

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

=====

(produced by SZGRF/BGR - ERLANGEN and partly by CLL - Observatory)

JUNE 2001 UPDATED 8.August.2001

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

(Format description at the end of the bulletin)

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2001/06/01	04:54: 9.5	49.270N	157.580E	33.0N	5.3	3.9		SZGRF	
2001/06/01	04:54:08.4	49.180N	155.583E	33N	4.5			NEIC	
East of Kuril Islands, Russia									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 05:05:59.0	76.5	23.1			5.3		
	e L	Z 05:44:57.3			19.0	61		3.9	
Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2001/06/01	14:00:43.2	35.101N	69.430E	63D	4.9			NEIC	
Hindu Kush, Afghanistan, region									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 14:08:49.3	44.2	86.4			4.7		
	e pP	Z 14:09:05.4							
	e PP	Z 14:10:31.8							
	e (S)	Z 14:15:24.0							
	e L	Z 14:30:26.0			21.1	205		4.0	
Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2001/06/01	16:50:46.0			N	4.6			SZGRF	
Ascension Island region									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:00:47.4					4.6		
BEAM		17:00:47.4			1.2	7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/01	20:36:56.3	7.146S	154.906E	33N	5.6	5.7		NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPdf	Z 20:55:57.4			0.9	14			
	e	20:56:17.6							
	e	20:56:33.3							
	e PP	Z 20:57:51.9							
	e	20:59:25.3							
	e PPP	Z 21:00:32.3							
	e SKSac	R 21:02:54.6							
	e Sdiff	T 21:05:52.5							
	e PS	Z 21:07:54.8							
	e PPS	Z 21:09:25.1							
	e SS	T 21:14:49.5							
	e SSS	N 21:19:38.2							
	e L	Z 21:56:38.7			18.0	2321		5.9	
GRA1	e PKPdf	Z 20:56:01.4	127.7	48.0					
	e L	Z 21:58:01.9			21.0	1153		5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/01	20:41:38.2	7.105S	155.032E	33N	5.4			NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 21:00:42.3	127.8	47.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/01	23:09:23.6	7.698S	107.306E	111?	5.2			NEIC

Jawa, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (Pdiff)	Z 23:23:08.2	99.8	90.4					
	e PP	Z 23:27:02.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/02	05:34:52.4			N	4.8	3.9		SZGRF
2001/06/02	05:34:34.2	14.274N	90.999W	109D	4.7			NEIC

Mexico-Guatemala border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:47:33.2	86.8	288.4			4.8		
	e L	Z 06:19:53.0			20.8	50		3.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/02	16:19:52.7	34.269N	139.122E	33N	4.7	4.2		NEIC

Southeast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:32:26.2	84.2	41.0					
	e L	Z 17:13:59.6			20.0	104		4.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/02	19:36:43.1			N	4.8	4.6		SZGRF
2001/06/02	19:36:32.9	12.752N	88.173W	63D	4.7			NEIC

Off coast of central America

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:49:27.6	86.3	285.4			4.8		
	e S	Z 19:59:26.0							
	e L	Z 20:25:16.2			21.0	280		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/03	02:41:57.1	29.811S	178.576W	185D	6.8			NEIC

Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 03:01:30.7							
	e	03:01:37.9			1.7	1283			
	i PKPbc	+ Z 03:01:48.9			2.0	2571			
	e PKPab	Z 03:02:01.5			1.3	1949			
	e pPKPdf	Z 03:02:26.9							
	e pPKPab	Z 03:02:55.3							
	e PP	Z 03:05:39.1							
	e pPP	Z 03:06:32.2							
	e PPP	Z 03:09:23.3							
	e SKKSac	N 03:12:13.9							
	e SKKS	N 03:15:49.1							
	e SPP	Z 03:18:35.1							
	e SS	E 03:25:01.0							
	e sSS	E 03:26:33.9							
	e SSS	N 03:31:32.5							

	e	PKKKKKP	Z	03:38:32.3							
GRA1	e	PKPdf	Z	03:01:33.3	158.8	24.1					
	e	PKPab	Z	03:02:11.2							
	e	PP	Z	03:05:48.3							
	e	L	Z	04:11:10.2			21.7	5978	6.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/03	08:20:28.7	45.190N	153.960E	33.0N	4.6			SZGRF
2001/06/03	08:20:26.1	43.430N	147.993E	33N	4.8			NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 08:32:33.8	79.5	30.4			4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/03								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 20:42:46.1							
	e (pPKPdf)	Z 20:42:55.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/03	22:20:16.4	25.1S	177.1W	127D	4.9			NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPbc	+ Z 22:39:58.8			0.9	23			
	e	22:40:03.2							
	e	22:40:07.2							
	e PKPab	Z 22:40:10.1							
	e pPKPbc	Z 22:40:34.5							
	e pPKPab	Z 22:40:45.3							
GRA1	e PKPdf	Z 22:40:11.5							
	e PKPab	Z 22:40:19.1							
	e (pPKPab)	Z 22:40:52.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04	13:09:56.0			N	4.5			SZGRF

Southern Xinjiang, China

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

GRA1	e P	Z	13:19:20.6						4.5
BEAM			13:19:20.6		1.2		6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04	18:42:34.6	64.721N	152.367W	10G	5.0	4.5		NEIC

Central Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:53:18.5	64.9	352.3			4.5		
	e	18:53:25.1							
	e L	Z 19:25:11.8			18.9	112		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 18:58:03.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPbc)	Z 22:10:01.6							
	e (PKPab)	Z 22:10:04.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04	22:40:57.6	16.70N	146.10E	80D		4.7		NEIC

Mariana Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z 22:54:45.0							
	e PP	Z 22:58:59.1							
	e SKSac	N 23:05:15.3							
	e Sdiff	E 23:06:22.7							
	e SP	Z 23:07:58.3							
	e SS	N 23:13:33.5							
	e	23:14:38.0							
	e L	Z 23:45:43.0			21.2	258		4.7	
CLL	e pPdiff	Z 22:55:04.3							
	e PP	Z 22:58:48.2							
	e pPP	Z 22:59:11.8							

e SKSac	Z	23:05:06.9									
e Sdiff	E	23:06:01.6									
e PS	Z	23:07:37.0									
e SS	E	23:12:56.8									
e LR	Z	23:29:22.0									
e L	Z	23:39:27.5			18.0		553			5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/04								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 23:10:52.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	01:45:37.8	46.680N	152.080E	33.0N	5.2	4.0		SZGRF
2001/06/05	01:45:34.1	45.409N	149.652E	55D	4.9			NEIC

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:57:32.5	78.3	28.4	0.9	20	5.2		
	e L	Z 02:35:07.4			20.4	69		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:39:00.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	09:00:05.1	6.899S	146.513E	10G	5.6	6.2		NEIC

Eastern New Guinea, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z 09:15:28.0							
	i PKPdf	- Z 09:19:00.2			1.0	39			
	e PP	Z 09:20:32.2							
	e PPP	Z 09:23:09.1							
	e Sdiff	T 09:28:25.3							
	e PKKP	Z 09:29:06.7							
	e PS	Z 09:30:19.3							
	e PPS	Z 09:31:46.2							

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

7

	e	SS	R	09:37:06.4								
	e	SSS	E	09:41:52.4								
	e	LR	Z	09:58:47.2								
GRA1	e	PKPdf	Z	09:19:04.0	123.2	56.6						
	e	PP	Z	09:20:48.6								
	e	L	Z	10:13:15.7			21.7	8461			6.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 10:08:29.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	14:38:59.1	9.582N	69.310W	19D	4.8			NEIC
Venezuela								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:50:51.8	76.6	269.1			4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	15:13:58.0	6.842S	146.345E	10G	5.7	5.6		NEIC
Eastern New Guinea, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPdf	Z 15:32:52.1			0.9	26			
	e PP	Z 15:34:25.2							
	e PPP	Z 15:36:59.5							
	e SKKSac	E 15:41:19.7							
	e PS	Z 15:44:20.8							
	e LR	Z 16:12:48.4							
	e L	Z 16:25:32.5				20.0	2619		5.9
GRA1	e PKPdf	Z 15:32:56.7	123.1	56.7					
	e PP	Z 15:34:40.1							
	e L	Z 16:27:07.8				21.8	1556		5.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	15:33:30.9	42.370N	48.290E	33.0N	4.4	4.0		SZGRF
2001/06/05	15:33:26.8	42.412N	48.730E	33N	5.3			NEIC
Caspian Sea								

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

8

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:39:05.3	26.7	91.3			4.4		
	e	15:39:09.3							
	e (S)	Z 15:45:23.1							
	e L	Z 15:50:18.5			21.5	502		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	16:16:56.7	14.401S	167.337E	197?	4.6			NEIC

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 16:36:04.3	139.7	37.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	20:04: 4.2			N	4.9			SZGRF
2001/06/05	20:04:44.7	29.088N	128.848E	167*	4.6			NEIC

Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:16:58.2	83.8	51.2			4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/05	21:46:55.1	15.329S	167.777E	33N	4.7			NEIC

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 22:06:23.3	140.7	37.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/06	06:55:37.7	20.128S	174.059W	33N	4.5			NEIC

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 07:15:27.0	150.1	10.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/06	08:50: 4.7			N	4.1			SZGRF
2001/06/06	08:49:45.7	71.066N	13.194W	10G	3.8			NEIC

Jan Mayen Island region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:55:03.7	24.2	340.9			4.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/06	14:00:40.2	36.030N	22.368E	10G	4.9			NEIC

Southern Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:04:24.0	15.9	145.2					
	e	14:04:30.2							
	e S	Z 14:07:27.5							
	e L	Z 14:11:27.6			19.2	526		3.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/06	23:18:52.2				4.8	4.0		SZGRF
2001/06/06	23:18:55.4	17.680N	60.458W	43D	4.4	4.0		NEIC

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:29:32.5	64.8	268.0			4.8		
	e (pP)	Z 23:29:45.0							
	e L	Z 23:57:14.4			19.3	84		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/07	07:03:20.3	51.920N	178.590W	33.0N	5.1	4.1		SZGRF
2001/06/07	07:03:16.9	51.456N	178.934W	65	4.9			NEIC

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 07:15:16.1	78.5	6.4			5.1		
	e L	Z 07:52:48.9			18.6	94		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/07	07:24:43.4	20.291S	177.461W	500G	4.4			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 07:43:40.4	149.8	16.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/07	09:15:57.2				4.5	4.0		SZGRF
2001/06/07	09:16:19.6	0.856N	27.806W	10G	4.9	4.2		NEIC

South Atlantic Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:26:21.7	59.1	227.2			4.5		
	e pP	Z 09:26:28.7							
	e S	Z 09:34:29.2							
	e L	Z 09:49:05.1			20.4	99		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/07	18:03:31.6	24.826N	99.059E	33N	4.6	4.4		NEIC

Yunnan, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:14:47.5	70.0	74.9			4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/07	19:04:34.2	20.751S	179.066W	600G	4.4			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 19:23:19.5	149.9	19.5					
	e PKPab	Z 19:23:28.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/08	15:08:29.9			G				SZGRF
2001/06/08	15:08:19.4	35.882N	22.369E	10G				NEIC

Southern Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 15:11:45.6	14.4	150.7	2.1	34			
WET	e P	Z 15:11:51.7	15.0	148.8	1.1	10			
GRA1	e P	Z 15:12:10.7	16.0	145.4	2.0	92			
BRG	e P	Z 15:12:08.4	16.2	154.8	1.1	8			
BFO	e P	Z 15:12:15.3	16.2	135.1	1.4	29			
MOX	e P	Z 15:12:15.5	16.7	148.2	1.6	16			
CLL	e P	Z 15:12:17.7	16.8	152.9	1.4	26			
TNS	e P	Z 15:12:26.5	17.5	139.6	1.2	32			
WLF	e P	Z 15:12:36.7	18.1	133.4	1.4	32			
BSEG	e P	Z 15:12:54.9	19.9	150.2	1.1	42			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/08	15:07: 7.7	9.800N	93.320E	33.0N	4.9			SZGRF
2001/06/08	15:07:03.8	10.891N	92.381E	33N	4.9	4.1		NEIC

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:19:00.1	76.0	89.6	1.1	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/08	21:56:21.3	73.320N	10.240E	33.0N	5.1			SZGRF
2001/06/08	21:56:22.9	72.690N	7.120E	10G	4.7			NEIC

Norwegian Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:01:30.1	23.1	356.9	2.0	119	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/08								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (P)	Z 23:27:41.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/09	01:27:35.5	37.080N	22.480E	33.0N	4.4			SZGRF
2001/06/09	01:28:24.9	36.197N	22.976E	10G	4.5			NEIC

Southern Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 01:31:51.8	14.4	148.4					
FUR	e P	Z 01:32:00.9	14.7	140.0					
WET	e P	Z 01:32:02.4	14.9	146.6					
GRA1	e P	Z 01:32:15.0	16.0	143.3					
BRG	e P	Z 01:32:15.7	16.0	152.7	0.9	20			
BFO	e P	Z 01:32:16.2	16.2	133.0	1.2	18			
MOX	e P	Z 01:32:22.2	16.6	146.2					
CLL	e P	Z 01:32:22.6	16.7	150.9	0.9	33	4.5		
TNS	e P	Z 01:32:31.5	17.5	137.7					
RUE	e P	Z 01:32:31.9	17.5	154.6	0.7	20	4.4		
BSEG	e P	Z 01:32:56.3	19.8	148.5	1.0	21	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (P)	Z 04:25:28.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/09	08:22:39.1	5.119S	152.803E	10G	5.4	5.4		NEIC
New Britain, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPdf	Z 08:41:38.0			0.9	12			
	e PP	Z 08:43:22.6							
	e PS	Z 08:52:57.1							
	e PPS	Z 08:54:25.9							
	e SS	Z 09:00:03.7							
	e L	Z 09:39:53.2							
GRA1	e PKPdf	Z 08:41:41.7	124.9	49.0		557		5.2	
	e	08:41:54.2							
	e	08:42:02.7							
	e PP	Z 08:43:37.4							
	e	08:54:54.4							
	e SS	N 09:00:55.9							
	e L	Z 09:41:36.3			19.9	578		5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 13:08:24.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:46:45.1	61.1	237.1	1.1	11	4.6		
	e	01:46:49.0							
	e	01:46:53.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10	01:51:20.1	36.840N	60.330E	33.0N	5.0	4.6		SZGRF
2001/06/10	01:52:08.0	39.865N	53.887E	34D	5.5	5.2		NEIC

Iran-Turkmenistan border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:58:28.8	31.4	91.7			5.0		
	e S	N 02:03:44.6							
	e L	Z 02:12:48.4			20.7	1043		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10	11:25:35.1	6.504S	154.898E	52?	5.4	4.9		NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 11:44:35.5	127.2	47.6					
	e PP	Z 11:46:41.0							
	e	11:58:22.9							
	e L	Z 12:43:24.6			21.7	125		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10	13:10: 7.7	38.200N	24.710E	33.0N		4.8		SZGRF
2001/06/10	13:11:04.2	38.589N	25.634E	33N	5.3	5.1		NEIC

Aegean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 13:14:16.7	13.4	135.7	1.5	234			
WET	e P	Z 13:14:25.0	14.0	134.3	1.6	185			
FUR	e P	Z 13:14:26.3	14.1	127.4	1.0	165			
BRG	e P	Z 13:14:35.5	14.8	141.6	1.9	302			
GRA1	e P	Z 13:14:39.3	15.1	131.8	1.6	320			
	e S	N 13:17:34.6							
	e L	Z 13:20:15.5			19.1	7514		4.8	
CLL	e P	Z 13:14:46.0	15.5	140.2	1.6	219			
STU	e P	Z 13:14:45.5	15.6	124.6	9.6	77006			
MOX	e P	Z 13:14:47.0	15.6	135.2	2.4	779			
BFO	e P	Z 13:14:48.5	15.8	121.6					
RUE	e P	Z 13:14:54.0	16.1	144.7					
	e S	N 13:17:52.3							
TNS	e P	Z 13:15:03.3	16.8	127.1					
CLZ	e P	Z 13:15:04.5	17.0	135.3					
	e S	N 13:18:09.3							
WLF	e P	Z 13:15:14.5	17.7	121.2					
RGN	e P	Z 13:15:21.8	18.0	147.4					
	e S	N 13:18:31.9							

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

14

IBBN	e P	Z	13:15:20.9	18.5	130.8	2.1	845
	e S	N	13:18:51.9				
BSEG	e P	Z	13:15:20.8	18.6	139.6	2.0	569
	e S	N	13:18:46.5				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10	13:19:17.2	47.940N	124.230W	45.7	4.7			SZGRF
2001/06/10	13:19:11.2	47.167N	123.503W	41	4.7			NEIC

Near coast of Washington, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:30:54.4	75.5	330.1			4.7		
	e pP	Z 13:31:07.1							
	e sP	Z 13:31:13.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/10	15:18:29.3	4.072N	126.378E	57D	5.5			NEIC

Talau Islands, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z 15:32:22.2	102.7	67.8					
	e L	Z 16:22:16.7			22.0	134		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/11	00:30:46.6	34.010N	24.370E	10.0G	4.2	3.3		SZGRF
2001/06/11	00:30:56.0	34.833N	23.113E	10G	4.3			NEIC

Crete, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 00:34:39.0	15.6	150.1	1.9	25	4.0		
	e L	Z 00:41:54.6			21.2	214		3.3	
FUR	e P	Z 00:34:43.5	16.0	142.3	0.9	32	4.5		
WET	e P	Z 00:34:49.1	16.2	148.4	1.3	13	3.9		
GRA1	e P	Z 00:35:01.3	17.2	145.2	1.6	42	4.3		
	e L	Z 00:42:57.9			20.9	113		3.1	
BRG	e P	Z 00:35:01.0	17.4	154.0	2.2	42	4.2		
	e	00:38:18.2							
MOX	e P	Z 00:35:08.0	17.9	147.8	0.8	5	3.8		
CLL	e P	Z 00:35:08.9	18.0	152.2	0.7	11	4.2		
TNS	e P	Z 00:35:19.0	18.7	139.7	0.9	8	4.0		
	e	00:38:52.2							
	e L	Z 00:44:00.8			19.2	248		3.6	
BSEG	e P	Z 00:35:41.9	21.1	149.7	0.7	22	4.7		

e		00:39:44.7									
e L	Z	00:45:12.3			19.8		158			3.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/11	00:42:10.0	6.516S	154.947E	33N	5.2			NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 01:01:12.9	127.2	47.6					
	e PP	Z 01:03:18.8							
	e	01:14:51.0							
	e L	Z 02:00:01.8			20.9	84		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/11	04:22:48.0	37.460N	140.860E	33.0N	4.8			SZGRF
2001/06/11	04:22:38.4	36.335N	141.474E	33N	4.7			NEIC

Eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:35:06.0	83.4	38.2	1.2	9	4.8		
	e	04:35:21.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/11	05:04:37.3	18.989S	168.752E	33N	4.7			NEIC

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:24:10.3	144.4	38.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/11	06:04:04.9	18.908S	174.930W	154D	4.4			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 06:23:36.3	148.8	11.3					
	e	06:23:41.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/12	12:40:59.0			N				SZGRF

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

16

2001/06/12 12:41:01.5
Southern India

22.222N 83.894E 33N 4.8 NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:51:26.6	62.2	87.8					

Date Origin Time
2001/06/12 13:43:48.4
Egypt

Lat Long Depth mb Ms ML Source
31.640N 31.900E 33.0G 4.5 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 13:48:39.8	22.0	134.8	1.2	13	4.2		
WET	e P	Z 13:48:44.2	22.6	133.7	0.9	6	4.1		
FUR	e P	Z 13:48:46.1	22.7	129.1	0.6	29	5.0		
BRG	e P	Z 13:48:54.0	23.4	138.6	0.9	6	4.1		
GRA1	e P	Z 13:48:56.2	23.8	131.7	0.9	8	4.3		
CLL	e P	Z 13:49:00.1	24.1	137.5	0.9	17	4.6		
STU	e P	Z 13:49:01.0	24.2	126.7	0.7	29	4.9		
MOX	e P	Z 13:49:00.8	24.2	134.0	0.8	14	4.6		
BFO	e P	Z 13:49:03.9	24.4	124.5	0.9	5	4.1		
CLZ	e P	Z 13:49:15.2	25.6	133.7	1.2	10	4.3		
BSEG	e P	Z 13:49:26.6	27.1	136.6	0.9	17	4.8		

Date Origin Time
2001/06/12 14:14: 2.5
2001/06/12 14:14:40.3
North Atlantic Ocean

Lat Long Depth mb Ms ML Source
9.430N 48.600W 33.0N 5.0 SZGRF
14.623N 44.994W 10G 4.9 4.2 NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:24:30.0	57.3	252.9			5.0		
	e	14:24:36.4							

Date Origin Time
2001/06/12 14:21:23.8
2001/06/12 14:22:15.9
North Atlantic Ocean

Lat Long Depth mb Ms ML Source
7.100N 49.300W 33.0N 5.5 4.5 SZGRF
14.540N 45.014W 10G 5.3 4.6 NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:32:06.0	57.4	252.9			5.5		
	e	14:32:12.4							
	e S	N 14:40:08.0							
	e L	Z 14:51:36.3			20.9	335		4.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/12	14:25:24.0	12.600N	46.340W	33.0N	4.9			SZGRF
2001/06/12	14:25:35.5	14.657N	45.129W	10G	4.9			NEIC

Northern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:35:25.4	57.3	253.1			4.9		
	e	14:35:31.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/12	22:26:44.6	17.860S	178.574W	600G	4.6			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 22:45:18.7	147.2	17.4					
	e PKPbc	Z 22:45:22.8							
	e PKPab	Z 22:45:26.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/12	22:41:42.3	46.500N	148.420E	33.0N	5.6	4.9		SZGRF
2001/06/12	22:41:28.2	44.318N	148.539E	33N	5.5	4.7		NEIC

Northwest of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	- Z 22:53:20.5			0.8	77	5.9		
	e pP	Z 22:53:32.0							
	e	22:54:52.2							
	e PP	Z 22:56:25.1							
	e S	Z 23:03:04.9							
	e SS	Z 23:08:38.5							
	e L	Z 23:31:27.5			18.0	1018		5.2	
GRA1	e P	- Z 22:53:31.8	78.9	29.6	1.0	52	5.6		
	e S	N 23:03:25.9							
	e SS	N 23:09:05.7							
	e L	Z 23:33:09.3			18.6	505		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	02:15:21.7	45.700N	155.480E	33.0N	4.9			SZGRF
2001/06/13	02:15:36.9	45.729N	149.973E	114D	5.0			NEIC

East of Kuril Islands, Russia

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

18

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:27:26.4	78.1	28.1	0.9	13	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	03:49:29.8	18.875S	172.986W	33N	5.1			NEIC
Tonga Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 04:09:10.7			0.9	28			
	e	04:11:04.1							
	e PP	Z 04:12:50.2							
	e SKSP	Z 04:23:05.3							
	e SS	E 04:31:33.5							
	e PSPS	N 04:32:41.9							
	e SSS	E 04:37:21.3							
	e LR	Z 04:59:21.4							
	e L	Z 05:18:15.4			22.0	557		5.3	
GRA1	e PKPbc	Z 04:09:16.0	149.0	7.7					
	e PP	Z 04:12:45.5							
	e L	Z 05:12:44.7			21.1	258		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	07:55: 5.7			N				SZGRF
2001/06/13	07:55:31.4	23.804N	95.195E	33N	4.3			NEIC
Myanmar								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:06:32.0	68.3	78.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	12:27:13.2	23.105S	179.115E	547D	4.6			NEIC
South of Fiji Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 12:45:56.4							
	i PKPbc	Z 12:46:02.7			0.9	113			
	e PKPab	Z 12:46:10.3							
	e	12:46:21.8							
	e pPKPdf	Z 12:48:08.7							
	e pPKPbc	Z 12:48:14.5							
	e sPKPbc	Z 12:49:08.7							
	e	13:04:08.2							
GRA1	e PKPdf	Z 12:46:00.1	151.8	24.1					

e PKPbc Z 12:46:07.3
 e PKPab Z 12:46:19.0
 e (pPKPdf) Z 12:48:15.2
 e pPKPbc Z 12:48:20.7
 e pPKPab Z 12:48:26.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	13:17:48.4	23.240N	122.020E	33.0N	5.8	4.7		SZGRF
2001/06/13	13:17:55.5	24.484N	122.400E	78D	5.7			NEIC

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e P	Z 13:30:01.5	80.5	60.7	0.8	55	5.8		
RUE	e P	Z 13:30:05.8	81.3	60.8	0.9	83	5.9		
BRG	e P	Z 13:30:09.3	82.0	60.7	1.1	40	5.5		
CLL	e P	Z 13:30:10.6	82.3	60.0	0.9	45	5.7		
BSEG	e P	Z 13:30:10.7	82.3	58.3	1.1	80	5.9		
GEC2	e P	Z 13:30:14.9	83.1	60.3	1.1	47	5.6		
MOX	e P	Z 13:30:16.1	83.4	58.9	1.3	44	5.5		
CLZ	e P	Z 13:30:16.5	83.4	58.1	1.1	80	5.9		
WET	e P	Z 13:30:16.6	83.4	59.7	1.5	72	5.7		
GRA1	e P	+ Z 13:30:19.9	84.1	58.6	1.8	157	5.9		
	e PP	Z 13:33:35.8							
	e S	N 13:40:23.2							
	e L	Z 14:15:55.3			21.9	311		4.7	
IBBN	e P	Z 13:30:22.1	84.5	56.2	1.1	113	5.9		
BUG	e P	Z 13:30:25.6	85.2	55.8	1.1	133	6.0		
TNS	e P	Z 13:30:25.9	85.3	56.6	1.0	45	5.5		
STU	e P	Z 13:30:27.8	85.7	57.0	1.7	108	5.7		
BFO	e P	Z 13:30:31.4	86.4	56.4	1.8	111	5.7		
WLF	e P	Z 13:30:33.8	86.8	54.8	0.9	94	6.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	17:10:46.1	4.546S	152.997E	55D	4.8			NEIC

New Ireland, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 17:29:41.6	124.5	48.5					
	e pPKPdf	Z 17:29:58.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/13	22:27:16.6	25.500N	122.040E	33.0N	5.4	4.5		SZGRF
2001/06/13	22:27:04.5	24.040N	123.426E	33N	5.0	4.7		NEIC

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:39:39.3	85.0	58.1	1.7	45	5.4		
	e PP	Z 22:42:59.9							
	e S	N 22:50:11.2							
	e SS	N 22:56:37.5							
	e	23:00:26.9							
	e L	Z 23:23:35.5							

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/14 00:15:54.5 N SZGRF
 Southern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:28:46.6							

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/14 02:35:27.6 24.940N 122.790E 33.0N 5.4 6.0 SZGRF
 2001/06/14 02:35:25.6 24.489N 121.992E 33N 5.9 5.6 NEIC
 Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML							
CLA	i P	Z 02:47:44.8	83.8	58.9	1.6	46	5.4									
	e	02:48:01.5														
	e	02:48:10.6														
	e PP	Z 02:50:57.7														
	e S	Z 02:57:58.4														
	e SS	Z 03:03:39.5														
	i PKKPbc	Z 03:06:13.8														
	e SSS	Z 03:08:01.1														
	e L	Z 03:28:24.4								18.0	8698	6.2				
	GRA1	e P								Z 02:47:54.6						
	e PcP	Z 02:47:59.5														
	e	02:48:08.0														
	e	02:48:11.7														
	e PP	Z 02:51:09.7														
	e S	N 02:58:16.2														
e SS	N 03:03:47.3															
e	03:08:16.2															
e L	Z 03:29:29.2	20.3	6682	6.0												

Date Origin Time Lat Long Depth mb Ms ML Source

2001/06/14 02:47:49.3

N

SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (P)	Z 02:52:59.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	03:55:32.5	18.849S	173.463W	33N	4.8	5.3		NEIC
Tonga Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 04:15:20.1	148.9	8.6					
	e	04:15:39.4							
	e PP	Z 04:18:50.8							
	e SS	E 04:37:59.7							
	e L	Z 05:21:37.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	10:01:19.9	15.632S	172.882W	33N	4.5			NEIC
Samoa Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 10:20:57.0	145.8	7.0					
	e	10:21:07.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	12:27:05.0	21.842S	179.540W	609D	5.3			NEIC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
CLL	e PKPdf	Z 12:45:42.0	150.9	20.9						
	i PKPbc	Z 12:45:46.4								
	i PKPab	Z 12:45:53.6								
	e pPKPdf	Z 12:48:04.5								
	e pPKPbc	Z 12:48:08.3								
	e sPKPbc	Z 12:48:57.8								
	e PP	Z 12:49:20.6								
	e pPP	Z 12:51:24.7								
	e sPP	Z 12:52:24.8								
	e	12:58:47.5								
	e	13:02:28.4								
	GRA1	e PKPdf								Z 12:45:44.7
		e PKPbc								Z 12:45:51.3
		e PKPab								Z 12:46:02.7

e pPKPbc Z 12:48:14.2
 e pPKPab Z 12:48:17.9
 e sPKPbc Z 12:49:07.5
 e PP Z 12:49:33.0
 e sPP Z 12:52:30.4
 e 12:58:56.5
 e 13:02:41.6
 e SS E 13:07:42.8

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	13:39:29.2	50.830N	177.320E	33.0N	5.5	4.8		SZGRF
2001/06/14	13:39:26.8	51.342N	179.845W	33N	5.1	4.9		NEIC

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	Z 13:51:19.0			0.8	29	5.5		
	e	13:51:33.4							
	e PP	Z 13:53:49.6							
	e S	T 14:00:57.8							
	e SKSac	R 14:01:17.1							
	e SS	Z 14:06:06.3							
	e LR	Z 14:16:40.4							
	e L	Z 14:27:16.8			22.0	644		4.9	
GRA1	e P	Z 13:51:29.1	78.5	7.0	1.1	53	5.5		
	e	13:51:42.6							
	e S	N 14:01:29.3							
	e SS	N 14:06:51.4							
	e L	Z 14:37:04.4			18.2	393		4.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	14:24:56.6	51.380N	176.070E	33.0N	4.9			SZGRF
2001/06/14	14:24:49.8	51.061N	179.800W	33N	4.6	4.3		NEIC

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:36:52.7	78.8	7.0	0.9	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 15:28:17.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	16:43:0.1	48.200N	157.880E	33.0N	4.7			SZGRF

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:54:55.5	78.0	22.0	0.9	6	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	17:08:11.1	20.598S	178.361W	538D	5.1			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPdf	Z 17:26:52.3							
	i PKPbc	- Z 17:26:57.1			0.9	126			
	i PKPab	Z 17:27:01.8							
	e pPKPbc	Z 17:29:01.9							
	e sPKPbc	Z 17:29:52.3							
	e PP	Z 17:30:24.7							
	e SKSdf	Z 17:33:18.1							
GRA1	e PKPdf	Z 17:26:55.6	149.9	18.1					
	e PKPbc	Z 17:27:01.5							
	e PKPab	Z 17:27:09.8							
	e PP	Z 17:30:45.5							
	e SKSdf	E 17:33:26.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	19:32:18.7			N				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 19:52:10.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	19:48:54.9	51.400N	179.080E	33.0N	6.1	6.1		SZGRF
2001/06/14	19:48:47.9	51.207N	179.815W	18G	6.0	6.3		NEIC

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	i P	+ Z 20:00:24.6	73.7	8.5	1.5	1078	6.7		
BSEG	i P	+ Z 20:00:29.5	74.5	6.6	1.1	466	6.4		
RUE	i P	+ Z 20:00:35.5	75.7	8.7	1.4	365	6.3		

IBBN	i P	+ Z	20:00:39.6	76.3	4.9	1.0	660	6.7
CLZ	i P	+ Z	20:00:41.3	76.6	6.5	1.1	335	6.4
CLL	i P	+ Z	20:00:42.0	76.9	8.2	1.8	370	6.2
	e pP	Z	20:00:54.3					
	e PP	Z	20:03:37.2					
	e PPP	Z	20:05:33.8					
	e S	T	20:10:14.7					
	e SKSac	R	20:10:52.5					
	e SS	R	20:15:34.7					
	e LR	Z	20:26:11.6					
	e		20:28:08.7					
	e L	Z	20:39:35.3			20.0	15948	6.3
BUG	i P	+ Z	20:00:44.0	77.2	4.5	1.4	363	6.3
BRG	i P	+ Z	20:00:44.1	77.3	8.8	1.5	236	6.1
MOX	i P	+ Z	20:00:46.8	77.7	7.3	1.5	254	6.1
TNS	i P	+ Z	20:00:50.6	78.3	5.3	0.8	134	6.1
GRA1	i P	+ Z	20:00:52.5	78.7	7.0	1.6	387	6.2
	e PP	Z	20:03:51.0					
	e		20:05:51.4					
	e S	N	20:10:55.5					
	e SS	N	20:16:13.4					
	e PKPPKP	Z	20:27:46.0					
	e		20:31:04.7					
	e L	Z	20:42:03.3			21.4	9194	6.1
WLF	i P	+ Z	20:00:54.6	79.0	3.8	1.3	135	5.8
WET	i P	+ Z	20:00:54.6	79.1	8.1	1.4	124	5.7
GEC2	i P	+ Z	20:00:55.6	79.3	8.6	1.5	112	5.7
STU	i P	+ Z	20:00:58.0	79.7	5.7	1.3	213	5.9
FUR	i P	+ Z	20:01:00.6	80.2	7.0	1.2	252	6.0
BFO	i P	+ Z	20:01:00.4	80.2	5.2	1.6	274	5.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	20:01:37.3	50.300N	176.050E	33.0N	4.4			SZGRF
2001/06/14	20:01:37.1	51.065N	179.761W	33N	5.0			NEIC

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:13:39.3	78.8	7.0	0.8	3	4.4		
	e	20:13:52.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/14	23:31:29.1	18.871N	146.847E	33N	5.5	5.7		NEIC

Mariana Islands

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

CLL	i P	Z	23:45:07.5			1.4	17	5.6		
	e		23:45:20.4							
	e PP	Z	23:49:10.4							
	e SKSac	R	23:55:41.8							
	e Sdiff	T	23:56:34.3							
	e PS	R	23:58:02.2							
	e PPS	Z	23:59:03.3							
	e SS	T	00:03:28.3							
	e SSSS	Z	00:10:56.5							
	e LR	Z	00:20:20.7							
	e L	Z	00:33:03.1			18.0	3811	5.9		
GRA1	e Pdiff	Z	23:45:18.2	101.0	42.4					
	e PP	Z	23:49:26.4							
	e L	Z	00:34:26.5			20.6	1584	5.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/15 06:17:45.5 18.909N 146.990E 33N 5.3 5.9 NEIC
 Mariana Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e Pdiff	Z	06:31:26.6			1.6	23			
	e		06:31:36.7							
	e		06:32:41.2							
	e PP	Z	06:35:28.9							
	e PPP	Z	06:37:31.8							
	e SKSac	R	06:42:01.5							
	e Sdiff	T	06:42:53.2							
	e PS	Z	06:44:26.8							
	e PPS	Z	06:45:27.4							
	e SS	T	06:49:45.3							
	e SSSS	Z	06:57:39.8							
	e LQ	T	07:04:10.0							
	e LR	R	07:07:13.9							
	e L	Z	07:21:33.9			18.0	7204	6.2		
GRA1	e Pdiff	Z	06:31:33.5	101.0	42.2					
	e PP	Z	06:35:42.9							
	e L	Z	07:20:53.7			20.3	2661	5.7		

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/15 06:28:12.2 51.920N 178.240W 33.0N 5.1 SZGRF
 2001/06/15 06:28:04.9 51.070N 179.766W 33N 4.7 NEIC
 Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z	06:40:08.1	78.8	7.0			5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/15	10:38:03.2	1.421S	97.383E	33N	5.1			NEIC

Southwest of Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:50:55.4	88.6	93.8			5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/15	13:03:38.7	33.800N	20.930E	33.0N		3.1		SZGRF
2001/06/15	13:03:38.7	34.968N	23.019E	33N	4.3			NEIC

Central Mediterranean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:07:40.8	17.1	145.2					
	e (S)	Z 13:10:57.9							
	e L	Z 13:15:28.7			18.7	110		3.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/15	16:19:06.9	13.768N	51.710E	10G	5.7	5.6		NEIC

Eastern Gulf of Aden

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:27:51.2	48.8	123.0					
	e	16:27:53.4							
	e	16:27:58.0							
	e	16:28:02.5							
	e	16:28:04.2							
	e	16:29:35.2							
	e PP	Z 16:29:49.0							
	e	16:30:38.0							
	e S	Z 16:34:54.6							
	e	16:38:43.2							
	e L	Z 16:56:05.6			20.3	1823		5.1	
CLL	e P	Z 16:27:51.8			1.9	129	5.7		
	e	16:27:58.5							
	e	16:28:04.1							
	e PP	Z 16:29:48.8							
	e PPP	Z 16:30:35.8							
	e S	E 16:34:58.8							
	e SS	N 16:38:42.5							
	e LR	Z 16:43:07.7							
	e L	Z 16:52:56.4			20.0	3249		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/15	21:34:54.8	17.713S	178.349W	600G	4.7			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 21:53:29.8	147.1	17.0					
	i PKPbc	- Z 21:53:33.1							
	e PKPab	Z 21:53:36.8							
	e pPKPbc	Z 21:55:49.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/16	02:13:40.8	15.013S	173.386W	33N	5.6	5.7		NEIC

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKP	+ Z 02:33:12.3			1.0	21			
	e PP	Z 02:36:20.6							
	e PKS	Z 02:36:55.4							
	e SKSac	Z 02:40:20.7							
	e SKKSac	N 02:43:19.3							
	e Sdiff	T 02:44:58.8							
	e SS	T 02:55:04.1							
	e SSS	E 03:00:34.8							
	e LR	Z 03:21:24.2							
	e L	Z 03:43:44.2			20.0	2358		6.0	
GRA1	i PKP	+ Z 02:33:16.5	145.1	7.8					
	e PP	Z 02:36:52.2							
	e L	Z 03:38:44.6			21.3	1566		5.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/16	03:46:21.7	18.060N	102.860W	33.3	5.3	4.6		SZGRF
2001/06/16	03:46:20.6	18.176N	102.479W	46D	4.9	4.7		NEIC

Michoacan, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 03:59:22.1	90.5	299.5			5.3		
	e pP	Z 03:59:31.2							
	e sP	Z 03:59:36.5							
	e L	Z 04:39:33.1			21.0	234		4.6	

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

28

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/16	13:56:45.4	16.573S	178.782W	33N	4.7			NEIC

Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPdf)	Z 14:16:17.1	145.9	17.3					
	e PKPbc	Z 14:16:18.9							
	e PKPab	Z 14:16:21.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/16	17:31:46.7	25.346N	123.846E	155D	4.8			NEIC

Southwestern Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 17:44:03.2	68.1	79.5			5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/16	18:21:09.8	6.872S	146.396E	33N	4.7			NEIC

Eastern New Guinea, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 18:40:04.5	123.1	56.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	04:28:34.6	21.665S	179.165W	590D	4.4			NEIC

Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 04:47:12.5							
	i PKPbc	- Z 04:47:17.3			1.1	60			
	i PKPab	Z 04:47:23.9							
GRA1	e (PKPdf)	Z 04:47:15.5	150.8	20.1					
	i PKPbc	- Z 04:47:22.0							
	e PKPab	Z 04:47:32.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	05:27:23.3	4.041S	151.804E	250?	4.7			NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 05:45:52.6	123.5	49.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	08:18:22.3	37.796N	142.942E	33N	4.7	4.1		NEIC

Off east coast of Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:30:46.2	82.7	36.5			4.7		
	e L	Z 09:13:04.2			21.7	93		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	11:07:12.1	14.947S	178.012W	300G	4.2			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	- Z 11:26:12.6	144.4	15.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:27:55.7					4.1		
BEAM		11:27:55.7			0.8	3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	14:16:21.3	51.680N	171.340W	33.0N	4.4	4.1		SZGRF
2001/06/17	14:16:17.7	51.543N	175.391W	33N	4.7	4.1		NEIC

Fox Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:28:20.1	78.6	4.2			4.4		
	e L	Z 15:02:15.7			21.6	103		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/17	16:01:43.6			N	4.1			SZGRF

Southern India

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:11:39.5					4.1		
BEAM		16:11:39.5			1.4	3			

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/17 17:26: 7.7
 Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:39:06.4					4.8		
BEAM		17:39:06.4			1.0	5			
GRA1	e (pP)	Z 17:39:15.5							
	e L	Z 18:24:38.5			18.8	134		4.4	

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/18 12:28:37.5
 Mona Passage

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (P)	Z 12:40:03.5	69.6	274.4			4.9		

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/18

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPbc)	- Z 15:09:44.2							
	e (PKPab)	Z 15:09:52.5							

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/18 18:16:25.0 52.310N 159.520E 33.0N 5.0 3.6 SZGRF
 2001/06/18 18:16:30.9 52.640N 158.622E 90D 4.9 NEIC
 Off east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 18:28:00.7	74.0	19.9			5.0		
	e L	Z 18:59:51.1			21.0	32		3.6	

Date Origin Time Lat Long Depth mb Ms ML Source
 2001/06/18 19:56:57.3 23.996S 68.911W 89D 5.6 NEIC
 Northern Chile

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

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

31

GRA1	i Pdiff	+ Z	20:10:42.5	102.1	247.0				
	e pPdiff	Z	20:11:07.6						
	e PP	Z	20:14:51.2						
	e pPP	Z	20:15:14.5						
	e SKS	Z	20:21:21.3						
	e L	Z	20:50:12.7			29.2	660	5.0	
CLL	i Pdiff	+ Z	20:10:51.0			1.6	16		
	i pPdiff	Z	20:11:15.0						
	e PP	Z	20:15:08.5						
	e pPP	Z	20:15:27.6						
	e SKSac	R	20:21:28.7						
	e SP	Z	20:24:07.8						
	e SS	T	20:29:46.6						
	e LR	Z	20:46:53.4						
	e L	Z	20:52:34.5			18.0	595	5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/18	23:00:29.2	58.570N	33.830W	33.0N	4.9	3.7		SZGRF
2001/06/18	23:00:31.5	58.144N	32.177W	10G	4.7			NEIC

North Atlantic Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 23:06:10.8	26.4	305.3			4.9		
	e L	Z 23:15:37.9			21.5	221		3.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/18	23:31:08.6	20.096S	169.115E	31D	5.3	5.1		NEIC

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e (PKPdf)	Z 23:50:38.7	142.5	33.9					
BRG	e (PKPdf)	Z 23:50:38.5	143.6	41.6					
CLL	e PKPdf	Z 23:50:38.5	143.6	39.9					
CLZ	e (PKPdf)	Z 23:50:40.8	144.2	35.6					
MOX	e PKPdf	Z 23:50:42.4	144.7	38.4					
IBBN	e pPKPdf	Z 23:50:42.2	144.7	31.3					
GEC2	e pPKPdf	Z 23:50:43.9	145.2	43.1					
WET	e (PKPbc)	Z 23:50:44.6	145.3	41.7					
GRA1	e PKPbc	Z 23:50:45.9	145.6	38.7					
	e pPKPbc	Z 23:50:55.6							
	e	23:51:09.3							
	e	23:52:01.8							
	e PP	Z 23:54:08.3							
BUG	e (PKPbc)	Z 23:50:44.9	145.6	31.2					
FUR	e (PKPbc)	Z 23:50:48.7	146.7	40.2					

STU	e	(PKPbc)	Z	23:50:49.7	147.1	36.4					
WLF	e	(PKPbc)	Z	23:50:51.3	147.5	30.8					
BFO	e	(PKPbc)	Z	23:50:51.4	147.8	35.5					
RGN	e	L	Z	00:56:19.5	141.0	37.7	20.4	301		5.0	
RUE	e	L	Z	00:56:49.8	142.4	40.0	21.3	260		5.0	
BSEG	e	L	Z	00:53:41.7	142.5	33.9	21.5	637		5.3	
BRG	e	L	Z	00:53:19.0	143.6	41.6	21.9	339		5.1	
CLL	e	L	Z	00:55:29.9	143.6	39.9	22.0	329		5.1	
CLZ	e	L	Z	00:56:33.4	144.2	35.6	21.9	509		5.3	
MOX	e	L	Z	00:56:39.5	144.7	38.4	21.3	313		5.1	
IBBN	e	L	Z	00:55:54.3	144.7	31.3	21.5	683		5.4	
GEC2	e	L	Z	00:59:22.6	145.2	43.1	21.4	312		5.1	
WET	e	L	Z	01:00:03.5	145.3	41.7	19.8	307		5.1	
GRA1	e	L	Z	00:56:15.6	145.6	38.7	21.0	200		4.9	
GRFO	e	L	Z	00:56:15.2	145.6	38.7	21.0	228		4.9	
BUG	e	L	Z	00:56:10.3	145.6	31.2	21.9	592		5.3	
TNS	e	L	Z	00:54:36.5	146.2	34.0	21.9	386		5.1	
FUR	e	L	Z	00:57:25.6	146.7	40.2	21.1	279		5.0	
STU	e	L	Z	00:54:38.1	147.1	36.4	22.0	162		4.8	
WLF	e	L	Z	00:56:35.2	147.5	30.8	21.7	291		5.0	
BFO	e	L	Z	00:54:33.9	147.8	35.5	21.0	216		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	02:41:58.3	40.860N	72.140E	33.0N	4.6	4.1		SZGRF
2001/06/19	02:41:40.6	39.625N	72.823E	33N	4.7			NEIC

Kyrgyzstan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:49:51.2	43.7	78.9	1.4	16	4.6		
	e L	Z 03:09:14.3			18.7	224		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 03:42:07.6							
	e	03:42:09.4							
	e	03:42:18.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	05:16:14.8	22.400N	122.830E	33.0N	5.3	5.0		SZGRF
2001/06/19	05:16:19.2	23.072N	121.050E	33N	4.8	4.8		NEIC

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:28:52.1	84.4	60.4			5.3		
	e (S)	Z 05:39:17.6							
	e L	Z 06:10:09.4			20.1	647		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	05:43:41.6	23.123N	121.206E	33N	5.1	4.7		NEIC

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 05:56:14.7	84.5	60.3			5.3		
	e pP	Z 05:56:20.8							
	e L	Z 06:35:57.0			21.0	272		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	06:57:04.8	9.243S	157.787E	33N	5.4	4.9		NEIC

Bougainville - Solomon Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 07:16:15.4	130.9	46.1					
	e L	Z 08:18:24.0			21.0	158		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPab)	Z 09:00:31.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	09:32:25.3	22.667S	67.872W	150D	5.6			NEIC

Chile-Bolivia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z 09:45:54.9	100.4	247.1					
	e pPdiff	Z 09:46:34.1							
	e PP	Z 09:49:59.2							
	e L	Z 10:30:16.1			20.0	630		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 13:38:00.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/19	23:05:51.1	17.317S	179.029W	600G	4.2			NEIC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 23:24:28.3	146.6	18.0					
	e PKPab	Z 23:24:31.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/20	00:04:29.5	44.390N	151.270E	33.0N	5.3	5.7		SZGRF
2001/06/20	00:04:30.9	45.628N	151.977E	33N	5.3	5.4		NEIC
East of Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	+ Z 00:16:22.5			1.2	124	5.8		
	e	00:16:51.2							
	e PP	Z 00:19:13.9							
	e PPP	Z 00:21:07.6							
	e S	E 00:26:08.9							
	e PS	N 00:26:44.7							
	e (SS)	N 00:31:41.2							
	e SSS	N 00:34:45.0							
	e LR	Z 00:41:07.3							
	e L	Z 00:57:48.8			18.0	5371		5.9	
GRA1	i P	+ Z 00:16:34.2	78.8	26.8	0.7	31	5.3		
	e PP	Z 00:19:35.1							
	e S	N 00:26:19.6							
	e SS	E 00:32:29.8							
	e L	Z 00:54:55.2			19.7	3697		5.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/20	00:26:55.8	44.850N	153.560E	33.0N	5.4			SZGRF
2001/06/20	00:26:59.9	45.801N	151.671E	33N	4.8			NEIC
East of Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:39:01.9	78.5	26.9	2.0	100	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/20	01:18: 7.5	45.230N	152.560E	33.0N	4.9			SZGRF
2001/06/20	01:18:07.2	45.634N	151.840E	33N	4.7			NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 01:30:10.2	78.7	26.9	1.1	18	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/20	01:55:49.9	30.100S	64.280E	33.0N	5.1			SZGRF

South Indian Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:08:58.6	92.6	136.2	1.2	11	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/20	02:37:46.4	45.410N	150.900E	33.0N	5.2	4.4		SZGRF
2001/06/20	02:37:41.8	45.673N	151.769E	33N	4.8			NEIC

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 02:49:45.5	78.7	26.9	1.5	39	5.2		
	e L	Z 03:28:04.4			20.1	174		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/21	02:24:10.3	44.960N	151.210E	53.9	5.7	4.9		SZGRF
2001/06/21	02:24:06.0	45.710N	151.858E	33N	5.1	4.7		NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 02:36:09.3	78.7	26.9	1.8	154	5.7		
	i pP	- Z 02:36:24.6							
	e S	N 02:46:11.6							
	e L	Z 03:14:28.9			19.4	532		4.9	
GRB1	e SS	Z 02:52:02.7	78.8	27.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/21	11:02: 6.0	17.460S	14.060W	36.8	5.6	4.7		SZGRF

GRA1	e PKP	Z	23:56:35.1
	e		23:56:39.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/22	07:16:05.8	18.866S	173.258W	33N	4.8			NEIC
Tonga Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z	07:35:52.7	149.0	8.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/22	11:54:48.5	39.354N	27.735E	5	4.6			NEIC
Turkey								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	11:58:10.7	13.8	128.2					
	e L	Z	12:03:47.1			20.8	1427		4.0	
WET	e P	Z	11:58:18.4	14.4	127.2					
	e L	Z	12:04:06.2			20.7	1922		4.2	
BRG	e P	Z	11:58:26.4	15.0	134.7					
	e L	Z	12:05:47.0			21.5	1706		4.1	
GRA1	e P	Z	11:58:33.2	15.6	125.2					
	e S	Z	12:01:48.2							
	e L	Z	12:04:53.0			19.7	1664		4.2	
CLL	e P	Z	11:58:35.7	15.8	133.6					
	e L	Z	12:06:17.5			18.9	2160		4.3	
MOX	e P	Z	11:58:40.5	16.0	128.7					
	e L	Z	12:05:25.1			19.5	1016		4.0	
BFO	e P	Z	11:58:48.2	16.6	115.6					
	e L	Z	12:05:48.8			21.5	1478		4.2	
CLZ	e P	Z	11:58:55.6	17.3	129.2					
	e L	Z	12:05:56.0			19.7	1160		4.1	
TNS	e P	Z	11:58:59.2	17.4	121.3					
	e L	Z	12:06:53.6			18.2	2098		4.4	
WLF	e P	Z	11:59:10.1	18.4	115.8					
BUG	e P	Z	11:59:13.6	18.7	122.3					
	e L	Z	12:07:36.2			19.6	1708		4.3	
BSEG	e P	Z	11:59:12.2	18.8	133.9					
	e L	Z	12:06:54.8			19.0	988		4.1	
IBBN	e P	Z	11:59:14.9	18.9	125.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/22	23:37:42.3	6.400N	95.630E	33.0N	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z	23:49:56.8	81.5	90.1	0.9	10	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	00:16:30.8	46.110N	153.070E	33.0N	5.0			SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z	00:28:29.9	78.6	25.9	0.8	12	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	02:48:35.7	29.420N	105.530E	33N	4.8			NEIC

Sichuan, China

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	02:59:51.6	70.6	67.1			4.9		
	e L	Z	03:32:36.4			21.5	211		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	06:52:41.9	35.711N	28.015E	33N	5.3	5.0		NEIC

Dodecanese Islands, Greece

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	06:56:39.7	16.8	136.1					
	e L	Z	07:04:42.6			19.9	2814		4.5	
WET	e P	Z	06:56:46.3	17.4	134.9					
	e L	Z	07:05:30.0			18.3	5327		4.8	
FUR	e P	Z	06:56:46.9	17.5	129.1					
	e L	Z	07:05:46.6			18.7	2437		4.5	
BRG	e P	Z	06:56:55.5	18.2	140.9					
	e L	Z	07:05:42.9			19.3	3345		4.6	
GRA1	e P	Z	06:56:58.9	18.6	132.5					
	e S	Z	07:00:26.1							
	e PcS	Z	07:04:58.1							
	e L	Z	07:04:59.0			18.5	2846		4.6	
CLL	e P	Z	06:57:03.1	18.9	139.6					
	e L	Z	07:05:12.2			21.6	4014		4.7	
STU	e P	Z	06:57:04.7	19.0	126.4					
	e L	Z	07:05:47.5			19.5	3068		4.6	
MOX	e P	Z	06:57:04.3	19.0	135.4					
	e L	Z	07:06:21.5			21.6	3598		4.6	

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

39

BFO	e P	Z	06:57:07.4	19.2	123.8						
	e L	Z	07:05:43.9			20.1	2924		4.6		
TNS	e P	Z	06:57:17.1	20.3	128.3						
	e L	Z	07:06:31.9			18.3	2944		4.7		
CLZ	e P	Z	06:57:18.6	20.4	135.2						
	e L	Z	07:07:05.5			18.2	3450		4.7		
WLF	e P	Z	06:57:26.8	21.1	123.0						
	e L	Z	07:06:42.1			21.9	1716		4.4		
BUG	e P	Z	06:57:30.8	21.6	128.6						
IBBN	e P	Z	06:57:35.1	21.9	131.2						
	e L	Z	07:07:42.6			20.6	2906		4.7		
BSEG	e P	Z	06:57:35.9	22.0	138.8						
	e L	Z	07:06:58.4			21.6	2521		4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	12:18:20.5	39.329N	27.775E	5G				NEIC

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:22:03.6	15.6	125.2					
	e (pP)	Z 12:22:10.3							
	e (sP)	Z 12:22:14.9							
	e L	Z 12:28:43.9			18.8	949		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 13:01:43.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	14:34:18.7	1.404N	125.557E	70D	5.6			NEIC

Northern Molucca Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i Pdiff	- Z 14:48:11.3			1.9	53			
	e pPdiff	Z 14:48:31.2							
	e PP	Z 14:52:24.8							
	e PPP	Z 14:54:43.4							
	e PS	Z 15:01:28.1							
	e LR	Z 15:25:28.8							
	e L	Z 15:36:22.9			22.0	455		5.0	
GRA1	e Pdiff	Z 14:48:18.5	104.3	70.1					

e PP	Z	14:52:39.4									
e L	Z	15:40:31.7			21.3		342			4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	16:08: 8.1			N	4.8			SZGRF
Red Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 16:15:04.4					4.8		
ALIGN		16:15:04.4			1.2	20			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	16:25:25.5			N	4.5			SZGRF
South Indian Ocean								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:37:13.7					4.5		
BEAM		16:37:13.7			1.2	5			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	16:51:14.2	55.040N	159.480W	38.5	5.7	5.0		SZGRF
2001/06/23	16:51:08.8	55.103N	159.349W	32D	5.1	5.1		NEIC
Alaska Peninsula, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	+ Z 17:02:42.1			1.5	55	5.4		
	e pP	Z 17:02:54.2							
	e S	E 17:12:08.7							
	e SS	Z 17:16:48.5							
	e SSS	Z 17:20:55.7							
	e LR	Z 17:26:39.4							
	e L	Z 17:37:55.1			20.0	703		4.9	
GRA1	i P	+ Z 17:02:51.9	74.9	354.4	1.9	143	5.7		
	e pP	Z 17:03:02.4							
	e (sP)	Z 17:03:08.1							
	e L	Z 17:44:37.2			19.8	753		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	20:33:14.2	16.224S	73.604W	33N	6.6	8.2		NEIC
Near coast of Peru								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	i P	+ Z	20:46:38.2	95.9	251.8					
BFO	i P	+ Z	20:46:41.9	96.8	253.2					
TNS	i P	+ Z	20:46:45.4	97.5	253.5					
STU	i P	+ Z	20:46:45.4	97.5	253.9					
IBBN	i P	+ Z	20:46:46.2	97.6	253.3					
FUR	i P	+ Z	20:46:50.9	98.7	255.3					
GRA1	i P	+ Z	20:46:52.9	99.0	255.5					
	e		20:47:31.1							
	e (PP)	Z	20:51:28.7							
	e L	Z	21:32:29.1			20.8	606598		8.1	
CLZ	i P	+ Z	20:46:52.7	99.1	255.2					
MOX	i P	+ Z	20:46:55.0	99.5	256.0					
BSEG	i P	+ Z	20:46:54.9	99.6	255.5					
WET	i P	+ Z	20:46:56.7	99.9	256.7					
GEC2	i P	+ Z	20:46:58.5	100.4	257.2					
CLL	i P	+ Z	20:46:59.0			1.6	350			
	e		20:47:39.2							
	e PP	Z	20:50:58.4							
	e SKSac	R	20:57:33.4							
	e Sdiff	T	20:58:29.7							
	e PS	T	21:00:07.4							
	e PPS	R	21:01:41.0							
	e SS	T	21:05:23.9							
	e P'P'	Z	21:12:34.0							
	e LR	Z	21:22:29.0							
	e L	Z	21:29:56.8			22.0	1377695		8.4	
BRG	i P	+ Z	20:47:01.7	101.0	257.8					

Date Origin Time Lat Long Depth mb Ms ML Source

2001/06/23

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z	21:09:55.5							

Date Origin Time Lat Long Depth mb Ms ML Source

2001/06/23

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	21:19:18.5							

Date Origin Time Lat Long Depth mb Ms ML Source

2001/06/23

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:41:15.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:08:33.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
1970/07/20	22:24:39.16	16.50S	73.24W	33N	5.5			NEIC
Near coast of Peru								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	+ Z 22:38:19.5							
	e pPdiff	Z 22:38:30.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	22:32:54.2			N				SZGRF
2001/06/23	22:32:36.5	17.505S	72.347W	33N	5.4			NEIC
Central Peru								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:46:17.5	99.2	253.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	23:10:01.4	16.692S	73.477W	33N	5.9	7.2		NEIC
Near coast of Peru								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i Pdiff	+ Z 23:23:42.0	99.3	255.1					
	e PP	Z 23:27:32.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	23:45: 2.2							SZGRF
2001/06/23	23:44:55.7	16.830S	73.700W	33N	5.4			NEIC
Near coast of Peru								

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

43

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pdiff	Z 23:58:37.0	99.6	255.2					
	e (pPdiff)	Z 23:58:46.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/23	23:49:52.0							SZGRF
2001/06/23	23:49:13.7	17.862S	71.574W	33N	5.6			NEIC

Peru-Bolivia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 00:02:52.3	99.0	253.0					
	e (pP)	Z 00:03:10.7							
	e sP	Z 00:03:16.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	00:15:24.9							SZGRF
2001/06/24	00:14:41.7	16.660S	73.952W	33N	5.3			NEIC

Northern Bolivia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:28:23.0	99.6	255.5					
	e (pP)	Z 00:28:32.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	01:22:53.4	17.561S	71.916W	33N	5.4	5.5		NEIC

Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 01:36:32.1	99.0	253.4					
	e pP	Z 01:36:44.9							
	e sP	Z 01:36:51.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	02:12: 4.8	12.480S	69.390W	46.5				SZGRF
2001/06/24	02:11:34.8	17.214S	72.615W	33N	5.1			NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:25:15.6	99.2	254.1					
	e pP	Z 02:25:28.1							
	e sP	Z 02:25:36.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	02:31:13.3							SZGRF
2001/06/24	02:31:06.2	17.687S	71.419W	33N	5.3			NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:44:43.1	98.8	253.0					
	e (pP)	Z 02:44:56.2							
	e PP	Z 02:48:39.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	06:08:40.1							SZGRF
2001/06/24	06:08:25.5	16.400S	73.134W	33N	4.9			NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 06:22:04.3	98.9	255.1					
	e pP	Z 06:22:13.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/24	13:18:59.2	45.220N	149.020E	85.0	6.7	6.0		SZGRF
2001/06/24	13:18:51.6	44.177N	148.504E	33N	5.8	5.7		NEIC

Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	i P	+ Z 13:30:36.1	75.6	29.6					
	e L	Z 14:07:22.3			18.6	7050		6.0	
CLL	i P	+ Z 13:30:44.6			0.8	565	6.7		
	e pP	Z 13:30:58.9							
	e sP	Z 13:31:05.1							
	e PP	Z 13:33:39.7							
	e PPP	Z 13:35:27.2							
	e S	E 13:40:26.8							
	e PS	N 13:41:10.2							
	e SS	N 13:45:32.5							
	e L	Z 14:08:46.9			18.0	11038		6.2	
BRG	i P	+ Z 13:30:44.5	77.1	31.6					
	e L	Z 14:08:48.2			18.9	9906		6.1	
CLZ	i P	+ Z 13:30:46.5	77.4	29.4					
	e L	Z 14:07:57.0			21.8	5321		5.8	
IBBN	i P	+ Z 13:30:48.3	77.8	27.7					
	e L	Z 14:07:44.1			22.0	6380		5.9	

MOX	i P	+ Z	13:30:50.0	78.1	30.1						
	e L	Z	14:09:48.2			18.5	8716		6.1		
BUG	i P	+ Z	13:30:53.1	78.7	27.3						
	e L	Z	14:10:05.9			18.6	7894		6.1		
GEC2	e P	Z	13:30:54.9	78.9	31.2						
	e L	Z	14:09:38.7			19.0	7442		6.0		
WET	i P	+ Z	13:30:55.3	78.9	30.7						
	e L	Z	14:10:06.1			18.6	10632		6.2		
GRA1	e P	+ Z	13:30:56.1	79.0	29.7	1.0	733	6.7			
	i pP	- Z	13:31:18.4								
	e S	Z	13:40:49.5								
	e L	Z	14:10:28.8			18.2	7982		6.1		
GRFO	e P	Z	13:30:55.9	79.0	29.7						
GRB1	e P	Z	13:30:56.3	79.1	30.0						
TNS	e P	Z	13:30:57.4	79.4	27.9						
	e L	Z	14:09:08.2			21.5	5097		5.8		
GRC1	e P	Z	13:30:58.1	79.5	29.8						
FUR	e P	Z	13:31:02.4	80.3	29.6						
	e L	Z	14:08:40.8			21.6	6265		5.9		
STU	e P	Z	13:31:03.0	80.5	28.3						
	e L	Z	14:14:31.4			19.2	3501		5.7		
WLF	e P	Z	13:31:03.9	80.6	26.4						
	e L	Z	14:11:34.7			19.4	5184		5.9		
BFO	e P	Z	13:31:06.5	81.1	27.7						
	e L	Z	14:08:51.1			21.9	2567		5.5		

Date 2001/06/24
Origin Time 13:31:43.3
Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:45:00.4							
	e pP	Z 13:45:10.8							

Date 2001/06/24
Origin Time 13:57:32.4
Peru-Bolivia border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:10:51.4							

Date 2001/06/24
Origin Time 14:32:50.3

Lat Long Depth mb Ms ML Source
SZGRF

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

46

2001/06/24 14:32:46.0
Southern Peru

16.798S 72.410W 33N 5.3 NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:46:22.9	98.7	254.3			5.7		
	e pP	Z 14:46:32.4							

Date Origin Time
2001/06/24 15:30:34.4
2001/06/24 15:30:15.5
Central Peru

Lat	Long	Depth	mb	Ms	ML	Source
		N	4.9			SZGRF
17.437S	72.040W	33N	4.9			NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:43:53.3	99.0	253.6			4.9		

Date Origin Time
2001/06/24 17:38:10.5
2001/06/24 17:37:50.4
Central Peru

Lat	Long	Depth	mb	Ms	ML	Source
			5.0			SZGRF
17.378S	72.187W	33N	5.0			NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:51:29.4	99.0	253.7			5.0		
	e pP	Z 17:51:41.7							
	e sP	Z 17:51:48.1							

Date Origin Time
2001/06/25 03:48:58.4
Near coast of Peru

Lat	Long	Depth	mb	Ms	ML	Source
15.936S	74.615W	33N	5.0	5.1		NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:02:39.3	99.5	256.5					
	e L	Z 04:43:17.5			20.8	348		4.8	

Date Origin Time
2001/06/25 06:14:47.7
2001/06/25 06:14:44.0
East of Kuril Islands, Russia

Lat	Long	Depth	mb	Ms	ML	Source
		N	4.5			SZGRF
43.380N	147.343E	33N	4.7			NEIC

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 06:26:50.4	79.3	30.8			4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/25	06:38:47.7	16.794S	73.666W	33N	5.1	5.5		NEIC

Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML							
GRA1	e Pdiff	Z 06:52:29.5	99.5	255.2												
	e	06:52:42.3														
	e	06:53:01.2														
	e PP	Z 06:56:31.2														
	e SKS	Z 07:03:16.4														
	e SP	Z 07:05:26.5														
CLL	e L	Z 07:43:56.8	18.9			1026		5.4								
	e Pdiff	Z 06:52:36.3														
	e	06:52:49.3														
	e PP	Z 06:56:46.6														
	e SKSac	R 07:03:19.6														
	e Sdiff	T 07:04:09.3														
	e PS	Z 07:05:46.9														
	e SS	R 07:11:13.4														
	e LR	Z 07:27:23.8														
	e L	Z 07:36:34.7								22.0			1735		5.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/25	07:03:40.6							SZGRF
2001/06/25	07:03:18.0	16.526S	73.725W	33N	5.2			NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:16:59.0	99.3	255.4					
	e pP	Z 07:17:07.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/25	09:57:01.5	21.680S	64.307W	33N	5.1	4.7		NEIC

Southern Bolivia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:10:33.2	97.6	245.2					
	e pP	Z 10:10:38.8							
GRA3	e L	Z 10:56:37.4	97.6	245.3	18.4	165		4.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
------	-------------	-----	------	-------	----	----	----	--------

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

48

2001/06/25 10:35:51.8 16.952S 173.605W 33N 4.6 NEIC
Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPab)	Z 10:55:59.9	147.0	8.5					

Date Origin Time Lat Long Depth mb Ms ML Source
2001/06/25 13:28:46.4 37.203N 36.167E 5G 5.4 4.9 ML NEIC
Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:33:42.7	21.8	115.4	1.2	73	5.0		
	e S	Z 13:37:48.5							
	e L	Z 13:43:21.7			21.4	1185		4.3	

Date Origin Time Lat Long Depth mb Ms ML Source
2001/06/25 15:52:21.9 N 4.4 SZGRF
2001/06/25 15:52:20.4 22.496N 44.962W 10G 4.7 3.9 NEIC
Northern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 16:01:27.0	51.4	259.3			4.4		

Date Origin Time Lat Long Depth mb Ms ML Source
2001/06/25 17:48:50.1 N 4.9 4.7 SZGRF
Mexico-Guatemala border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:01:17.8					4.9		
BEAM		18:01:17.8			1.1	9			
GRA3	e L	Z 18:36:23.9			20.7	364		4.7	

Date Origin Time Lat Long Depth mb Ms ML Source
2001/06/25 19:44:45.5 16.524S 73.096W 33N 4.9 NEIC
Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (Pdiff)	Z 19:58:28.9	98.9	255.0					
	e (pPdiff)	Z 19:58:37.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/25	22:04:10.9	37.227N	72.008E	164D	4.0			NEIC

Tajikistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:12:09.7	44.5	82.2					
	e	22:12:14.0							
	e pP	Z 22:12:46.6							
	e (sP)	Z 22:13:06.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/25	22:14:19.5				5.5	4.5		SZGRF
2001/06/25	22:14:09.8	17.516S	70.559W	73D	5.4			NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRFO	e L	Z 23:08:05.6	98.1	252.4	21.5	192		4.5	
GRA1	i P	+ Z 22:27:39.9	98.1	252.4			5.5		
	i pP	- Z 22:28:00.1							
	e SKS	Z 22:38:11.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 02:06:28.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	04:18:42.7	15.560S	71.540W	42.0		6.9		SZGRF
2001/06/26	04:18:31.6	17.739S	71.342W	33N	6.0	6.7		NEIC

Southern Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 04:31:56.0	95.7	249.1					
	e L	Z 05:13:23.2			19.9	29774		6.8	
BFO	e P	Z 04:31:59.4	96.5	250.6					
	e L	Z 05:19:24.6			18.3	27540		6.8	
STU	e P	Z 04:32:04.0	97.2	251.3					
	e L	Z 05:12:05.2			21.8	35868		6.8	
TNS	e P	Z 04:32:02.9	97.2	250.9					
	e L	Z 05:12:56.4			21.9	42311		6.9	
IBBN	e P	Z 04:32:05.2	97.5	250.6					

	e L	Z	05:15:08.9			18.7	43182	7.0
FUR	e P	Z	04:32:08.5	98.4	252.7			
	e L	Z	05:14:42.2			20.6	25458	6.7
GRFO	e P	Z	04:32:12.1	98.8	252.9			
	e L	Z	05:20:58.6			18.3	36805	6.9
GRA1	e P	Z	04:32:11.0	98.8	252.9			
	e pP	Z	04:32:23.3					
	e		04:33:12.8					
	e		04:33:47.7					
	e		04:35:02.0					
	e PP	Z	04:36:05.3					
	e L	Z	05:20:58.7			18.3	41454	7.0
CLZ	e P	Z	04:32:12.3	98.9	252.6			
	e L	Z	05:14:36.4			21.1	35981	6.8
MOX	e P	Z	04:32:14.0	99.3	253.3			
	e L	Z	05:14:07.5			21.1	40290	6.9
BSEG	e P	Z	04:32:14.2	99.5	252.8			
	e L	Z	05:13:51.0			20.8	49211	7.0
WET	e P	Z	04:32:15.1	99.7	254.0			
	e L	Z	05:16:42.7			20.7	29375	6.8
GEC2	e P	Z	04:32:17.4	100.1	254.5			
	e L	Z	05:16:16.2			21.9	16414	6.5
CLL	e Pdiff	Z	04:32:18.0			2.1	207	
	e pPdiff	Z	04:32:29.2					
	e PP	Z	04:36:21.8					
	e PPP	Z	04:38:28.5					
	e SKSac	E	04:43:00.2					
	e SKKSac	R	04:43:08.3					
	e Sdiff	N	04:43:58.2					
	e PS	Z	04:45:17.1					
	e SS	N	04:50:50.2					
	e SKKSdf	R	04:55:18.9					
	e L	Z	05:12:42.2			22.0	60578	7.1
BRG	e P	Z	04:32:20.1	100.8	255.1			
	e L	Z	05:18:34.7			19.3	44933	7.0
RUE	e P	Z	04:32:22.5	101.1	255.3			
	e L	Z	05:18:10.9			19.1	51234	7.0

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	08:47:26.0			N		4.9		SZGRF
2001/06/26	08:47:09.0	16.411S	73.753W	33N	5.0	4.8		NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:00:52.5	99.3	255.5					
	e L	Z 09:41:11.9			21.1	461		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	09:46:13.2	43.570N	152.550E	80.6	5.6	4.1		SZGRF
2001/06/26	09:46:19.2	43.705N	147.093E	81D	5.2			NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 09:58:18.1	79.0	30.9	1.0	68	5.6		
	e pP	Z 09:58:39.6							
	e (sP)	Z 09:58:46.4							
	e L	Z 10:32:54.9			20.2	83		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	12:33:52.5	3.99S	104.38W	10N		5.7		NEIC

Northern Easter Island Cordillera

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (Pdiff)	Z 12:48:32.4							
	e PP	Z 12:52:58.5							
	e	12:55:19.2							
	e SP	Z 13:02:21.2							
	e SS	Z 13:08:18.3							
	e L	Z 13:33:36.1			21.9	2457		5.7	
CLL	e PKP	Z 12:52:20.1							
	e PP	Z 12:52:59.8							
	e PPP	Z 12:55:13.2							
	e SKSac	R 12:59:07.6							
	e Sdiff	T 13:00:38.0							
	e PS	Z 13:02:33.5							
	e PPS	Z 13:03:32.5							
	e SS	Z 13:08:33.0							
	e LR	Z 13:26:05.8							
	e L	Z 13:32:42.3			22.0	2276		5.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	12:51:19.3			N	5.4			SZGRF
2001/06/26	12:51:16.1	16.530S	73.312W	33N	5.3			NEIC

Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:04:56.7	99.1	255.1			5.4		

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

52

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	14:05:37.2	61.514N	140.007W	10G	5.8	5.4		NEIC

Southern Yukon Territory, Canada

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	+ Z 14:16:21.9			1.1	72	5.8		
	e pP	Z 14:16:27.7							
	e PP	Z 14:18:45.4							
	e S	E 14:24:43.9							
	e PPS	N 14:25:25.1							
	e SS	N 14:29:12.1							
	e LR	Z 14:36:37.1							
	e L	Z 14:44:20.4			20.0	2141		5.3	
GRA1	e P	+ Z 14:16:30.7	66.4	345.5	1.3	190	6.2		
	e (pP)	- Z 14:16:36.7							
	e PP	Z 14:18:57.7							
	e S	Z 14:25:52.3							
	e SS	Z 14:30:08.6							
	e PKPPKP	Z 14:44:52.7							
	e L	Z 14:45:26.9			20.6	1692		5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	15:30:13.2			N				SZGRF
2001/06/26	15:30:02.6	38.660N	26.470E	20G				NEIC

Aegean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:33:50.3	15.5	129.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 15:35:37.4							
	e L	Z 16:39:10.8			21.7	260			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	17:19:30.3			N	3.7			SZGRF
2001/06/26	17:19:47.4	38.650N	26.440E	21G	3.9			NEIC

Dodecanese Islands, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:23:34.8	15.5	129.8			3.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	17:27:41.7			N	3.7			SZGRF
2001/06/26	17:27:55.6	38.640N	26.480E	8G	3.9			NEIC

Dodecanese Islands, Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:31:43.9	15.5	129.7			3.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	17:27:57.2			N	5.3	5.0		SZGRF
2001/06/26	17:27:48.0	17.628S	71.917W	33N	5.2	5.2		NEIC

Central Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:41:28.1	99.0	253.4			5.3		
	e L	Z 18:26:30.2			19.2	441		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26	19:28:46.8			N	4.2			SZGRF

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:33:57.7					4.2		
BEAM		19:33:57.7			1.1	10			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPbc)	Z 22:59:57.6							
	e (PKPab)	Z 23:00:00.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/27	00:21:06.6	17.866S	71.411W	33N	5.1	5.0		NEIC

Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:34:45.7	98.9	252.8			5.7		

e pP	Z	00:34:56.8									
e L	Z	01:15:23.8			21.9		659			5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/27	02:05:35.6	48.697S	126.464E	10G	5.0	4.6		NEIC

South of Australia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 02:25:02.9	139.0	114.4					
	e (pPKPdf)	Z 02:25:10.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/27	19:49:59.7	29.44S	178.63W	228	4.7			NEIC

Kermadec Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPab)	Z 20:10:06.4							
CLL	e PKPdf	Z 20:09:26.6							
	e PKPbc	Z 20:09:37.9							
	e PKPab	Z 20:09:56.8			1.5	22			
	e pPKPab	Z 20:10:48.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/28	07:16:32.2	17.795S	178.535W	550G	4.4			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 07:35:14.7	147.1	17.3					
	e	07:35:17.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/28	07:34:23.4			N	4.3	3.0		SZGRF
2001/06/28	07:34:53.4	34.661N	23.184E	33N	4.3			NEIC

Eastern Mediterranean Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:38:55.8	17.4	145.2			4.3		
	e L	Z 07:46:24.2			22.0	71		3.0	

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

55

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/28		34.610N	6.500W	49.8	4.3	3.0		SZGRF
2001/06/28	15:21:44.0	34.205N	5.543W	10G	4.5			NEIC

Morocco

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 15:26:17.8	19.8	224.8			4.3		
	e	15:26:25.5							
	e pP	Z 15:26:28.8							
	e sP	Z 15:26:36.4							
	e S	Z 15:30:00.8							
	e L	Z 15:37:14.8			20.5	66		3.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/28	15:48:37.3	11.380N	70.340W	42.8	5.1	4.6		SZGRF
2001/06/28	15:48:33.8	11.414N	70.300W	33N	4.9	4.7		NEIC

Near coast of Venezuela

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 16:00:19.7	75.9	271.1			5.1		
	e pP	Z 16:00:31.0							
	e sP	Z 16:00:38.2							
	e S	Z 16:09:22.0							
	e L	Z 16:31:05.5			21.3	332		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/28	21:36:35.7			N	4.5	4.4		SZGRF
2001/06/28	21:35:24.6	17.482S	72.313W	33N	4.9	4.3		NEIC

Western Brazil

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:49:18.1	99.2	253.8			4.5		
	e (SKS)	Z 21:59:43.1							
	e	22:02:01.0							
	e	22:14:17.7							
	e L	Z 22:31:17.1			20.5	149		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	03:11:28.2	3.891S	80.718W	33N	4.9	4.6		NEIC

Peru-Ecuador border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 03:24:47.1	94.2	269.0			5.3		

e pP	Z	03:25:04.4									
e S	Z	03:35:41.0									
e SS	Z	03:42:17.3									
e L	Z	04:04:57.6			21.0		178		4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	10:00:22.7	17.504S	178.025W	455D	4.7			NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPbc	- Z 10:19:14.4	147.0	16.3					
	e PKPab	Z 10:19:17.5							
	e pPKPbc	Z 10:21:06.2							
	e pPKPab	Z 10:21:10.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	10:05:45.8	21.527S	169.295E	10G	4.9			NEIC

Southeast of Loyalty Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 10:25:30.8	146.9	39.5					
	e (pPKP)	Z 10:25:45.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	12:13:30.9	19.110N	96.650E	33.0N	5.0	4.0		SZGRF
2001/06/29	12:14:01.4	23.226N	93.730E	65*	4.7			NEIC

Myanmar

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 12:24:55.6	67.8	79.8			5.0		
	e L	Z 12:53:33.1			21.4	82		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	18:35:59.2	18.370S	65.410W	274.9	6.0	5.0		SZGRF
2001/06/29	18:35:51.1	19.449S	66.169W	266D	5.8			NEIC

Central Bolivia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:48:53.4	96.9	248.0	1.5	107	6.0		
	e	18:49:35.8							
	e pP	Z 18:49:59.6							

	e			18:52:15.4								
	e PP	Z		18:52:47.6								
	e pPP	Z		18:54:03.4								
	e SKSac	Z		18:59:08.2								
	e SP	Z		19:01:16.4								
	e PKKPdf	Z		19:05:32.7								
	e PKKPab	Z		19:06:04.7								
	e SS	Z		19:06:36.7								
	e L	Z		19:29:55.2	20.4		547				5.0	
CLL	i P	+ Z		18:49:00.7	1.6		76		5.7			
	e pP	Z		18:50:07.8								
	e PP	Z		18:53:01.9								
	e pPP	Z		18:54:16.3								
	e SKSac	R		18:59:16.5								
	e S	T		19:00:05.2								
	e SP	Z		19:01:34.5								
	e PS	Z		19:02:24.8								
	i PKKPbc	Z		19:05:28.5								
	e PKKPab	Z		19:05:57.3								
	e SS	E		19:07:05.0								
	e sSS	E		19:08:52.1								
	e LQ	T		19:16:22.4								
	e LR	Z		19:18:02.1								
	e L	Z		19:24:44.1	22.0		587				5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 19:13:41.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/29	23:39:15.9	7.210S	27.410E	26.6	5.0	4.3		SZGRF
2001/06/29	23:40:00.4	0.238N	30.078E	10G	4.7			NEIC

Zaire

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	- Z 23:49:11.0	52.0	155.8			5.0		
	e pP	Z 23:49:17.6							
	e (sP)	Z 23:49:22.5							
	e PP	Z 23:51:13.0							
	e L	Z 00:14:22.3			20.0	246		4.3	

./2001/bul0106.txt

Thu Apr 23 08:38:25 2020

58

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	00:20:29.5			N	5.1			SZGRF
2001/06/30	00:21:08.6	24.829N	95.429E	160*	4.6			NEIC

Myanmar

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 00:31:51.8	67.7	77.4			5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 01:05:37.1							
	i PKPbc	+ Z 01:05:39.2							
	e PKPab	Z 01:05:42.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	04:07:35.5	23.840N	122.880E	33.0N		4.2		SZGRF
2001/06/30	04:07:37.5	24.107N	121.628E	33N	4.9			NEIC

Taiwan region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:20:07.3	83.9	59.4					
	e L	Z 05:01:03.7			21.3	118		4.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 08:49:18.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	08:57:19.0	17.629S	71.840W	33N	5.5	4.8		NEIC

Near coast of Peru

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:10:58.9	99.0	253.3					
	e pP	Z 09:11:07.2							
	e L	Z 09:59:39.3			18.5	283		4.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	09:41:40.6	64.161N	150.165W	10G	4.4			NEIC

Central Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:52:24.2	65.2	351.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 10:35:11.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	11:48:42.5	32.100N	70.260E	38.0	5.2	4.7		SZGRF
2001/06/30	11:48:35.2	31.072N	69.891E	33N	5.2	4.6		NEIC

Pakistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 11:57:06.9	47.0	90.5			5.2		
	e	Z 11:57:11.9							
	e (pP)	Z 11:57:17.1							
	e L	Z 12:20:43.7			18.0	720		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 13:04:27.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	16:34:36.5	6.361S	146.772E	103D	5.8			NEIC

Eastern New Guinea, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPdf	Z 16:53:18.7			1.0	36			
	e pPKPdf	Z 16:53:45.7							
	e sPKPdf	Z 16:53:55.4							
	e PP	Z 16:54:54.8							
	e pPP	Z 16:55:23.2							

	e PPP	Z	16:57:27.6							
	e sSKS	R	17:00:54.4							
	e sSdiff	T	17:03:11.5							
	e PKKP	Z	17:03:22.9							
	e SP	Z	17:04:41.9							
	e SS	N	17:11:21.4							
	e sSS	N	17:12:08.7							
	e sSSS	N	17:16:19.1							
	e sSSSS	N	17:19:55.1							
	e LR	Z	17:33:13.3							
	e L	Z	17:42:12.7			22.0	983		5.4	
GRA1	i PKPdf	Z	16:53:22.1	122.9	56.0					
	e pPKPdf	Z	16:53:49.9							
	e sPKPdf	Z	16:53:59.6							
	e PP	Z	16:55:04.4							
	e L	Z	17:46:53.1			21.4	558		5.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2001/06/30	20:17:35.9				4.7			SZGRF
2001/06/30	20:19:49.4	23.388N	70.207E	10G	4.6			NEIC

Maldive Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:29:05.6	52.5	97.5			4.7		
	e pP	Z 20:29:18.3							

Format description

=====

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

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

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

EPICENTER LINES:

The epicenter locations of several authorities can be reported. The epicenter location with the highest priority

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

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

COMMENT LINE:

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

REGION LINE:

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

PHASE LINE:

Sta	Station code of the reported phase
Phase	Preceded flag for the sharpness of the onset of the phase
	e - emergent
	i - impulsive
	w - weak
	ISC phase code
	Flag for the direction of the first motion
	'+' - compression
	'-' - dilatation
	Component where the phase was picked
Time	Arrival time of the reported phase
Dist	Distance from the epicenter location with the highest priority to the station in kilometer
BAz	Backazimuth from the epicenter location with the highest priority to the station in degree
T[s]	Phase Period
A[nm]	Phase Amplitude
mb	Body wave magnitude
MS	Surface wave magnitude
ML	Local Richter magnitude