

e S	Z	13:40:24.2									
e L	Z	13:47:05.1			19.0		1617			4.8	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/01	14:07:56.6	19.900N	101.340W	33.0N		5.0		SZGRF
2000/12/01	14:07:42.8	18.182N	102.279W	27D	5.3	4.9		NEIC

Michoacan, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:20:46.1	90.4	299.4					
	e	14:20:49.3							
	e	14:20:54.4							
	e L	Z 15:01:06.3			21.3	661		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/01								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 14:45:24.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/01	17:37:25.1	44.970N	153.200E	48.4	4.8			SZGRF
2000/12/01	17:37:27.0	44.526N	148.194E	47D	4.8	4.5		NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 17:49:27.8	78.6	29.8			4.8		
	e (pP)	Z 17:49:41.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/02	04:16:19.5	10.590S	28.430E	13.6	5.3			SZGRF
2000/12/02	04:16:42.0	7.240S	27.930E	10G	4.9			NEIC

Zaire

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	- Z 04:26:40.4	58.8	160.5			5.3		
	e (pP)	Z 04:26:44.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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./2000/bul0012.txt

Thu Apr 23 08:38:25 2020

3

2000/12/02 15:35:46.5
2000/12/02 15:35:19.9
Western Caucasus

42.434N 47.410E 15D 4.6 4.0

SZGRF
NEIC

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z	15:40:55.7	25.9	92.3			4.2		
	e pP	Z	15:41:00.1							
	e		15:41:08.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPab)	Z	01:06:03.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z	04:29:25.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03	12:55:20.6	51.940N	179.290W	33.0N	5.4	5.1		SZGRF
2000/12/03	12:55:17.1	51.760N	178.135W	44D	5.6	5.1		NEIC

Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	i P	+ Z	13:06:52.4	74.1	5.4	1.0	48	5.5		
RUE	i P	+ Z	13:06:58.9	75.3	7.6	0.9	29	5.3		
IBBN	i P	+ Z	13:07:02.4	75.8	3.8	0.9	75	5.8		
CLZ	i P	+ Z	13:07:04.4	76.2	5.4	0.9	53	5.7		
CLL	i P	Z	13:07:05.0			1.1	46	5.5		
	e		13:07:09.4							
	e pP	Z	13:07:15.0							
	e PP	Z	13:10:05.0							
	e PPP	Z	13:12:10.6							
	e (S)	N	13:16:44.3							
	e PS	N	13:17:28.4							
	e PPS	Z	13:17:52.6							
	e SS	N	13:21:49.0							
	e L	Z	13:44:05.5			20.0	1054		5.2	
BUG	i P	+ Z	13:07:06.9	76.7	3.4	0.8	26	5.4		
BRG	i P	+ Z	13:07:07.5	76.9	7.6	0.9	17	5.2		

MOX	i P	+ Z	13:07:10.2	77.3	6.2	0.9	19	5.2
TNS	i P	+ Z	13:07:13.7	77.9	4.2	0.8	28	5.4
GRA1	i P	+ Z	13:07:16.0	78.2	5.9	0.9	38	5.5
	e S	Z	13:17:09.1					
	e L	Z	13:46:16.6			21.9	982	5.1
WET	i P	+ Z	13:07:18.0	78.7	6.9			
GEC2	i P	+ Z	13:07:19.1	78.9	7.4			
STU	e P	Z	13:07:21.3	79.3	4.6	1.4	68	5.5
FUR	e P	Z	13:07:24.0	79.8	5.9			
BFO	i P	+ Z	13:07:23.8	79.8	4.1	1.3	46	5.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03								
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb MS ML
	GRA1	e (P)	Z 13:26:07.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03								
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb MS ML
	GRA1	e PKP	Z 13:34:04.2					
		e	13:34:09.2					
		e	13:34:13.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/03								
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb MS ML
	GRA1	e PKPab	Z 21:05:04.4					
		e (pPKPab)	Z 21:05:19.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/04	01:22: 5.2	26.960N	131.820E	33.0N	5.0	4.6		SZGRF
2000/12/04	01:22:12.2	27.472N	128.271E	33N	4.8			NEIC
Southeast of Ryukyu Islands, Japan								
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb MS ML
	GRA1	i P	- Z 01:34:47.6	84.8	52.5			5.0

e L Z 02:16:57.4 18.8 242 4.6

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/04 04:42:14.4 14.958N 93.801W 33N 5.3 6.2
 Near coast of Chiapas, Mexico

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z	04:55:04.1					6.0		
BEAM			04:55:04.1			1.9	143			
CLL	i P	+ Z	04:55:06.0			0.9	23	5.4		
	e PP	Z	04:58:24.3							
	e		04:59:23.6							
	e SKKSac	R	05:05:38.7							

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/04 04:43:09.6 14.906N 93.898W 33N 5.6 5.7
 Near coast of Chiapas, Mexico

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z	04:55:59.5	88.0	291.0			6.4		
	e		04:56:15.6							
	e L	Z	05:32:45.0			21.0	8944		6.2	
	i P	+ Z	04:55:59.5					6.4		
	e		04:56:15.6							
	e L	Z	05:32:45.0			21.0	8944		6.2	
CLL	i P	- Z	04:56:01.9			2.3	260	6.1		
	e pP	Z	04:56:10.9							
	e PP	Z	04:59:31.4							
	e SKKSac	E	05:06:35.8							
	e SS	E	05:12:51.8							
	e SSS	E	05:15:41.4							
	e L	Z	05:35:41.4			19.6	9393		6.2	

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/04 07:54:30.5 0.700S 98.930E 33.0N 5.1
 2000/12/04 07:54:36.7 1.482N 99.063E 33N 5.2
 Southern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	08:07:22.6	87.5	90.7			5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/04	10:17:24.3	53.098N	171.008E	31D	5.2	4.6		NEIC

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 10:29:11.2	75.8	12.4			5.5		
	e L	Z 10:58:39.2			20.8	164		4.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/04	16:47:54.0	36.400N	139.630E	127.4	5.7	5.6		SZGRF
2000/12/04	16:47:38.0	35.803N	140.941E	63	5.2			NEIC

Eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 17:00:02.8	83.6	38.9			5.7		
	e pP	Z 17:00:35.1							
	e L	Z 17:41:59.9			19.1	2542		5.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/05	02:01:40.8	22.957S	177.912W	294D				NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 02:20:58.6	150.4	20.7					
CLZ	e PKPdf	Z 02:20:58.9	150.4	15.6					
BRG	e PKPdf	Z 02:20:59.4	150.6	22.7					
MOX	e PKPdf	Z 02:21:00.7	151.3	18.5					
TNS	e PKPdf	Z 02:21:02.9	152.3	12.7					
GRFO	e PKPdf	Z 02:21:04.7	152.3	18.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/05	02:09:21.4	26.253S	179.564E	500G	5.0			NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 02:28:44.5	154.9	25.3					
CLL	e PKPdf	Z 02:28:13.6							
	i PKPbc	- Z 02:28:22.0			0.8	10			
	i PKPab	Z 02:28:35.7			0.7	8			
	e pPKPbc	Z 02:30:24.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/05	22:11:36.1	51.730N	168.620W	55.7	5.9	5.7		SZGRF
2000/12/05	22:11:34.3	52.644N	167.844W	33N	5.6	5.6		NEIC

Fox Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	22:23:06.6	73.4	358.8					
	e L	Z	22:59:35.5			18.6	3304		5.7	
RUE	e P	Z	22:23:15.1	74.9	1.0					
	e L	Z	23:03:45.2			18.8	3899		5.7	
IBBN	e P	Z	22:23:15.6	75.0	357.2					
	e L	Z	23:05:59.1			19.0	5260		5.9	
CLZ	e P	Z	22:23:18.8	75.5	358.9					
	e L	Z	23:01:45.9			18.5	5492		5.9	
BUG	e P	Z	22:23:20.2	75.8	356.9					
	e L	Z	23:07:06.1			19.5	2817		5.6	
CLL	i P	+ Z	22:23:21.6			1.1	57	5.6		
	e pP	Z	22:23:34.3							
	e PP	Z	22:26:11.4							
	e S	E	22:33:04.4							
	e SS	N	22:38:13.9							
	e SSS	Z	22:41:58.9							
	e SSSS	E	22:43:41.1							
	e SSSSS	E	22:45:38.0							
	e LV	Z	22:48:35.8							
	e L	Z	23:07:36.6			18.0	4296		5.8	
BRG	e P	Z	22:23:24.1	76.5	1.1					
	e L	Z	23:03:39.0			20.1	3564		5.7	
MOX	e P	Z	22:23:25.9	76.7	359.7					
	e L	Z	23:03:48.8			19.1	2765		5.6	
TNS	e P	Z	22:23:28.8	77.1	357.7					
	e L	Z	23:06:57.6			19.2	2364		5.5	
GRA1	i P	+ Z	22:23:31.8	77.7	359.4			5.9		
	e pP	Z	22:23:46.0							
	e sP	Z	22:23:56.0							
	e S	Z	22:33:40.8							
	e L	Z	23:05:20.7			19.6	3305		5.7	
WET	e P	Z	22:23:34.5	78.2	0.4					
	e L	Z	23:07:48.9			18.2	4033		5.8	
GEC2	e P	Z	22:23:35.9	78.5	1.0					
	e L	Z	23:06:32.8			19.1	3310		5.7	
STU	e P	Z	22:23:38.1	78.6	358.2					
	e L	Z	23:03:22.1			18.9	3963		5.8	
BFO	e P	Z	22:23:40.4	79.0	357.6					
	e L	Z	23:02:44.7			18.6	3754		5.8	
FUR	e P	Z	22:23:39.6	79.2	359.5					
	e L	Z	23:06:13.4			18.9	3157		5.7	

Date Origin Time
2000/12/06 00:35:0.2
Greenland Sea

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2000/12/06	00:35:0.2			N		3.8		SZGRF	
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:40:19.2							
	e	00:40:26.2							
	e L	Z 00:54:49.4			19.2	279		3.8	

Date Origin Time
2000/12/06

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2000/12/06									
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 16:24:25.8							

Date Origin Time
2000/12/06 17:11:28.6
2000/12/06 17:11:06.7
Caspian Sea

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source	
2000/12/06	17:11:28.6	39.740N	51.610E	33.0N		7.0		SZGRF	
2000/12/06	17:11:06.7	39.625N	54.772E	30G	6.6	7.5		NEIC	
Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	i P	+ Z 17:17:19.6	30.4	95.6					
GEC2	i P	+ Z 17:17:19.2	30.4	92.0					
RUE	i P	+ Z 17:17:21.4	30.7	98.2					
WET	i P	+ Z 17:17:23.4	31.0	91.8					
CLL	i P	+ Z 17:17:24.7			1.1	978	6.5		
	e PP	Z 17:18:19.7							
	e (S)	N 17:22:23.2							
	e L	Z 17:32:06.8			22.0	713551		7.2	
RGN	i P	+ Z 17:17:23.8	31.3	101.1					
MOX	i P	+ Z 17:17:32.5	31.8	93.3					
FUR	i P	+ Z 17:17:33.1	32.0	89.0					
GRA1	i P	+ Z 17:17:34.3	32.1	91.4					
	e S	N 17:22:48.2							
	e L	Z 17:32:47.5			19.0	373599		7.0	
CLZ	i P	+ Z 17:17:39.7	32.7	94.1					
BSEG	i P	+ Z 17:17:42.0	32.9	97.3					
STU	i P	+ Z 17:17:45.1	33.4	88.5					
TNS	i P	+ Z 17:17:50.1	33.9	90.1					
BFO	i P	+ Z 17:17:49.7	34.0	87.2					
IBBN	i P	+ Z 17:17:54.0	34.3	92.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/06	18:12:27.0	39.196N	55.005E	33N	4.6			NEIC
Turkmenistan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:18:58.3	32.4	91.9			4.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/06	18:40:28.0	63.870N	149.830W	25	5.0			NEIC
Central Alaska, United States								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 18:51:15.1	65.5	351.0			5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/06	22:57:40.4	4.184S	152.771E	31G	6.1	6.6		NEIC
New Britain, Papua New Guinea, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	+ Z 23:16:31.5	121.1	49.8					
	e PP	Z 23:17:57.8							
BSEG	e PKPdf	+ Z 23:16:32.8	121.6	45.5					
	e PP	Z 23:18:01.2							
BRG	e PKPdf	+ Z 23:16:33.3	122.0	50.8					
	e PP	Z 23:18:07.7							
CLL	e PKPdf	+ Z 23:16:33.5	122.2	49.6					
	e PP	Z 23:18:09.6							
	i SKP	Z 23:20:10.6			1.0	62			
	e PPP	Z 23:20:46.2							
	e PKKPab	Z 23:26:30.4							
	e PSKS	Z 23:28:03.4							
	e PPS	Z 23:29:26.0							
	e	23:30:28.2							
	e SKKPdf	Z 23:30:40.9							
	e SS	E 23:34:50.2							
	e L	Z 00:14:18.6			20.0	12091		6.5	
CLZ	e PKPdf	+ Z 23:16:34.9	123.1	46.6					
	e PP	Z 23:18:14.1							
MOX	e PKPdf	+ Z 23:16:35.8	123.3	48.5					
	e PP	Z 23:18:17.5							
GEC2	e PKPdf	+ Z 23:16:36.1	123.4	51.5					

	e PP	Z	23:18:18.6									
WET	e PKPdf	+ Z	23:16:36.8	123.7	50.5							
	e PP	Z	23:18:20.6									
IBBN	e PKPdf	+ Z	23:16:36.9	123.9	43.5							
GRA1	e PKPdf	+ Z	23:16:37.5	124.1	48.5							
	e PP	Z	23:18:24.3									
	e SKPdf	Z	23:20:14.3									
	e PKKP	Z	23:26:23.7									
	e (SKKP)	Z	23:30:20.8									
GRFO	e PKPdf	+ Z	23:16:37.5	124.1	48.5							
	e PP	Z	23:18:24.3									
BUG	e PKPdf	+ Z	23:16:38.5	124.7	43.4							
	e PP	Z	23:18:26.1									
TNS	e PKPdf	+ Z	23:16:39.2	125.1	45.3							
	e PP	Z	23:18:21.9									
FUR	e PKPdf	+ Z	23:16:39.1	125.1	49.4							
	e PP	Z	23:18:27.6									
STU	e PKPdf	+ Z	23:16:40.5	125.7	46.8							
	e PP	Z	23:18:32.3									
BFO	e PKPdf	+ Z	23:16:41.4	126.4	46.1							
	e PP	Z	23:18:34.7									
GRA1	e L	Z	00:15:50.4	124.1	48.5	21.7	10083				6.4	

Date
2000/12/07

Origin Time

Lat

Long

Depth

mb

Ms

ML

Source

Sta
GRA1

Phase
e PKPdf

Time
Z 01:59:58.9

Dist

BAz

T[s]

A[nm]

mb

MS

ML

Date
2000/12/07
New Britain, Papua New Guinea, region

Origin Time
09:31:19.0

Lat
4.239S

Long
152.757E

Depth
33N

mb
5.7

Ms
5.7

ML

Source
NEIC

Sta
RUE

Phase
i PKPdf

Time
+ Z 09:50:10.8

Dist
121.1

BAz
49.9

T[s]

A[nm]

mb

MS

ML

BSEG

i PKPdf

+ Z 09:50:11.9

121.7

45.6

20.1

1443

5.6

BRG

i PKPdf

+ Z 09:50:12.4

122.1

50.8

21.0

933

5.4

CLL

i PKPdf

+ Z 09:50:12.6

21.6

0.8

1538

52

5.6

e PP

Z 09:51:55.0

e PPP

Z 09:54:23.1

	i	PKKPab	Z	10:00:08.7			1.6	32			
	e	PS	Z	10:01:35.8							
	e	PPS	Z	10:03:05.8							
	i			10:04:05.8							
	e	L	Z	10:46:20.1			18.0	1214		5.6	
CLZ	i	PKPdf	+ Z	09:50:14.8	123.1	46.6					
	e	L	Z	10:46:03.3			20.6	1755		5.7	
MOX	i	PKPdf	+ Z	09:50:14.8	123.3	48.5					
	e	L	Z	10:49:03.2			20.6	1423		5.6	
GEC2	i	PKPdf	+ Z	09:50:15.2	123.5	51.6					
	e	L	Z	10:47:32.0			20.3	747		5.3	
WET	i	PKPdf	+ Z	09:50:15.7	123.7	50.6					
	e	L	Z	10:49:11.1			20.3	1773		5.7	
IBBN	i	PKPdf	+ Z	09:50:16.0	123.9	43.6					
	e	L	Z	10:47:14.2			21.0	1027		5.5	
GRA1	i	PKPdf	+ Z	09:50:16.7	124.2	48.6					
	e	L	Z	10:51:25.7			20.8	874		5.4	
BUG	i	PKPdf	+ Z	09:50:17.7	124.8	43.4					
	e	L	Z	10:47:09.2			20.9	1431		5.6	
TNS	i	PKPdf	+ Z	09:50:18.5	125.1	45.3					
	e	L	Z	10:49:36.8			20.7	1645		5.7	
FUR	i	PKPdf	+ Z	09:50:18.3	125.1	49.4					
	e	L	Z	10:48:04.2			20.6	1218		5.6	
STU	i	PKPdf	+ Z	09:50:19.7	125.8	46.9					
	e	L	Z	10:48:47.0			20.6	821		5.4	
BFO	i	PKPdf	+ Z	09:50:20.5	126.5	46.2					
	e	L	Z	10:49:17.3			21.9	884		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/07	18:48: 6.1	30.430N	130.430E	39.9	5.9	4.9		SZGRF
2000/12/07	18:47:55.8	29.496N	131.482E	33N	5.1	4.8		NEIC

Kyushu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 19:00:29.7	84.7	49.0	1.6	122	5.9		
	e pP	Z 19:00:41.4							
	e sP	Z 19:00:45.8							
	e L	Z 19:42:04.5			18.5	496		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/07	19:13:32.9	4.258S	152.871E	33N	5.0			NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 19:32:30.7	124.2	48.5					

e pPKPdf	Z	19:32:37.6										
e L	Z	20:31:23.2			21.3		218			4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/07	21:14:3.2			N	5.2			SZGRF

South of Aleutian Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:26:31.5					5.2		
ALIGN		21:26:31.5			1.1	16			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/07								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 23:21:36.5							
	e pPKPdf	Z 23:21:43.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/07	23:18:19.8	4.141S	152.884E	33N	5.4	5.1		NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 23:37:17.8	124.1	48.4					
	e pPKPdf	Z 23:37:28.9							
	e L	Z 00:36:22.8			20.0	255		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/08	00:48:02.0	60.013N	4.872E	10G	4.2			NEIC

North Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e Pn	Z 00:49:44.2	6.8	336.2					
	e Sg	E 00:51:01.8							
IBBN	e Sg	N 00:51:12.5	7.9	349.4					
	e Sg	Z 00:51:17.5							
CLZ	e Pn	Z 00:50:10.8	8.7	341.6					
	e Sg	E 00:51:45.7							
TNS	e Pn	Z 00:50:27.8	10.0	349.7					
	e Sg	E 00:52:14.1							
GRA1	e Pn	Z 00:50:47.7	10.9	343.1					

e Sg N 00:52:54.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/08	05:53:58.1	59.693N	1.829E	10G	4.8	4.3		NEIC

North Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e Pn	Z 05:55:48.6	7.4	324.6					5.0
	e Sg	E 05:57:09.0							
IBBN	e Pn	Z 05:55:58.6	8.1	338.3					5.0
	e Sg	N 05:57:27.0							
BUG	e Pn	Z 05:56:09.0	8.8	341.8					
	e Sg	N 05:57:42.3							
CLZ	e Pn	Z 05:56:12.5	9.2	332.0					
	e Sg	N 05:57:49.7							
TNS	e Pn	Z 05:56:27.2	10.2	340.8					
	e Sg	N 05:58:14.3							
CLL	e Pn	Z 05:56:29.7	10.5	327.5					
	e Sg	N 05:58:18.9							
MOX	e Pn	Z 05:56:32.2	10.6	332.2					
	e Sg	N 05:58:23.6							
BRG	e Pn	Z 05:56:49.8	11.2	326.8					
	e Sg	E 05:58:36.6							
GRA1	e Pn	Z 05:56:39.0	11.4	335.3					
	e Sg	E 05:58:39.8							
BFO	e Pn	Z 05:56:53.5	12.0	344.0					
	e Sg	N 05:59:01.6							
GEC2	e Pn	Z 05:57:03.2	12.8	332.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/08	06:22:54.0			N	4.2			SZGRF

Western Caucasus

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 06:28:06.0					4.2		
BEAM		06:28:06.0			1.0	9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/08	08:22:02.0	19.864S	174.038W	33N	5.1	5.1		NEIC

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2000/12/08 06:22:48.0 42.918N 44.844E 10G 4.3 NEIC
Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 08:41:52.9	24.0	93.5					
	e PKPab	Z 08:41:59.1							
	e L	Z 09:52:57.7			19.2	292		5.1	
	e PKPbc	Z 08:41:52.9							
	e PKPab	Z 08:41:59.1							
	e L	Z 09:52:57.7			19.2	292		5.1	

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/08 09:57:39.0 20.770S 178.831W 600G 4.4 NEIC
Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPdf)	Z 10:16:17.5	150.0	19.0					
	i PKPbc	- Z 10:16:23.5							
	e PKPab	Z 10:16:31.0							

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/08

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 15:43:12.9							
	e (PKPab)	Z 15:43:33.0							
	e L	Z 16:42:45.5			19.9	289			

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/08 18:02:45.6 29.713S 177.843W 38D 5.3 4.9 NEIC
Kermadec Islands, New Zealand

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 18:23:17.0	158.9	22.3					
	e L	Z 19:29:42.8			21.7	181		4.9	

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/08 19:44:23.2 45.510N 153.910E 33.0N 5.1 4.4 SZGRF
2000/12/08 19:44:25.1 46.685N 152.875E 18* 5.1 4.5 NEIC
East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 19:56:26.6	78.1	25.8			5.1		
	e L	Z 20:37:21.4			18.6	158		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/09	02:02:1.3	41.510N	124.610W	10.0G	5.1	4.4		SZGRF
2000/12/09	02:01:54.4	41.710N	126.915W	10G	4.7	4.5		NEIC

Near coast of northern California, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:14:16.0	81.5	329.8			5.1		
	e L	Z 02:49:53.4			21.9	202		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/09								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	- Z 08:04:57.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/09	17:01:02.0	17.993N	105.117W	33N	5.0	4.7		NEIC

Off coast of Jalisco, Mexico

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:14:11.6	92.1	301.5			5.2		
	e L	Z 17:54:53.6			21.4	634		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/09	23:38:40.1	21.748S	179.569W	598D	5.0			NEIC

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 23:57:16.5							
	e PKPbc	Z 23:57:22.0			1.0	62			
	e PKPab	Z 23:57:28.9			1.0	25			
	e pPKPdf	Z 23:59:38.3							
	e pPKPbc	Z 23:59:44.1							
	e pPKPab	Z 23:59:50.1							
GRA1	e (PKPdf)	Z 23:57:19.4	150.8	20.9					
	i PKPbc	+ Z 23:57:27.0							

e PKPab Z 23:57:36.4
e pPKPbc Z 23:59:43.5

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/10

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e PKPdf Z 03:36:58.1

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/10 12:55: 3.8 43.990N 85.740E 33.0N 5.3 4.5 SZGRF
2000/12/10 12:55:20.8 44.222N 81.351E 33N 5.2 4.4 NEIC
Northern Xinjiang, China

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 i P + Z 13:03:48.8 46.4 68.5 5.3
e L Z 13:23:50.4 19.0 425 4.5

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/10 13:30:27.3 18.800N 124.260E 33.0N 5.4 5.1 SZGRF
2000/12/10 13:30:34.8 19.091N 121.204E 33N 5.3 4.9 NEIC
Philippine Islands region

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e P Z 13:43:22.2 87.7 62.7 5.4
e L Z 14:26:07.9 18.8 741 5.1

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/10

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e (P) Z 17:26:41.6

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/10 18:58:35.8 0.048N 127.397E 145? 5.5 NEIC
Halmahera, Indonesia

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e PP Z 19:17:03.8 106.5 69.4

e L Z 20:06:47.3 21.8 255 4.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/10	19:30:38.9			N	4.9			SZGRF
2000/12/10	19:30:46.2	23.048N	120.279E	33N	4.8			NEIC

Southeast of Taiwan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:43:22.3	84.0	61.0			4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/11								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 00:37:44.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/11								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 01:59:52.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/11								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 05:51:40.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/11	12:58:47.3	29.901S	176.760W	52D	5.2	4.8		NEIC

Kermadec Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	+ Z 13:19:19.2	159.3	19.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2000/12/11 18:54:07.1 19.122N 67.114W 46* 5.1 4.8 NEIC
 Mona Passage

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 19:05:04.3	68.1	274.1			5.5		
	e (pP)	Z 19:05:10.1							
	e L	Z 19:29:33.4			21.6	739		4.9	

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/12 03:30:24.2 16.134S 173.715W 33N 4.9 NEIC
 Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	- Z 03:50:03.3	146.2	8.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/12 05:26:45.8 6.020N 82.682W 10G 5.9 5.7 NEIC
 South of Panama

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
TNS	e P	Z 05:39:27.2	86.1	274.7					
	e L	Z 06:12:08.9			21.4	4926		5.9	
BFO	e P	Z 05:39:28.3	86.2	274.8					
	e L	Z 06:13:40.0			21.2	2336		5.6	
STU	e P	Z 05:39:31.5	86.7	275.4					
	e L	Z 06:11:26.1			22.0	3935		5.8	
BSEG	e P	Z 05:39:32.6	86.9	276.0					
	e L	Z 06:13:34.6			21.3	2820		5.6	
CLZ	e P	Z 05:39:34.1	87.1	276.1					
	e L	Z 06:13:35.5			22.0	3544		5.7	
GRA1	e P	Z 05:39:37.8	87.9	276.9					
	e L	Z 06:13:36.0			21.8	4810		5.9	
MOX	e P	Z 05:39:38.1	88.1	277.1					
	e L	Z 06:13:53.1			21.6	4221		5.8	
FUR	e P	Z 05:39:39.1	88.1	277.0					
	e L	Z 06:13:28.1			21.9	2114		5.5	
CLL	e P	Z 05:39:39.3			1.2	53	5.7		
	e PP	Z 05:43:10.6							
	e S	E 05:50:23.2							
	e PS	E 05:51:31.4							
	e SS	E 05:56:17.8							
	e SSS	E 06:00:05.4							
WET	e L	Z 06:15:11.4			18.0	3397		5.8	
	e P	Z 05:39:43.1	89.1	278.1					

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GRA1	e P	Z	11:12:44.5	77.5	24.8	5.5
	e pP	Z	11:12:57.0			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/13	13:39:21.3			N	4.8			SZGRF
2000/12/13	13:39:27.6	47.122N	154.088E	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 13:51:27.5	78.0	24.8			4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/13	14:27:21.1	27.480N	132.640E	39.4	5.4	4.7		SZGRF
2000/12/13	14:27:33.1	28.988N	129.966E	65?	4.9			NEIC

West of Bonin Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:40:02.4	84.4	50.4			5.4		
	e (pP)	Z 14:40:13.9							
	e L	Z 15:23:03.8			18.0	299		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/13								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 14:48:13.5							
	e (pPKPdf)	Z 14:48:28.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/13								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	+ Z 23:57:24.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/24	03:11:07.1	4.111S	123.389E	33N	5.4	5.1		NEIC

Banda Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 18:43:52.7	107.3	75.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 03:35:49.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	06:55:53.9	20.213S	178.276W	500G	4.6			NEIC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 07:14:38.5							
	i PKPbc	- Z 07:14:42.3			0.8	100			
	e PKPab	Z 07:14:46.5			0.8	43			
	e pPKPbc	Z 07:16:42.5							
GRA1	e PKPdf	Z 07:14:44.5	149.6	17.8					
	i PKPbc	- Z 07:14:47.5							
	e PKPab	Z 07:14:54.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	10:01: 4.3			N	5.0			SZGRF
2000/12/15	10:01:20.1	5.390S	29.640E	10G	4.9			NEIC
Lake Tanganyika region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	- Z 10:11:09.5	57.4	158.1			5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	10:16:02.0	20.330S	174.447W	33N	4.7			NEIC
Tonga Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 10:35:59.3	150.3	10.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	14:07:45.2	9.480S	15.720W	26.6	4.9	4.7		SZGRF
2000/12/15	14:08:17.4	5.432S	11.655W	10G	5.4	5.0		NEIC

Ascension Island region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z	14:18:14.6	58.6	207.0			4.9		
	e pP	Z	14:18:21.0							
	e sP	Z	14:18:26.8							
	e		14:19:12.2							
	e PP	Z	14:20:28.1							
	e L	Z	14:42:39.8			20.7	527		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	16:44:44.9	38.608N	31.058E	10G	5.6	5.8		NEIC

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	16:48:43.5	16.1	122.9					
	e S	Z	16:51:58.4							
	e L	Z	16:56:13.0			14.8	45202		5.8	
WET	e P	Z	16:48:48.7	16.7	122.2					
	e S	Z	16:52:15.2							
	e L	Z	16:56:35.4			14.2	56048		5.9	
BRG	e P	Z	16:48:53.6	17.2	128.9					
	e S	Z	16:52:23.5							
	e L	Z	16:56:59.4			15.2	62829		6.0	
CLL	e P	Z	16:48:59.8	17.9	128.1					
	e S	Z	16:52:36.7							
	e L	Z	16:57:31.3			15.2	67242		6.0	
GRA1	e S	Z	16:52:36.7	17.9	120.6					
	e L	Z	16:57:13.8			14.6	50901		5.9	
MOX	e P	Z	16:49:07.2	18.2	123.8					
	e S	Z	16:52:47.5							
	e L	Z	16:58:03.3			15.8	35252		5.7	
STU	e P	Z	16:49:10.9	18.7	114.8					
	e S	Z	16:52:55.8							
	e L	Z	16:57:29.7			15.5	41435		5.8	
BFO	e P	Z	16:49:13.5	19.0	112.3					
	e S	Z	16:52:58.2							
	e L	Z	16:57:54.5			17.5	38541		5.8	
CLZ	e P	Z	16:49:20.8	19.6	124.4					
	e S	Z	16:53:07.8							
	e L	Z	16:58:21.7			17.8	30383		5.7	
TNS	e P	Z	16:49:23.8	19.8	117.3					
	e S	Z	16:53:17.3							

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	e L	Z	16:58:20.1			17.2	39585	5.8
BSEG	e P	Z	16:49:34.0	20.8	128.9			
	e S	Z	16:53:36.5					
	e L	Z	16:58:52.1			19.5	24850	5.6
BUG	e P	Z	16:49:36.0	21.0	118.4			
	e S	Z	16:53:43.7					
	e L	Z	16:59:28.8			14.7	48028	6.0
IBBN	e P	Z	16:49:37.1	21.2	121.1			
	e S	Z	16:53:46.0					
	e L	Z	16:59:20.9			17.0	28964	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	17:43:11.8	15.649S	177.352W	33N	4.9	5.2		NEIC

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 18:02:47.3	145.3	14.6					
	e (pPKPab)	Z 18:02:57.3							
	e L	Z 19:06:42.2			19.1	439			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/15	22:53:30.2	17.751S	178.869W	600G	4.6			NEIC

Tonga Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i (PKPdf) +	Z 23:12:09.0	147.0	17.9					
	e PKPab	Z 23:12:12.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/16	07:31:08.4	42.645N	12.659E	10G				NEIC

Northern Italy

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
FUR	e Pn	Z 07:32:27.3	5.6	169.5					3.9
	e L	Z 07:35:40.4			15.5	695		2.7	
GEC2	e Pn	Z 07:32:42.2	6.2	187.1					3.7
	e Sg	N 07:33:50.2							
	e L	Z 07:35:48.7			16.1	715		3.0	
BFO	e Pn	Z 07:32:44.0	6.4	150.3					
	e L	Z 07:35:58.7			16.6	1035		2.9	
WET	e Pn	Z 07:32:45.0	6.5	181.4					
	e Sg	N 07:33:57.2							
	e L	Z 07:36:01.2			17.4	1036		3.1	

GRA1	e Pn	Z	07:32:48.9	7.1	171.4							4.2
	e L	Z	07:36:18.7				21.8	435		2.7		
MOX	e Sg	N	07:34:32.8	8.0	174.5							
	e L	Z	07:37:06.9				15.0	1313		3.4		
TNS	e Pn	Z	07:33:08.0	8.1	157.5							
	e L	Z	07:36:57.0				15.8	415		2.9		
BRG	e Pn	Z	07:33:09.5	8.3	186.6							4.1
	e L	Z	07:36:59.5				17.2	668		3.2		
CLL	e Pn	Z	07:33:14.4	8.7	181.7							4.3
	e L	Z	07:37:31.9				14.8	1297		3.6		
CLZ	e L	Z	07:37:55.2	9.3	169.6		14.9	804		3.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/16	09:12:19.7	6.340N	77.930W	33.0N	5.4	4.3		SZGRF
2000/12/16	09:12:20.6	7.132N	77.951W	33N	5.2	4.7		NEIC

Near west coast of Colombia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 09:24:50.3	84.0	274.0			5.4		
	e L	Z 09:53:38.9			19.8	132		4.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/16								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 13:32:05.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/16	14:27:51.0			G				SZGRF
2000/12/16	14:27:07.7	33.589N	33.160E	31	4.5			NEIC

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:32:09.6	22.8	126.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/16	21:57:59.2	3.961S	151.444E	33N	5.6	5.2		NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 22:16:55.2	123.3	49.8					

GRA1	e PKPdf	Z	22:44:11.4	157.5	20.1
	i PKPbc	Z	22:44:13.1		
	e PKPab	Z	22:44:14.4		
	e pPKPbc	Z	22:44:45.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/18	00:03:15.5	14.506S	173.928E	554*	4.6			NEIC

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z	00:21:42.3	142.1	27.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/18	01:19:20.0	21.107S	179.072W	600G	6.3			NEIC

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	i PKPdf	- Z	01:37:50.3	145.3	20.6					
	i PKPbc	- Z	01:37:51.9							
	i PKPab	+ Z	01:37:53.8							
	e PP	Z	01:41:14.9							
BSEG	i PKPdf	- Z	01:37:52.2	146.4	16.0					
	i PKPbc	- Z	01:37:55.2							
	i PKPab	+ Z	01:37:58.1							
	e pPKPbc	Z	01:40:25.6							
	e PP	Z	01:41:22.2							
IBBN	i PKPdf	- Z	01:37:55.3	148.4	12.2					
	i PKPbc	- Z	01:38:00.1							
	i PKPab	+ Z	01:38:06.2							
	e pPKPbc	Z	01:40:28.7							
CLL	i PKPdf	- Z	01:37:54.8			1.2	518			
	i PKPbc	- Z	01:38:00.1			1.0	5738			
	i PKPab	Z	01:38:06.0			0.9	2526			
	e pPKPbc	Z	01:40:22.3							
	e PP	Z	01:41:30.7							
	e		01:43:42.2							
	e PPP	Z	01:44:47.7							
	e SKKP	Z	01:48:12.1							
	e		01:50:44.1							
	e PSKS	N	01:51:51.0							
	e PPS	Z	01:54:19.5							
	e sSS	E	02:03:38.5							
	e (SSS)	E	02:05:36.0							
	e sSSS	E	02:09:15.5							
	e SSSS	N	02:09:58.5							

	i	P5KP	Z	02:14:27.5					
CLZ	i	PKPdf	- Z	01:37:55.7	148.4	17.0			
	i	PKPbc	- Z	01:38:00.6					
	i	PKPab	+ Z	01:38:06.6					
	e	PP	Z	01:41:31.4					
BRG	i	PKPdf	- Z	01:37:55.6	148.5	23.7			
	i	PKPbc	- Z	01:38:00.9					
	i	PKPab	+ Z	01:38:06.9					
	e	PP	Z	01:41:32.5					
BUG	i	PKPdf	- Z	01:37:56.6	149.3	11.6			
	i	PKPbc	- Z	01:38:02.2					
	e	PP	Z	01:41:35.3					
MOX	i	PKPdf	- Z	01:37:56.7	149.3	19.8			
	i	PKPbc	- Z	01:38:02.6					
	i	PKPab	+ Z	01:38:10.0					
	e	pPKPbc	Z	01:40:28.2					
	e	PP	Z	01:41:35.5					
GRA1	i	PKPdf	- Z	01:37:58.6	150.3	19.6			
	i	PKPbc	- Z	01:38:05.0					
	i	PKPab	+ Z	01:38:14.8					
	e	pPKPbc	Z	01:40:31.1					
	e	PP	Z	01:41:38.3					
	e	L	Z	02:40:09.1			21.4	951	5.6
TNS	i	PKPdf	- Z	01:37:58.4	150.3	14.3			
	i	PKPbc	- Z	01:38:05.0					
	i	PKPab	+ Z	01:38:14.2					
	e	PP	Z	01:41:38.7					
WET	i	PKPdf	- Z	01:37:58.5	150.4	23.0			
	i	PKPbc	- Z	01:38:05.1					
	i	PKPab	+ Z	01:38:15.2					
	e	pPKPbc	Z	01:40:33.0					
	e	PP	Z	01:41:43.1					
GEC2	i	PKPdf	- Z	01:37:58.4	150.4	24.7			
	i	PKPbc	- Z	01:38:05.1					
	e	PP	Z	01:41:43.0					
STU	i	PKPdf	- Z	01:38:00.3	151.6	16.4			
	i	PKPbc	- Z	01:38:07.7					
	i	PKPab	+ Z	01:38:19.6					
	e	PP	Z	01:41:45.8					
FUR	i	PKPdf	- Z	01:38:00.2	151.7	20.7			
	i	PKPbc	- Z	01:38:07.8					
	i	PKPab	+ Z	01:38:20.8					
	e	pPKPbc	Z	01:40:33.6					
	e	PP	Z	01:41:48.6					
BFO	i	PKPdf	- Z	01:38:00.8	152.1	14.9			
	i	PKPbc	- Z	01:38:08.9					
	i	PKPab	+ Z	01:38:22.0					
	e	pPKPbc	Z	01:40:33.8					
	e	PP	Z	01:41:50.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source				
2000/12/18												
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
		GRA1	e PKP	Z 03:55:33.1								
2000/12/18	18:29:29.8			Depth	mb	Ms	ML	Source				
Weddell Sea				N				SZGRF				
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
		GRA1	e (PP)	Z 18:50:47.2								
2000/12/18	20:26:30.1			Depth	mb	Ms	ML	Source				
Tonga Islands		21.005S	179.081W	600G	4.5			NEIC				
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
		GRA1	e PKPdf	Z 20:45:13.0	150.2	19.6						
			i PKPbc	- Z 20:45:14.7								
			e PKPab	Z 20:45:23.1								
2000/12/18	20:47:21.4			Depth	mb	Ms	ML	Source				
Eastern Mediterranean Sea				N	3.8			SZGRF				
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
		GRA1	e P	Z 20:51:55.3					3.8			
		BEAM		20:51:55.3			1.1	7				
2000/12/18	21:15:30.7			Depth	mb	Ms	ML	Source				
Fiji Islands region		21.163S	179.130W	649D	5.1			NEIC				
		Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
		CLL	e PKPdf	Z 21:34:03.0			1.5	42				
			e PKPbc	Z 21:34:07.1			1.0	236				

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	i	PKPab	Z	21:34:13.6			0.8	85
	i	pPKPbc	Z	21:36:36.7			0.9	18
	e	PP	Z	21:37:41.2				
GRA1	e	PKPdf	Z	21:34:06.3	150.3	19.8		
	i	PKPbc	- Z	21:34:12.2				
	e	PKPab	Z	21:34:22.5				
	e	pPKPbc	Z	21:36:39.5				
	e	PP	Z	21:37:53.0				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/18								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z 23:40:14.8							
BRG	e PKP	Z 23:40:06.5							
BSEG	e PKP	Z 23:39:59.4							
CLL	e PKP	Z 23:40:05.5							
CLZ	e PKP	Z 23:40:12.2							
GEC2	e PKP	Z 23:40:11.3							
MOX	e PKP	Z 23:40:08.4							
TNS	e PKP	Z 23:40:10.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 09:09:48.4							
GRA3	e L	Z 10:13:36.5			21.5	429			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/19								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 11:03:41.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/19	13:11:47.4	11.782N	144.760E	33N	6.3	5.8		NEIC
South of Mariana Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RGN	e Pdiff	Z 13:25:40.9	102.1	48.6					

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RUE	e Pdiff	Z	13:25:41.7	103.2	49.4					
BSEG	e Pdiff	Z	13:25:54.4	103.8	46.0					
BRG	e Pdiff	Z	13:25:55.9	104.2	49.8					
CLL	e Pdiff	Z	13:25:50.7			1.0	19			
	e PP	Z	13:30:08.6							
	e SKSac	E	13:36:29.1							
	e PS	Z	13:39:23.0							
	e PPS	N	13:40:12.0							
	e SS	N	13:45:21.7							
	e SSS	N	13:48:52.8							
	e LV	Z	14:01:59.1							
	e L	Z	14:20:32.8			18.0	4812		6.1	
CLZ	e Pdiff	Z	13:26:00.4	105.2	46.5					
MOX	e Pdiff	Z	13:26:01.1	105.5	47.8					
GEC2	e Pdiff	Z	13:26:02.6	105.6	50.0					
WET	e Pdiff	Z	13:26:04.1	105.8	49.3					
GRA1	e Pdiff	Z	13:25:59.7	106.3	47.7					
	e PP	Z	13:32:43.5							
	e PKKP	Z	13:41:31.5							
	e L	Z	14:22:05.1			18.2	3327		5.9	
GRFO	e Pdiff	Z	13:26:02.6	106.3	47.7					
BUG	e Pdiff	Z	13:26:10.9	106.9	43.7					
TNS	e Pdiff	Z	13:26:06.4	107.2	45.1					
FUR	e Pdiff	Z	13:26:12.3	107.3	48.1					
STU	e Pdiff	Z	13:26:13.8	107.9	46.1					
BFO	e Pdiff	Z	13:26:16.1	108.6	45.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/19	14:20:50.1			G			3.9	SZGRF
2000/12/19	14:20:49.9	43.742N	7.416E	2G				NEIC

Near south coast of France

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e Pn	Z 14:21:59.5	4.6	188.2					3.9
	e Sn	E 14:22:54.6							
GRA1	e Sn	E 14:23:37.5	6.5	205.1					
WET	e Pn	Z 14:22:28.2	6.6	216.9					
	e Sn	E 14:23:41.6							
GEC2	e Pn	Z 14:22:29.0	6.7	222.7					
	e Sn	E 14:23:41.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/20	09:19:52.8	53.190N	159.450E	64.4	5.4	4.7		SZGRF
2000/12/20	09:19:50.2	53.411N	159.890E	67D	5.6			NEIC

Near east coast of Kamchatka Peninsula, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:30:56.2	69.7	18.8					
RUE	e P	Z	09:31:00.2	70.4	20.7					
CLL	e P	Z	09:31:07.3	71.7	20.1					
CLZ	e P	Z	09:31:08.3	71.7	18.6					
IBBN	e P	Z	09:31:08.3	71.7	17.1					
BRG	e P	Z	09:31:08.8	71.9	20.6					
MOX	e P	Z	09:31:13.3	72.6	19.2					
BUG	e P	Z	09:31:13.7	72.7	16.7					
GRA1	i P	- Z	09:31:19.6	73.6	18.9	1.0	43	5.4		
	e		09:31:26.1							
	i pP	- Z	09:31:37.1							
	e (sP)	Z	09:31:44.5							
	e		09:31:53.1							
	e		09:32:02.5							
	e L	Z	09:59:41.2			34.9	704		4.7	
TNS	e P	Z	09:31:19.6	73.6	17.3					
WET	e P	Z	09:31:20.4	73.7	19.8					
GEC2	e P	Z	09:31:20.6	73.8	20.2					
STU	e P	Z	09:31:26.5	74.9	17.6					
FUR	e P	Z	09:31:28.7	75.0	18.7					
BFO	e P	Z	09:31:29.9	75.4	17.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/20	11:23:56.9	39.061S	74.425W	33N	6.1	6.2		NEIC

Off coast of central Chile

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKPdf	Z	11:42:35.9	113.9	237.4					
	e L	Z	12:27:20.1			19.6	10193		6.4	
STU	e PKPdf	Z	11:42:36.8	114.6	238.1					
	e L	Z	12:26:44.6			20.9	9523		6.4	
TNS	e PKPdf	Z	11:42:36.8	115.0	238.2					
	e L	Z	12:28:39.3			19.9	21149		6.7	
BUG	e PKPdf	Z	11:42:36.9	115.0	238.0					
	e L	Z	12:25:32.3			21.2	8770		6.3	
GRA1	e PKPdf	Z	11:42:40.7	116.3	239.7					
	e PP	Z	11:43:43.5							
	e SKP	Z	11:46:19.2							
	e SKS	Z	11:49:27.9							
	e (PKKPbc)	Z	11:52:41.3							
	e PKKPab	Z	11:53:30.8							
	e L	Z	12:35:11.9			18.9	9060		6.4	
CLZ	e PKPdf	Z	11:42:39.9	116.9	240.1					
	e L	Z	12:29:48.8			20.8	20670		6.7	

WET	e PKPdf	Z	11:42:41.3	116.9	240.4					
	e L	Z	12:30:22.1			20.6	11088		6.5	
MOX	e PKPdf	Z	11:42:40.5	117.0	240.3					
	e L	Z	12:28:04.3			20.3	8447		6.3	
GEC2	e PKPdf	Z	11:42:40.4	117.2	240.8					
	e L	Z	12:28:42.1			21.6	8329		6.3	
BSEG	e PKPdf	Z	11:42:41.9	117.9	241.0					
	e L	Z	12:34:35.2			19.4	10264		6.5	
CLL	e PKPdf	Z	11:42:41.2			1.3	55			
	e		11:42:51.2							
	e PP	Z	11:43:51.5							
	e PPP	Z	11:46:26.2							
	e SKKSac	E	11:50:52.2							
	e Sdiff	N	11:51:50.9							
	e PS	Z	11:53:43.1							
	e SS	N	12:00:13.3							
	e SSS	E	12:04:48.2							
	e L	Z	12:37:38.8			18.0	10987		6.5	
BRG	e PKPdf	Z	11:42:44.2	118.4	241.9					
	e L	Z	12:36:17.6			19.3	10765		6.5	
RUE	e PKPdf	Z	11:42:43.8	119.0	242.6					
	e L	Z	12:31:21.1			19.0	11629		6.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/20	13:22:16.5				5.1			SZGRF
2000/12/20	13:22:22.0	36.765N	71.051E	74*	5.1			NEIC

Pakistan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 13:30:27.9	44.2	83.4			5.1		
	i pP	- Z 13:30:38.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/20	15:17:17.4	7.040N	83.830W	23.1	5.1			SZGRF
2000/12/20	15:17:20.7	9.632N	85.283W	33N	4.8	4.5		NEIC

Off coast of Costa Rica

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	+ Z 15:30:05.4	86.8	281.2			5.1		
	e pP	- Z 15:30:12.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKP	- Z	00:25:41.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	01:01:27.8	5.740S	151.126E	33N	6.4	6.5		NEIC
New Britain, Papua New Guinea, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
BRG	i PKPdf	+ Z	01:20:22.2	122.6	53.4						
	e PP	Z	01:23:54.7								
	e L	Z	02:15:22.0			20.7	15436	6.6			
CLL	i PKPdf	+ Z	01:20:22.3			2.0	1064				
	e pPKPdf	Z	01:20:36.0								
	e PP	Z	01:21:59.0								
	e SKP	Z	01:23:54.8								
	e PPP	Z	01:24:46.4								
	e PKKPab	Z	01:30:14.1			1.7	46				
	e PS	Z	01:31:56.5								
	e PPS	Z	01:33:17.1								
	e SKKP	Z	01:34:07.8			1.9	42				
	e SS	E	01:39:01.9								
CLZ	e L	Z	02:13:28.1			22.0	13942		6.5		
	i PKPdf	+ Z	01:20:24.8	123.7	49.2						
	e PP	Z	01:23:55.2								
e L	Z	02:16:00.2	21.4			15296	6.6				
MOX	i PKPdf	+ Z	01:20:24.6	123.9	51.1						
	e PP	Z	01:23:54.3								
	e L	Z	02:17:42.9			20.7	9022	6.4			
GEC2	i PKPdf	+ Z	01:20:24.6	123.9	54.2						
	e PP	Z	01:23:55.7								
	e L	Z	02:14:47.6			21.7	9866	6.4			
WET	i PKPdf	+ Z	01:20:25.4	124.1	53.2						
	e PP	Z	01:23:56.1								
	e L	Z	02:15:38.2			21.9	12926	6.5			
IBBN	i PKPdf	+ Z	01:20:26.2	124.6	46.1						
	e PP	Z	01:23:57.5								
	e L	Z	02:18:11.9			20.2	11078	6.5			
GRA1	i PKPdf	+ Z	01:20:26.4	124.7	51.2						
	e PP	Z	01:23:57.2								
	e L	Z	02:16:55.9			21.2	9588	6.4			
BUG	i PKPdf	+ Z	01:20:27.6	125.4	46.0						
	e PP	Z	01:23:59.8								
	e L	Z	02:17:07.2			21.1	11218	6.5			
FUR	i PKPdf	+ Z	01:20:27.9	125.6	52.1						
	e PP	Z	01:24:00.3								

	e L	Z	02:16:32.1			21.7	13587	6.6
TNS	i PKPdf	+ Z	01:20:28.4	125.7	47.9			
	e L	Z	02:18:41.2			21.8	8606	6.4
STU	i PKPdf	+ Z	01:20:29.2	126.3	49.5			
	e PP	Z	01:23:59.8					
	e L	Z	02:16:44.8			21.6	6676	6.3
BFO	i PKPdf	+ Z	01:20:30.2	127.0	48.9			
	e PP	Z	01:24:01.2					
	e L	Z	02:16:32.2			21.7	7266	6.3

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/21 02:41:23.4 5.298S 154.031E 386D 5.5 NEIC
 Bougainville - Solomon Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKPdf	Z	02:59:37.5	123.6	50.1					
	e pPKPdf	Z	03:01:16.9							
	e PP	Z	03:01:26.3							
CLL	i PKPdf	- Z	02:59:37.4			0.9	51			
	e pPKPdf	Z	03:01:16.6							
	e PP	Z	03:01:26.5							
	e PKKPab	Z	03:09:25.6			1.2	22			
CLZ	e PKPdf	Z	02:59:39.7	124.6	45.8					
	e pPKPdf	Z	03:01:18.8							
	e PP	Z	03:01:32.8							
MOX	e PKPdf	Z	02:59:39.7	124.9	47.8					
	e pPKPdf	Z	03:01:19.2							
	e PP	Z	03:01:33.8							
GEC2	e PKPdf	Z	02:59:40.1	125.0	50.9					
	e pPKPdf	Z	03:01:19.7							
	e PP	Z	03:01:35.6							
WET	e PKPdf	Z	02:59:40.7	125.2	49.9					
	e pPKPdf	Z	03:01:19.8							
	e PP	Z	03:01:37.8							
IBBN	e PKPdf	Z	02:59:40.8	125.4	42.7					
	e pPKPdf	Z	03:01:19.9							
GRA1	e PKPdf	Z	02:59:41.6	125.7	47.8					
	e pPKPdf	Z	03:01:21.1							
	e PP	Z	03:01:39.9							
BUG	e PKPdf	Z	02:59:42.4	126.3	42.6					
	e pPKPdf	Z	03:01:21.8							
TNS	e PKPdf	Z	02:59:43.5	126.6	44.5					
	e pPKPdf	Z	03:01:22.4							
	e PP	Z	03:01:45.5							
FUR	e PKPdf	Z	02:59:43.3	126.7	48.7					

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	e pPKPdf	Z	03:01:23.0									
	e PP	Z	03:01:47.8									
STU	e PKPdf	Z	02:59:44.6	127.3	46.1							
	e pPKPdf	Z	03:01:23.9									
	e PP	Z	03:01:50.8									
BFO	e PKPdf	Z	02:59:45.4	128.0	45.4							
	e pPKPdf	Z	03:01:24.6									

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	03:06:13.7	18.430S	178.650W	600G	5.2			NEIC

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
IBBN	e PKPdf	Z	03:24:47.4	145.8	10.8					
CLZ	e PKPdf	Z	03:24:46.4	145.8	15.4					
CLL	e PKPdf	Z	03:24:46.4	145.9	20.0					
BRG	e PKPdf	Z	03:24:47.4	146.0	21.7					
BUG	e PKPdf	Z	03:24:47.3	146.7	10.3					
MOX	e PKPdf	Z	03:24:49.0	146.8	18.0					
TNS	e PKPdf	Z	03:24:50.9	147.7	12.7					
GRA1	e PKPdf	Z	03:24:50.6	147.7	17.7					
WET	e PKPdf	Z	03:24:51.5	147.9	20.9					
GEC2	e PKPdf	Z	03:24:51.3	148.0	22.5					
STU	e PKPdf	Z	03:24:49.9	149.0	14.6					
FUR	e PKPdf	Z	03:24:49.7	149.2	18.6					
BFO	e PKPdf	Z	03:24:55.4	149.6	13.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	- Z	03:54:41.3							
	e pPKPdf	Z	03:56:54.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	05:19:21.4				4.8	4.4		SZGRF
2000/12/21	05:19:18.6	58.400N	31.950W	10G	4.8	4.4		NEIC

North Atlantic Ocean

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	05:24:56.1	26.3	305.9			4.8		
	e (pP)	Z	05:25:01.4							
	e L	Z	05:34:11.1			21.6	1207		4.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	10:39:4.6			N	4.9			SZGRF
Western Gulf of Aden								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:47:31.7					4.9		
BEAM		10:47:31.7			1.0	10			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 16:31:55.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	20:50:08.7	33.552N	140.364E	87?	4.4			NEIC
Sea of Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 21:02:47.0	85.3	40.4			4.4		
	e pP	Z 21:02:57.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/21	22:49:30.9			N	4.9			SZGRF
Sea of Japan								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:02:53.9					4.9		
BEAM		23:02:53.9			1.2	5			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 00:27:38.2							
	e (pPKP)	Z 00:27:47.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22	00:40:42.8	57.260N	160.460W	107.3	5.5	4.3		SZGRF
2000/12/22	00:40:36.9	56.826N	158.365W	108D	5.5			NEIC

Bristol Bay, Alaska, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 00:51:59.8	73.1	354.1			5.5		
	e pP	Z 00:52:26.9							
	e L	Z 01:17:16.8			39.3	340		4.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:53:23.6							
	e (pP)	Z 02:53:35.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22	08:30:39.1	10.560S	164.204E	33N	5.5	5.4		NEIC

Santa Cruz Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 08:50:00.3	134.9	39.1					
	e (pPKPdf)	Z 08:50:06.3							
	e L	Z 09:48:30.9			21.7	864		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22	09:04:57.2			N	3.9			SZGRF

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:10:08.4					3.9		
BEAM		09:10:08.4			1.0	4			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/22	10:13:00.8	44.833N	147.157E	137km	5.9			NEIC

Kuril Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
BFO	e P	Z	10:24:58.5								
	e L	Z	10:58:28.8			19.9	1364				
BRG	e P	Z	10:24:36.2								
	e L	Z	11:03:00.0			19.9	1506				
BUG	e P	Z	10:24:45.2								
	e L	Z	11:01:00.2			21.8	2391				
CLL	i P	+ Z	10:24:35.8			0.8	946	6.9			
	e sP	Z	10:25:23.6								
	e PP	Z	10:27:28.4								
	e pPP	Z	10:28:19.8								
	e S	N	10:34:08.3								
	e sS	N	10:34:44.6								
	e SS	N	10:39:30.2								
	e sSSS	N	10:43:31.8								
	e SSSS	N	10:44:46.9								
	e LV	Z	10:48:22.1								
	e L	Z	10:56:22.1			22.0	1328				
	CLZ	e P	Z	10:24:38.6							
		e L	Z	10:59:18.6			21.3	1636			
FUR	e P	Z	10:24:54.5								
	e L	Z	10:55:12.8			20.0	1702				
GEC2	e P	Z	10:24:46.6								
	e L	Z	11:03:28.7			19.1	1960				
GRA1	i P	+ Z	10:24:47.8			1.8	3528	6.2			
	e (pP)	Z	10:25:36.5								
	e L	Z	10:59:40.7			20.2	1235				
MOX	e P	Z	10:24:41.8								
	e L	Z	10:59:10.8			21.1	1763				
RGN	e P	Z	10:24:19.6								
	e L	Z	11:00:46.9			20.0	2509				
STU	e P	Z	10:24:55.0								
	e L	Z	10:55:02.9			22.0	1231				
TNS	e P	Z	10:24:49.5								
	e L	Z	10:59:57.2			21.8	1656				
WET	e P	Z	10:24:47.2								
	e L	Z	11:04:14.3			19.1	2958				
WLF	e P	Z	10:24:55.9								
	e L	Z	11:05:47.5			18.4	1444				

Date Origin Time Lat Long Depth mb Ms ML Source
 2000/12/22 19:06: 4.9 N SZGRF
 Near coast of Libya

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	19:10:09.6							

BFO	e PP	Z	03:30:13.3			
	e SP	Z	03:39:42.7			
	e (PS)	Z	03:40:45.9			
	e L	Z	04:14:12.2	20.2	296	4.9
BRG	e PP	Z	03:29:39.6			
	e SP	Z	03:39:06.3			
	e (PS)	Z	03:39:54.7			
	e L	Z	04:20:43.4	20.4	341	4.9
BUG	e PP	Z	03:30:08.5			
	e SP	Z	03:39:37.7			
	e (PS)	Z	03:40:41.0			
	e L	Z	04:22:29.6	18.6	269	4.9
CLL	e PP	Z	03:29:47.4			
	e SP	Z	03:39:06.5			
	e (PS)	Z	03:39:59.0			
	e L	Z	04:11:01.1	22.0	230	4.7
CLZ	e PP	Z	03:29:55.4			
	e SP	Z	03:39:19.9			
	e (PS)	Z	03:40:16.4			
	e L	Z	04:23:22.3	20.4	350	4.9
FUR	e PP	Z	03:29:56.8			
	e SP	Z	03:39:25.8			
	e (PS)	Z	03:40:21.6			
	e L	Z	04:18:37.1	21.5	351	4.9
GEC2	e PP	Z	03:29:46.2			
	e SP	Z	03:39:09.3			
	e (PS)	Z	03:40:02.5			
	e L	Z	04:19:31.9	20.0	236	4.8
GRA1	e PP	Z	03:29:55.8			
	e SP	Z	03:39:21.3			
	e (PS)	Z	03:40:22.5			
	e L	Z	04:22:57.8	19.0	308	4.9
MOX	e PP	Z	03:29:51.9			
	e SP	Z	03:39:17.3			
	e (PS)	Z	03:40:14.4			
	e L	Z	04:15:05.6	19.9	414	5.0
STU	e PP	Z	03:30:04.6			
	e SP	Z	03:39:37.8			
	e (PS)	Z	03:40:35.7			
	e L	Z	04:23:53.0	20.8	329	4.9
TNS	e PP	Z	03:30:06.5			
	e SP	Z	03:39:38.5			
	e (PS)	Z	03:40:37.0			
	e L	Z	04:23:22.6	21.5	274	4.8
WET	e PP	Z	03:29:48.7			
	e SP	Z	03:39:13.7			
	e (PS)	Z	03:40:08.2			
	e L	Z	04:18:15.1	21.8	437	5.0
WLF	e PP	Z	03:30:18.5			

e SP	Z	03:39:52.8									
e (PS)	Z	03:40:57.4									
e L	Z	04:23:50.8				20.5		213		4.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/24	06:12:0.2			N	4.4			SZGRF
Eastern Kalaallit Nunaat								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 06:18:26.3					4.4		
BEAM		06:18:26.3			1.2	7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/24	11:30:54.3			N	4.9	3.5		SZGRF
2000/12/24	11:30:48.0	38.566N	40.249E	10G	4.6			NEIC
Turkey								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:35:59.0	23.4	107.3	1.2	48	4.9		
	e L	Z 11:46:27.9			18.8	145		3.5	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/24	12:42:48.5	20.566S	178.591W	500G	4.4			NEIC
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPbc	- Z 13:01:41.3	149.8	18.5					
	e PKPab	Z 13:01:49.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/25	03:50:33.9			G	4.0			SZGRF
2000/12/25	03:50:32.9	72.853N	14.492E	10G	4.4			NEIC
Norwegian Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 03:55:40.9	23.2	2.4			4.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
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2000/12/25 05:11:58.6
Fiji Islands region

21.249S 179.182W 645D 5.3 NEIC

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z	05:30:30.2			1.4	32			
	i PKPbc	- Z	05:30:35.6			1.1	359			
	e PKPab	Z	05:30:41.3							
	e pPKPbc	Z	05:33:01.4							
	e SKP	Z	05:33:14.4							
	e PP	Z	05:34:08.5							
GRA1	e PKPdf	Z	05:30:33.7	150.4	19.9					
	i PKPbc	- Z	05:30:40.5							
	e PKPab	Z	05:30:49.8							
	e pPKPbc	Z	05:33:09.2							
	e PP	Z	05:34:17.4							

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/25 11:16:35.4 23.237S 176.404W 33N 5.2 4.9 NEIC
South of Fiji Islands

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z	11:36:29.4	152.9	15.5					
	e (pPKPdf)	Z	11:36:34.6							
	e L	Z	12:41:24.3			20.8	131			

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/25

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z	13:28:43.6							
	e (pPKPdf)	Z	13:28:54.4							

Date Origin Time Lat Long Depth mb Ms ML Source
2000/12/25 13:24:22.6 42.564S 120.296E 10G 5.8 5.6 NEIC
South of Australia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z	13:43:25.6	132.2	110.0					
	i pPKPdf	+ Z	13:43:37.6							
	e sPKPdf	Z	13:43:45.2							
	e PP	Z	13:45:56.4							
	e L	Z	14:38:28.9			21.4	368		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/25	20:43: 9.6	50.550N	178.100E	33.0N	4.7	4.0		SZGRF

Rat Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 20:55:11.4	79.1	8.4			4.7		
GRA2	e L	Z 21:33:53.9	79.2	8.5	19.4	73		4.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	03:20:45.9			N	4.6			SZGRF
2000/12/26	03:20:59.2	20.947N	122.047E	157D	5.0			NEIC

Southwestern Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 03:33:27.2	86.7	61.0			4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 04:43:25.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	06:00:55.8	21.329S	168.681E	33N	5.0			NEIC

New Caledonia region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 06:20:34.5	146.5	40.3					
	i PKPbc	- Z 06:20:35.9							
	e PKPab	Z 06:20:46.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPab)	Z 06:25:16.9							

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Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	10:21:33.8				4.7	3.9		SZGRF
2000/12/26	10:22:16.4	48.872N	92.207E	10G	4.2			NEIC

Mongolia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA2	e L	Z 10:54:55.0	50.1	57.9	18.3	91		3.9	
GRA1	i P	+ Z 10:31:16.5	50.1	57.8			4.7		
	e pP	Z 10:31:23.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	15:21:27.4	34.918S	179.666E	33N	5.2	5.4		NEIC

South of Kermadec Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 15:41:24.7	163.0	34.1					
	e PKPab	Z 15:42:15.3							
	e L	Z 17:01:35.0			19.9	474		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	19:08:37.1	24.462S	175.945W	33N	4.8	4.3		NEIC

South of Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPab	Z 19:28:48.9	154.2	15.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 19:51:25.3							
	e PKPab	Z 19:51:28.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/26	22:12:41.8	43.960N	151.250E	33.0N	4.6			SZGRF
2000/12/26	22:12:46.8	44.460N	148.267E	33N	4.7			NEIC

East of Kuril Islands, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 22:24:48.6	78.7	29.7			4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/27	07:03:48.0	9.246S	154.565E	33N	5.2	5.7		NEIC

D'Entrecasteaux Islands, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 07:23:05.1	129.4	49.7					
	e pPKPdf	Z 07:23:18.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/27	07:26:31.5	4.233S	152.729E	33N	5.7	5.6		NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	+ Z 07:45:28.8	124.1	48.6					
	e pPKPdf	Z 07:45:36.0							
	e PP	Z 07:47:14.5							
	e PKKPab	Z 07:55:14.9							
	e SKKPab	Z 07:59:11.7							
	e L	Z 08:21:53.5			21.4	853		5.4	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/27	09:16: 7.4			N				SZGRF

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:20:24.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/28	00:42:17.1			G			3.2	SZGRF
2000/12/28	00:42:18.5	45.613N	14.387E	10G				NEIC

Northwestern Balkan Peninsula

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Sn	E 00:43:43.9	3.3	171.6					
WET	e Sn	E 00:43:58.3	3.7	163.3					
GRC1	e Pn	Z 00:43:18.5	3.9	149.1					3.2
	e Sn	N 00:44:02.0							
	e Sg	E 00:44:21.5							
GRA1	e Pn	Z 00:43:25.5	4.6	151.2					
	e Sg	E 00:44:43.3							
BFO	e Pn	Z 00:43:32.3	4.9	121.1					

	e Sn	E	00:44:28.0						
CLL	e Sg	E	00:45:21.3	5.8	170.3				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2000/12/28											
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
	GRA1	e P	Z 04:31:54.5								

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2000/12/28	04:34:28.6	4.037S	152.378E	33N	5.6	6.0		NEIC			
New Britain, Papua New Guinea, region											
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
	GRA1	i PKPdf	+ Z 04:53:25.3	123.8	48.8						
		e PP	Z 04:55:11.2								
		e L	Z 05:48:06.8			22.0	2389		5.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2000/12/28	09:01:29.3	23.390N	121.813E	33N	4.6	4.2		NEIC			
Taiwan											
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
	GRA1	e P	Z 09:14:01.3	84.6	59.7			4.8			
		e L	Z 09:56:16.5			19.5	100		4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2000/12/28	18:12:33.0	22.477S	174.984W	33N	5.1	5.3		NEIC			
Tonga Islands region											
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	
	GRA1	e PKPbc	Z 18:32:29.9	152.3	12.4						
		e PKPab	Z 18:32:41.3								
		e L	Z 19:56:37.8			18.4	420		5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source			
2000/12/28											
	Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML	

GRA1 e (PKPab) Z 19:07:55.8
 e pPKPab Z 19:08:10.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/28	22:21: 2.2	45.450N	15.900E	10.0G			3.2	SZGRF

Northwestern Balkan Peninsula

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 22:21:59.5	3.7	155.4					3.0
	e Sn	N 22:22:42.4							
WET	e Pn	Z 22:22:06.2	4.2	149.9					
	e Sn	E 22:22:54.0							
GRC1	e Pn	Z 22:22:12.4	4.6	138.4					3.5
	e Sn	N 22:23:04.3							
GRA1	e Sn	E 22:23:20.1	5.3	141.6					
CLL	e Pn	Z 22:22:32.2	6.2	160.7					
	e Sn	N 22:23:41.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/29								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e (PKPdf)	Z 00:00:37.4							
	i PKPbc	- Z 00:00:41.7							
	e PKPab	Z 00:00:51.6							
	e (pPKPbc)	Z 00:03:13.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/29	10:42:59.9	4.233S	152.954E	33N	5.2	4.5		NEIC

New Britain, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 11:01:57.9	124.2	48.4					
	e pPKPdf	Z 11:02:05.7							
	e PP	Z 11:03:52.4							
	e L	Z 12:00:57.1			21.8	132		4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/29	18:03:18.0			N	4.6	4.6		SZGRF
2000/12/29	18:03:32.3	24.587N	121.847E	33N	5.0	4.6		NEIC

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2000/12/30 10:55:31.3
Fiji Islands region

N 4.0 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:02:34.7					4.0		
BEAM		11:02:34.7			0.8	2			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/30	11:47:36.2				4.9	4.1		SZGRF
2000/12/30	11:47:20.3	51.540N	159.267E	48D	4.8	4.3		NEIC

Near east coast of Kamchatka Peninsula, Russia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 11:59:00.7	75.2	19.9			4.9		
	e pP	Z 11:59:14.5							
	e (sP)	Z 11:59:24.6							
GRA2	e L	Z 12:36:28.0	75.2	20.0	19.4	89		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/30	15:08:19.0				4.4	3.7		SZGRF
2000/12/30	15:07:12.5	39.844N	54.738E	32D	5.0	4.0		NEIC

Eastern Caucasus

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:13:38.6	31.9	91.1			4.4		
	e pP	Z 15:13:47.7							
	e L	Z 15:28:14.9			18.2	236		3.7	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPdf	Z 18:25:14.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/30	19:42:53.2	24.880N	123.660E	33.0N	5.2			SZGRF
2000/12/30	19:42:58.1	24.759N	122.763E	85	5.1			NEIC

Southwestern Ryukyu Islands, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	+ Z 19:55:22.9	84.0	58.1			5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/31	01:45: 0.8	81.000N	124.760E	34.4	5.1	4.1		SZGRF
2000/12/31	01:45:03.3	81.567N	120.234E	27D	5.1	4.5		NEIC

East of Severnaya Zemlya

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i P	- Z 01:53:09.5	43.7	11.6			5.1		
	e pP	Z 01:53:18.7							
	e PP	Z 01:54:47.0							
	e L	Z 02:11:03.0			21.6	233		4.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/31								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKPbc	Z 13:24:17.0							
	e PKPab	Z 13:24:22.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/31								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	i PKPdf	+ Z 15:06:39.6							
	e pPKPdf	Z 15:07:05.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2000/12/31	22:04:38.7	22.690N	140.230E	82.2	4.9			SZGRF

Volcano Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 22:17:50.4	94.7	46.0			4.9		
	i pP	+ Z 22:18:12.7							

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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 comprehensive at CLL-station and included in the bulletin (ISOP-analysis)

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