0	0.9	37	5.4			
WET	e P	Z	17:28:20.5	73.7	20.5	0.9	38	5.4			
GEC2	e P	Z	17:28:20.6	73.8	20.9	0.9	22	5.2			
WLF	e P	Z	17:28:25.6	74.6	16.6						
STU	e P	Z	17:28:26.3	74.9	18.3						
FUR	e P	Z	17:28:27.6	75.0	19.5	0.9	46	5.5			
RJOB	e P	Z	17:28:28.3	75.0	20.3						
BFO	e P	Z	17:28:30.0	75.5	17.8	0.9	27	5.4			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/18	00:32: 2.4	21.030S	175.560W	174.5				SZGRF
Tonga Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 00:51:23.6	146.8	10.0					
	e pPKPbc	Z 00:52:09.3							
CLL	e PKPbc	Z 00:51:29.2	149.0	15.7					
BRG	e PKPbc	Z 00:51:29.7	149.2	17.5					
MOX	e PKPbc	Z 00:51:31.5	149.9	13.4					
	e PKPab	Z 00:51:35.7							
TANN	e PKPbc	Z 00:51:31.8	149.9	15.1					
	e PKPab	Z 00:51:36.3							
TNS	e PKPbc	Z 00:51:33.3	150.6	7.6					
GRA1	e PKPbc	Z 00:51:33.5	150.8	13.1					
	e PKPab	Z 00:51:43.1							
	e pPKPbc	Z 00:52:18.6							
GEC2	e PKPbc	Z 00:51:34.3	151.2	18.2					
FUR	e PKPab	Z 00:51:47.7	152.3	13.8					
RJOB	e PKPbc	Z 00:51:37.7	152.5	17.1					
	e PKPab	Z 00:51:49.1							
BFO	e PKPbc	Z 00:51:37.0	152.5	7.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/18								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 03:05:42.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/18	05:40: 9.0	21.785S	65.940W	231.4	5.4			SZGRF
Southern Bolivia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	05:53:14.1	95.6	242.6					
STU	e P	Z	05:53:19.9	97.0	244.7					
	e PKKPbc	Z	06:09:53.8							
TNS	e P	Z	05:53:20.9	97.2	244.3					
	e PKKPbc	Z	06:09:53.4							
IBBN	e P	Z	05:53:23.2	97.7	244.1					
FUR	e P	Z	05:53:24.7	98.0	246.1					
	e PKKPbc	Z	06:09:50.8							
GRA1	e P	Z	05:53:26.8	98.6	246.3	1.1	21	5.4		
	e pP	Z	05:54:26.7							
	e SKSac	E	06:03:42.4							
	e SP	Z	06:05:58.2							
	e PKKPbc	Z	06:09:51.1							
	e		06:10:17.9							
RJOB	e PKKPbc	Z	06:09:48.7	98.8	247.1					
MOX	e P	Z	05:53:30.3	99.2	246.7					
ROTZ	e P	Z	05:53:30.5	99.2	247.0					
WET	e P	Z	05:53:30.9	99.4	247.4					
	e PKKPbc	Z	06:09:47.8							
TANN	e P	Z	05:53:32.4	99.6	247.3					
	e pP	Z	05:54:26.0							
	e PKKPbc	Z	06:09:47.2							
GEC2	e P	Z	05:53:32.5	99.8	248.0					
	e PKKPbc	Z	06:09:46.2							
BSEG	e P	Z	05:53:33.1	99.8	246.3					
CLL	e P	Z	05:53:34.9	100.3	247.8					
	e pP	Z	05:54:31.0							
	e PKKPbc	Z	06:09:44.8							
BRG	e PKKPbc	Z	06:09:43.5	100.7	248.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	00:52:15.7	20.935S	178.982W	564.3				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e PKPdf	Z	01:10:49.7	145.1	20.4					
	e PP	Z	01:14:08.6							
BSEG	e PKPdf	Z	01:10:49.3	146.2	15.8					
	e PKPbc	Z	01:10:52.7							
HLG	e PKPdf	Z	01:10:50.8	146.3	11.6					

	e pPKPbc	Z	01:13:01.0		
RUE	e PKPdf	Z	01:10:51.1	147.0	22.2
	e pPKPbc	Z	01:13:02.2		
IBBN	e PKPdf	Z	01:10:52.6	148.2	12.0
	e PKPbc	Z	01:10:57.6		
	e PKPab	Z	01:11:02.7		
CLL	e PKPdf	Z	01:10:51.8	148.2	21.6
	e PKPbc	Z	01:10:57.2		
	e PKPab	Z	01:11:02.8		
	e PP	Z	01:14:28.2		
BRG	e PKPdf	Z	01:10:52.2	148.4	23.5
	e PKPbc	Z	01:10:57.8		
BUG	e PKPdf	Z	01:10:53.9	149.1	11.4
	e PKPbc	Z	01:11:00.1		
	e PKPab	Z	01:11:06.6		
MOX	e PKPdf	Z	01:10:53.6	149.1	19.6
	e PKPbc	Z	01:11:00.2		
TANN	e PKPdf	Z	01:10:53.7	149.2	21.2
	e PKPbc	Z	01:11:00.1		
	e PKPab	Z	01:11:07.1		
WERD	e PKPdf	Z	01:10:53.3	149.2	20.9
	e PKPab	Z	01:11:07.1		
GUNZ	e PKPdf	Z	01:10:53.5	149.2	21.0
	e PKPab	Z	01:11:07.5		
	e pPKPbc	Z	01:13:12.4		
	e PP	Z	01:14:35.1		
WERN	e PKPdf	Z	01:10:53.6	149.3	21.1
	e PKPbc	Z	01:11:00.0		
	e PKPab	Z	01:11:07.5		
	e PP	Z	01:14:35.1		
MANZ	e PKPdf	Z	01:10:54.1	149.7	20.8
	e PKPbc	Z	01:11:01.4		
ROTZ	e PKPdf	Z	01:10:54.9	149.8	21.1
	e PKPbc	Z	01:11:01.7		
	e PP	Z	01:14:37.8		
GRA1	e PKPdf	Z	01:10:55.2	150.1	19.4
	e PKPbc	Z	01:11:02.5		
	e PKPab	Z	01:11:10.3		
	e pPKPbc	Z	01:13:12.8		
	e PP	Z	01:14:42.3		
	e SKKPbc	Z	01:21:07.9		
	e SS	E	01:33:20.0		
TNS	e PKPdf	Z	01:10:55.7	150.1	14.0
	e PKPbc	Z	01:11:02.4		
	e PKPab	Z	01:11:10.7		
	e pPKPbc	Z	01:13:11.7		
	e PP	Z	01:14:40.8		
WET	e PKPdf	Z	01:10:55.2	150.2	22.8
	e PKPbc	Z	01:11:02.5		

	e	PKPab	Z	01:11:11.9		
	e	pPKPbc	Z	01:13:13.2		
	e	PP	Z	01:14:40.6		
GEC2	e	PKPdf	Z	01:10:55.7	150.3	24.5
	e	PKPbc	Z	01:11:03.0		
	e	PKPab	Z	01:11:12.4		
	e	pPKPbc	Z	01:13:13.8		
WLF	e	PKPdf	Z	01:10:56.9	151.0	9.9
	e	PKPbc	Z	01:11:05.0		
	e	PKPab	Z	01:11:14.2		
	e	pPKPbc	Z	01:13:14.1		
	e	PP	Z	01:14:47.4		
STU	e	PKPdf	Z	01:10:57.5	151.4	16.1
	e	PKPbc	Z	01:11:05.1		
	e	PKPab	Z	01:11:15.8		
FUR	e	PKPdf	Z	01:10:57.6	151.6	20.4
	e	PKPbc	Z	01:11:05.3		
	e	PKPab	Z	01:11:16.7		
	e	PP	Z	01:14:47.8		
RJOB	e	PKPdf	Z	01:10:56.9	151.6	23.6
	e	PKPbc	Z	01:11:05.4		
	e	PKPab	Z	01:11:18.4		
BFO	e	PKPdf	Z	01:10:57.9	152.0	14.7
	e	PKPbc	Z	01:11:06.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	02:54: 4.9	43.733N	147.762E	33.0N	5.1			SZGRF
Kuril Islands, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	03:05:48.3	75.8	30.3	1.1	33	5.4		
CLL	e P	Z	03:05:55.3	77.2	31.7	0.8	30	5.5		
BRG	e P	Z	03:05:56.0	77.3	32.3					
TANN	e P	Z	03:06:00.6	78.1	31.3	1.1	11	4.9		
MOX	e P	Z	03:06:01.5	78.2	30.8	1.1	15	4.9		
MANZ	e P	Z	03:06:02.6	78.6	31.0	0.9	8	4.8		
ROTZ	e P	Z	03:06:04.6	78.8	31.1	1.0	16	5.0		
GEC2	e P	Z	03:06:06.1	79.1	31.9	1.0	10	4.8		
WET	e P	Z	03:06:06.5	79.1	31.4	1.0	23	5.1		
GRA1	e P	Z	03:06:06.9	79.2	30.4	0.8	37	5.3		
TNS	e P	Z	03:06:09.3	79.6	28.6	0.8	14	5.0		
FUR	e P	Z	03:06:14.1	80.5	30.3	0.9	22	5.2		
STU	e P	Z	03:06:14.9	80.6	29.0	0.9	21	5.2		
BFO	e P	Z	03:06:18.3	81.3	28.4	1.0	13	5.0		



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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	15:20: 3.5	22.000S	173.400E	10.0		5.7		NEIC

Southeast of Loyalty Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	15:39:41.7	145.6	28.5					
CLL	e PKP	Z	15:39:44.4	147.0	34.8					
BRG	e PKP	Z	15:39:45.6	147.0	36.7					
TANN	e PKP	Z	15:39:47.2	147.9	34.7					
MOX	e PKP	Z	15:39:47.7	148.0	33.2					
MANZ	e PKP	Z	15:39:49.3	148.4	34.6					
UBBA	e PKP	Z	15:39:49.6	148.4	30.4					
ROTZ	e PKP	Z	15:39:50.0	148.5	34.9					
GEC2	e PKP	Z	15:39:48.5	148.7	38.2					
WET	e PKP	Z	15:39:51.0	148.8	36.6					
GRA1	e PKP	Z	15:39:49.6	148.9	33.4					
	e SS	E	16:02:41.9							
	e L	Z	16:43:26.8			21.7	1377		5.7	
TNS	e PKP	Z	15:39:52.7	149.4	28.2					
BFO	e PKP	Z	15:39:49.5	151.1	29.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	17:49: 8.0	28.169N	140.922E	33.0N	5.4			SZGRF

Bonin Islands, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	18:02:05.6	90.2	42.7	0.9	18	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	18:25: 6.7	29.034N	52.865E	33.0N	5.2			SZGRF

Southern Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	18:32:18.2	37.6	107.6	2.0	88	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/19	20:32:51.1	43.086N	128.132W	29.0	5.2	5.1		SZGRF

Off coast of Oregon, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	20:45:01.1	80.7	331.2	1.6	37	5.2		
	e pP	Z	20:45:08.4							
	e sP	Z	20:45:14.4							

e S	E	20:55:09.4							
e SS	E	21:00:15.6							
e L	Z	21:21:37.6	20.0	827	5.1				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	00:42:17.5	64.791N	145.458E	15.0	4.8			SZGRF

Eastern Siberia, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 00:51:58.6	56.4	21.1					
CLL	e P	Z 00:52:10.6	58.2	21.7	0.8	14	5.1		
BRG	e P	Z 00:52:11.9	58.4	22.0	1.5	12	4.7		
PRU	e P	Z 00:52:17.0	59.1	22.0	1.2	17	5.0		
MOX	e P	Z 00:52:17.5	59.2	21.0	1.3	16	4.9		
TANN	e P	Z 00:52:17.7	59.2	21.3	1.4	12	4.7		
WERD	e P	Z 00:52:18.0	59.2	21.2	1.3	22	5.0		
GUNZ	e P	Z 00:52:18.2	59.3	21.2	1.2	16	4.7		
WERN	e P	Z 00:52:18.1	59.3	21.2	0.8	8	4.6		
NKC	e P	Z 00:52:19.1	59.4	21.2	1.5	12	4.5		
ROTZ	e P	Z 00:52:22.3	59.9	21.0	0.9	5	4.3		
GRA1	e P	Z 00:52:24.7	60.1	20.6	1.4	17	4.7		
WET	e P	Z 00:52:25.4	60.3	21.2	1.4	11	4.9		
GEC2	e P	Z 00:52:25.6	60.4	21.4	1.3	10	4.9		
FUR	e P	Z 00:52:33.8	61.6	20.3	1.0	12	4.9		
RJOB	e P	Z 00:52:34.5	61.6	20.9	0.9	12	5.0		
BFO	e P	Z 00:52:37.0	62.1	19.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	02:50:47.6	17.669S	175.849W	33.0N				SZGRF

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 03:10:22.0	145.6	15.1					
BRG	e PKPbc	Z 03:10:23.4	145.9	16.8					
MOX	e PKPbc	Z 03:10:24.2	146.5	13.0					
TANN	e PKPbc	Z 03:10:25.4	146.6	14.5					
ROTZ	e PKPbc	Z 03:10:27.4	147.3	14.3					
TNS	e PKPbc	Z 03:10:26.8	147.3	7.6					
GRA1	e PKPbc	Z 03:10:27.7	147.5	12.6					
GEC2	e PKPbc	Z 03:10:28.4	147.9	17.3					
WLF	e PKPbc	Z 03:10:29.2	148.0	3.6					
STU	e PKPbc	Z 03:10:31.4	148.6	9.3					
RJOB	e PKPbc	Z 03:10:32.0	149.1	16.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	05:20:3.4	31.700N	49.900E	7.0	5.2			IGUT

Western Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WET	e P	Z	05:26:35.5	32.7	108.4					
ROTZ	e P	Z	05:26:41.3	33.3	108.6					
FUR	e P	Z	05:26:42.6	33.4	105.2					
GRA1	e P	Z	05:26:46.2	33.9	107.4	1.7	55	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	09:18:55.3	32.200N	35.200E	34.0	4.7			NCSS

Dead Sea region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	09:24:03.7	23.2	128.0	1.0	32	4.8		
BRG	e P	Z	09:24:14.8	24.4	131.9	0.9	22	4.7		
ROTZ	e P	Z	09:24:15.7	24.5	127.2					
TANN	e P	Z	09:24:18.5	24.8	128.7					
GRA1	e P	Z	09:24:19.6	25.0	125.5	1.3	13	4.5		
CLL	e P	Z	09:24:20.9	25.1	131.1	1.3	24	4.8		
MOX	e P	Z	09:24:23.1	25.3	127.7					
BFO	e P	Z	09:24:25.0	25.9	118.7	0.9	30	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	11:46:35.3	34.033N	140.482E	33.0N	5.3			SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	11:58:52.3	82.1	39.7	1.4	29	5.2		
BRG	e P	Z	11:58:56.5	82.9	42.1	0.9	25	5.5		
CLL	e P	Z	11:58:56.6	83.0	41.5	0.9	54	5.8		
TANN	e P	Z	11:59:01.5	83.9	41.0	0.9	6	4.8		
MOX	e P	Z	11:59:02.1	84.1	40.4	0.9	13	5.1		
IBBN	e P	Z	11:59:03.4	84.3	37.7					
ROTZ	e P	Z	11:59:04.7	84.5	40.8	1.5	26	5.3		
GEC2	e P	Z	11:59:04.3	84.6	41.8					
UBBA	e P	Z	11:59:04.6	84.6	39.3					
WET	e P	Z	11:59:05.7	84.7	41.3					
GRA1	e P	Z	11:59:07.6	85.0	40.1	1.3	42	5.5		
BUG	e P	Z	11:59:07.9	85.2	37.3					
TNS	e P	Z	11:59:10.6	85.7	38.1	1.4	14	4.9		
STU	e P	Z	11:59:14.9	86.5	38.6					
BFO	e P	Z	11:59:17.5	87.2	38.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	12:52:59.2	6.800S	155.600E	51.0		6.0		NEIC
Bougainville - Solomon Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	13:11:54.5	125.4	43.7					
BRG	e PKPdf	Z	13:11:55.5	126.0	49.2					
CLL	e PKPdf	Z	13:11:55.4	126.1	48.0					
TANN	e PKPdf	Z	13:11:57.7	127.0	47.9					
MOX	e PKPdf	Z	13:11:57.9	127.2	46.8					
GEC2	e PKPdf	Z	13:11:58.4	127.4	50.1					
ROTZ	e PKPdf	Z	13:11:58.9	127.5	48.0					
WET	e PKPdf	Z	13:11:59.0	127.6	49.1					
IBBN	e PKPdf	Z	13:11:59.0	127.7	41.6					
UBBA	e PKPdf	Z	13:11:59.1	127.8	44.9					
GRA1	e Pdiff	Z	13:08:46.4	128.0	46.9					
	e PKPdf	Z	13:11:59.7							
	e pPKPdf	Z	13:12:15.0							
	e PP	Z	13:14:06.2							
	e SS	N	13:31:17.8							
	e L	Z	14:10:58.2			21.7	1663		5.7	
BUG	e PKPdf	Z	13:12:00.6	128.5	41.5					
TNS	e PKPdf	Z	13:12:01.7	128.9	43.5					
FUR	e PKPdf	Z	13:12:01.8	129.0	47.9					
STU	e PKPdf	Z	13:12:03.0	129.6	45.2					
WLF	e PKPdf	Z	13:12:04.6	130.3	41.1					
BFO	e PKPdf	Z	13:12:04.1	130.3	44.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/20	15:28:18.7	30.496S	179.412W	60.0		5.7		GSRC
Kermadec Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	15:48:14.7	155.5	20.6					
	e PKPab	Z	15:48:38.6							
CLL	e PKP	Z	15:48:16.5	157.2	28.6					
	e PKPab	Z	15:48:45.6							
BRG	e PKP	Z	15:48:17.0	157.3	31.1					
	e PKPab	Z	15:48:46.8							
IBBN	e PKP	Z	15:48:17.2	157.6	16.4					
	e PKPab	Z	15:48:46.9							
TANN	e PKP	Z	15:48:17.7	158.2	28.5					
	e PKPab	Z	15:48:50.3							
MOX	e PKP	Z	15:48:17.6	158.2	26.4					

	e PKPab	Z	15:48:50.2									
BUG	e PKPab	Z	15:48:50.5	158.5	15.9							
UBBA	e PKP	Z	15:48:17.7	158.5	22.6							
	e PKPab	Z	15:48:51.2									
ROTZ	e PKP	Z	15:48:17.8	158.8	28.7							
	e PKPab	Z	15:48:54.3									
GEC2	e PKP	Z	15:48:19.0	159.1	33.3							
	e PKPab	Z	15:48:55.9									
WET	e PKP	Z	15:48:18.9	159.2	31.0							
	e PKPab	Z	15:48:55.8									
GRA1	e PKP	Z	15:48:19.0	159.2	26.6							
	e pPKPdf	Z	15:48:30.5									
	e PKPab	Z	15:48:55.3									
	e PP	Z	15:52:35.0									
	e SS	N	16:12:32.6									
	e SSS	E	16:18:52.1									
	e L	Z	17:04:27.2			21.2	1164			5.7		
TNS	e PKP	Z	15:48:19.2	159.4	19.6							
	e pPKPdf	Z	15:48:31.5									
	e PKPab	Z	15:48:55.7									
WLF	e PKP	Z	15:48:20.9	160.4	14.4							
	e PKPab	Z	15:48:59.8									
RJOB	e PKP	Z	15:48:20.6	160.4	32.9							
	e PKPab	Z	15:49:01.3									
FUR	e PKPab	Z	15:49:02.0	160.5	28.7							
STU	e PKP	Z	15:48:20.5	160.6	22.8							
	e pPKPdf	Z	15:48:33.5									
	e PKPab	Z	15:49:01.2									
BFO	e PKPab	Z	15:49:03.6	161.2	21.1							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/20

	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	GRA1	e PKP	Z 23:12:40.2							
		e	23:12:48.4							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/20 23:52:52.9 18.980S 173.240W 33.0N 5.7  
 Tonga Islands

	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
	BSEG	e PKPbc	Z 00:12:24.9	144.9	5.9					
	RUE	e PKPbc	Z 00:12:28.1	146.1	11.9					
	IBBN	e PKPbc	Z 00:12:30.3	146.7	1.7					

CLL	e	PKPbc	Z	00:12:32.1	147.3	11.0					
BUG	e	PKPbc	Z	00:12:32.9	147.5	0.9					
BRG	e	PKPbc	Z	00:12:33.5	147.6	12.7					
FBE	e	PKPbc	Z	00:12:33.7	147.6	11.7					
UBBA	e	PKPbc	Z	00:12:34.9	148.1	5.8					
	e	PP	Z	00:16:02.6							
MOX	e	PKPbc	Z	00:12:35.0	148.1	8.7					
	e	PP	Z	00:16:03.1							
WERD	e	PKPbc	Z	00:12:35.5	148.2	10.0					
TANN	e	PKPbc	Z	00:12:35.8	148.2	10.3					
GUNZ	e	PKPdf	Z	00:12:33.1	148.3	10.1					
	e	PKPbc	Z	00:12:35.9							
WERN	e	PKPdf	Z	00:12:33.4	148.4	10.2					
	e	PKPbc	Z	00:12:36.2							
MANZ	e	PKPdf	Z	00:12:33.6	148.7	9.8					
	e	PKPbc	Z	00:12:36.8							
TNS	e	PKPbc	Z	00:12:36.8	148.7	3.1					
ROTZ	e	PKPdf	Z	00:12:34.0	148.9	10.0					
	e	PKPbc	Z	00:12:37.6							
	e	PP	Z	00:16:08.3							
GRA1	e	PKPbc	Z	00:12:38.2	149.1	8.2					
	e	PP	Z	00:16:09.4							
	e	SS	T	00:35:15.2							
	e	SSS	T	00:40:57.9							
	e	L	Z	01:21:44.7			21.2	1237		5.7	
WLF	e	PKPdf	Z	00:12:35.1	149.3	358.9					
	e	PKPbc	Z	00:12:38.8							
WET	e	PKPdf	Z	00:12:34.7	149.4	11.4					
	e	PKPbc	Z	00:12:39.0							
GEC2	e	PKPdf	Z	00:12:35.0	149.6	13.1					
	e	PKPbc	Z	00:12:39.2							
STU	e	PKPbc	Z	00:12:40.6	150.1	4.6					
FUR	e	PKPdf	Z	00:12:36.7	150.6	8.7					
	e	PKPbc	Z	00:12:41.6							
BFO	e	PKPbc	Z	00:12:41.5	150.6	3.0					
RJOB	e	PKPdf	Z	00:12:36.7	150.8	11.8					
	e	PKPbc	Z	00:12:42.0							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/21 03:30:19.2 3.870N 95.232E 44.2 5.1  
 Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:42:33.9	81.5	94.3	1.7	21	5.0		
	e pP	Z	03:42:45.5							
GEC2	e P	Z	03:42:34.4	81.5	93.8	1.4	26	5.2		
	e pP	Z	03:42:46.3							

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WET	e P	Z	03:42:36.8	82.1	93.3	1.2	11	4.9
	e pP	Z	03:42:49.3					
CLL	e P	Z	03:42:36.7	82.1	93.7	1.5	20	5.0
ROTZ	e P	Z	03:42:39.5	82.5	92.8	1.3	11	4.9
MANZ	e P	Z	03:42:39.8	82.6	92.8	1.0	10	5.0
	e pP	Z	03:42:52.7					
GRA1	e P	Z	03:42:42.4	83.2	92.1	1.0	16	5.2
	e pP	Z	03:42:55.2					
BSEG	e P	Z	03:42:46.2	83.9	91.8	2.1	86	5.6
BFO	e P	Z	03:42:50.8	85.1	89.7	1.4	14	5.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/21	06:47:20.4	22.830S	178.160W	33.0G				SZGRF
South of Fiji Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	07:07:03.1	148.2	15.0					
	e PKPab	Z	07:07:05.7							
IBBN	e PKPbc	Z	07:07:08.3	150.2	11.0					
CLL	e PKPbc	Z	07:07:08.1	150.2	21.1					
	e PKPab	Z	07:07:14.0							
BRG	e PKPbc	Z	07:07:08.3	150.4	23.0					
	e PKPab	Z	07:07:14.9							
BUG	e PKPbc	Z	07:07:10.3	151.1	10.4					
MOX	e PKPbc	Z	07:07:10.4	151.2	18.9					
	e PKPab	Z	07:07:17.9							
TANN	e PKPbc	Z	07:07:10.6	151.2	20.6					
UBBA	e PKPbc	Z	07:07:10.5	151.3	15.8					
	e PKPab	Z	07:07:18.4							
MANZ	e PKPbc	Z	07:07:12.0	151.7	20.3					
ROTZ	e PKPbc	Z	07:07:12.3	151.9	20.6					
	e PKPab	Z	07:07:21.5							
TNS	e PKPbc	Z	07:07:13.0	152.1	13.1					
	e PKPab	Z	07:07:21.9							
GRA1	e PKPbc	Z	07:07:13.0	152.1	18.8					
	e PKPab	Z	07:07:22.4							
WET	e PKPbc	Z	07:07:13.0	152.3	22.3					
	e PKPab	Z	07:07:23.1							
GEC2	e PKPbc	Z	07:07:13.2	152.3	24.1					
	e PKPab	Z	07:07:23.2							
WLF	e PKPbc	Z	07:07:15.4	153.0	8.8					
STU	e PKPbc	Z	07:07:15.8	153.4	15.3					
FUR	e PKPbc	Z	07:07:16.3	153.6	19.8					
	e PKPab	Z	07:07:28.7							
RJOB	e PKPbc	Z	07:07:15.8	153.6	23.2					
	e PKPab	Z	07:07:29.0							
BFO	e PKPbc	Z	07:07:16.9	154.0	13.7					

e PKPab Z 07:07:29.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/21	08:09:14.5	32.897S	179.234W	54.0G				NEIC

South of Kermadec Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 08:29:44.1	159.5	30.6					
BRG	e PKPab	Z 08:29:44.3	159.6	33.3					
IBBN	e PKPab	Z 08:29:46.7	159.9	17.3					
TANN	e PKPab	Z 08:29:48.7	160.5	30.6					
ROTZ	e PKPab	Z 08:29:51.6	161.1	31.0					
GRA1	e PKPab	Z 08:29:53.2	161.5	28.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/21	12:55: 6.9	24.600S	68.400W	121.0				NEIC

Chile-Argentina border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e SP	Z 13:21:26.8	99.2	242.6					
BFO	e SP	Z 13:21:33.5	99.9	243.9					
STU	e SP	Z 13:21:40.6	100.6	244.6					
BUG	e SP	Z 13:21:42.6	100.7	243.7					
TNS	e SP	Z 13:21:44.3	100.8	244.3					
IBBN	e SP	Z 13:21:49.3	101.3	244.2					
FUR	e SP	Z 13:21:49.9	101.6	246.0					
UBBA	e SP	Z 13:21:56.1	102.0	245.6					
GRA1	e PP	Z 13:12:59.9	102.2	246.2					
	e SP	Z 13:21:57.4							
RJOB	e SP	Z 13:21:57.5	102.4	246.9					
MOX	e SP	Z 13:22:04.9	102.8	246.7					
ROTZ	e SP	Z 13:22:04.1	102.8	246.9					
MANZ	e SP	Z 13:22:04.4	102.9	246.9					
WET	e SP	Z 13:22:04.5	103.0	247.3					
TANN	e SP	Z 13:22:08.6	103.2	247.2					
GEC2	e SP	Z 13:22:07.4	103.4	247.8					
BSEG	e SP	Z 13:22:09.1	103.4	246.4					
CLL	e SP	Z 13:22:15.5	103.9	247.8					
BRG	e SP	Z 13:22:19.3	104.3	248.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/21	19:04: 3.2	7.760N	92.940E	33.0N	4.9			SZGRF

Nicobar Islands, India, region



Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	19:15:54.1	77.1	93.6	0.8	4	4.6		
GEC2	e P	Z	19:15:54.5	77.1	93.0	0.7	9	5.0		
WET	e P	Z	19:15:57.6	77.6	92.4	1.2	10	4.8		
RJOB	e P	Z	19:15:58.0	77.6	92.0	1.0	8	4.8		
ROTZ	e P	Z	19:16:00.8	78.1	92.0	1.1	10	4.9		
MANZ	e P	Z	19:16:00.6	78.2	92.0	0.9	9	4.9		
GRA1	e P	Z	19:16:04.0	78.7	91.3	1.6	43	5.2		
BSEG	e P	Z	19:16:07.5	79.4	91.4	0.9	21	5.1		
BFO	e P	Z	19:16:13.9	80.6	88.8	1.1	10	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/21	19:28:55.0	30.206N	130.259E	33.0N	4.9			SZGRF

Kyushu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	19:41:20.2	83.6	49.5	0.9	7	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/22	03:45:16.0	28.570N	52.320E	15.7	5.1			SZGRF

Southern Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	03:52:12.3	35.7	110.2	1.1	17	4.8		
RJOB	e P	Z	03:52:14.5	36.0	107.8	0.8	32	5.2		
BRG	e P	Z	03:52:17.5	36.3	113.1	0.9	27	5.1		
	e pP	Z	03:52:21.7							
WET	e P	Z	03:52:17.2	36.4	109.7	0.9	23	5.0		
	e pP	Z	03:52:21.5							
FBE	e P	Z	03:52:20.6	36.7	112.5	1.5	39	4.9		
ROTZ	e P	Z	03:52:23.3	37.0	109.8	0.9	32	5.1		
	e pP	Z	03:52:27.5							
FUR	e P	Z	03:52:23.5	37.1	106.8	1.4	114	5.4		
WERN	e P	Z	03:52:23.8	37.1	110.6	1.4	34	4.9		
CLL	e P	Z	03:52:23.7	37.1	112.6	1.2	46	5.1		
	e pP	Z	03:52:27.9							
RUE	e P	Z	03:52:23.9	37.1	114.9	1.2	131	5.5		
	e pP	Z	03:52:28.0							
GUNZ	e P	Z	03:52:24.3	37.1	110.7	1.0	12	4.5		
MANZ	e P	Z	03:52:24.1	37.1	110.0	1.0	15	4.7		
GRA1	e P	Z	03:52:28.0	37.6	108.7	1.4	117	5.4		
MOX	e P	Z	03:52:28.5	37.6	110.3	1.3	17	4.6		
RGN	e P	Z	03:52:33.4	38.2	116.8	1.1	209	5.8		
	e pP	Z	03:52:37.2							

STU	e P	Z	03:52:35.5	38.5	105.5	1.7	57	4.9
UBBA	e P	Z	03:52:37.1	38.7	108.8	0.8	12	4.6
CLZ	e P	Z	03:52:38.6	38.8	110.4	1.4	121	5.3
	e pP	Z	03:52:42.6					
BFO	e P	Z	03:52:40.3	39.0	104.2	0.7	20	4.8
TNS	e P	Z	03:52:43.2	39.4	106.5	1.4	64	5.1
BSEG	e P	Z	03:52:44.5	39.6	112.7	1.0	55	5.1
IBBN	e P	Z	03:52:52.7	40.4	108.2	1.0	66	5.3
BUG	e P	Z	03:52:53.3	40.5	106.8	1.0	61	5.3
WLF	e P	Z	03:52:53.7	40.7	103.7	1.3	68	5.2
	e pP	Z	03:52:57.9					
HLG	e P	Z	03:52:56.4	41.0	110.4	1.6	550	6.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/22	08:48:46.9	4.850S	145.340E	33.0G		6.5		SZGRF
Near north coast of New Guinea, Papua New Guinea								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e Pdiff	Z	09:03:40.9	118.8	58.5					
	e PP	Z	09:08:50.8							
	e PPP	Z	09:11:27.4							
BSEG	e Pdiff	Z	09:03:40.7	118.9	53.6					
	e PP	Z	09:08:51.8							
	e PPP	Z	09:11:28.3							
CLL	e Pdiff	Z	09:03:41.8	119.0	57.4					
	e PP	Z	09:08:52.6							
	e PPP	Z	09:11:29.5							
TANN	e Pdiff	Z	09:03:45.8	119.8	57.3					
	e PP	Z	09:08:58.3							
	e PPP	Z	09:11:36.1							
GEC2	e Pdiff	Z	09:03:45.1	120.0	59.3					
	e PP	Z	09:08:58.9							
	e PPP	Z	09:11:37.8							
CLZ	e Pdiff	Z	09:03:46.9	120.1	54.6					
	e PP	Z	09:09:00.2							
	e PPP	Z	09:11:38.8							
MOX	e Pdiff	Z	09:03:47.0	120.1	56.4					
	e PP	Z	09:09:00.3							
	e PPP	Z	09:11:38.7							
MANZ	e Pdiff	Z	09:03:47.8	120.2	57.2					
	e PP	Z	09:09:01.2							
	e PPP	Z	09:11:39.7							
WET	e Pdiff	Z	09:03:48.0	120.3	58.3					
	e PP	Z	09:09:01.3							
	e PPP	Z	09:11:40.0							
ROTZ	e Pdiff	Z	09:03:48.3	120.3	57.4					
	e PP	Z	09:09:01.9							

	e PPP	Z	09:11:40.6							
GRA1	e Pdiff	Z	09:03:50.6	120.9	56.5					
	e PP	Z	09:09:05.8							
	e PPP	Z	09:11:44.5							
	e PKKPab	Z	09:17:12.9							
	e PS	E	09:18:53.2							
	e SS	N	09:25:36.7							
	e L	Z	10:02:29.1			21.1	12605		6.5	
UBBA	e Pdiff	Z	09:03:50.1	120.9	54.7					
	e PP	Z	09:09:05.3							
	e PPP	Z	09:11:44.7							
RJOB	e Pdiff	Z	09:03:51.2	121.0	59.0					
	e PP	Z	09:09:06.6							
	e PPP	Z	09:11:47.5							
IBBN	e Pdiff	Z	09:03:50.9	121.1	51.7					
	e PP	Z	09:09:07.0							
	e PPP	Z	09:11:46.0							
FUR	e Pdiff	Z	09:03:54.0	121.7	57.3					
	e PP	Z	09:09:10.6							
	e PPP	Z	09:11:51.4							
BUG	e Pdiff	Z	09:03:54.7	121.9	51.6					
	e PP	Z	09:09:12.2							
	e PPP	Z	09:11:53.2							
TNS	e Pdiff	Z	09:03:55.8	122.0	53.4					
	e PP	Z	09:09:13.5							
	e PPP	Z	09:11:54.6							
STU	e Pdiff	Z	09:03:57.7	122.5	54.9					
	e PP	Z	09:09:16.3							
	e PPP	Z	09:11:58.1							
BFO	e Pdiff	Z	09:04:00.9	123.2	54.3					
	e PP	Z	09:09:21.1							
	e PPP	Z	09:12:04.1							
WLF	e Pdiff	Z	09:04:02.9	123.5	51.4					
	e PP	Z	09:09:24.0							
	e PPP	Z	09:12:07.5							

Date 2007/11/22 Origin Time 10:39: 1.0 Lat 52.060N Long 175.920E Depth 33.0G mb 5.3 Ms ML Source SZGRF  
 Rat Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:50:32.4	73.3	9.2	1.3	61	5.5		
IBBN	e P	Z	10:50:43.0	75.2	7.5	1.1	117	5.9		
CLZ	e P	Z	10:50:44.3	75.4	9.1	1.1	61	5.6		
CLL	e P	Z	10:50:45.2	75.6	10.7	1.3	22	5.1		
BRG	e P	Z	10:50:46.9	75.9	11.3	1.1	17	5.1		
BUG	e P	Z	10:50:47.8	76.1	7.2	1.2	51	5.5		

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UBBA	e P	Z	10:50:49.8	76.4	8.9	1.6	34	5.2
MOX	e P	Z	10:50:50.0	76.4	9.9	1.2	26	5.2
TANN	e P	Z	10:50:51.1	76.6	10.4	1.6	27	5.1
MANZ	e P	Z	10:50:53.3	77.0	10.1	1.1	10	4.9
TNS	e P	Z	10:50:54.1	77.2	7.9	1.4	45	5.4
ROTZ	e P	Z	10:50:55.0	77.2	10.2	1.2	19	5.1
GRA1	e P	Z	10:50:55.8	77.4	9.6	1.5	68	5.6
WET	e P	Z	10:50:57.6	77.8	10.6	1.4	24	5.1
WLF	e P	Z	10:50:58.6	77.9	6.4	1.2	34	5.3
GEC2	e P	Z	10:50:58.7	78.0	11.1	1.5	25	5.1
STU	e P	Z	10:51:01.8	78.5	8.3	1.8	72	5.4
BFO	e P	Z	10:51:04.2	79.1	7.7	1.3	36	5.2
RJOB	e P	Z	10:51:05.5	79.2	10.5	0.9	8	4.7

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/22 16:21:11.8 28.210N 52.140E 33.0N 4.6  
 Southern Iran

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	16:28:09.5	35.9	110.8	0.6	4	4.5		
RJOB	e P	Z	16:28:11.1	36.1	108.5	0.7	11	4.8		
WET	e P	Z	16:28:14.0	36.5	110.3	0.9	8	4.4		
BRG	e P	Z	16:28:14.5	36.5	113.7	1.2	9	4.4		
ROTZ	e P	Z	16:28:20.1	37.1	110.4	0.9	10	4.5		
FUR	e P	Z	16:28:20.4	37.2	107.4	1.4	50	5.1		
CLL	e P	Z	16:28:20.6	37.2	113.2	1.0	11	4.5		
MANZ	e P	Z	16:28:21.5	37.3	110.6	0.9	5	4.2		
GRA1	e P	Z	16:28:25.0	37.7	109.3	1.5	36	4.9		
CLZ	e P	Z	16:28:35.7	38.9	111.0	1.3	29	4.8		
BFO	e P	Z	16:28:36.7	39.1	104.8					
TNS	e P	Z	16:28:40.2	39.6	107.1	1.0	9	4.3		
BSEG	e P	Z	16:28:41.9	39.8	113.3	0.9	16	4.7		
WLF	e P	Z	16:28:50.9	40.8	104.2	1.2	23	4.8		

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/22 20:30:14.5 20.510S 169.330E 40.3  
 Vanuatu Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
TANN	e PKPbc	Z	20:49:47.3	145.0	39.9					
	e pPKPbc	Z	20:49:59.4							
MOX	e PKPbc	Z	20:49:47.2	145.1	38.4					
	e pPKPbc	Z	20:49:59.3							
IBBN	e PKPbc	Z	20:49:47.8	145.1	31.2					
MANZ	e PKPbc	Z	20:49:48.3	145.4	39.7					

	e	pPKPbc	Z	20:50:00.3		
ROTZ	e	PKPbc	Z	20:49:49.1	145.6	40.1
	e	pPKPbc	Z	20:50:01.2		
UBBA	e	PKPbc	Z	20:49:48.9	145.6	35.8
	e	pPKPbc	Z	20:50:00.8		
GEC2	e	PKPbc	Z	20:49:49.1	145.6	43.2
	e	pPKPbc	Z	20:50:01.3		
WET	e	PKPbc	Z	20:49:50.1	145.8	41.7
	e	pPKPbc	Z	20:50:01.6		
GRA1	e	PKPbc	Z	20:49:50.5	146.0	38.7
	e	pPKPbc	Z	20:50:02.6		
BUG	e	PKPbc	Z	20:49:49.7	146.0	31.1
TNS	e	PKPbc	Z	20:49:52.7	146.7	33.9
	e	pPKPbc	Z	20:50:04.8		
RJOB	e	PKPbc	Z	20:49:52.8	146.8	43.0
	e	pPKPbc	Z	20:50:05.2		
FUR	e	PKPbc	Z	20:49:54.2	147.2	40.2
	e	pPKPbc	Z	20:50:06.2		
STU	e	PKPbc	Z	20:49:55.5	147.6	36.4
	e	pPKPbc	Z	20:50:07.3		
WLF	e	PKPbc	Z	20:49:57.0	147.9	30.7
	e	pPKPbc	Z	20:50:08.9		
BFO	e	PKPbc	Z	20:49:57.0	148.3	35.4
	e	pPKPbc	Z	20:50:09.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/22	23:02: 9.2	4.190N	94.720E	33.0G	6.0	5.1		SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:14:21.4	80.9	94.5	1.0	115	5.9		
	e S	T	23:24:24.6							
GEC2	e P	Z	23:14:21.7	80.9	94.0	1.1	240	6.1		
	e S	T	23:24:25.4							
RJOB	e P	Z	23:14:23.8	81.5	93.2	0.9	74	5.7		
	e S	T	23:24:28.8							
WET	e P	Z	23:14:24.5	81.5	93.4	1.0	108	5.9		
	e S	T	23:24:31.8							
CLL	e P	Z	23:14:24.1	81.6	93.9	1.2	102	5.8		
	e S	T	23:24:29.6							
TANN	e P	Z	23:14:26.1	81.8	93.3	1.3	80	5.7		
	e S	T	23:24:34.7							
ROTZ	e P	Z	23:14:27.3	82.0	93.0	0.9	99	6.0		
	e S	T	23:24:37.8							
MANZ	e P	Z	23:14:27.7	82.0	93.0	1.1	159	6.0		
	e S	T	23:24:38.0							
MOX	e P	Z	23:14:28.9	82.4	92.7	0.9	58	5.7		

	e S	T	23:24:40.1							
FUR	e P	Z	23:14:29.3	82.5	92.1	0.7	75	6.0		
	e S	T	23:24:40.1							
GRA1	e P	Z	23:14:30.5	82.6	92.2	0.9	146	6.2		
	e S	T	23:24:43.8							
	e L	Z	23:57:45.0			21.3	846	5.1		
CLZ	e P	Z	23:14:33.2	83.2	91.9	0.9	123	6.1		
	e S	T	23:24:46.6							
BSEG	e P	Z	23:14:33.7	83.3	92.1	1.0	192	6.3		
	e S	T	23:24:47.7							
UBBA	e P	Z	23:14:34.2	83.4	91.4	1.9	134	5.9		
	e S	T	23:24:49.9							
STU	e P	Z	23:14:36.6	83.9	90.6	0.8	70	5.9		
	e S	T	23:24:55.7							
TNS	e P	Z	23:14:39.4	84.4	90.2	0.9	92	6.0		
	e S	T	23:25:01.0							
BFO	e P	Z	23:14:39.3	84.5	89.9	0.8	78	6.0		
	e S	T	23:25:01.6							
IBBN	e P	Z	23:14:41.5	84.8	89.8	0.9	147	6.2		
	e S	T	23:25:03.5							
BUG	e P	Z	23:14:43.0	85.1	89.4	0.9	119	6.1		
	e S	T	23:25:08.7							
WLF	e P	Z	23:14:47.2	85.9	88.4	1.1	90	5.8		
	e S	T	23:25:15.4							

Date 2007/11/23  
 Origin Time 01:26:49.1  
 Lat 4.700S  
 Long 151.900E  
 Depth 161.0  
 mb  
 Ms  
 ML  
 Source NEIC  
 New Britain, Papua New Guinea, region

Sta	Phase		Time	Dist	B Az	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	01:45:24.2	121.7	46.7					
BRG	e PKPdf	Z	01:45:24.3	122.0	51.9					
CLL	e PKPdf	Z	01:45:24.5	122.2	50.8					
TANN	e PKPdf	Z	01:45:26.1	123.1	50.7					
CLZ	e PKPdf	Z	01:45:26.9	123.1	47.8					
MOX	e PKPdf	Z	01:45:27.0	123.3	49.7					
GEC2	e PKPdf	Z	01:45:26.9	123.4	52.7					
MANZ	e PKPdf	Z	01:45:27.4	123.5	50.5					
ROTZ	e PKPdf	Z	01:45:27.6	123.6	50.7					
WET	e PKPdf	Z	01:45:27.7	123.7	51.7					
UBBA	e PKPdf	Z	01:45:28.3	124.0	47.9					
GRA1	e PKPdf	Z	01:45:28.6	124.1	49.7					
RJOB	e PKPdf	Z	01:45:29.0	124.6	52.4					
FUR	e PKPdf	Z	01:45:30.8	125.1	50.6					
TNS	e PKPdf	Z	01:45:30.6	125.1	46.5					
STU	e PKPdf	Z	01:45:31.6	125.7	48.1					
WLF	e PKPdf	Z	01:45:34.0	126.6	44.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/23	07:08:26.3	50.600N	155.190E	33.0N	4.9			SZGRF
Kuril Islands, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	07:19:55.9	73.2	24.0	0.9	14	5.0		
BRG	e P	Z	07:19:56.7	73.3	24.5					
CLZ	e P	Z	07:19:57.0	73.3	22.4	1.2	18	5.0		
MOX	e P	Z	07:20:01.5	74.1	23.1	0.8	5	4.6		
MANZ	e P	Z	07:20:04.7	74.6	23.3	0.9	4	4.5		
ROTZ	e P	Z	07:20:05.5	74.8	23.3	1.4	18	4.9		
GRA1	e P	Z	07:20:07.5	75.1	22.7	0.9	21	5.2		
WET	e P	Z	07:20:08.0	75.2	23.7	1.0	12	5.0		
GEC2	e P	Z	07:20:07.7	75.2	24.1	0.7	5	4.7		
TNS	e P	Z	07:20:08.3	75.3	21.1	0.7	17	5.3		
RJOB	e P	Z	07:20:15.1	76.5	23.5	0.9	7	4.8		
BFO	e P	Z	07:20:18.2	77.1	20.9	1.3	24	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/23	12:22:55.5	16.329S	174.073W	33.0N		5.3		SZGRF
Tonga Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	12:42:25.7	144.0	3.0					
CLZ	e PKPbc	Z	12:42:26.6	144.3	7.3					
CLL	e PKPbc	Z	12:42:27.0	144.6	11.8					
BRG	e PKPbc	Z	12:42:28.3	144.9	13.4					
UBBA	e PKPbc	Z	12:42:31.3	145.4	6.9					
MOX	e PKPbc	Z	12:42:31.2	145.4	9.6					
TANN	e PKPbc	Z	12:42:31.1	145.5	11.1					
MANZ	e PKPbc	Z	12:42:31.7	146.0	10.6					
TNS	e PKPbc	Z	12:42:33.3	146.0	4.3					
ROTZ	e PKPbc	Z	12:42:33.0	146.2	10.9					
GRA1	e PKPbc	Z	12:42:32.4	146.4	9.2					
	e L	Z	14:13:01.8			18.8	479		5.3	
WLF	e PKPbc	Z	12:42:34.3	146.7	0.4					
WET	e PKPbc	Z	12:42:34.1	146.7	12.2					
GEC2	e PKPbc	Z	12:42:34.1	146.9	13.7					
BFO	e PKPbc	Z	12:42:37.0	147.9	4.3					
RJOB	e PKPbc	Z	12:42:39.2	148.1	12.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/23 12:37:37.3  
Tonga Islands

16.952S 173.888W 33.0N

SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	12:57:08.8	144.6	2.7					
CLZ	e PKPbc	Z	12:57:09.8	144.9	7.1					
CLL	e PKPbc	Z	12:57:10.0	145.2	11.6					
BRG	e PKPbc	Z	12:57:11.3	145.5	13.3					
MOX	e PKPbc	Z	12:57:13.3	146.0	9.4					
TANN	e PKPbc	Z	12:57:13.9	146.2	10.9					
MANZ	e PKPbc	Z	12:57:14.8	146.6	10.5					
ROTZ	e PKPbc	Z	12:57:15.6	146.8	10.7					
GRA1	e PKPbc	Z	12:57:16.1	147.0	9.0					
WLF	e PKPbc	Z	12:57:17.2	147.3	0.1					
WET	e PKPbc	Z	12:57:16.9	147.3	12.1					
GEC2	e PKPbc	Z	12:57:16.8	147.5	13.6					
STU	e PKPbc	Z	12:57:19.3	148.1	5.6					
BFO	e PKPbc	Z	12:57:19.7	148.6	4.1					
RJOB	e PKPbc	Z	12:57:21.0	148.7	12.4					

Date Origin Time  
2007/11/23 12:38:54.3  
Tonga Islands

Lat Long Depth mb  
16.647S 174.038W 33.0N

Ms ML Source  
SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPbc	Z	12:58:24.6	144.3	3.0					
CLZ	e PKPbc	Z	12:58:25.7	144.6	7.3					
CLL	e PKPbc	Z	12:58:26.0	144.9	11.8					
BRG	e PKPbc	Z	12:58:27.4	145.2	13.5					
BUG	e PKPbc	Z	12:58:27.9	145.2	2.2					
MOX	e PKPbc	Z	12:58:29.3	145.7	9.6					
TANN	e PKPbc	Z	12:58:29.9	145.8	11.1					
MANZ	e PKPbc	Z	12:58:30.8	146.3	10.7					
TNS	e PKPbc	Z	12:58:31.4	146.4	4.3					
ROTZ	e PKPbc	Z	12:58:31.4	146.5	10.9					
GRA1	e PKPbc	Z	12:58:32.2	146.7	9.2					
WLF	e PKPbc	Z	12:58:33.3	147.0	0.3					
WET	e PKPbc	Z	12:58:32.7	147.0	12.2					
GEC2	e PKPbc	Z	12:58:33.5	147.2	13.8					
BFO	e PKPbc	Z	12:58:35.8	148.3	4.3					
RJOB	e PKPbc	Z	12:58:36.1	148.4	12.6					

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/24 03:36:23.4 44.850N 16.840E 10.0G 3.6 SZGRF  
Northwestern Balkan Peninsula



Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
ARSA	e Pn	Z	03:37:01.6	2.6	158.7					3.3
	e Sg	E	03:37:46.2							
KBA	e Pn	Z	03:37:15.5	3.3	131.3					3.4
	e Sg	E	03:38:07.8							
MOA	e Pn	Z	03:37:16.0	3.5	148.4					3.7
	e Sg	N	03:38:13.6							
RJOB	e Pn	Z	03:37:24.8	4.0	134.5					3.7
	e Sg	N	03:38:27.1							
WTTA	e Pn	Z	03:37:29.4	4.3	121.9					3.8
GEC2	e Pn	Z	03:37:30.0	4.5	150.6					3.7
FUR	e Pn	Z	03:37:38.8	5.1	128.8					
WET	e Pn	Z	03:37:38.5	5.1	146.4					
	e Sg	Z	03:39:05.3							
DAVA	e Pn	Z	03:37:44.3	5.4	114.2					
ROTZ	e Pn	Z	03:37:49.1	5.8	145.7					
MANZ	e Pn	Z	03:37:51.8	6.0	146.3					
NKC	e Pn	Z	03:37:52.5	6.1	149.5					
GRA1	e Pn	Z	03:37:52.9	6.2	139.7					
WERN	e Pn	Z	03:37:53.4	6.2	149.3					
GUNZ	e Pn	Z	03:37:55.0	6.3	149.4					
TANN	e Pn	Z	03:37:54.2	6.3	150.4					
WERD	e Pn	Z	03:37:55.6	6.4	149.7					
MOX	e Pn	Z	03:38:01.9	6.8	146.8					
CLL	e Pn	Z	03:38:06.0	6.9	156.9					

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/24

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z	04:53:45.2							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/24 05:02: 5.3 23.649S 68.758W 80.0G  
 Northern Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z	05:16:14.8	101.7	247.1					
	e PP	Z	05:19:56.5							
	e SP	Z	05:28:56.5							

Date Origin Time Lat Long Depth mb Ms ML Source

2007/11/24

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 06:39:13.6							
	e Sn	N 06:40:08.0							
WET	e Pn	Z 06:39:23.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/24								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:06:41.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/24	22:09:56.1	15.159N	92.294W	33.0N	5.0			SZGRF
Mexico-Guatemala border region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:22:38.1	86.9	290.0	2.3	28	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/25	00:11:35.9	16.030S	171.150W	33.0G		5.5		SZGRF
Samoa Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPbc	Z 00:31:06.8	144.9	8.5					
UBBA	e PKPbc	Z 00:31:07.6	145.2	1.9					
MOX	e PKPbc	Z 00:31:07.9	145.3	4.7					
TANN	e PKPbc	Z 00:31:08.4	145.5	6.1					
TNS	e PKPbc	Z 00:31:09.5	145.8	359.3					
MANZ	e PKPbc	Z 00:31:09.7	145.9	5.6					
ROTZ	e PKPbc	Z 00:31:10.6	146.2	5.8					
GRA1	e PKPbc	Z 00:31:11.3	146.3	4.1					
	e L	Z 01:38:50.9			19.0	707		5.5	
WET	e PKPbc	Z 00:31:12.8	146.7	7.1					
GEC2	e PKPbc	Z 00:31:12.8	146.9	8.6					
STU	e PKPbc	Z 00:31:13.8	147.3	0.6					
BFO	e PKPbc	Z 00:31:15.4	147.7	359.1					
FUR	e PKPbc	Z 00:31:15.7	147.8	4.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2007/11/25 02:51:59.0 3.320S 100.820E 72.5  
 Southern Sumatera, Indonesia

6.0

SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	03:04:53.4	90.6	94.4	1.5	233	6.3		
	e pP	Z	03:05:13.3							
BRG	e P	Z	03:04:53.3	90.6	94.5	1.5	200	6.2		
	e pP	Z	03:05:13.2							
RJOB	e P	Z	03:04:55.0	91.1	93.7	1.5	76	5.8		
WET	e P	Z	03:04:55.9	91.2	93.7	1.1	112	6.1		
	e pP	Z	03:05:15.8							
	e PP	Z	03:08:32.8							
CLL	e P	Z	03:04:55.6	91.2	93.8	1.5	133	6.0		
	e pP	Z	03:05:15.7							
TANN	e P	Z	03:04:57.4	91.5	93.4	1.6	96	5.9		
	e pP	Z	03:05:17.0							
ROTZ	e P	Z	03:04:58.5	91.6	93.2	1.5	132	6.0		
	e pP	Z	03:05:18.3							
	e PP	Z	03:08:36.3							
MANZ	e P	Z	03:04:58.8	91.7	93.1	1.3	160	6.2		
	e pP	Z	03:05:18.5							
	e PP	Z	03:08:39.4							
MOX	e P	Z	03:04:59.9	92.1	92.7	1.7	159	6.1		
	e pP	Z	03:05:19.4							
FUR	e P	Z	03:04:59.9	92.2	92.6	1.6	140	6.1		
	e pP	Z	03:05:20.3							
GRA1	e P	Z	03:05:01.2	92.3	92.5	1.5	176	6.2		
	e pP	Z	03:05:21.2							
	e PP	Z	03:08:41.9							
	e S	T	03:16:00.6							
	e SS	T	03:22:17.7							
CLZ	e P	Z	03:05:03.6	92.9	91.7	1.2	81	6.0		
	e pP	Z	03:05:23.4							
BSEG	e P	Z	03:05:03.8	93.0	91.5	1.0	73	6.0		
	e pP	Z	03:05:24.1							
UBBA	e P	Z	03:05:04.4	93.1	91.5	1.6	77	5.9		
STU	e P	Z	03:05:06.6	93.6	91.0	1.6	100	5.9		
	e PP	Z	03:08:49.1							
TNS	e P	Z	03:05:09.1	94.1	90.3	1.1	75	5.9		
	e pP	Z	03:05:29.4							
BFO	e P	Z	03:05:08.9	94.1	90.4	1.6	60	5.7		
	e pP	Z	03:05:29.2							
IBBN	e P	Z	03:05:10.7	94.5	89.6	1.4	107	6.0		
BUG	e P	Z	03:05:11.8	94.8	89.3	1.1	38	5.8		
	e pP	Z	03:05:32.1							

Date Origin Time Lat Long Depth mb Ms ML Source

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2007/11/25 13:53:30.9 27.270N 70.544E 33.0N 4.9 SZGRF  
India-Pakistan border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	14:02:08.6	48.3	95.0	0.8	8	4.9		
BRG	e P	Z	14:02:09.1	48.4	96.9	0.9	11	5.0		
RJOB	e P	Z	14:02:12.5	48.8	93.3	1.6	27	5.0		
CLL	e P	Z	14:02:13.3	49.0	96.5	0.9	7	4.7		
TANN	e P	Z	14:02:15.9	49.3	95.3	0.9	7	4.7		
ROTZ	e P	Z	14:02:17.1	49.4	94.6	0.9	6	4.6		
MANZ	e P	Z	14:02:17.9	49.5	94.7	1.1	18	4.9		
MOX	e P	Z	14:02:20.5	49.8	94.8	0.9	11	4.8		
FUR	e P	Z	14:02:20.6	49.9	92.5	1.1	21	5.0		
GRA1	e P	Z	14:02:22.3	50.0	93.7	0.8	24	5.2		
CLZ	e P	Z	14:02:25.9	50.7	94.8	1.5	21	4.9		
BSEG	e P	Z	14:02:28.1	50.9	96.4	1.0	25	5.1		
STU	e P	Z	14:02:31.4	51.3	91.4	0.9	14	4.9		
BFO	e P	Z	14:02:35.2	51.8	90.4	0.7	5	4.5		

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/25 16:02:17.7 8.300S 118.400E 30.0 6.2  
Sumbawa, Indonesia, region NEIC

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WET	e PP	Z	16:20:57.5	106.4	83.7					
TANN	e PP	Z	16:20:57.3	106.5	83.0					
ROTZ	e PP	Z	16:20:58.8	106.8	83.0					
MANZ	e PP	Z	16:20:58.8	106.8	82.8					
MOX	e PP	Z	16:21:00.7	107.0	82.2					
GRA1	e Pdiff	Z	16:16:34.0	107.4	82.2					
	e PP	Z	16:21:01.8							
	e PPP	Z	16:23:20.7							
	e SKSac	R	16:27:10.2							
	e SP	Z	16:30:19.4							
	e PKKPdf	Z	16:32:10.5							
	e SS	T	16:36:09.6							
	e L	Z	17:10:34.6			21.6	8094		6.2	
CLZ	e PP	Z	16:21:05.1	107.6	80.8					
UBBA	e PP	Z	16:21:05.7	108.0	80.9					

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/25 17:41:32.6 4.090S 100.720E 44.3 5.8  
Southwest of Sumatera, Indonesia SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
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GEC2	e P	Z	17:54:32.6	91.1	94.9	1.4	120	6.0
	e pP	Z	17:54:45.1					
BRG	e P	Z	17:54:32.6	91.1	95.1	1.3	77	5.9
	e pP	Z	17:54:45.3					
RJOB	e P	Z	17:54:34.2	91.6	94.3	1.7	57	5.6
	e PP	Z	17:58:12.5					
WET	e P	Z	17:54:35.2	91.7	94.3	1.3	76	5.9
	e pP	Z	17:54:47.8					
CLL	e P	Z	17:54:35.0	91.8	94.3	1.4	57	5.7
TANN	e P	Z	17:54:36.7	92.0	93.9	1.5	52	5.6
ROTZ	e P	Z	17:54:37.8	92.2	93.8	1.3	56	5.7
	e pP	Z	17:54:50.4					
MANZ	e P	Z	17:54:38.2	92.2	93.7	1.3	79	5.9
	e pP	Z	17:54:50.6					
MOX	e P	Z	17:54:39.3	92.6	93.3	1.7	78	5.9
	e pP	Z	17:54:52.5					
FUR	e P	Z	17:54:39.3	92.7	93.1	2.6	273	6.2
GRA1	e P	Z	17:54:40.6	92.8	93.0	1.3	68	5.9
	e pP	Z	17:54:53.4					
CLZ	e P	Z	17:54:43.1	93.4	92.3	1.3	54	5.8
	e pP	Z	17:54:56.7					
BSEG	e P	Z	17:54:43.4	93.5	92.1	1.9	150	6.0
	e pP	Z	17:54:57.6					
UBBA	e P	Z	17:54:43.9	93.6	92.0	2.4	127	5.8
STU	e P	Z	17:54:46.0	94.1	91.6	1.2	40	5.6
TNS	e P	Z	17:54:48.6	94.6	90.9	1.1	41	5.8
	e pP	Z	17:55:02.0					
BFO	e P	Z	17:54:48.3	94.6	90.9	1.2	24	5.5
IBBN	e P	Z	17:54:50.3	95.0	90.2	1.4	39	5.6
	e pP	Z	17:55:04.5					
BUG	e P	Z	17:54:51.6	95.3	89.9	1.4	44	5.7

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/25 18:20: 9.1 20.354S 176.932W 33.0N  
 Fiji Islands region SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKPbc	Z 18:39:51.2	148.0	13.0					
CLL	e PKPbc	Z 18:39:51.1	148.1	17.8					
BRG	e PKPbc	Z 18:39:52.0	148.3	19.7					
MOX	e PKPbc	Z 18:39:53.9	149.0	15.7					
TANN	e PKPbc	Z 18:39:53.9	149.0	17.3					
MANZ	e PKPbc	Z 18:39:55.3	149.5	16.9					
ROTZ	e PKPbc	Z 18:39:55.8	149.7	17.2					
TNS	e PKPbc	Z 18:39:56.2	149.8	10.1					
GRA1	e PKPbc	Z 18:39:56.1	150.0	15.4					
GEC2	e PKPbc	Z 18:39:57.2	150.3	20.4					

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BFO e PKPbc Z 18:40:00.6 151.7 10.5

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/25 19:53: 8.4 8.200S 118.500E 35.0 6.2 NEIC  
Sumbawa, Indonesia, region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML  
GRA1 e Pdiff Z 20:07:25.3 107.4 82.1  
e PP Z 20:11:43.7  
e SKSac R 20:18:00.1  
e SS T 20:26:59.0  
e L Z 21:05:15.0 20.2 7415 6.2

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/25 20:28:25.6 16.809S 176.333W 33.0N SZGRF  
Fiji Islands region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML  
TANN e PKPbc Z 20:48:00.4 145.7 15.0  
MANZ e PKPbc Z 20:48:01.8 146.1 14.6  
ROTZ e PKPbc Z 20:48:02.4 146.3 14.9  
TNS e PKPbc Z 20:48:02.8 146.4 8.3  
GRA1 e PKPbc Z 20:48:03.6 146.6 13.2  
GEC2 e PKPbc Z 20:48:04.3 146.9 17.8  
BFO e PKPbc Z 20:48:08.2 148.2 8.5

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/25 21:18: 4.8 29.500S 179.100W 251.0 NEIC  
Kermadec Islands region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML  
BSEG e PKPab Z 21:37:50.5 154.6 19.4  
CLL e PKPab Z 21:37:58.2 156.4 27.1  
BRG e PKPab Z 21:37:58.9 156.5 29.5  
CLZ e PKPab Z 21:37:59.1 156.6 21.1  
IBBN e PKPab Z 21:37:59.3 156.6 15.2  
TANN e PKPab Z 21:38:02.8 157.3 26.9  
MOX e PKPab Z 21:38:02.6 157.4 24.9  
MANZ e PKPab Z 21:38:04.7 157.8 26.6  
ROTZ e PKPab Z 21:38:05.9 158.0 27.1  
GEC2 e PKPab Z 21:38:06.8 158.3 31.5  
WET e PKPab Z 21:38:07.3 158.3 29.3  
GRA1 e PKPab Z 21:38:07.2 158.3 25.0

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TNS	e	PKPab	Z	21:38:07.5	158.5	18.2
RJOB	e	PKPab	Z	21:38:13.0	159.6	31.0
FUR	e	PKPab	Z	21:38:13.4	159.7	26.9
STU	e	PKPab	Z	21:38:12.8	159.7	21.2
BFO	e	PKPab	Z	21:38:15.0	160.3	19.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/25	22:50:32.8	16.563S	171.290W	63.5				SZGRF

Samoa Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e	PKPbc	Z	23:10:04.7	144.7	2.8			
CLL	e	PKPbc	Z	23:10:05.2	145.1	7.2			
MOX	e	PKPbc	Z	23:10:08.2	145.8	5.0			
	e	pPKPbc	Z	23:10:26.0					
TANN	e	PKPbc	Z	23:10:08.7	146.0	6.4			
TNS	e	PKPbc	Z	23:10:10.2	146.3	359.5			
MANZ	e	PKPbc	Z	23:10:10.5	146.5	5.9			
	e	pPKPbc	Z	23:10:28.6					
ROTZ	e	PKPbc	Z	23:10:11.6	146.7	6.1			
	e	pPKPbc	Z	23:10:29.5					
GRA1	e	PKPbc	Z	23:10:12.0	146.8	4.4			
GEC2	e	PKPbc	Z	23:10:13.4	147.5	8.9			
STU	e	PKPbc	Z	23:10:14.4	147.8	0.9			
BFO	e	PKPbc	Z	23:10:15.4	148.2	359.3			
	e	pPKPbc	Z	23:10:34.8					
RJOB	e	PKPbc	Z	23:10:16.3	148.6	7.5			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	00:23:52.6	51.254N	178.441W	33.0N	4.9			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e	P	Z	00:35:41.4	77.0	7.3	0.7	8	5.0
BRG	e	P	Z	00:35:43.4	77.3	7.9	0.6	6	4.9
FBE	e	P	Z	00:35:44.4	77.3	7.5	1.0	11	5.0
MOX	e	P	Z	00:35:46.0	77.7	6.4	1.1	11	4.9
WERN	e	P	Z	00:35:48.1	78.0	6.9	0.9	13	5.1
GRA1	e	P	Z	00:35:52.1	78.7	6.1	0.7	16	5.2
GEC2	e	P	Z	00:35:55.1	79.4	7.7	0.8	5	4.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	02:23:47.5	35.300S	177.500W	35.0		5.1		NEIC

East of North Island, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPab	Z 02:44:25.5	162.3	29.3					
BRG	e PKPab	Z 02:44:26.6	162.4	32.3					
FBE	e PKPab	Z 02:44:27.1	162.5	30.8					
TANN	e PKPab	Z 02:44:30.7	163.2	29.3					
WERD	e PKPab	Z 02:44:30.1	163.3	28.9					
GUNZ	e PKPab	Z 02:44:31.1	163.3	29.1					
WERN	e PKPab	Z 02:44:31.0	163.4	29.3					
MANZ	e PKPab	Z 02:44:32.7	163.7	29.1					
ROTZ	e PKPab	Z 02:44:33.1	163.9	29.7					
GRA1	e PKPab	Z 02:44:34.5	164.3	27.1					
	e L	Z 03:37:49.3			21.4	273		5.1	
FUR	e PKPab	Z 02:44:41.3	165.6	30.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	06:44:12.9	1.550N	96.130E	33.0N	5.2			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 06:56:39.7	83.9	94.7	2.2	56	5.4		
BRG	e P	Z 06:56:39.6	83.9	95.1	2.5	57	5.4		
WET	e P	Z 06:56:42.2	84.4	94.1	1.3	10	4.9		
WERN	e P	Z 06:56:44.6	84.8	93.8	1.5	18	5.1		
MANZ	e P	Z 06:56:45.3	85.0	93.6	1.1	10	5.0		
GRA1	e P	Z 06:56:48.0	85.5	92.9	1.8	40	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	11:03:48.8	2.200S	100.400E	35.0	5.2			NEIC

Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 11:16:43.0	89.5	94.1	1.2	12	5.0		
GEC2	e P	Z 11:16:43.2	89.5	93.9	1.4	19	5.1		
WET	e P	Z 11:16:45.5	90.0	93.3	1.4	15	5.0		
CLL	e P	Z 11:16:45.6	90.1	93.4	2.1	72	5.5		
ROTZ	e P	Z 11:16:47.8	90.5	92.8	1.3	12	4.9		
MANZ	e P	Z 11:16:48.4	90.6	92.7	1.2	17	5.2		
GRA1	e P	Z 11:16:50.8	91.1	92.1	1.2	16	5.3		
TNS	e P	Z 11:16:58.8	92.9	89.9	1.4	23	5.4		
IBBN	e P	Z 11:16:59.8	93.4	89.3	1.3	42	5.7		
WLF	e P	Z 11:17:04.4	94.4	88.2	1.2	20	5.3		



Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	13:51:43.4	38.015N	142.335E	43.3	6.0	5.7		SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 14:03:43.9	79.2	36.6	1.1	179	6.0		
BRG	e P	Z 14:03:49.3	80.3	38.8	1.2	110	5.7		
	e pP	Z 14:04:01.7							
CLL	e P	Z 14:03:49.1	80.3	38.2	1.3	209	6.0		
CLZ	e P	Z 14:03:52.8	80.9	36.4	1.4	312	6.1		
TANN	e P	Z 14:03:54.4	81.2	37.7	1.4	74	5.5		
	e pP	Z 14:04:06.9							
MOX	e P	Z 14:03:55.1	81.4	37.2	1.4	119	5.8		
	e pP	Z 14:04:07.7							
IBBN	e P	Z 14:03:55.4	81.4	34.6	1.0	217	6.2		
MANZ	e P	Z 14:03:56.8	81.7	37.4	1.2	82	5.7		
ROTZ	e P	Z 14:03:58.1	81.8	37.5	1.4	213	6.1		
	e pP	Z 14:04:10.3							
UBBA	e P	Z 14:03:57.4	81.8	36.0	1.3	65	5.6		
	e pP	Z 14:04:10.2							
GEC2	e P	Z 14:03:57.9	82.0	38.4	1.1	67	5.7		
WET	e P	Z 14:03:58.9	82.1	37.9	1.2	104	5.8		
GRA1	e P	Z 14:04:00.4	82.3	36.8	1.6	472	6.4		
	e PP	Z 14:07:16.0							
	e S	T 14:14:18.0							
	e L	Z 14:45:29.3			19.4	3518		5.7	
BUG	e P	Z 14:03:59.8	82.3	34.2	0.9	61	5.8		
TNS	e P	Z 14:04:03.2	82.9	34.9	1.5	117	5.9		
RJOB	e P	Z 14:04:04.9	83.2	37.7	1.1	130	6.1		
FUR	e P	Z 14:04:06.1	83.5	36.7	1.8	530	6.5		
STU	e P	Z 14:04:07.6	83.8	35.3	1.1	210	6.3		
WLF	e P	Z 14:04:10.2	84.2	33.3	1.4	207	6.2		
	e pP	Z 14:04:23.0							
BFO	e P	Z 14:04:11.0	84.5	34.7	1.1	247	6.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	15:31:37.2	65.346N	19.545W	33.0N	4.2			SZGRF

Iceland

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:36:32.7	22.3	325.9	1.4	13	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	17:41:49.8	17.150N	92.190W	99.0	5.4			SZGRF

Chiapas, Mexico

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	17:54:07.1	83.3	290.1	1.4	69	5.5		
TNS	e P	Z	17:54:07.4	83.5	289.0	1.4	72	5.5		
	e sP	Z	17:54:43.1							
BFO	e P	Z	17:54:09.5	84.0	289.2	1.4	19	5.0		
	e sP	Z	17:54:45.7							
CLZ	e P	Z	17:54:11.0	84.1	290.3	1.4	35	5.3		
	e sP	Z	17:54:46.6							
UBBA	e P	Z	17:54:11.3	84.2	290.1	1.6	39	5.3		
STU	e P	Z	17:54:12.0	84.4	289.7	1.5	50	5.4		
	e S	R	18:04:35.2							
MOX	e P	Z	17:54:16.2	85.2	291.4	1.5	37	5.4		
	e pP	Z	17:54:41.7							
GRA1	e P	Z	17:54:17.1	85.3	291.2	1.5	57	5.6		
	e sP	Z	17:54:52.6							
	e S	R	18:04:38.8							
MANZ	e P	Z	17:54:19.1	85.7	291.8	3.7	264	5.9		
CLL	e P	Z	17:54:20.1	85.8	292.4	1.7	45	5.4		
	e S	R	18:04:50.1							
TANN	e P	Z	17:54:19.4	85.8	292.0	1.7	45	5.4		
ROTZ	e P	Z	17:54:19.7	85.9	291.9	1.8	44	5.4		
	e pP	Z	17:54:45.3							
	e sP	Z	17:54:55.5							
BRG	e P	Z	17:54:23.2	86.5	293.1	2.2	71	5.5		
	e S	R	18:04:46.8							
WET	e P	Z	17:54:22.7	86.5	292.4	1.6	38	5.4		
	e pP	Z	17:54:49.0							
	e sP	Z	17:54:58.7							
RJOB	e P	Z	17:54:25.1	87.0	292.4	1.2	16	5.1		
GEC2	e P	Z	17:54:26.9	87.1	293.1	2.8	109	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/26	21:56:0.9	16.476N	102.824W	65.9	5.6			SZGRF

Off coast of Guerrero, Mexico

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e S	R	22:19:20.3	89.0	296.1					
BUG	e S	R	22:19:26.5	89.1	295.8					
WLF	e P	Z	22:08:48.0	89.2	294.9	1.1	57	5.7		
	e pP	Z	22:09:05.9							
	e S	R	22:19:28.8							
BSEG	e P	Z	22:08:49.3	89.6	298.1	1.2	50	5.6		
	e S	R	22:19:22.1							
TNS	e P	Z	22:08:52.2	90.3	296.7	1.1	50	5.7		
	e pP	Z	22:09:11.0							

CLZ	e P	Z	22:08:54.2	90.6	298.2	1.0	74	6.0
UBBA	e P	Z	22:08:55.2	90.9	297.9	1.6	44	5.5
	e pP	Z	22:09:13.3					
BFO	e P	Z	22:08:55.5	91.0	296.6	1.4	32	5.5
STU	e P	Z	22:08:57.7	91.4	297.2	0.9	19	5.4
	e S	R	22:19:47.8					
MOX	e P	Z	22:08:59.6	91.9	299.1	1.1	26	5.5
GRA1	e P	Z	22:09:01.1	92.1	298.8	1.3	57	5.8
CLL	e P	Z	22:09:01.7	92.3	300.2	0.9	20	5.4
	e S	R	22:19:50.0					
TANN	e P	Z	22:09:02.7	92.4	299.8	1.2	29	5.6
MANZ	e P	Z	22:09:02.9	92.4	299.5	1.2	21	5.4
ROTZ	e P	Z	22:09:03.1	92.6	299.6	1.3	24	5.5
	e pP	Z	22:09:21.9					
BRG	e P	Z	22:09:05.3	93.0	301.0	1.1	32	5.7
	e pP	Z	22:09:23.8					
WET	e P	Z	22:09:06.7	93.3	300.1	1.1	28	5.6
	e pP	Z	22:09:25.0					
GEC2	e P	Z	22:09:09.6	93.9	300.7	1.1	22	5.4
	e pP	Z	22:09:27.8					

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/27 04:27: 0.8 16.560N 120.120E 44.2 6.0 5.9  
 Luzon, Philippine Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	04:39:40.0	86.5	67.2	1.5	321	6.2		
	e pP	Z	04:39:52.4							
BRG	e P	Z	04:39:42.2	87.0	67.2	1.6	176	5.9		
	e pP	Z	04:39:54.8							
FBE	e P	Z	04:39:44.0	87.3	66.7	1.9	351	6.2		
CLL	e P	Z	04:39:43.8	87.4	66.5	2.0	223	6.2		
	e PP	Z	04:43:07.3							
BSEG	e P	Z	04:39:46.0	87.8	64.5	1.0	54	5.8		
	e pP	Z	04:39:58.8							
GEC2	e P	Z	04:39:46.8	87.9	66.9	1.8	193	6.1		
TANN	e P	Z	04:39:46.9	88.0	66.0	2.2	194	6.0		
WERD	e P	Z	04:39:47.5	88.1	65.9	1.8	120	5.9		
	e PP	Z	04:43:13.9							
GUNZ	e P	Z	04:39:47.9	88.1	65.9	1.9	181	6.1		
WERN	e P	Z	04:39:48.0	88.1	66.0	1.9	146	6.0		
WET	e P	Z	04:39:48.5	88.3	66.3	2.5	350	6.3		
MOX	e P	Z	04:39:49.0	88.4	65.4	1.4	63	5.7		
	e PP	Z	04:43:18.8							
CLZ	e P	Z	04:39:50.4	88.6	64.5	1.2	66	5.8		
GRA1	e P	Z	04:39:51.6	89.1	65.1	2.7	518	6.3		
	e PP	Z	04:43:23.1							

	e S	E	04:50:40.5							
	e SS	E	04:56:38.9							
	e L	Z	05:22:28.3			19.2	4397		5.9	
UBBA	e P	Z	04:39:52.2	89.3	64.2	1.6	82	5.7		
	e pP	Z	04:40:06.0							
FUR	e P	Z	04:39:55.2	89.7	65.1	1.9	475	6.4		
IBBN	e P	Z	04:39:56.0	89.9	62.4	1.3	80	5.8		
TNS	e P	Z	04:39:58.5	90.4	63.0	1.4	74	5.8		
BUG	e P	Z	04:39:58.7	90.5	62.0	1.4	89	5.9		
	e pP	Z	04:40:11.8							
STU	e P	Z	04:39:59.6	90.6	63.6	1.3	99	6.0		
BFO	e P	Z	04:40:02.5	91.4	62.9	1.8	145	6.0		
	e pP	Z	04:40:15.7							
	e PP	Z	04:43:40.2							
WLF	e P	Z	04:40:06.3	92.0	61.2	1.7	221	6.2		
	e pP	Z	04:40:19.0							
	e PP	Z	04:43:47.4							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/27 09:24: 9.6 19.980S 177.400W 552.2 SZGRF  
 Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPbc	Z 09:42:49.5	146.4	19.2					
CLZ	e PKPdf	Z 09:42:50.0	147.6	13.7					
	e PKPbc	Z 09:42:52.7							
CLL	e PKPdf	Z 09:42:49.7	147.6	18.5					
	e PKPbc	Z 09:42:52.6							
	e PKPab	Z 09:42:55.8							
BRG	e PKPdf	Z 09:42:50.2	147.8	20.3					
	e PKPbc	Z 09:42:53.4							
	e PKPab	Z 09:42:56.9							
FBE	e PKPdf	Z 09:42:50.5	147.9	19.3					
	e PKPbc	Z 09:42:53.8							
	e PKPab	Z 09:42:57.4							
BUG	e PKPdf	Z 09:42:50.8	148.3	8.4					
	e PKPbc	Z 09:42:54.1							
MOX	e PKPdf	Z 09:42:51.2	148.5	16.4					
	e PKPbc	Z 09:42:54.9							
WERD	e PKPdf	Z 09:42:51.4	148.6	17.7					
	e PKPbc	Z 09:42:55.2							
	e PKPab	Z 09:42:59.8							
TANN	e PKPdf	Z 09:42:51.5	148.6	18.0					
	e PKPbc	Z 09:42:55.4							
	e PKPab	Z 09:42:59.9							
UBBA	e PKPbc	Z 09:42:54.7	148.6	13.4					
GUNZ	e PKPdf	Z 09:42:51.8	148.7	17.8					

	e	PKPbc	Z	09:42:55.5					
	e	PKPab	Z	09:43:00.3					
	e	pPKPbc	Z	09:45:01.2					
WERN	e	PKPdf	Z	09:42:51.8	148.7	17.9			
	e	PKPbc	Z	09:42:55.6					
	e	PKPab	Z	09:43:00.8					
MANZ	e	PKPdf	Z	09:42:52.2	149.1	17.6			
	e	PKPbc	Z	09:42:56.6					
	e	PKPab	Z	09:43:01.7					
ROTZ	e	PKPbc	Z	09:42:57.1	149.2	17.9			
	e	PKPab	Z	09:43:03.0					
TNS	e	PKPdf	Z	09:42:52.9	149.4	10.8			
	e	PKPbc	Z	09:42:57.4					
	e	PKPab	Z	09:43:03.1					
GRA1	e	PKPbc	Z	09:42:57.6	149.5	16.1			
	e	PKPab	Z	09:43:04.0					
WET	e	PKPdf	Z	09:42:53.2	149.7	19.4			
	e	PKPbc	Z	09:42:57.6					
	e	PKPab	Z	09:43:04.7					
	e	pPKPbc	Z	09:45:04.6					
GEC2	e	PKPdf	Z	09:42:53.1	149.8	21.1			
	e	PKPbc	Z	09:42:58.2					
	e	PKPab	Z	09:43:05.0					
WLF	e	PKPdf	Z	09:42:54.5	150.2	6.7			
	e	PKPbc	Z	09:42:59.7					
STU	e	PKPdf	Z	09:42:55.1	150.7	12.7			
	e	PKPbc	Z	09:43:00.6					
FUR	e	PKPbc	Z	09:43:00.9	151.0	17.0			
RJOB	e	PKPbc	Z	09:43:01.0	151.0	20.1			
	e	PKPab	Z	09:43:10.7					
	e	pPKPbc	Z	09:45:08.8					
BFO	e	PKPbc	Z	09:43:01.5	151.3	11.3			
	e	PKPab	Z	09:43:10.8					
	e	pPKPbc	Z	09:45:10.5					

Date      Origin Time      Lat      Long      Depth      mb      Ms      ML      Source  
 2007/11/27    10:14:2.2      0.290S    12.080W    33.0N      5.8      4.9           SZGRF  
 North of Ascension Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 10:23:05.6	51.7	206.4	2.3	424	6.1		
WLF	e P	Z 10:23:10.4	52.3	203.3	2.4	407	6.0		
STU	e P	Z 10:23:10.7	52.4	207.3	1.0	29	5.3		
FUR	e P	Z 10:23:11.9	52.5	210.0	1.2	150	5.9		
TNS	e P	Z 10:23:18.3	53.5	205.9	2.2	285	5.9		
	e PP	Z 10:25:17.7							
GRA1	e P	Z 10:23:20.7	53.8	209.3	1.0	56	5.6		

	e PP	Z	10:25:23.4								
	e S	R	10:30:53.9								
	e L	Z	10:45:50.8			21.3	1045		4.9		
WET	e P	Z	10:23:21.0	53.9	211.5	2.4	527	6.1			
	e PP	Z	10:25:22.7								
GEC2	e P	Z	10:23:21.8	53.9	212.6	1.5	186	5.9			
	e PP	Z	10:25:23.6								
ROTZ	e P	Z	10:23:23.5	54.2	210.5	2.3	303	5.9			
	e PP	Z	10:25:25.0								
BUG	e P	Z	10:23:23.9	54.3	204.1	1.5	101	5.6			
MANZ	e P	Z	10:23:25.2	54.4	210.3	2.5	459	6.1			
	e PP	Z	10:25:25.8								
UBBA	e P	Z	10:23:25.2	54.4	207.5	2.4	275	5.9			
	e PP	Z	10:25:26.7								
MOX	e P	Z	10:23:27.6	54.8	209.5	2.3	364	6.0			
	e PP	Z	10:25:30.1								
TANN	e P	Z	10:23:28.2	54.8	210.5	2.4	286	5.9			
IBBN	e P	Z	10:23:30.2	55.2	204.4	1.2	51	5.4			
CLZ	e P	Z	10:23:32.9	55.5	207.6	2.5	253	5.8			
	e PP	Z	10:25:37.8								
BRG	e P	Z	10:23:34.2	55.7	212.1	1.7	66	5.4			
	e PP	Z	10:25:38.3								
CLL	e P	Z	10:23:34.9	55.8	210.8	1.9	132	5.7			
BSEG	e P	Z	10:23:45.2	57.3	206.9	2.4	432	6.1			

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/27 11:50: 1.9 11.000S 162.200E 42.0 6.7 NEIC  
 Bougainville - Solomon Islands region

Sta	Phase		Time	Dist	B Az	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPdf	Z	12:09:14.7	131.6	38.2					
	e PP	Z	12:11:36.5							
BRG	e PKPdf	Z	12:09:13.4	132.4	44.4					
	e PP	Z	12:11:40.8							
	e SKPdf	Z	12:12:38.7							
CLL	e SKPdf	Z	12:12:39.2	132.5	43.0					
FBE	e PKPdf	Z	12:09:15.1	132.7	43.7					
	e PP	Z	12:11:41.4							
	e SKPdf	Z	12:12:39.5							
CLZ	e PKPdf	Z	12:09:16.9	133.2	39.5					
	e PP	Z	12:11:45.0							
TANN	e PKPdf	Z	12:09:17.1	133.4	42.9					
	e PP	Z	12:11:46.8							
	e SKPdf	Z	12:12:42.6							
WERD	e PP	Z	12:11:48.2	133.5	42.7					
	e SKPdf	Z	12:12:42.4							
GUNZ	e SKPdf	Z	12:12:42.6	133.5	42.8					

WERN	e PKPdf	Z	12:09:15.6	133.5	42.9			
	e PP	Z	12:11:47.4					
	e SKPdf	Z	12:12:42.7					
MOX	e PP	Z	12:11:48.8	133.6	41.7			
	e SKPdf	Z	12:12:42.5					
IBBN	e SKPdf	Z	12:12:44.4	133.8	35.9			
MANZ	e PKPdf	Z	12:09:15.9	133.9	42.8			
	e PP	Z	12:11:51.1					
	e SKPdf	Z	12:12:43.7					
GEC2	e PKPdf	Z	12:09:16.2	134.0	45.5			
	e PP	Z	12:11:50.5					
	e SKPdf	Z	12:12:44.1					
ROTZ	e PKPdf	Z	12:09:17.4	134.0	43.0			
	e PP	Z	12:11:50.5					
	e SKPdf	Z	12:12:44.6					
UBBA	e PKPdf	Z	12:09:18.0	134.1	39.6			
	e PP	Z	12:11:50.5					
	e SKPdf	Z	12:12:44.9					
WET	e SKPdf	Z	12:12:44.7	134.2	44.3			
GRA1	e PKPdf	Z	12:09:18.0	134.5	41.9			
	e PP	Z	12:11:52.8					
	e L	Z	13:11:56.5			20.0	15876	6.7
RJOB	e SKPdf	Z	12:12:47.6	135.2	45.2			
TNS	e SKPdf	Z	12:12:47.6	135.2	38.1			
FUR	e SKPdf	Z	12:12:49.7	135.6	43.0			
STU	e SKPdf	Z	12:12:50.7	136.1	39.9			
WLF	e SKPdf	Z	12:12:52.5	136.6	35.4			
BFO	e PKPdf	Z	12:09:23.0	136.8	39.1			
	e PP	Z	12:12:01.9					
	e SKPdf	Z	12:12:52.2					

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/27 15:46:10.8 1.600S 100.500E 35.0 5.2  
 Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 15:59:02.3	89.1	93.7	0.8	7	5.1		
GEC2	e P	Z 15:59:02.7	89.1	93.5	1.6	19	5.2		
FBE	e P	Z 15:59:04.4	89.4	93.2	1.1	10	5.1		
WET	e P	Z 15:59:05.2	89.7	92.8	0.9	7	5.1		
CLL	e P	Z 15:59:05.0	89.7	93.0	0.9	6	4.9		
WERN	e P	Z 15:59:07.2	90.0	92.5	1.2	6	4.9		
GUNZ	e P	Z 15:59:07.2	90.1	92.4	5.3	439	6.1		
WERD	e P	Z 15:59:07.1	90.1	92.4	1.4	9	5.0		
ROTZ	e P	Z 15:59:07.5	90.1	92.3	1.0	6	5.0		
MANZ	e P	Z 15:59:08.0	90.2	92.3	1.1	8	5.1		
MOX	e P	Z 15:59:08.1	90.5	91.9	1.5	14	5.2		

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GRA1	e P	Z	15:59:10.6	90.8	91.6	0.9	7	5.0
CLZ	e P	Z	15:59:10.8	91.3	90.9	1.8	18	5.1
TNS	e P	Z	15:59:18.9	92.5	89.4	1.0	9	5.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/28	01:51:21.5	21.250S	175.350W	33.0N				SZGRF

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 02:11:00.4	147.0	9.7					
CLL	e PKPbc	Z 02:11:06.2	149.2	15.4					
MOX	e PKPbc	Z 02:11:08.7	150.1	13.1					
TANN	e PKPbc	Z 02:11:09.2	150.2	14.8					
MANZ	e PKPbc	Z 02:11:10.4	150.7	14.3					
ROTZ	e PKPbc	Z 02:11:10.9	150.9	14.6					
TNS	e PKPbc	Z 02:11:10.3	150.9	7.3					
GRA1	e PKPbc	Z 02:11:11.5	151.1	12.7					
GEC2	e PKPbc	Z 02:11:12.1	151.5	17.9					
WLF	e PKPbc	Z 02:11:12.7	151.6	2.9					
FUR	e PKPbc	Z 02:11:14.6	152.6	13.5					
BFO	e PKPbc	Z 02:11:14.9	152.8	7.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/28								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:29:27.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/28	09:42:20.9	21.346S	175.666E	33.0G		4.8		SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 10:01:53.2	145.6	24.6					
CLL	e PKPbc	Z 10:01:57.5	147.1	30.8					
BRG	e PKPbc	Z 10:01:57.6	147.2	32.6					
TANN	e PKPbc	Z 10:02:00.2	148.1	30.6					
MANZ	e PKPbc	Z 10:02:01.5	148.6	30.4					
ROTZ	e PKPbc	Z 10:02:01.8	148.7	30.7					
GEC2	e PKPbc	Z 10:02:02.2	149.0	34.0					
GRA1	e PKPbc	Z 10:02:03.2	149.1	29.1					
	e L	Z 11:06:36.9			22.0	166		4.8	
WLF	e PKPbc	Z 10:02:07.1	150.5	20.1					



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BFO e PKPbc Z 10:02:07.6 151.2 25.1

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/28 10:05:49.3 3.470S 102.660E 52.1 5.3  
Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 10:18:52.3	91.9	93.2	2.0	56	5.5		
GEC2	e P	Z 10:18:52.4	91.9	93.1	1.6	36	5.4		
WET	e P	Z 10:18:54.9	92.5	92.4	1.1	12	5.1		
CLL	e P	Z 10:18:54.9	92.5	92.4	1.6	19	5.2		
WERD	e P	Z 10:18:56.7	92.9	91.9	1.1	8	5.1		
ROTZ	e P	Z 10:18:57.5	92.9	91.9	1.4	19	5.3		
MANZ	e P	Z 10:18:57.8	93.0	91.8	1.1	16	5.3		
MOX	e P	Z 10:18:59.2	93.3	91.4	1.5	13	5.1		
GRA1	e P	Z 10:19:00.0	93.6	91.2	1.4	33	5.5		
	e pP	Z 10:19:15.1							
TNS	e P	Z 10:19:08.1	95.4	89.0	0.8	10	5.3		

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/28 10:37:21.7 37.060N 93.036E 33.0N 4.7  
Qinghai, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:47:10.1	57.8	69.0	0.7	6	4.7		

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/28

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 11:10:23.9							

Date Origin Time Lat Long Depth mb Ms ML Source  
2007/11/28 23:57:10.6 63.660N 151.100W 53.4 5.1  
Central Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 00:07:23.9	61.5	350.7	2.1	104	5.7		
NRDL	e P	Z 00:07:32.9	62.9	350.8	0.8	9	5.0		
CLZ	e P	Z 00:07:38.4	63.6	350.9	1.1	25	5.3		
CLL	e P	Z 00:07:42.2	64.4	352.3	1.0	9	4.9		

UBBA	e P	Z	00:07:44.4	64.6	350.8	1.5	14	5.0
BRG	e P	Z	00:07:46.1	64.9	352.7	1.0	11	5.0
MOX	e P	Z	00:07:46.2	64.9	351.6	1.0	15	5.2
TNS	e P	Z	00:07:47.2	65.0	350.1	1.1	10	5.0
TANN	e P	Z	00:07:48.2	65.2	352.0	1.1	10	5.0
WLF	e P	Z	00:07:48.3	65.3	349.1	2.2	72	5.5
MANZ	e P	Z	00:07:50.3	65.6	351.9	1.4	10	4.9
GRA1	e P	Z	00:07:52.1	65.8	351.5	1.2	13	5.0
	e pP	Z	00:08:07.0					
ROTZ	e P	Z	00:07:52.3	65.8	352.0	1.1	10	4.9
WET	e P	Z	00:07:56.8	66.5	352.3	1.3	17	5.1
GEC2	e P	Z	00:07:58.8	66.9	352.7	1.0	8	4.9
FUR	e P	Z	00:08:01.7	67.3	351.6			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	00:05:35.2	6.230S	102.850E	70.2	5.8			SZGRF
Southwest of Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	00:18:45.8	94.1	94.7	1.6	99	6.0		
	e pP	Z	00:19:05.2							
BRG	e P	Z	00:18:45.8	94.1	94.8	1.5	61	5.8		
	e pP	Z	00:19:05.1							
RUE	e P	Z	00:18:46.8	94.4	94.5	1.4	150			
	e pP	Z	00:19:06.1							
FBE	e P	Z	00:18:47.5	94.5	94.3	1.5	62			
RJOB	e P	Z	00:18:47.2	94.6	94.2	1.3	16			
WET	e P	Z	00:18:48.4	94.7	94.1	1.4	52	5.9		
CLL	e P	Z	00:18:48.2	94.8	94.0	1.6	51	5.8		
	e pP	Z	00:19:07.7							
TANN	e P	Z	00:18:49.9	95.0	93.7	1.7	46	5.7		
	e pP	Z	00:19:09.1							
WERN	e P	Z	00:18:50.4	95.1	93.6	1.4	24			
	e pP	Z	00:19:09.8							
GUNZ	e P	Z	00:18:50.4	95.1	93.6	1.4	32			
	e pP	Z	00:19:09.7							
WERD	e P	Z	00:18:50.3	95.1	93.6	1.3	26			
	e pP	Z	00:19:09.5							
ROTZ	e P	Z	00:18:51.0	95.2	93.5	1.5	42	5.7		
MANZ	e P	Z	00:18:51.1	95.2	93.4	1.5	64	5.9		
	e pP	Z	00:19:11.4							
MOX	e P	Z	00:18:52.2	95.6	93.0	1.4	29	5.7		
	e pP	Z	00:19:11.3							
FUR	e P	Z	00:18:52.7	95.7	93.0	1.2	32	5.8		
GRA1	e P	Z	00:18:53.5	95.8	92.8	1.8	88	6.1		
CLZ	e P	Z	00:18:55.7	96.4	91.9	1.4	37	5.9		
BSEG	e P	Z	00:18:56.3	96.5	91.6	1.4	32	5.9		

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NRDL	e P	Z	00:18:57.1	96.6	91.6	1.3	25	5.8
	e pP	Z	00:19:16.5					
UBBA	e P	Z	00:18:56.8	96.6	91.7	2.0	50	5.9
STU	e P	Z	00:18:59.2	97.1	91.4	1.7	40	5.9
TNS	e P	Z	00:19:01.8	97.6	90.6	1.2	29	5.9
BFO	e P	Z	00:19:01.3	97.7	90.8	1.4	20	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	00:31:60.0	19.104S	176.278E	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 00:51:33.4	145.2	28.5					
BRG	e PKPbc	Z 00:51:34.4	145.3	30.2					
FBE	e PKPbc	Z 00:51:33.2	145.4	29.3					
TANN	e PKPbc	Z 00:51:36.5	146.2	28.2					
WERD	e PKPbc	Z 00:51:36.6	146.2	27.9					
GUNZ	e PKPbc	Z 00:51:36.5	146.2	28.0					
MANZ	e PKPbc	Z 00:51:37.6	146.6	27.9					
GEC2	e PKPbc	Z 00:51:39.2	147.1	31.4					
WET	e PKPbc	Z 00:51:38.8	147.1	29.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 02:10:30.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	02:59:12.8	21.369S	32.039E	33.0N	5.1			SZGRF
Mozambique								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
FUR	e P	Z 03:10:33.4	72.0	159.7	1.5	76	5.6		
GEC2	e P	Z 03:10:33.2	72.1	162.1	1.3	16	5.0		
BFO	e P	Z 03:10:38.0	72.9	156.9	1.8	24	5.0		
ROTZ	e P	Z 03:10:40.9	73.3	160.7	1.1	19	5.2		
GRA1	e P	Z 03:10:42.1	73.4	159.8	1.1	24	5.2		
MANZ	e P	Z 03:10:42.3	73.5	160.7	1.0	10	4.9		
TANN	e P	Z 03:10:44.2	73.8	161.0	1.4	20	4.9		
MOX	e P	Z 03:10:46.7	74.2	160.3	1.2	13	4.8		
CLL	e P	Z 03:10:48.4	74.6	161.6	1.3	18	4.9		
BSEG	e P	Z 03:11:06.0	77.6	159.3	1.4	31	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	03:26:22.6	36.900S	97.700W	10.0		5.5		NEIC
West Chile Rise								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPdf	Z	03:45:35.9	126.5	253.1					
STU	e PKPdf	Z	03:45:33.7	127.2	253.9					
UBBA	e PKPdf	Z	03:45:37.2	128.2	255.9					
CLZ	e PKPdf	Z	03:45:34.9	128.7	257.0					
GRA1	e PKPdf	Z	03:45:37.4	128.7	255.9					
	e PP	Z	03:47:39.7							
	e PPP	Z	03:50:13.9							
	e SS	R	04:04:47.4							
	e L	Z	04:38:18.0			22.0	1001		5.5	
BSEG	e PKPdf	Z	03:45:37.3	129.1	258.6					
MOX	e PKPdf	Z	03:45:38.5	129.2	256.9					
MANZ	e PKPdf	Z	03:45:37.6	129.4	256.7					
WET	e PKPdf	Z	03:45:37.9	129.6	256.5					
TANN	e PKPdf	Z	03:45:34.8	129.7	257.2					
GEC2	e PKPdf	Z	03:45:35.5	130.1	256.7					
CLL	e PKPdf	Z	03:45:39.3	130.2	258.3					
BRG	e PKPdf	Z	03:45:37.4	130.7	258.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	15:28:53.9	46.020N	153.040E	33.0N	5.1			SZGRF
Kuril Islands, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
NRDL	e P	Z	15:40:43.6	76.5	25.5	1.5	20	5.0		
CLL	e P	Z	15:40:44.7	76.8	27.3	1.4	38	5.3		
BRG	e P	Z	15:40:45.2	76.9	27.8	1.3	15	5.0		
CLZ	e P	Z	15:40:47.0	77.0	25.6	1.5	45	5.4		
TANN	e P	Z	15:40:50.5	77.7	26.8	1.6	18	5.0		
MOX	e P	Z	15:40:50.5	77.8	26.3	1.1	17	5.1		
UBBA	e P	Z	15:40:52.2	78.0	25.3	0.9	7	4.8		
MANZ	e P	Z	15:40:52.9	78.2	26.6	1.0	10	4.8		
ROTZ	e P	Z	15:40:54.6	78.4	26.6	1.0	14	5.0		
GRA1	e P	Z	15:40:56.5	78.7	26.0	1.5	68	5.5		
WET	e P	Z	15:40:56.5	78.7	27.0	1.0	20	5.1		
GEC2	e P	Z	15:40:56.1	78.7	27.5	1.4	18	4.9		
BFO	e P	Z	15:41:06.5	80.8	24.0	1.0	15	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 16:14:11.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/29	19:00: 2.2	14.370N	61.580W	33.0N	7.3	6.8		SZGRF

Windward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 19:10:38.0	64.7	262.4	1.2	3592	7.5		
	e S	T 19:19:17.9							
	e SS	T 19:23:23.2							
BUG	e P	Z 19:10:43.8	65.7	262.5	1.4	4623	7.5		
	e S	T 19:19:28.2							
	e SS	T 19:23:37.9							
BFO	e P	Z 19:10:45.8	66.0	264.8	1.4	2590	7.3		
	e S	T 19:19:32.7							
	e SS	T 19:23:45.4							
IBBN	e P	Z 19:10:46.6	66.1	262.5	1.3	8457	7.8		
	e S	T 19:19:32.8							
	e SS	T 19:23:43.3							
HLG	e P	Z 19:10:48.5	66.4	261.8	1.4	6594	7.7		
	e S	T 19:19:37.0							
	e SS	T 19:23:50.8							
STU	e P	Z 19:10:49.5	66.6	265.2	1.1	4116	7.6		
	e S	T 19:19:38.3							
	e SS	T 19:23:55.0							
CLZ	e P	Z 19:10:56.5	67.6	264.9	1.3	3623	7.4		
	e S	T 19:19:52.0							
	e SS	T 19:24:08.8							
BSEG	e P	Z 19:10:57.3	67.8	264.0	1.2	3311	7.5		
	e S	T 19:19:53.0							
	e SS	T 19:24:13.2							
FUR	e P	Z 19:10:58.6	68.0	267.1	1.9	5785	7.5		
	e S	T 19:19:56.5							
	e SS	T 19:24:19.1							
GRFO	e S	T 19:19:57.2	68.0	266.4					
	e SS	T 19:24:19.8							
GRA1	e P	Z 19:10:58.7	68.0	266.4	2.1	7726	7.6		
	e S	R 19:19:49.7							
	e S	T 19:19:57.0							
	e SS	T 19:24:22.9							
	e L	T 19:34:25.7			21.4	59435		6.8	
	e PKPPKP	Z 19:39:20.3							
MOX	e P	Z 19:11:00.9	68.3	266.3	1.3	896	6.8		

	e S	T	19:20:01.4							
	e SS	T	19:24:20.4							
MANZ	e P	Z	19:11:02.7	68.6	267.0	1.3	3745	7.5		
	e S	T	19:20:04.4							
	e SS	T	19:24:25.0							
ROTZ	e P	Z	19:11:03.1	68.6	267.2	1.5	3229	7.3		
	e S	T	19:20:05.4							
	e SS	T	19:24:27.8							
WERD	e P	Z	19:11:03.2	68.7	267.0	1.5	2391	7.2		
GUNZ	e P	Z	19:11:03.5	68.8	267.0	1.4	1914	7.1		
WERN	e P	Z	19:11:03.8	68.8	267.1	1.4	2408	7.2		
TANN	e P	Z	19:11:04.0	68.8	267.1	1.3	2482	7.3		
	e S	T	19:20:07.8							
	e SS	T	19:24:30.5							
RJOB	e P	Z	19:11:04.7	69.0	268.4	1.0	445	6.7		
	e S	T	19:20:06.5							
	e SS	T	19:24:36.4							
WET	e P	Z	19:11:05.3	69.1	267.9	1.3	1799	7.2		
	e S	T	19:20:09.7							
	e SS	T	19:24:35.2							
CLL	e P	Z	19:11:06.2	69.2	267.2	1.2	2437	7.3		
	e S	T	19:20:10.8							
	e SS	T	19:24:33.9							
FBE	e P	Z	19:11:07.7	69.4	267.6	1.3	2437	7.3		
GEC2	e P	Z	19:11:08.5	69.6	268.7	1.4	2825	7.2		
	e S	T	19:20:15.7							
	e SS	T	19:24:38.3							
RGN	e P	Z	19:11:08.9	69.6	266.2	1.2	3993	7.4		
	e S	T	19:20:15.6							
	e SS	T	19:24:42.8							
RUE	e P	Z	19:11:09.5	69.8	267.4	1.3	2683	7.2		
	e S	T	19:20:17.1							
BRG	e P	Z	19:11:10.0	69.8	268.1	1.1	2155	7.2		
	e S	T	19:20:18.6							
	e SS	T	19:24:44.6							

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/29 22:27:39.9 65.820N 143.810W 10.0 5.0  
 Northern Alaska, United States SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 22:37:39.0	58.6	347.9	1.1	15	4.9		
IBBN	e P	Z 22:37:47.7	59.9	347.0	1.0	37	5.3		
NRDL	e P	Z 22:37:48.3	60.0	348.0	1.1	13	4.9		
CLZ	e P	Z 22:37:53.3	60.7	348.2	1.1	22	4.9		
CLL	e P	Z 22:37:58.3	61.5	349.4	1.0	11	5.0		
MOX	e P	Z 22:38:01.5	62.0	348.9	1.3	16	5.1		

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BRG	e P	Z	22:38:02.1	62.1	349.9	1.2	14	5.1
WLF	e P	Z	22:38:03.3	62.2	346.6	1.1	20	5.2
TANN	e P	Z	22:38:03.8	62.3	349.3	1.2	8	4.7
MANZ	e P	Z	22:38:06.6	62.7	349.2	1.8	19	4.9
GRA1	e P	Z	22:38:07.6	62.9	348.8	1.5	21	5.0
ROTZ	e P	Z	22:38:08.2	63.0	349.2	2.4	55	5.3
WET	e P	Z	22:38:13.5	63.6	349.6	1.5	25	5.2
BFO	e P	Z	22:38:14.0	63.9	347.7	1.6	16	5.0
GEC2	e P	Z	22:38:15.8	64.0	350.0	1.5	18	5.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/30	01:11:47.1	11.000S	162.300E	46.0				NEIC
Bougainville - Solomon Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e SKPdf	Z	01:34:36.5	132.5	44.3					
CLL	e SKPdf	Z	01:34:36.9	132.6	42.9					
FBE	e SKPdf	Z	01:34:36.5	132.7	43.6					
NEUB	e SKPdf	Z	01:34:39.0	133.2	41.5					
WERD	e SKPdf	Z	01:34:39.9	133.5	42.6					
GEC2	e SKPdf	Z	01:34:41.5	134.0	45.3					
ROTZ	e SKPdf	Z	01:34:41.8	134.0	42.9					
WET	e SKPdf	Z	01:34:42.8	134.2	44.2					
GRA1	e SKPdf	Z	01:34:41.5	134.5	41.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/30	08:38:19.6	36.254N	20.413E	33.0N				SZGRF
Central Mediterranean Sea								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z	08:41:37.3	13.5	156.2					
WET	e Pn	Z	08:41:43.6	14.0	154.1					
GRA1	e Pn	Z	08:41:54.7	15.0	150.2					
TANN	e Pn	Z	08:41:57.1	15.3	154.9	1.2	13			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2007/11/30	09:36:56.4	36.710N	140.800E	33.0N	5.1			SZGRF
Near east coast of eastern Honshu, Japan								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:49:04.0	79.8	38.3	1.0	17	4.9		
BRG	e P	Z	09:49:08.6	80.8	40.5	0.9	9	4.8		
CLL	e P	Z	09:49:08.7	80.8	39.9	1.0	20	5.1		

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NRDL	e P	Z	09:49:09.7	81.0	38.0	2.2	68	5.3
CLZ	e P	Z	09:49:12.5	81.4	38.1	1.0	16	5.1
MOX	e P	Z	09:49:14.5	81.9	38.9	0.9	9	4.9
IBBN	e P	Z	09:49:15.4	82.0	36.3	0.6	29	5.6
MANZ	e P	Z	09:49:16.2	82.2	39.2	0.9	9	5.0
ROTZ	e P	Z	09:49:17.3	82.3	39.2	1.5	22	5.2
GEC2	e P	Z	09:49:17.2	82.4	40.2	1.3	10	4.9
WET	e P	Z	09:49:18.2	82.5	39.6	1.0	8	4.9
GRA1	e P	Z	09:49:19.5	82.8	38.5	0.9	25	5.4
RJOB	e P	Z	09:49:23.9	83.7	39.5	1.0	11	5.0
STU	e P	Z	09:49:27.2	84.3	37.0	0.8	21	5.4
BFO	e P	Z	09:49:30.5	85.0	36.4	1.0	22	5.3

Date Origin Time Lat Long Depth mb Ms ML Source  
 2007/11/30 21:29:59.1 18.689S 178.508W 33.0N  
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPbc	Z	21:49:30.6	144.9	20.5					
NRDL	e PKPbc	Z	21:49:32.9	145.5	14.5					
IBBN	e PKPbc	Z	21:49:35.3	146.0	10.7					
CLZ	e PKPbc	Z	21:49:35.5	146.1	15.2					
CLL	e PKPbc	Z	21:49:35.0	146.1	19.8					
BRG	e PKPbc	Z	21:49:35.6	146.3	21.6					
FBE	e PKPbc	Z	21:49:36.1	146.4	20.6					
MOX	e PKPbc	Z	21:49:37.8	147.0	17.8					
TANN	e PKPbc	Z	21:49:38.0	147.1	19.4					
WERD	e PKPbc	Z	21:49:38.1	147.1	19.1					
UBBA	e PKPbc	Z	21:49:37.9	147.2	15.0					
GUNZ	e PKPbc	Z	21:49:38.3	147.2	19.2					
WERN	e PKPbc	Z	21:49:38.6	147.2	19.3					
	e PKPab	Z	21:49:40.4							
MANZ	e PKPbc	Z	21:49:39.3	147.6	19.0					
ROTZ	e PKPbc	Z	21:49:40.1	147.8	19.3					
GRA1	e PKPbc	Z	21:49:40.9	148.0	17.6					
	e PKPab	Z	21:49:43.7							
WET	e PKPbc	Z	21:49:41.3	148.2	20.8					
	e PKPab	Z	21:49:44.0							
GEC2	e PKPbc	Z	21:49:41.0	148.3	22.4					
STU	e PKPbc	Z	21:49:44.1	149.3	14.4					
FUR	e PKPbc	Z	21:49:44.4	149.5	18.5					
	e PKPab	Z	21:49:49.3							
RJOB	e PKPbc	Z	21:49:44.2	149.5	21.5					
	e PKPab	Z	21:49:50.1							
BFO	e PKPbc	Z	21:49:45.5	149.8	13.0					



## Format description

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

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

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

## EPICENTER LINES:

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

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

## COMMENT LINE:

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

## REGION LINE:

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

## PHASE LINE:

Sta	Station code of the reported phase
Phase	Preceded flag for the sharpness of the onset of the phase
	e - emergent
	i - impulsive
	w - weak
	ISC phase code
	Component where the phase was picked

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