

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

2

2004/12/02 03:29:58.5

36.000N

33.670W

33.0N

SZGRF

Azores Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z	03:36:31.7	33.0	263.9	1.4	33			
CLZ	e P	Z	03:36:47.1	34.8	260.5	3.4	183			
GRA1	e P	Z	03:36:48.5	35.0	264.3	1.0	11			
BSEG	e P	Z	03:36:49.8	35.1	257.5	1.7	98			
MOX	e P	Z	03:36:52.1	35.4	263.3	1.4	18			
WERD	e P	Z	03:36:55.9	35.8	264.2	1.4	17			
CLL	e P	Z	03:37:00.9	36.3	263.6	1.2	13			
GEC2	e P	Z	03:37:02.4	36.6	267.5	1.4	14			
BRG	e P	Z	03:37:04.8	36.9	265.0	1.3	12			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	04:17:23.0	50.580N	175.400W	33.0N	5.0			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	04:29:06.1	75.4	3.7	0.9	16	5.1		
NRDL	e P	Z	04:29:14.1	76.8	3.6	1.2	18	5.1		
IBBN	e P	Z	04:29:15.6	77.1	2.1	0.9	25	5.3		
CLZ	e P	Z	04:29:17.8	77.5	3.8	0.9	21	5.3		
CLL	e P	Z	04:29:19.4	77.9	5.4	0.9	16	5.2		
BUG	e P	Z	04:29:20.0	78.0	1.7	0.8	14	5.2		
BRG	e P	Z	04:29:21.8	78.2	6.0	0.9	14	5.0		
MOX	e P	Z	04:29:24.0	78.6	4.5	0.9	15	5.1		
GUNZ	e P	Z	04:29:25.3	78.8	5.0	1.0	10	4.8		
GRA1	e P	Z	04:29:29.6	79.6	4.3	0.8	24	5.2		
GEC2	e P	Z	04:29:33.2	80.3	5.8	1.1	9	4.7		
STU	e P	Z	04:29:34.7	80.6	3.0	0.8	15	5.1		
BFO	e P	Z	04:29:37.0	81.0	2.4	1.1	13	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	10:28: 3.0	48.930N	154.200E	143.7	5.3			SZGRF

Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	10:39:17.3	72.7	23.9	0.9	26	5.4		
	e pP	Z	10:39:53.2							
NRDL	e P	Z	10:39:25.4	74.1	23.6	0.9	16	5.0		
CLL	i P	+ Z	10:39:26.8	74.4	25.3	1.0	46	5.6		
	e		10:40:02.7							
	e LQ	T	11:04:18.1							
	e L	Z	11:18:33.3			18.0	622		5.0	

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

3

BRG	e P	Z	10:39:27.8	74.6	25.8	0.7	12	5.0
CLZ	e P	Z	10:39:28.7	74.6	23.7	1.3	54	5.4
WERD	e P	Z	10:39:32.7	75.4	24.8	1.5	29	5.2
MOX	e P	Z	10:39:32.8	75.4	24.4	1.2	25	5.2
	e pP	Z	10:40:08.5					
GUNZ	e P	Z	10:39:33.4	75.5	24.8	0.9	17	5.2
UBBA	e P	Z	10:39:34.3	75.7	23.4	0.9	19	5.2
	e pP	Z	10:40:09.8					
BUG	e P	Z	10:39:34.5	75.7	21.7	0.9	25	5.4
GRA1	e P	Z	10:39:38.9	76.4	24.0	1.0	47	5.6
	e pP	Z	10:40:13.6					
GEC2	e P	Z	10:39:38.8	76.5	25.5	0.9	12	5.0
BFO	e P	Z	10:39:49.5	78.4	22.1	1.6	48	5.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	11:02:58.2	19.470S	178.080W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	11:22:30.4	144.9	13.9					
NRDL	e PKPbc	Z	11:22:35.5	146.4	14.0					
IBBN	e PKPbc	Z	11:22:36.8	146.8	10.1					
CLZ	e PKPbc	Z	11:22:37.3	147.0	14.7					
CLL	e PKPbc	Z	11:22:36.8	147.0	19.4					
BRG	e PKPbc	Z	11:22:37.6	147.2	21.3					
WERD	e PKPbc	Z	11:22:39.9	147.9	18.7					
GUNZ	e PKPbc	Z	11:22:40.4	148.0	18.8					
GRA1	e PKPbc	Z	11:22:42.7	148.9	17.1					
	e PKPab	Z	11:22:46.2							
GEC2	e PKPbc	Z	11:22:43.2	149.1	22.0					
WLF	e PKPbc	Z	11:22:44.8	149.6	7.9					
	e PKPab	Z	11:22:49.0							
BFO	e PKPbc	Z	11:22:46.8	150.7	12.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	12:54:27.5	40.500N	77.500E	70.0N	4.7			GSRC-M

Kyrgyzstan-Xinjiang border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	13:02:50.3	46.1	75.0	1.5	12	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	14:48:15.7	17.618N	60.545W	33.0N	5.1			SZGRF

Leeward Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 14:58:52.4	64.9	268.0	1.1	12	5.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	15:52:1.6	39.563N	26.871E	33.0N				SZGRF

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:55:36.8	15.0	126.5	1.0	13			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	17:50:44.8	34.130N	2.220W	33.0N	4.5	4.1		SZGRF

Morocco

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 17:54:32.9	16.2	212.8	1.2	29	4.3		
WLF	e P	Z 17:54:37.1	16.7	204.8	1.0	45	4.6		
FUR	e P	Z 17:54:42.5	17.3	220.6	1.4	49	4.4		
GRA1	e P	Z 17:54:56.5	18.4	217.5	1.4	52	4.5		
	e L	Z 18:01:30.8			18.8	847		4.1	
BUG	e P	Z 17:54:58.0	18.6	205.3					
GEC2	e P	Z 17:55:01.8	18.9	224.6	1.1	13	4.1		
MOX	e P	Z 17:55:07.2	19.3	216.7	1.5	33	4.3		
CLZ	e P	Z 17:55:13.3	19.9	212.0	1.5	28	4.3		
NRDL	e P	Z 17:55:18.5	20.4	210.5	1.7	43	4.4		
CLL	i P	+ Z 17:55:18.0	20.4	218.6	1.1	14	4.1		
	e S	N 17:59:04.7							
	e LR	Z 18:00:11.3							
	e L	Z 18:03:13.7			18.0	401		3.8	
BRG	e P	Z 17:55:18.5	20.5	221.3	1.7	68	4.6		
RUE	e P	Z 17:55:31.8	21.6	218.3	1.4	67	4.9		
BSEG	e P	Z 17:55:31.2	21.7	209.1	1.5	72	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/02	19:16:29.4	9.610N	61.250W	33.0N	5.4	5.2		SZGRF

Near coast of Venezuela

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 19:27:26.3	68.1	258.8					
BUG	e P	Z 19:27:33.6	69.2	259.0	1.4	47	5.4		
BFO	e P	Z 19:27:33.6	69.3	261.0					

IBBN	e P	Z	19:27:35.7	69.6	259.1	1.1	82	5.8	
STU	e P	Z	19:27:38.1	69.9	261.5	0.8	68	5.8	
CLZ	e P	Z	19:27:44.9	71.1	261.4	1.2	41	5.4	
GRA1	e P	Z	19:27:46.6	71.4	262.8	1.2	42	5.4	
	e L	Z	19:55:16.7			22.0	1391		5.2
BSEG	e P	Z	19:27:46.8	71.4	260.7	1.0	34	5.4	
MOX	e P	Z	19:27:48.3	71.7	262.8	1.0	12	5.0	
WERD	e P	Z	19:27:51.0	72.2	263.4	1.1	20	5.2	
GUNZ	e P	Z	19:27:50.9	72.2	263.5	1.0	16	5.1	
CLL	i P	+ Z	19:27:54.6	72.7	263.7	1.0	32	5.4	
	e pP	Z	19:28:09.5						
	e S	T	19:37:15.6						
	e SS	T	19:41:57.6						
	e LQ	T	19:46:55.9						
	e LR	R	19:50:57.1						
	e L	Z	19:55:38.5			22.0	1576		5.2
GEC2	e P	Z	19:27:55.6	72.9	265.0	1.1	47	5.4	
BRG	e P	Z	19:27:57.7	73.2	264.6	1.1	34	5.3	

Date 2004/12/03
 Origin Time 03:46:44.4
 Lat 9.990N
 Long 61.200W
 Depth 41.9
 mb 5.1
 Ms 4.9
 ML
 Source SZGRF
 Near coast of Venezuela

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	03:57:38.5	67.8	259.0	0.8	19	5.4		
	e pP	Z	03:57:50.3							
BUG	e P	Z	03:57:44.9	68.8	259.2	0.6	12	5.3		
IBBN	e P	Z	03:57:47.9	69.3	259.3	0.7	37	5.7		
	e pP	Z	03:57:59.5							
STU	e P	Z	03:57:49.4	69.6	261.8	0.7	33	5.6		
NRDL	e P	Z	03:57:56.8	70.7	261.2	0.9	12	5.1		
	e pP	Z	03:58:09.1							
CLZ	e P	Z	03:57:57.1	70.8	261.6	0.8	11	5.0		
	e pP	Z	03:58:09.2							
GRA1	e P	Z	03:57:58.6	71.1	263.0	0.9	11	5.0		
	e pP	Z	03:58:10.6							
	e L	Z	04:25:57.0			20.9	653		4.9	
BSEG	e P	Z	03:57:58.5	71.1	260.9	1.1	18	5.1		
MOX	e P	Z	03:58:00.5	71.4	263.0	0.7	3	4.5		
WERD	e P	Z	03:58:03.2	71.8	263.6	0.8	6	4.8		
GUNZ	e P	Z	03:58:03.5	71.8	263.7	0.8	5	4.7		
CLL	i P	- Z	03:58:06.1	72.4	263.9	1.0	9	4.9		
	e pP	Z	03:58:18.1							
	e S	E	04:07:25.2							
	e SS	N	04:12:08.5							
	e SSS	N	04:15:53.3							
	e LR	Z	04:20:46.1							

	e L	Z	04:27:32.7			22.0	610		4.8
GEC2	e P	Z	03:58:07.7	72.6	265.3	0.9	16	5.2	
BRG	e P	Z	03:58:09.9	72.9	264.8	0.9	10	5.0	
	e pP	Z	03:58:21.6						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/03	08:13:16.9	43.129N	15.156E	10.0G			5.1	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 08:14:41.5	5.8	169.4					4.8
	e Sn	N 08:15:47.3							
BFO	e Pn	Z 08:15:00.1	7.0	135.0					4.8
	e Sn	E 08:16:16.5							
GRA1	e Sn	N 08:16:16.8	7.1	156.1					5.3
TANN	e Pn	Z 08:15:05.8	7.5	164.8					5.1
	e Sn	E 08:16:28.6							
BRG	e Pn	Z 08:15:09.1	7.8	173.5					5.0
MOX	e Pn	Z 08:15:09.8	7.9	160.8					5.1
	e Sn	N 08:16:35.7							
CLL	e Pn	Z 08:15:16.2	8.3	169.1					5.4
	e Sn	E 08:16:46.7							
CLZ	e Pn	Z 08:15:30.4	9.3	157.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/03	14:59:14.2	34.394S	179.317E	155G	5.2			NEIC-M

South of Kermadec Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPdf	Z 15:18:55.2	160.4	35.7					
	e PKPab	Z 15:19:35.1			1.3	23			
	e sPKPab	Z 15:20:35.5							
GRA1	e PKPdf	Z 15:18:56.7	162.4	34.3					
	e PKPab	Z 15:19:42.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	02:16:10.3	42.999N	15.576E	10.0G			4.1	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 02:17:05.8	3.6	167.9					4.5
	e Sg	E 02:18:04.1							
ARSA	e Pn	Z 02:17:14.6	4.3	179.5					3.9

KBA	e Pn	Z	02:17:16.5	4.4	158.1						4.0
	e Sn	N	02:18:06.8								
MOA	e Pn	Z	02:17:24.5	4.9	168.8						3.9
	e Sn	E	02:18:20.1								
WTTA	e Pn	Z	02:17:26.4	5.1	145.5						
DAVA	e Pn	Z	02:17:37.3	5.9	134.8						
FUR	e Pn	Z	02:17:38.3	6.0	148.2						
GEC2	e Pn	Z	02:17:38.2	6.0	166.7						
	e Sn	E	02:18:45.1								
GRA1	e Pn	Z	02:17:57.2	7.3	154.2						
	e Sn	N	02:19:17.1								
BFO	e Pn	Z	02:17:55.7	7.3	133.8						
TANN	e Pn	Z	02:18:02.2	7.7	162.8						
	e Sn	N	02:19:24.7								
BRG	e Pn	Z	02:18:04.5	8.0	171.3						
MOX	e Pn	Z	02:18:06.5	8.1	159.0						
	e Sn	N	02:19:34.8								
CLZ	e Pn	Z	02:18:26.8	9.5	156.3						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	10:16:24.2	39.884N	40.845E	5.0G	4.2			kan-m

Turkey

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:21:33.6	23.0	103.9	1.1	8	4.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	10:29:59.8	35.009N	3.021W	10.0G	4.8	5.0		mad-m

Strait of Gibraltar

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 10:33:42.7	15.8	216.4	2.8	404	5.1		
WLF	e P	Z 10:33:48.0	16.1	208.1	2.8	1187	5.5		
STU	e P	Z 10:33:51.8	16.4	217.7	1.9	133	4.8		
FUR	e P	Z 10:33:56.2	16.9	224.1	1.7	150	4.8		
GRA1	e P	Z 10:34:10.5	18.0	220.7	1.4	78	4.7		
	e S	N 10:37:35.4							
	e L	Z 10:42:17.6			10.6	4039		5.0	
BUG	e P	Z 10:34:14.0	18.0	208.2	1.5	88	4.7		
UBBA	e P	Z 10:34:15.1	18.4	215.8	2.4	114	4.6		
GEC2	e P	Z 10:34:14.8	18.5	227.9	1.4	54	4.6		
MOX	e P	Z 10:34:21.0	18.9	219.7	2.5	292	5.1		
IBBN	e P	Z 10:34:23.3	18.9	208.2	1.6	80	4.7		
GUNZ	e P	Z 10:34:22.9	19.0	221.8	1.7	73	4.6		
WERD	e P	Z 10:34:23.3	19.0	221.6	2.5	180	4.9		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

8

CLZ	e P	Z	10:34:28.2	19.4	214.9	1.6	55	4.5
NRDL	e P	Z	10:34:33.0	19.8	213.3	1.7	100	4.8
BRG	e P	Z	10:34:34.7	20.0	224.2	1.5	115	4.9
BSEG	e P	Z	10:34:45.7	21.1	211.7	1.5	167	5.2
RUE	e P	Z	10:34:46.1	21.2	221.0	1.3	125	5.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	11:05:0.6	18.416S	177.028W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 11:24:30.9	144.0	11.9					
CLZ	e PKPbc	Z 11:24:37.5	146.1	12.6					
BRG	e PKPbc	Z 11:24:37.9	146.4	19.0					
WERD	e PKPbc	Z 11:24:40.2	147.1	16.5					
GUNZ	e PKPbc	Z 11:24:40.5	147.2	16.5					
GRA1	e PKPbc	Z 11:24:42.3	148.0	14.9					
GEC2	e PKPbc	Z 11:24:43.2	148.4	19.7					
WLF	e PKPbc	Z 11:24:44.8	148.6	5.8					
BFO	e PKPbc	Z 11:24:47.0	149.8	10.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	20:39:32.4	42.960N	14.919E	10.0G			3.3	SZGRF
Central Italy								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 20:40:27.7	3.6	175.6					3.5
	e Sg	E 20:41:25.6							
KBA	e Pn	Z 20:40:38.1	4.3	164.3					3.2
ARSA	e Pn	Z 20:40:36.9	4.3	185.9					
MOA	e Pn	Z 20:40:46.5	4.9	174.4					
GEC2	e Pn	N 20:40:59.5	5.9	171.4					
	e Sn	N 20:42:06.0							
GUNZ	e Pn	Z 20:41:23.0	7.6	165.6					
MOX	e Pn	Z 20:41:27.3	8.0	162.4					
	e Sn	N 20:42:54.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	21:03:42.6	42.990N	15.472E	10.0G			3.4	SZGRF
Adriatic Sea								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 21:04:38.3	3.6	169.1					3.7

	e Sg	E	21:05:36.6						
ARSA	e Pn	Z	21:04:47.0	4.3	180.5				3.1
KBA	e Pn	Z	21:04:48.9	4.4	159.1				
MOA	e Pn	Z	21:04:57.2	4.9	169.7				
GEC2	e Pn	Z	21:05:10.3	6.0	167.5				
	e Sn	N	21:06:16.3						
MOX	e Pn	Z	21:05:38.5	8.1	159.5				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	22:20:51.6	45.872N	12.006E	10.0G			3.4	SZGRF

Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WTTA	e Pg	Z	22:21:17.0	1.4	169.5					3.3
	e Sg	E	22:21:37.1							
KBA	e Pn	Z	22:21:19.1	1.5	217.9					2.8
	e Sg	E	22:21:40.5							
OBKA	e Pn	Z	22:21:23.4	1.9	251.0					2.8
DAVA	e Pn	Z	22:21:26.9	2.0	133.3					3.3
	e Sg	N	22:21:54.8							
FUR	e Pn	Z	22:21:30.5	2.3	167.5					3.8
MOA	e Pn	Z	22:21:32.7	2.5	218.8					2.8
ARSA	e Pn	Z	22:21:35.4	2.8	241.6					
GEC2	e Pn	Z	22:21:41.0	3.2	201.8					
STU	e Sn	N	22:22:26.4	3.5	145.6					4.1
BFO	e Pn	Z	22:21:45.7	3.5	133.1					3.4
	e Sn	N	22:22:26.6							
GRA1	e Pn	Z	22:21:52.3	3.9	171.9					4.1
TANN	e Pn	Z	22:22:00.3	4.6	184.0					
MOX	e Pn	Z	22:22:02.7	4.8	176.7					3.8
	e Sn	N	22:22:56.8							
BRG	e Pn	Z	22:22:08.4	5.2	195.2					
WLF	e Pn	Z	22:22:14.1	5.5	131.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	22:45:42.2	45.940N	11.975E	10.0G			2.6	SZGRF

Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WTTA	e Pg	Z	22:46:06.5	1.3	169.9					2.4
	e Sg	N	22:46:25.8							
KBA	e Pg	Z	22:46:08.4	1.5	220.1					2.1
	e Sg	E	22:46:29.8							
DAVA	e Pn	Z	22:46:16.3	2.0	132.3					2.5
	e Sg	N	22:46:44.2							

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

10

GEC2	e Pn	Z	22:46:30.5	3.1	202.6						
GRA1	e Pg	Z	22:46:52.3	3.8	172.0						3.3
MOX	e Sn	N	22:47:45.9	4.7	177.0						

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/04	22:48:1.7	45.907N	12.049E	10.0G			2.8	SZGRF

Northern Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WTTA	e Pg	Z	22:48:26.7	1.4	168.0					2.7
	e Sg	N	22:48:46.2							
KBA	e Pg	Z	22:48:28.6	1.5	217.8					2.3
	e Sg	N	22:48:49.9							
OBKA	e Pn	Z	22:48:33.4	1.8	251.7					
DAVA	e Pn	Z	22:48:37.1	2.0	132.0					2.8
MOA	e Pn	Z	22:48:42.9	2.5	218.8					2.4
	e Sg	E	22:49:19.7							
ARSA	e Pn	Z	22:48:45.0	2.7	241.9					
GEC2	e Pn	Z	22:48:50.4	3.1	201.5					
GRA1	e Pg	Z	22:49:12.1	3.8	171.3					3.4
	e Sg	N	22:50:03.1							
MOX	e Pn	Z	22:49:12.4	4.7	176.4					
	e Sn	N	22:50:06.0							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05	08:50:20.8	26.763N	131.831E	38.8	4.8			SZGRF

Southeast of Ryukyu Islands, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z	09:03:02.3	87.2	50.3	0.9	7	4.8		
	e pP	Z	09:03:13.6			0.9	7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPbc	- Z	12:06:17.1			0.7	36			
	e PKPab	Z	12:06:28.3							
	e pPKPbc	Z	12:08:24.7							
	e sPKPbc	Z	12:09:21.9							

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

11

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05	12:13:2.8	21.757S	176.702W	33.0N				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 12:32:43.4	147.4	12.2					
RUE	e PKPbc	Z 12:32:45.5	148.2	18.7					
NRDL	e PKPbc	Z 12:32:47.1	148.8	12.3					
IBBN	e PKPbc	Z 12:32:48.1	149.3	8.1					
CLZ	e PKPbc	Z 12:32:49.0	149.4	13.0					
BRG	e PKPbc	Z 12:32:49.3	149.7	19.9					
BUG	e PKPbc	Z 12:32:50.5	150.2	7.4					
MOX	e PKPbc	Z 12:32:51.2	150.4	15.8					
WERD	e PKPbc	Z 12:32:51.1	150.5	17.2					
GUNZ	e PKPbc	Z 12:32:51.6	150.5	17.2					
GRA1	e PKPbc	Z 12:32:53.2	151.4	15.5					
GEC2	e PKPbc	Z 12:32:54.0	151.7	20.7					
WLF	e PKPbc	Z 12:32:55.8	152.0	5.7					
STU	e PKPbc	Z 12:32:56.3	152.6	12.0					
FUR	e PKPbc	Z 12:32:56.5	152.8	16.4					
BFO	e PKPbc	Z 12:32:57.0	153.1	10.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05	12:41:29.2	52.387N	164.130W	33.0N	4.8			SZGRF

South of Alaska

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 12:53:23.9	77.8	357.1	1.1	9	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05	12:53:22.0	41.156N	140.613E	33.0N	4.6			SZGRF

Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 13:05:22.4	78.9	36.4	1.1	7	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/05	19:45:30.1	41.550N	141.927E	33.0N	5.1			SZGRF

Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z 19:57:13.4	75.8	37.4	1.1	26	5.3		
BSEG	e P	Z 19:57:14.3	75.9	35.2	1.5	44	5.4		

BRG	e P	Z	19:57:20.0	77.1	37.2	0.9	5	4.6
NRDL	e P	Z	19:57:20.2	77.2	34.9	2.7	143	5.6
CLZ	e P	Z	19:57:23.3	77.6	35.0	1.1	25	5.3
IBBN	e P	Z	19:57:26.1	78.1	33.3	1.2	24	5.2
MOX	e P	Z	19:57:26.4	78.1	35.7	1.4	25	5.1
GEC2	e P	Z	19:57:30.0	78.8	36.8	0.9	4	4.5
BUG	e P	Z	19:57:31.1	79.0	32.8	1.1	18	5.0
GRA1	e P	Z	19:57:31.3	79.0	35.3	1.3	44	5.3
GRFO	e P	Z	19:57:31.6	79.0	35.3			
FUR	e P	Z	19:57:38.3	80.3	35.2	1.0	20	5.1
STU	e P	Z	19:57:39.4	80.6	33.9	0.9	21	5.2
BFO	e P	Z	19:57:42.6	81.2	33.3	1.5	24	5.1

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/06 14:15:11.4 43.360N 146.090E 33.0N 6.7 7.1
 Kuril Islands, Russia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	14:26:55.4	75.6	31.6	1.2	1167	6.9		
RUE	e P	Z	14:26:55.9	75.7	33.7	1.4	1953	7.0		
NRDL	e P	Z	14:27:02.8	76.9	31.2	1.5	930	6.7		
CLL	i P	+	14:27:03.0	77.0	33.0	1.2	1122	6.9		
	e sP	Z	14:27:18.6							
	e PP	Z	14:29:57.5							
	e pPP	Z	14:30:08.5							
	e PPP	Z	14:31:43.0							
	e S	T	14:36:48.3							
	e sS	T	14:37:07.4							
	e PS	T	14:37:36.5							
	e SS	Z	14:42:05.7							
	e SSS	R	14:45:55.4							
	e LQ	T	14:49:11.6							
	e LR	Z	14:52:34.7							
	e PKPPKPdf	Z	14:54:11.9							
	e L	Z	15:03:42.1			22.0	107063		7.1	
BRG	e P	Z	14:27:03.2	77.0	33.6	1.4	701	6.6		
CLZ	e P	Z	14:27:05.6	77.4	31.3	1.2	1203	6.9		
IBBN	e P	Z	14:27:07.4	77.8	29.6	1.2	1276	6.9		
WERD	e P	Z	14:27:08.4	77.9	32.5	1.5	735	6.6		
GUNZ	e P	Z	14:27:08.9	78.0	32.5	1.5	783	6.6		
MOX	e P	Z	14:27:08.7	78.0	32.0	1.5	894	6.7		
UBBA	e P	Z	14:27:10.6	78.4	31.0	1.7	801	6.5		
BUG	e P	Z	14:27:12.3	78.7	29.2	1.4	1038	6.7		
GEC2	e P	Z	14:27:13.0	78.8	33.2	1.4	559	6.4		
GRA1	e P	Z	14:27:14.0	78.9	31.7	1.3	1442	6.9		
	e PP	Z	14:30:16.6							
	e S	N	14:37:12.8							

	e P'P'df	Z	14:53:55.3							
	e L	Z	15:05:11.0			22.0	94513		7.1	
FUR	e P	Z	14:27:20.7	80.2	31.6	1.3	1319	6.8		
STU	e P	Z	14:27:21.4	80.4	30.3	1.2	745	6.6		
WLF	e P	Z	14:27:23.3	80.6	28.3	2.1	1385	6.6		
BFO	e P	Z	14:27:25.3	81.1	29.7	1.5	805	6.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/06 16:26:29.1 19.390S 176.870W 456.5 mb SZGRF
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z	16:45:12.0	145.0	11.9					
RUE	e PKP	Z	16:45:15.0	145.9	18.1					
NRDL	e PKP	Z	16:45:16.2	146.5	12.0					
IBBN	e PKPbc	Z	16:45:18.9	146.9	8.0					
CLZ	e PKPdf	Z	16:45:17.4	147.1	12.6					
	e PKPbc	Z	16:45:19.3							
CLL	i PKPdf	Z	16:45:17.0	147.1	17.3	1.2	32			
	i PKPbc	+ Z	16:45:19.1			0.9	208			
	e PKPab	Z	16:45:21.6							
	e pPKPbc	Z	16:47:04.2							
BRG	e SKPbc	Z	16:48:16.1							
	e PKPdf	Z	16:45:17.5	147.4	19.2					
	e PKPbc	Z	16:45:20.0							
	e		16:48:17.3							
BUG	e PKPdf	Z	16:45:18.3	147.8	7.3					
MOX	e PKPdf	Z	16:45:18.6	148.0	15.2					
	e PKPbc	Z	16:45:21.7							
	e pPKPbc	Z	16:47:08.5							
WERD	e PKPdf	Z	16:45:18.8	148.1	16.5					
	e PKPbc	Z	16:45:22.0							
	e pPKPbc	Z	16:47:08.9							
UBBA	e PKPdf	Z	16:45:18.7	148.1	12.3					
GUNZ	e PKPdf	Z	16:45:19.1	148.2	16.6					
	e PKPbc	Z	16:45:22.4							
	e pPKPbc	Z	16:47:09.5							
GRA1	e PKPdf	Z	16:45:20.6	149.0	14.9					
	e PKPbc	Z	16:45:24.6							
	e pPKPbc	Z	16:47:13.2							
GEC2	e PKPdf	Z	16:45:20.9	149.3	19.8					
	e PKPbc	Z	16:45:25.2							
	e pPKPbc	Z	16:47:14.7							
WLF	e PKPdf	Z	16:45:22.2	149.6	5.6					
	e PKPbc	Z	16:45:26.8							
	e PKPab	Z	16:45:32.5							
STU	e PKPdf	Z	16:45:22.6	150.2	11.6					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

14

	e PKPbc	Z	16:45:27.7		
	e pPKPbc	Z	16:47:17.8		
FUR	e PKPdf	Z	16:45:22.7	150.5	15.7
	e PKPbc	Z	16:45:28.1		
	e pPKPbc	Z	16:47:17.8		
BFO	e PKPdf	Z	16:45:22.8	150.8	10.1
	e PKPbc	Z	16:45:28.7		
	e PKPab	Z	16:45:36.6		
	e pPKPbc	Z	16:47:18.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/06	18:46:56.6	18.421S	177.539W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	19:06:26.2	144.0	12.7					
NRDL	e PKPbc	Z	19:06:31.1	145.4	12.8					
CLZ	e PKPbc	Z	19:06:32.8	146.0	13.5					
CLL	e PKPbc	Z	19:06:32.5	146.1	18.1					
BRG	e PKPbc	Z	19:06:33.4	146.3	19.9					
WERD	e PKPbc	Z	19:06:35.5	147.0	17.3					
GRA1	e PKPbc	Z	19:06:38.1	147.9	15.8					
GEC2	e PKPbc	Z	19:06:38.5	148.2	20.6					
WLF	e PKPbc	Z	19:06:40.5	148.6	6.7					
BFO	e PKPbc	Z	19:06:42.2	149.7	11.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/07	02:19:37.7	46.060N	12.417E	10.0G			3.2	SZGRF
Northern Italy								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
FUR	e Pn	Z	02:20:15.6	2.2	159.3					3.6
	e Sg	N	02:20:48.7							
GEC2	e Pn	Z	02:20:24.0	2.9	197.8					2.8
	e Sn	N	02:21:00.2							
BFO	e Pn	Z	02:20:33.0	3.6	127.7					3.1
	e Sn	N	02:21:15.8							
GRA1	e Pn	Z	02:20:34.6	3.7	167.1					3.3
	e Sn	N	02:21:17.3							
TANN	e Pn	Z	02:20:44.2	4.4	180.4					
MOX	e Pn	Z	02:20:46.4	4.6	173.1					3.4
	e Sn	N	02:21:39.8							
BRG	e Sn	E	02:21:46.1	4.9	192.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/07	03:16:55.9	51.450N	176.760W	33.0N	5.0			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 03:28:33.5	74.4	4.6	0.8	21	5.2		
NRDL	e P	Z 03:28:41.6	75.9	4.4	1.0	12	5.0		
IBBN	e P	Z 03:28:43.0	76.2	2.9	0.9	31	5.5		
CLZ	e P	Z 03:28:45.6	76.5	4.6	0.9	27	5.4		
CLL	e P	Z 03:28:47.0	76.9	6.2	0.8	12	5.1		
BRG	e P	Z 03:28:49.6	77.3	6.8	1.0	13	5.0		
MOX	e P	Z 03:28:51.6	77.7	5.3	1.1	14	5.0		
WERD	e P	Z 03:28:52.6	77.8	5.8	1.3	14	4.9		
GRA1	e P	Z 03:28:57.3	78.6	5.1	0.9	24	5.2		
GEC2	e P	Z 03:29:00.4	79.3	6.6	1.0	7	4.6		
STU	e P	Z 03:29:02.7	79.7	3.8	0.8	9	4.8		
BFO	e P	Z 03:29:04.9	80.1	3.2	1.2	14	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/08	06:03:53.0	30.714S	71.149W	25.0G		5.1		NEIC-M

Near coast of central Chile

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 06:22:40.6	108.4	243.9					
	e L	Z 07:04:39.6			22.0	564		5.1	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/08	08:50:27.1	7.904S	30.604E	10.0N	4.8			SZGRF

Lake Tanganyika region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 09:00:34.2	60.0	157.7	1.4	13	4.8		
	e	09:00:45.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/08	10:04:10.9	27.500N	56.500E	36.9	4.8	4.2		SZGRF

Southern Iran

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 10:11:35.2	39.1	107.2	1.2	34	4.8		
	e pP	Z 10:11:45.8			1.2	34			
BRG	e P	Z 10:11:39.4	39.6	109.8	0.8	6	4.3		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

16

CLL	e P	Z	10:11:45.8	40.3	109.3	1.2	23	4.7		
	e pP	Z	10:11:55.6							
GRA1	e P	Z	10:11:51.0	40.9	105.7	1.1	50	5.1		
	e pP	Z	10:12:00.8							
	e L	Z	10:30:56.6			21.3	329		4.2	
CLZ	e P	Z	10:11:59.5	42.0	107.2	1.1	24	4.9		
	e pP	Z	10:12:10.4							
NRDL	e P	Z	10:12:02.6	42.4	107.6	1.2	18	4.7		

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/08 23:52:10.0 44.246N 144.768E 37.5 4.6 Ms ML SZGRF
Hokkaido, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:04:03.9	77.7	32.1	1.1	6	4.6		
	e pP	Z 00:04:14.7							

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/09 01:09:13.3 49.224N 19.319E 10.0G 3.4 Ms ML SZGRF
Poland

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 01:10:10.7	3.7	82.0					3.2
	e Sg	N 01:11:11.2							
BRG	e Pg	Z 01:10:22.4	3.8	113.5					3.2
	e Sg	E 01:11:14.9							
CLL	e Sg	N 01:11:37.8	4.5	114.8					3.5
TANN	e Pn	Z 01:10:23.4	4.6	102.4					3.4
	e Sg	N 01:11:38.6							
WERD	e Pn	Z 01:10:25.7	4.7	102.4					3.3
	e Sg	N 01:11:42.5							
MOX	e Sg	N 01:11:58.0	5.2	103.0					3.5
GRA1	e Sg	E 01:12:02.4	5.3	92.0					3.7

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/09 01:53:27.1 27.518N 139.006E 33.0N 5.2 Ms ML SZGRF
Bonin Islands, Japan, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:06:23.4	90.0	44.5	0.9	15	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/09	02:44:25.0	42.794N	13.893E	10.0G			4.1	SZGRF

Central Italy

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	02:45:22.7	3.7	187.4					4.2
	e Sn	E	02:46:07.1							
KBA	e Pn	Z	02:45:30.4	4.3	174.6					3.9
	e Sn	E	02:46:19.7							
ARSA	e Pn	Z	02:45:34.2	4.6	195.1					
	e Sn	E	02:46:25.5							
WTTA	e Pn	Z	02:45:37.1	4.7	159.6					4.2
	e Sn	E	02:46:31.5							
MOA	e Pn	Z	02:45:41.2	5.1	183.1					3.9
	e Sn	N	02:46:39.1							
DAVA	e Pn	Z	02:45:44.9	5.3	146.3					4.1
	e Sn	E	02:46:44.6							
FUR	e Pn	Z	02:45:49.6	5.7	160.2					4.5
	e Sn	N	02:46:52.7							
GEC2	e Pn	Z	02:45:53.6	6.1	178.7					
	e Sn	N	02:47:00.3							
BFO	e Pn	Z	02:46:03.0	6.8	142.8					
	e Sn	N	02:47:16.4							
STU	e Sn	N	02:47:19.0	6.8	149.5					
	e Pn	Z	02:46:07.9	7.1	164.0					
GRA1	e Sn	E	02:47:24.9							
	e Pn	Z	02:46:15.6	7.7	172.1					
MOX	e Pn	Z	02:46:19.5	8.0	167.9					
	e Sn	E	02:47:45.2							
BRG	e Pn	Z	02:46:21.0	8.1	180.3					
	e Sn	N	02:47:49.0							
CLL	e Pn	Z	02:46:26.6	8.5	175.6					
	e Sn	N	02:47:59.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/09	08:49: 5.7	24.880N	92.150E	58.5	5.9	4.7		SZGRF

India-Bangladesh border region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e P	Z	08:59:30.5	63.6	82.9	1.0	121	6.1		
	e pP	Z	08:59:47.2							
BRG	e P	Z	08:59:31.4	63.7	82.2	1.0	72	5.9		
CLL	e P	Z	08:59:34.5	64.2	81.7	1.2	58	5.7		
WERD	e P	Z	08:59:38.5	64.8	80.8	0.9	62	5.8		
MOX	e P	Z	08:59:41.1	65.2	80.4	1.1	65	5.8		
	e pP	Z	08:59:57.7							
BSEG	e P	Z	08:59:43.0	65.4	80.9	1.0	115	6.1		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

18

GRA1	e P	Z	08:59:44.5	65.6	79.7	1.4	200	6.2	
	e PP	Z	09:02:07.6						
	e L	Z	09:31:06.9			21.8	584		4.7
CLZ	e P	Z	08:59:44.9	65.7	80.0	0.9	120	6.1	
	e pP	Z	09:00:01.6						
NRDL	e P	Z	08:59:45.5	65.8	80.1	1.2	171	6.1	
FUR	e P	Z	08:59:45.5	65.8	79.0	1.3	115	5.9	
UBBA	e P	Z	08:59:47.3	66.1	79.3	1.6	81	5.7	
STU	e P	Z	08:59:53.3	67.1	77.9	0.9	97	6.0	
IBBN	e P	Z	08:59:54.3	67.2	78.3	1.3	119	6.0	
BUG	e P	Z	08:59:57.3	67.7	77.6	1.0	70	5.8	
BFO	e P	Z	08:59:57.0	67.7	77.1	1.6	52	5.5	
WLF	e P	Z	09:00:04.8	68.8	76.1	1.1	200	6.2	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/09	18:35:16.8	41.663N	20.779E	10.0G				SZGRF
Albania								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	18:36:52.5	6.6	135.1					
	e Sn	E	18:38:04.9							
ARSA	e Pn	Z	18:36:53.6	6.7	144.2					
KBA	e Pn	Z	18:37:06.9	7.6	132.9					
	e Sn	E	18:38:29.4							
MOA	e Pn	Z	18:37:07.9	7.7	140.9					
	e Sn	E	18:38:32.7							
WTTA	e Pn	Z	18:37:20.5	8.6	127.4					
	e Sn	N	18:38:53.9							
FUR	e Pn	Z	18:37:30.2	9.3	130.6					
	e Sn	N	18:39:11.9							
DAVA	e Pn	Z	18:37:34.4	9.6	122.0					
	e Sn	E	18:39:17.7							
GRA1	e Pn	Z	18:37:44.3	10.4	136.7					
WERD	e Pn	Z	18:37:46.8	10.6	143.1					
	e Sn	E	18:39:40.2							
MOX	e Pn	Z	18:37:54.0	11.0	141.3					
	e Sn	E	18:39:49.6							
BFO	e Pn	Z	18:37:52.6	11.0	122.6					
	e Sn	N	18:39:49.2							
WLF	e Pn	Z	18:38:19.2	12.9	122.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/10	00:53:49.0	19.100S	169.100E	100.0N				GSRC-M
Vanuatu Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPpre	Z	01:13:07.3	142.7	39.3					
	e PKPdf	Z	01:13:11.5							
	e SKPbc	Z	01:16:35.4			0.9	23			
BRG	e PKP	Z	01:13:07.6	142.7	40.9					
	e SKP	Z	01:16:35.7							
CLZ	e PKP	Z	01:13:10.4	143.3	35.0					
	e SKP	Z	01:16:37.7							
WERD	e PKP	Z	01:13:10.8	143.6	38.9					
	e SKP	Z	01:16:38.0							
IBBN	e PKP	Z	01:13:11.4	143.7	30.7					
	e SKP	Z	01:16:39.2							
MOX	e PKP	Z	01:13:10.6	143.8	37.7					
	e SKP	Z	01:16:38.5							
UBBA	e PKP	Z	01:13:12.6	144.2	35.2					
BUG	e PKP	Z	01:13:13.1	144.6	30.6					
	e SKP	Z	01:16:41.1							
GRA1	e PKP	Z	01:13:14.6	144.7	38.0					
	e SKP	Z	01:16:41.5							
FUR	e PKP	Z	01:13:18.3	145.8	39.4					
STU	e PKP	Z	01:13:17.6	146.2	35.7					
	e SKP	Z	01:16:44.3							
WLF	e PKP	Z	01:13:20.6	146.5	30.2					
BFO	e PKP	Z	01:13:20.7	146.9	34.7					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/10 02:33:52.8 20.390S 177.370W 520.2 SZGRF
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	02:52:34.0	145.9	12.9					
	e pPKPbc	Z	02:54:36.5							
RUE	e PKPbc	Z	02:52:36.3	146.8	19.3					
NRDL	e PKPbc	Z	02:52:38.0	147.4	13.1					
IBBN	e PKPbc	Z	02:52:39.2	147.8	9.1					
	e PKPab	Z	02:52:43.3							
CLZ	e PKPbc	Z	02:52:39.9	148.0	13.8					
CLL	e PKPdf	Z	02:52:35.9	148.0	18.6					
	e PKPbc	Z	02:52:39.7							
	e PKPab	Z	02:52:43.9							
	e pPKPbc	Z	02:54:38.1							
	e PKPdf	Z	02:52:36.4	148.2	20.4					
BRG	e PKPbc	Z	02:52:40.4							
	e PKPab	Z	02:52:45.0							
	e PKPbc	Z	02:52:41.3	148.7	8.4					
BUG	e PKPbc	Z	02:52:42.0	148.9	16.5					
MOX	e PKPbc	Z	02:52:42.0	148.9	16.5					
WERD	e PKPbc	Z	02:52:42.3	149.0	17.8					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

20

	e	PKPab	Z	02:52:48.0					
UBBA	e	pPKPbc	Z	02:54:44.7	149.0	13.5			
GRA1	e	PKPdf	Z	02:52:38.5	149.9	16.2			
	e	PKPbc	Z	02:52:44.5					
	e	PKPab	Z	02:52:51.6					
GRFO	e	PKPdf	Z	02:52:38.7	149.9	16.2			
WLF	e	PKPbc	Z	02:52:46.5	150.6	6.7			
	e	PKPab	Z	02:52:55.2					
STU	e	PKPdf	Z	02:52:41.0	151.1	12.8			
	e	PKPbc	Z	02:52:47.2					
	e	pPKPbc	Z	02:54:50.8					
FUR	e	PKPbc	Z	02:52:47.8	151.4	17.1			
	e	PKPab	Z	02:52:58.3					
BFO	e	PKPdf	Z	02:52:41.7	151.7	11.3			
	e	PKPbc	Z	02:52:48.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/10	03:44:7.3	36.090N	92.550E	24.1	5.2	4.7		SZGRF
Qinghai, China								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 03:53:46.2	56.1	72.6	1.7	38	5.1		
CLL	e P	Z 03:53:48.8	56.5	72.3	1.5	37	5.2		
WERD	e P	Z 03:53:53.6	57.2	71.3	1.6	28	5.0		
	e pP	Z 03:54:00.1							
BSEG	e P	Z 03:53:54.8	57.3	72.1	1.4	33	5.2		
MOX	e P	Z 03:53:56.6	57.6	71.0	1.5	24	5.0		
NRDL	e P	Z 03:53:58.9	57.9	71.1	1.6	74	5.5		
CLZ	e P	Z 03:53:59.1	57.9	70.9	1.4	37	5.2		
GRA1	e P	Z 03:54:01.0	58.1	70.2	1.7	92	5.5		
	e pP	Z 03:54:07.6							
	e L	Z 04:20:48.0			19.7	524		4.7	
UBBA	e P	Z 03:54:03.0	58.5	70.0					
FUR	e P	Z 03:54:04.6	58.6	69.3	1.4	69	5.5		
STU	e P	Z 03:54:11.4	59.7	68.4	0.9	18	5.1		
	e pP	Z 03:54:18.0							
BUG	e P	Z 03:54:12.4	59.9	68.6	0.7	13	5.1		
	e pP	Z 03:54:19.1							
BFO	e P	Z 03:54:15.7	60.4	67.6	1.5	37	5.0		
	e pP	Z 03:54:21.7							
WLF	e P	Z 03:54:21.8	61.2	67.0	1.4	50	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/10	10:32:36.3	16.484N	95.210W	33.0N	5.3			SZGRF
Oaxaca, Mexico								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:45:21.8	87.7	293.0	1.4	24	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/11	01:54:57.9	2.790S	146.710E	33.0				SZGRF

Admiralty Islands, Papua New Guinea, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e PKPdf	Z 02:13:39.8	116.9	55.1					
BSEG	e PKPdf	Z 02:13:41.4	117.7	51.1					
	e SKPdf	Z 02:16:32.4							
BRG	e PKPdf	Z 02:13:41.5	117.8	56.0					
CLL	e PKPdf	Z 02:13:41.7	118.0	54.9					
	e SKPdf	Z 02:16:33.2							
NRDL	e PKPdf	Z 02:13:43.5	118.7	51.5					
CLZ	e PKPdf	Z 02:13:43.9	119.0	52.0					
	e SKPdf	Z 02:16:35.2							
GEC2	e PKPdf	Z 02:13:44.0	119.0	56.6					
	e SKPdf	Z 02:16:35.5							
MOX	e PKPdf	Z 02:13:43.8	119.1	53.8					
WET	e PKPdf	Z 02:13:44.7	119.3	55.7					
GRA1	e PKPdf	Z 02:13:45.5	119.9	53.8					
	e SKPdf	Z 02:16:37.0							
IBBN	e PKPdf	Z 02:13:45.6	119.9	49.2					
FUR	e PKPdf	Z 02:13:47.2	120.7	54.6					
BUG	e PKPdf	Z 02:13:47.1	120.7	49.1					
STU	e PKPdf	Z 02:13:48.8	121.5	52.3					
BFO	e PKPdf	Z 02:13:49.8	122.2	51.6					
WLF	e PKPdf	Z 02:13:51.0	122.4	48.8					
	e SKPdf	Z 02:16:42.5							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/11	11:40:43.4	36.595N	21.330E	33.0N				SZGRF

Southern Greece

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e Pn	Z 11:44:18.9	15.0	147.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/11	19:45:46.5	19.038N	64.530W	55.0G	5.3			SZGRF

Virgin Islands

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

23

2004/12/12 05:28:40.8
Kyushu, Japan

31.426N 131.797E 33.0N 5.5 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 05:41:04.6	83.3	47.7	2.0	58	5.5		

Date Origin Time
2004/12/12 19:41:38.9
Hokkaido, Japan, region

Lat Long Depth mb Ms ML Source
41.877N 141.978E 33.0N 4.8 4.5 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:53:38.8	78.8	35.1	0.9	10	4.8		
	e L	Z 20:40:40.8			22.0	243		4.5	

Date Origin Time
2004/12/13 04:08:36.4
Lake Tanganyika region

Lat Long Depth mb Ms ML Source
2.926S 30.189E 21.6 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:18:07.1	55.1	156.7					
	e pP	Z 04:18:13.1							

Date Origin Time
2004/12/13 11:08:55.4
East of Kuril Islands, Russia

Lat Long Depth mb Ms ML Source
48.190N 162.380E 33.0N 4.7 SZGRF

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z 11:20:48.9	77.1	20.4	0.6	6	4.8		
BRG	e P	Z 11:20:51.5	77.3	21.0	1.2	7	4.7		
MOX	e P	Z 11:20:55.0	78.0	19.4	1.0	6	4.6		
WERD	e P	Z 11:20:55.2	78.1	19.9	1.3	8	4.7		
GUNZ	e P	Z 11:20:54.8	78.1	19.9	1.3	11	4.8		
GRA1	e P	Z 11:21:00.4	79.0	19.1	0.8	5	4.6		
WET	e P	Z 11:21:01.0	79.2	20.2	1.2	9	4.6		
GEC2	e P	Z 11:21:01.1	79.3	20.7	1.4	8	4.5		

Date Origin Time
2004/12/13 12:00:12.7
East Timor region

Lat Long Depth mb Ms ML Source
8.064S 125.124E 10G 5.8 4.7 NEIC-M

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

24

GRA1	e PP	Z	12:19:22.5	111.5	76.7	0.7	3
	e L	Z	13:11:30.4			20.9	187

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/13	14:16:08.4	36.196N	9.953W	10G	4.9	4.6		NEIC-M

West of Gibraltar

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z	14:20:20.4			1.1	40	4.4		
BRG	e P	Z	14:21:10.7			1.3	24	4.5		
BSEG	e P	Z	14:21:09.3							
CLZ	e P	Z	14:20:58.3			1.0	31	4.6		
GEC2	e P	Z	14:20:56.8			0.8	22	4.5		
GRA1	e P	Z	14:20:47.4							
	e L	Z	14:28:27.4			20.0	492		3.9	
MOX	e P	Z	14:20:58.5			1.3	21	4.3		
NOTT	e P	Z	14:20:52.7			1.0	12	4.2		
NRDL	e P	Z	14:21:02.1			1.1	28	4.5		
WERD	e P	Z	14:20:57.9			1.1	10	4.1		
WET	e P	Z	14:20:53.6			1.0	26	4.5		
WLF	e P	Z	14:20:16.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/13	15:23:37.4	12.670N	88.320W	33.0N	5.7	5.7		SZGRF

Off coast of central America

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z	15:36:01.2	83.2	281.6	1.3	78	5.8		
BSEG	e P	Z	15:36:09.2	84.8	284.4	1.2	80	5.8		
BFO	e P	Z	15:36:09.3	84.9	283.4	1.4	33	5.4		
NRDL	e P	Z	15:36:11.0	85.0	284.4	1.4	75	5.7		
CLZ	e P	Z	15:36:12.2	85.3	284.6	1.3	63	5.7		
UBBA	e P	Z	15:36:12.6	85.4	284.4	1.3	28	5.3		
MOX	e P	Z	15:36:17.3	86.4	285.7	1.5	78	5.6		
GRA1	e P	Z	15:36:18.0	86.4	285.4	1.2	60	5.6		
	e PP	Z	15:39:43.6							
	e S	E	15:46:46.2							
	e SS	E	15:52:50.4							
	e L	Z	16:11:09.4			21.2	3624		5.7	
WERD	e P	Z	15:36:19.7	86.9	286.2	1.4	79	5.7		
	e PP	Z	15:39:42.9							
GUNZ	e P	Z	15:36:20.0	86.9	286.2	1.4	85	5.7		
	e PP	Z	15:39:43.2							
CLL	i P	+ Z	15:36:20.0	87.1	286.7	1.2	72	5.7		
	e pP	Z	15:36:38.7							

	e PP	Z	15:39:58.0								
	e S	E	15:46:50.3								
	e PS	Z	15:48:15.3								
	e SS	E	15:52:46.1								
	e SSS	E	15:56:39.8								
	e LR	Z	16:04:35.0								
	e L	Z	16:12:27.5			22.0	3972		5.8		
RUE	e P	Z	15:36:20.9	87.2	287.2	1.0	61		5.7		
WET	e P	Z	15:36:23.6	87.6	286.7	1.4	112		6.0		
BRG	e P	Z	15:36:23.9	87.7	287.4	1.4	70		5.8		
GEC2	e P	Z	15:36:26.3	88.2	287.3	1.4	60		5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/13	17:27:0.2	30.808N	131.146E	33.0N	5.0	5.3		SZGRF

Kyushu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 17:39:25.0	83.5	48.5	1.2	11	5.0		
	e L	Z 18:19:27.4			18.0	1278		5.3	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/14	23:20:12.2	18.240N	81.660W	33.0N	6.4	6.8		SZGRF

North of Honduras

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 23:31:50.0	74.8	280.4	1.6	450	6.4		
BUG	e P	Z 23:31:52.2	75.2	280.8	2.0	986	6.5		
	e S	R 23:41:28.3							
IBBN	e P	Z 23:31:52.9	75.3	280.9	2.1	1388	6.6		
BFO	e P	Z 23:31:59.3	76.5	282.4	1.3	180	5.9		
BSEG	e P	Z 23:31:59.7	76.5	282.5	1.9	648	6.3		
NRDL	e P	Z 23:32:01.1	76.7	282.7	1.9	936	6.5		
STU	e P	Z 23:32:02.4	76.9	282.9	1.4	236	6.0		
CLZ	e P	Z 23:32:03.4	77.0	283.0	1.8	804	6.5		
	e S	R 23:41:51.1							
GRA1	e P	Z 23:32:08.6	78.0	284.1	1.9	569	6.4		
MOX	e P	Z 23:32:08.4	78.0	284.2	1.8	484	6.3		
FUR	e P	Z 23:32:10.7	78.4	284.5	2.2	828	6.5		
WERD	e P	Z 23:32:11.1	78.5	284.8	2.0	581	6.4		
GUNZ	e P	Z 23:32:11.5	78.5	284.8	1.8	506	6.3		
CLL	e P	Z 23:32:12.6	78.7	285.1	2.0	636	6.4		
	i PP	Z 23:35:16.9							
	e S	E 23:42:07.2							
	e SS	E 23:47:17.0							
	e SSS	E 23:50:40.9							

	e LR	Z	23:56:37.7							
	e PKPPKPdf	Z	23:59:17.9							
	e L	Z	00:05:32.6			20.0	26348			
WET	e P	Z	23:32:15.4	79.2	285.4	2.1	936	6.5		
	e S	R	23:42:13.9							
BRG	e P	Z	23:32:16.5	79.4	285.9	1.7	556	6.4		
GRA1	e L	Z	00:01:50.7	78.0	284.1	21.8	51194		6.8	

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/14 05:56:18.8 45.460N 141.930E 33.0N 5.9 5.8
 Hokkaido, Japan, region SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	06:07:44.3	72.4	33.4	1.7	126	5.8		
CLL	i P	Z	06:07:51.0	73.7	34.6	1.2	86	5.7		
	e PP	Z	06:10:39.2							
	e PPP	Z	06:12:22.7							
	e S	E	06:17:28.3							
	e ScS	N	06:18:02.5							
	e (SS)	N	06:22:32.8							
	e (SSS)	N	06:25:53.2							
	e LR	Z	06:32:24.7							
	e L	Z	06:41:36.7			22.0	4722		5.7	
NRDL	e P	Z	06:07:51.7	73.7	33.0	1.7	123	5.8		
BRG	e P	Z	06:07:51.2	73.7	35.2	2.1	224	5.9		
CLZ	e P	Z	06:07:54.8	74.2	33.1	1.6	219	6.0		
WERD	e P	Z	06:07:57.7	74.6	34.1	1.9	178	5.8		
GUNZ	e P	Z	06:07:57.4	74.7	34.1	2.0	225	5.8		
MOX	e P	Z	06:07:57.5	74.7	33.7	1.9	200	5.8		
UBBA	e P	Z	06:07:59.8	75.1	32.7	1.8	163	5.7		
GEC2	e P	Z	06:08:01.6	75.5	34.7	1.6	111	5.6		
BUG	e P	Z	06:08:01.8	75.5	31.0	2.0	359	6.1		
WET	e P	Z	06:08:02.5	75.5	34.2	1.8	273	6.0		
GRA1	e P	Z	06:08:03.3	75.7	33.3	1.6	299	6.1		
	e S	E	06:17:44.8							
	e L	Z	06:41:55.9			21.1	5574		5.8	
FUR	e P	Z	06:08:10.2	76.9	33.1	1.8	516	6.4		
STU	e P	Z	06:08:11.3	77.2	31.9	0.5	57	5.9		
WLF	e P	Z	06:08:12.8	77.4	30.1	1.9	293	6.1		
BFO	e P	Z	06:08:15.0	77.8	31.3	1.9	336	6.2		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/15 01:10:52.4 42.899N 13.821E 10.0G 3.3
 Central Italy SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	01:11:48.4	3.6	188.4					3.5
KBA	e Pn	Z	01:11:56.1	4.2	175.2					3.2
	e Sn	E	01:12:44.7							
ARSA	e Pn	Z	01:11:59.9	4.5	196.1					
MOA	e Pn	Z	01:12:07.1	5.0	183.8					
	e Sn	E	01:13:03.7							
DAVA	e Pn	Z	01:12:11.4	5.2	146.2					
GEC2	e Pn	Z	01:12:19.2	5.9	179.2					
	e Sn	N	01:13:26.0							
WET	e Pn	Z	01:12:23.3	6.3	173.7					
	e Sn	N	01:13:33.7							
BFO	e Pn	Z	01:12:29.4	6.6	142.7					
	e Sn	N	01:13:42.3							
GRA1	e Sn	N	01:13:51.1	7.0	164.2					
TANN	e Sn	E	01:14:05.2	7.6	172.4					
MOX	e Sn	Z	01:14:10.4	7.9	168.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/15	06:47:28.0	79.240N	0.050W	31.1				SZGRF

Greenland Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	06:52:55.8	25.5	355.5	1.5	58			
NRDL	e P	Z	06:53:08.5	27.0	355.8	1.2	35			
CLZ	e P	Z	06:53:15.0	27.6	355.8	1.2	24			
BUG	e P	Z	06:53:17.2	27.9	357.1					
CLL	i P	Z	06:53:20.1	28.3	354.9	1.2	35	5.1		
	e PcP	Z	06:56:16.9							
UBBA	e P	Z	06:53:23.4	28.6	356.1	1.8	53			
BRG	e P	Z	06:53:24.6	28.8	354.6	1.2	37			
MOX	e P	Z	06:53:25.6	28.9	355.5	1.1	44			
WERD	e P	Z	06:53:27.6	29.1	355.3	1.2	48			
GUNZ	e P	Z	06:53:28.3	29.2	355.3	1.1	51			
GRA1	e P	Z	06:53:34.1	29.8	355.8	1.1	32			
	e pP	Z	06:53:42.1							
WET	e P	Z	06:53:40.0	30.4	355.3	1.1	16			
STU	e P	Z	06:53:41.4	30.6	356.6	0.9	43			
GEC2	e P	Z	06:53:43.0	30.8	355.0	1.1	37			
BFO	e P	Z	06:53:44.8	31.1	357.0	1.4	40			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/15	19:35:25.2	24.920S	16.150W	24.5	5.0			SZGRF

Southern Mid-Atlantic Ridge

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

28

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 19:47:11.6	76.5	202.7	1.2	21	5.1		
STU	e P	Z 19:47:15.1	77.1	203.5	0.9	17	5.2		
GEC2	e P	Z 19:47:22.5	78.4	207.4	1.5	13	4.8		
WET	e P	Z 19:47:22.4	78.5	206.7	1.4	19	5.0		
GRA1	e P	Z 19:47:23.0	78.5	205.2	1.5	43	5.4		
	e pP	Z 19:47:30.0							
GUNZ	e P	Z 19:47:28.4	79.4	206.1	1.4	18	4.9		
MOX	e P	Z 19:47:28.5	79.5	205.5	1.5	15	4.8		
WERD	e P	Z 19:47:28.3	79.5	206.1	1.2	7	4.5		
NRDL	e P	Z 19:47:34.8	80.7	204.0	1.4	46	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/15	20:26:23.5	42.689N	84.496E	33.0N	4.6			SZGRF

Northern Xinjiang, China

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:35:08.6	49.2	68.5	1.1	8	4.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16	00:10: 6.4	24.214N	121.746E	33.0N	5.1	5.0		SZGRF

Taiwan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 00:22:33.5	83.9	59.2	1.1	14	5.1		
	e L	Z 01:04:58.7			19.5	577		5.0	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16	03:02:44.6	20.293S	177.563E	33.0N				SZGRF

South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 03:22:17.6	145.0	21.1					
NRDL	e PKPbc	Z 03:22:21.6	146.4	21.6					
CLL	e PKPbc	Z 03:22:22.5	146.7	27.1					
BRG	e PKPbc	Z 03:22:23.0	146.8	28.9					
CLZ	e PKPbc	Z 03:22:23.0	146.9	22.4					
MOX	e PKPbc	Z 03:22:24.8	147.7	25.2					
GEC2	e PKPbc	Z 03:22:27.3	148.7	30.1					
GRA1	e PKPbc	Z 03:22:28.1	148.7	25.2					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

29

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16	04:29:21.4	20.470S	173.750W	46.7				QED

Tonga Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e PKPbc	Z 04:49:04.8	148.7	12.2	1.3	23			
	e pPKPbc	Z 04:49:18.4							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16	04:48:23.1	21.700S	179.230W					QED

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i PKPbc	Z 05:07:05.9	148.9	22.4	1.0	27			
	e PKPab	Z 05:07:12.4			0.9	9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16	15:30:27.5	36.280N	71.231E	122.9	4.8			SZGRF

Afghanistan-Tajikistan border region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 15:38:36.9	44.6	83.8	1.5	19	4.8		
	e pP	Z 15:39:05.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/16								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 18:14:56.2							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/17	01:42: 2.5	43.112N	14.937E	10.0G			3.7	SZGRF

Adriatic Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z 01:42:55.0	3.4	175.2					4.2
KBA	e Pn	Z 01:43:05.9	4.1	163.6					
ARSA	e Pn	Z 01:43:04.7	4.2	185.9					3.3
	e Sn	N 01:43:52.4							
WTTA	e Pn	Z 01:43:15.3	4.8	149.6					
MOA	e Pn	Z 01:43:14.2	4.8	174.1					3.6

	e Sn	E	01:44:08.7		
DAVA	e Sn	N	01:44:24.5	5.5	137.7
GEC2	e Pn	Z	01:43:27.7	5.8	171.0
	e Sn	N	01:44:32.6		
WET	e Pn	Z	01:43:33.1	6.2	165.9
	e Sn	E	01:44:41.6		
BFO	e Pn	Z	01:43:42.9	7.0	136.1
GRA1	e Sn	N	01:45:02.0	7.1	157.4
TANN	e Pn	Z	01:43:51.6	7.5	166.0
	e Sn	N	01:45:13.2		
MOX	e Pn	Z	01:43:55.7	7.9	162.0
	e Sn	N	01:45:20.7		
CLL	e Pn	Z	01:44:02.0	8.3	170.2
	e Sn	E	01:45:32.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/17	07:13: 9.9	21.770S	178.480W	577.1				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	07:31:48.8	147.1	15.2					
	e PKPab	Z	07:31:52.4							
RUE	e PKPbc	Z	07:31:50.5	147.9	21.8					
	e PKPab	Z	07:31:55.0							
NRDL	e PKPbc	Z	07:31:52.0	148.6	15.4					
	e PKPab	Z	07:31:57.7							
IBBN	e PKPbc	Z	07:31:53.1	149.1	11.3					
	e PKPab	Z	07:32:00.2							
CLL	e PKPbc	Z	07:31:53.5	149.1	21.1					
	e PKPab	Z	07:32:00.1							
CLZ	e PKPbc	Z	07:31:53.9	149.2	16.2					
	e PKPab	Z	07:32:00.6							
BRG	e PKPbc	Z	07:31:54.0	149.3	23.0					
	e PKPab	Z	07:32:01.1							
BUG	e PKPbc	Z	07:31:55.7	150.0	10.7					
MOX	e PKPbc	Z	07:31:55.7	150.1	19.0					
	e PKPab	Z	07:32:04.2							
WERD	e PKPbc	Z	07:31:55.8	150.1	20.4					
	e PKPab	Z	07:32:04.6							
	e pPKPbc	Z	07:34:07.8							
GUNZ	e PKPbc	Z	07:31:56.2	150.2	20.5					
	e PKPab	Z	07:32:04.9							
UBBA	e PKPbc	Z	07:31:55.6	150.2	16.0					
	e PKPab	Z	07:32:04.4							
GRA1	e PKPbc	Z	07:31:57.7	151.0	18.9					
	e PKPab	Z	07:32:08.8							
	e pPKPbc	Z	07:34:10.9							

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

31

	e PP	Z	07:35:38.9		
WET	e PKPbc	Z	07:31:58.3	151.2	22.3
	e PKPab	Z	07:32:09.2		
GEC2	e PKPbc	Z	07:31:58.2	151.2	24.0
	e PKPab	Z	07:32:09.2		
WLF	e PKPbc	Z	07:32:00.6	151.9	9.2
	e PKPab	Z	07:32:12.1		
STU	e PKPbc	Z	07:32:00.5	152.3	15.5
	e PKPab	Z	07:32:13.5		
	e pPKPbc	Z	07:34:13.8		
FUR	e PKPbc	Z	07:32:00.6	152.5	19.9
	e PKPab	Z	07:32:14.3		
BFO	e PKPbc	Z	07:32:02.0	152.9	14.0
	e PKPab	Z	07:32:15.9		
	e pPKPbc	Z	07:34:15.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/17	10:31:24.0	22.811S	179.078W	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	10:51:06.3	148.1	16.5					
NRDL	e PKPbc	Z	10:51:09.6	149.5	16.8					
CLL	i PKPbc	Z	10:51:11.1	150.0	22.7	1.1	48			
	e PKPab	Z	10:51:17.3							
	e pPKPbc	Z	10:53:30.0							
IBBN	e PKPbc	Z	10:51:11.4	150.0	12.7					
CLZ	e PKPbc	Z	10:51:11.5	150.1	17.7					
BRG	e PKPbc	Z	10:51:11.7	150.2	24.7					
MOX	e PKPbc	Z	10:51:13.4	150.9	20.6					
WERD	e PKPbc	Z	10:51:13.6	151.0	22.0					
GUNZ	e PKPbc	Z	10:51:14.0	151.0	22.1					
UBBA	e PKPbc	Z	10:51:13.5	151.1	17.5					
GRA1	e PKPbc	Z	10:51:15.8	151.9	20.5					
WET	e PKPbc	Z	10:51:15.4	152.0	24.0					
GEC2	e PKPbc	Z	10:51:15.8	152.1	25.8					
BFO	e PKPbc	Z	10:51:20.3	153.8	15.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	06:46:28.2	49.637N	156.846E	33.0N	5.8	6.6		SZGRF
Kuril Islands, Russia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	06:57:53.1	72.7	22.0	1.0	105	5.9		
RUE	e P	Z	06:57:55.9	73.2	24.0	1.1	168	6.0		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

32

NRDL	e P	Z	06:58:00.8	74.1	21.7	1.1	113	5.8		
CLL	i P	+ Z	06:58:02.7	74.5	23.4	1.0	190	6.2		
	e		06:58:25.5							
	e PPP	Z	07:02:42.5							
	e S	E	07:07:45.8							
	e (SS)	N	07:13:21.2							
	e (SSS)	N	07:16:15.9							
	e L	Z	07:35:10.5			18.0	34486		6.7	
CLZ	e P	Z	06:58:04.5	74.6	21.8	1.0	157	6.0		
BRG	e P	Z	06:58:03.8	74.6	23.9	1.0	72	5.6		
IBBN	e P	Z	06:58:05.2	74.7	20.2	0.9	77	5.7		
MOX	e P	Z	06:58:08.7	75.4	22.4	1.1	80	5.8		
WERD	e P	Z	06:58:08.1	75.4	22.8	1.2	76	5.7		
GUNZ	e P	Z	06:58:09.4	75.5	22.9	1.0	59	5.7		
UBBA	e P	Z	06:58:09.6	75.6	21.4	1.1	49	5.5		
BUG	e P	Z	06:58:09.1	75.7	19.8	1.2	86	5.8		
GRA1	e P	Z	06:58:14.7	76.4	22.1	1.0	166	6.1		
	e PP	Z	07:01:10.2							
	e S	N	07:08:13.0							
	e L	Z	07:37:47.7			18.2	26809		6.6	
WET	e P	Z	06:58:15.0	76.5	23.1	1.1	102	5.9		
GEC2	e P	Z	06:58:14.9	76.5	23.5	1.1	44	5.5		
STU	e P	Z	06:58:21.8	77.7	20.8	1.1	82	5.8		
FUR	e P	Z	06:58:22.2	77.8	22.0	1.0	54	5.6		
BFO	e P	Z	06:58:25.0	78.3	20.2	1.3	68	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	07:19:25.1	49.453N	156.153E	33.0N	5.0			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:31:11.6	76.4	22.6	1.2	16	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	07:24:20.3	49.500N	158.500E	33.0N	5.3			SZGRF
East of Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 07:35:52.0	73.2	21.0	1.1	32	5.3		
RUE	e P	Z 07:35:55.9	73.7	23.0	0.9	43	5.5		
NRDL	e P	Z 07:36:00.9	74.5	20.7	1.2	24	5.1		
CLL	e P	Z 07:36:02.6	75.0	22.4	1.1	48	5.4		
CLZ	e P	Z 07:36:04.4	75.1	20.8	1.1	46	5.4		
BRG	e P	Z 07:36:03.8	75.2	22.9	1.1	16	5.1		
MOX	e P	Z 07:36:08.6	75.9	21.5	1.2	27	5.2		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

33

WERD	e P	Z	07:36:08.8	76.0	21.9	1.2	21	5.2
GUNZ	e P	Z	07:36:09.6	76.0	21.9	1.1	20	5.2
GRA1	e P	Z	07:36:14.8	76.9	21.1	1.0	39	5.5
WET	e P	Z	07:36:15.2	77.0	22.1	1.3	34	5.3
GEC2	e P	Z	07:36:14.6	77.1	22.6	1.3	13	4.9
BFO	e P	Z	07:36:24.0	78.8	19.2	2.1	50	5.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	07:46:12.9	48.363N	152.358E	33.0N	4.9			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 07:57:59.4	76.4	25.4	1.0	11	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	07:50:33.7	49.137N	156.030E	33.0N	4.8			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 08:02:21.6	76.7	22.8	0.9	8	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	08:50:15.6	49.700N	156.040E	44.9	5.9			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 09:01:39.7	72.4	22.5	1.2	114	5.9		
RUE	e P	Z 09:01:42.6	72.9	24.5	1.2	196	6.1		
NRDL	e P	Z 09:01:47.5	73.8	22.2	1.2	90	5.7		
CLL	i P	+ Z 09:01:49.3	74.2	23.8	1.1	194	6.1		
	e pP	Z 09:02:01.0							
	e LQ	T 09:24:59.9							
	e L	Z 09:39:56.4			18.0	4294		5.8	
CLZ	e P	Z 09:01:51.0	74.4	22.3	1.2	230	6.1		
BRG	e P	Z 09:01:50.2	74.4	24.4	1.3	93	5.7		
IBBN	e P	Z 09:01:51.5	74.5	20.7	1.1	149	5.9		
MOX	e P	Z 09:01:55.3	75.2	22.9	1.2	100	5.8		
WERD	e P	Z 09:01:55.4	75.2	23.3	1.3	127	5.9		
GUNZ	e P	Z 09:01:56.0	75.2	23.3	1.2	111	5.9		
UBBA	e P	Z 09:01:56.3	75.4	21.9	1.5	123	5.8		
BUG	e P	Z 09:01:56.8	75.4	20.3	1.2	134	5.9		
GRA1	e P	Z 09:02:01.1	76.1	22.6	1.2	250	6.2		
	e pP	Z 09:02:14.0							

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

34

WET	e P	Z	09:02:01.8	76.2	23.5	1.3	172	6.0
GEC2	e P	Z	09:02:01.6	76.3	24.0	1.2	68	5.7
STU	e P	Z	09:02:08.5	77.5	21.2	1.3	110	5.8
FUR	e P	Z	09:02:09.0	77.5	22.5	1.4	191	6.0
BFO	e P	Z	09:02:11.8	78.1	20.7	1.2	70	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	09:12:48.7	40.922N	10.190E	10.0G				neir-m

Tyrrhenian Sea

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e P	Z 09:14:38.2	7.5	169.2					
STU	e P	Z 09:14:43.6	7.9	174.5					
GEC2	e P	Z 09:14:48.8	8.3	198.7					
WET	e P	Z 09:14:51.1	8.4	194.0					
GRA1	e P	Z 09:14:55.8	8.8	185.1					
GUNZ	e P	Z 09:15:06.2	9.6	189.8					
WERD	e P	Z 09:15:08.1	9.6	189.6					
MOX	e P	Z 09:15:09.0	9.8	186.4					
BRG	e P	Z 09:15:16.4	10.3	196.1					
CLL	e P	Z 09:15:19.3	10.6	191.7					
CLZ	e P	Z 09:15:23.7	10.9	180.7					
NRDL	e P	Z 09:15:30.9	11.6	179.7	1.6	36			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:56:00.1							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 11:47:37.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/18	17:15:27.4	16.800S	174.700W	33.0N				GSRC-M

Tonga Islands

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

35

GRA1 e PKP Z 17:35:08.9 146.8 10.4

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/18 17:57:33.1 15.342S 71.099W 33.0N 5.6
Southern Peru

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e P Z 18:11:02.0 96.8 254.3 1.3 22 5.6
CLL e P Z 18:11:08.8 98.2 255.8
e L Z 18:55:39.0 18.0 3514 5.9

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/18

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
CLL e PKP Z 19:37:20.4
GRA1 e PKP Z 19:37:26.1

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/19 03:07:44.8 19.790S 170.720E 33.0N
Vanuatu Islands

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GUNZ e PKPbc Z 03:27:17.0 145.0 37.1
MOX e PKPbc Z 03:27:16.2 145.0 35.8
UBBA e PKPbc Z 03:27:18.8 145.4 33.2
GEC2 e PKPbc Z 03:27:20.0 145.6 40.5
WET e PKPbc Z 03:27:20.6 145.7 39.0
BUG e PKPbc Z 03:27:20.2 145.8 28.5
GRA1 e PKPbc Z 03:27:20.3 145.9 36.0
FUR e PKPbc Z 03:27:24.3 147.1 37.5
STU e PKPbc Z 03:27:24.8 147.4 33.6
WLF e PKPbc Z 03:27:26.6 147.7 27.9
BFO e PKPbc Z 03:27:27.3 148.1 32.6

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/19 05:22:52.9 36.213N 140.403E 33.0N 5.5 4.9
Near east coast of eastern Honshu, Japan

Sta Phase Time Dist BAz T[s] A[nm] mb MS ML
GRA1 e P Z 05:35:15.6 83.1 39.1 0.9 26 5.5

e pP Z 05:35:27.5
 e L Z 06:15:34.6 19.3 523 4.9

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/19 08:23:49.0 10.030N 78.280W 33.0N 5.8 4.6
 North of Panama

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 08:35:49.7	78.8	272.3	1.0	168	6.0		
BUG	e P	Z 08:35:52.6	79.4	272.8	1.6	170	5.8		
IBBN	e P	Z 08:35:54.1	79.7	273.1	1.2	92	5.6		
BFO	e P	Z 08:35:57.0	80.3	274.2	1.4	71	5.4		
STU	e P	Z 08:36:00.2	80.8	274.8	1.1	89	5.7		
NRDL	e P	Z 08:36:02.0	81.1	274.9	1.5	115	5.7		
BSEG	e P	Z 08:36:01.7	81.1	274.8	2.4	222	5.8		
UBBA	e P	Z 08:36:02.1	81.2	275.1	1.6	89	5.5		
CLZ	e P	Z 08:36:03.1	81.3	275.2	1.1	85	5.7		
GRA1	e P	Z 08:36:07.0	82.0	276.2	3.3	1160	6.4		
	e L	Z 09:06:38.2			20.9	255		4.6	
MOX	e P	Z 08:36:07.5	82.2	276.3	1.2	42	5.5		
FUR	e P	Z 08:36:08.0	82.2	276.4	1.2	66	5.6		
WERD	e P	Z 08:36:10.0	82.7	276.9	1.2	61	5.7		
GUNZ	e P	Z 08:36:10.3	82.7	276.9	1.2	47	5.6		
CLL	i P	- Z 08:36:11.8	83.0	277.3	1.2	71	5.8		
	e pP	Z 08:36:28.6							
	e L	Z 09:06:06.9			21.9	275		4.6	
WET	e P	Z 08:36:13.0	83.2	277.5	1.7	199	6.1		
RUE	e P	Z 08:36:13.3	83.3	277.8	1.1	77	5.8		
BRG	e P	Z 08:36:15.2	83.6	278.1	5.6	3605	6.8		
GEC2	e P	Z 08:36:15.7	83.8	278.1	1.1	80	5.9		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/19 10:16:50.0 39.848N 142.144E 33.0N 4.8
 Near east coast of eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 10:28:59.7	80.6	36.0	1.0	9	4.8		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/19

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e Pn	Z 13:37:17.6							

WET e Pn Z 13:37:22.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/19	15:14:52.0	7.254N	123.912E	600.0G				gsrc-m

Mindanao, Philippine Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
RUE	e Pdiff	Z 15:27:18.1	96.2	69.5					
BRG	e Pdiff	Z 15:27:20.0	96.7	69.8					
CLL	e Pdiff	Z 15:27:23.2	97.1	69.0					
GEC2	e Pdiff	Z 15:27:24.4	97.5	69.9					
BSEG	e Pdiff	Z 15:27:24.5	97.6	66.5					
WERD	e Pdiff	Z 15:27:24.9	97.8	68.6					
GUNZ	e Pdiff	Z 15:27:25.2	97.8	68.6					
WET	e Pdiff	Z 15:27:27.2	97.9	69.2					
MOX	e Pdiff	Z 15:27:28.0	98.1	68.0					
NRDL	e Pdiff	Z 15:27:28.0	98.3	66.5					
CLZ	e Pdiff	Z 15:27:28.8	98.4	66.8					
GRA1	e Pdiff	Z 15:27:29.7	98.7	67.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/19	20:13:42.4	18.010S	179.090W	600.0G				SZGRF

Fiji Islands region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKP	Z 20:32:05.8	143.3	15.1					
RUE	e PKPbc	Z 20:32:08.3	144.1	21.2					
NRDL	e PKPbc	Z 20:32:10.3	144.8	15.3					
CLL	e PKPdf	Z 20:32:10.3	145.3	20.5					
	i PKPbc	- Z 20:32:12.3			0.5	69			
	i PKPab	Z 20:32:13.9			0.8	135			
	e pPKP	Z 20:34:25.2							
	i SKPbc	Z 20:34:57.9			0.8	28			
	e PP	Z 20:35:40.6							
CLZ	e PKPbc	Z 20:32:13.8	145.4	16.0					
BRG	e PKPbc	Z 20:32:14.3	145.5	22.3					
BUG	e PKPbc	Z 20:32:15.9	146.2	10.9					
MOX	e PKPbc	Z 20:32:16.1	146.3	18.5					
WERD	e PKPbc	Z 20:32:16.6	146.3	19.8					
GUNZ	e PKPbc	Z 20:32:17.0	146.4	19.9					
GRA1	e PKPbc	Z 20:32:18.7	147.3	18.3					
	e PKPab	Z 20:32:21.7							
	e pPKPbc	Z 20:34:30.1							
WET	e PKPbc	Z 20:32:19.1	147.4	21.5					
	e PKPab	Z 20:32:22.4							

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

38

	e pPKPbc	Z	20:34:30.1		
GEC2	e PKPbc	Z	20:32:19.3	147.5	23.1
	e pPKPbc	Z	20:34:30.2		
WLF	e PKPbc	Z	20:32:21.6	148.1	9.5
	e pPKPbc	Z	20:34:31.5		
STU	e PKPbc	Z	20:32:22.0	148.5	15.2
	e PKPab	Z	20:32:26.3		
	e pPKPbc	Z	20:34:34.4		
FUR	e PKPbc	Z	20:32:22.5	148.7	19.2
	e PKPab	Z	20:32:27.6		
	e pPKPbc	Z	20:34:34.8		
BFO	e PKPbc	Z	20:32:23.5	149.1	13.8
	e pPKPbc	Z	20:34:36.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/19	20:34:1.9	17.193S	178.898W	33.0N				SZGRF

Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	20:53:26.7	142.6	14.6					
RUE	e PKPbc	Z	20:53:29.6	143.3	20.6					
NRDL	e PKPbc	Z	20:53:31.9	144.0	14.7					
IBBN	e PKPbc	Z	20:53:33.1	144.5	11.0					
CLZ	e PKPbc	Z	20:53:33.3	144.6	15.4					
CLL	e PKPbc	Z	20:53:33.1	144.6	19.9					
BRG	e PKPbc	Z	20:53:33.8	144.8	21.6					
WERD	e PKPbc	Z	20:53:36.2	145.6	19.2					
GRA1	e PKPbc	Z	20:53:39.2	146.5	17.7					
GEC2	e PKPbc	Z	20:53:39.3	146.7	22.3					
WLF	e PKPbc	Z	20:53:41.5	147.3	8.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/19	22:39:13.5	55.110N	158.840W	42.7	5.4	4.5		SZGRF

Alaska Peninsula, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	22:50:26.8	70.6	353.4	1.1	52	5.6		
NRDL	e P	Z	22:50:35.1	72.0	353.4	1.0	37	5.5		
IBBN	e P	Z	22:50:35.4	72.0	352.0	0.9	48	5.6		
RUE	e P	Z	22:50:36.6	72.2	355.6	1.1	92	5.8		
CLZ	e P	Z	22:50:39.5	72.7	353.6	1.1	44	5.5		
BUG	e P	Z	22:50:39.8	72.8	351.7	1.9	207	5.9		
CLL	e P	Z	22:50:42.8	73.4	355.1	0.9	33	5.3		
	e pP	Z	22:50:54.8							
UBBA	e P	Z	22:50:44.9	73.7	353.4	1.4	19	4.9		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

39

BRG	e P	Z	22:50:45.9	73.8	355.7	1.0	26	5.2		
	e pP	Z	22:50:58.1							
MOX	e P	Z	22:50:46.7	73.9	354.3	1.2	72	5.6		
	e pP	Z	22:50:58.9							
WERD	e P	Z	22:50:48.0	74.2	354.8	1.2	25	5.1		
GUNZ	e P	Z	22:50:48.5	74.3	354.8	1.1	25	5.1		
	e pP	Z	22:51:00.6							
WLF	e P	Z	22:50:49.8	74.5	351.2	1.1	54	5.5		
GRA1	e P	Z	22:50:52.3	74.9	354.1	0.9	37	5.4		
	e L	Z	23:21:08.2			26.8	358		4.5	
	e L	Z	23:25:52.0			21.0	252			
WET	e P	Z	22:50:55.9	75.5	355.1	1.3	34	5.3		
STU	e P	Z	22:50:56.4	75.6	353.0	1.1	32	5.4		
GEC2	e P	Z	22:50:57.8	75.9	355.6	1.0	20	5.2		
BFO	e P	Z	22:50:58.2	76.0	352.5	1.5	49	5.4		
FUR	e P	Z	22:51:00.8	76.4	354.2	1.6	102	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/19	23:32:33.0	36.562N	21.247E	21.0G				mso-m
Southern Greece								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 23:36:09.7	15.0	147.3	1.4	63			
GUNZ	e P	Z 23:36:14.0	15.2	151.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/20	03:59:38.0				4.8	4.9		SZGRF
Southern Greece								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 04:12:23.5			0.9	4	4.8		
	e L	Z 04:59:02.0			19.1	474		4.9	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/20	07:39:36.7	15.321S	175.078W	268.7				SZGRF
Tonga Islands								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLZ	e PKPbc	Z 07:58:34.8	143.2	8.8					
CLL	e PKPbc	Z 07:58:34.9	143.4	13.2					
BRG	e PKPbc	Z 07:58:36.1	143.7	14.8					
BUG	e PKPbc	Z 07:58:37.0	143.8	3.8					
MOX	e PKPbc	Z 07:58:38.0	144.3	11.1					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

40

UBBA	e	PKPbc	Z	07:58:37.4	144.3	8.4
WERD	e	PKPbc	Z	07:58:38.4	144.4	12.3
GUNZ	e	PKPbc	Z	07:58:38.8	144.4	12.4
GRA1	e	PKPbc	Z	07:58:41.7	145.2	10.7
	e	pPKPbc	Z	07:59:47.9		
WET	e	PKPbc	Z	07:58:42.0	145.6	13.7
	e	pPKPbc	Z	07:59:49.9		
WLF	e	PKPbc	Z	07:58:42.7	145.6	2.1
	e	pPKPbc	Z	07:59:48.9		
GEC2	e	PKPbc	Z	07:58:42.3	145.7	15.1
	e	pPKPbc	Z	07:59:49.0		
BFO	e	PKPbc	Z	07:58:45.7	146.9	6.0
	e	pPKPbc	Z	07:59:51.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/20	16:32:22.8	43.127N	15.436E	10.0G			3.2	SZGRF

Adriatic Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
OBKA	e Pn	Z	16:33:16.8	3.4	169.1					3.5
ARSA	e Pn	Z	16:33:25.4	4.1	180.9					
KBA	e Pn	Z	16:33:26.8	4.2	158.8					3.1
	e Sn	E	16:34:15.5							
MOA	e Pn	Z	16:33:35.5	4.8	169.7					3.2
	e Sn	E	16:34:29.5							
WTTA	e Pn	Z	16:33:36.4	4.9	145.7					
DAVA	e Pn	Z	16:33:48.0	5.7	134.7					3.2
	e Sn	N	16:34:50.6							
GEC2	e Pn	Z	16:33:48.8	5.8	167.5					
	e Sn	E	16:34:54.0							
WET	e Pn	Z	16:33:54.2	6.3	162.7					
	e Sn	E	16:35:02.5							
GUNZ	e Pn	Z	16:34:12.0	7.5	162.5					
TANN	e Pn	Z	16:34:12.0	7.6	163.3					
WERD	e Pn	Z	16:34:13.2	7.6	162.5					
MOX	e Pn	Z	16:34:16.7	8.0	159.4					
	e Sn	N	16:35:43.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/20								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z	20:38:30.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/20	23:02:16.8	37.120N	28.140E	10.0G		4.7		SZGRF

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WET	e P	Z	23:06:09.1	16.3	131.7	1.0	327			
FUR	e P	Z	23:06:10.0	16.5	125.7					
BRG	e P	Z	23:06:17.5	17.1	138.2					
GUNZ	e P	Z	23:06:21.4	17.4	133.5					
WERD	e P	Z	23:06:22.8	17.5	133.6					
GRA1	e P	Z	23:06:22.3	17.5	129.5					
	e L	Z	23:13:43.0			20.1	4464		4.7	
CLL	e P	Z	23:06:25.7	17.8	137.0					
MOX	e P	Z	23:06:29.3	17.9	132.6					
STU	e P	Z	23:06:29.1	18.0	123.2					
BFO	e P	Z	23:06:31.7	18.3	120.5					
RUE	e P	Z	23:06:32.1	18.4	141.1					
CLZ	e P	Z	23:06:42.7	19.3	132.7					
WLF	e P	Z	23:06:52.4	20.2	120.1					
BUG	e P	Z	23:06:56.1	20.6	126.0					
BSEG	e P	Z	23:06:58.1	20.8	136.6					
IBBN	e P	Z	23:06:59.4	20.8	128.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/21	00:23:33.2	36.949N	28.267E	2.0G				kan-m

Dodecanese Islands, Greece

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	00:27:24.6	15.9	132.9					
WET	e P	Z	00:27:31.3	16.5	131.8					
MOX	e P	Z	00:27:50.2	18.1	132.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/21	15:34:29.2	42.949N	145.886E	39.5	5.9	5.4		SZGRF

Hokkaido, Japan, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	15:46:12.2	75.9	31.9	1.0	218	6.3		
RUE	e P	Z	15:46:12.4	76.0	34.0	1.1	204	6.2		
NRDL	e P	Z	15:46:19.1	77.2	31.6	1.1	89	5.8		
CLL	i P	+ Z	15:46:19.1	77.3	33.4	0.9	277	6.4		
	e pP	Z	15:46:30.4							
	e sP	Z	15:46:35.6							
	e PP	Z	15:49:12.0							

	e PPP	Z	15:51:14.1								
	e S	N	15:56:03.3								
	e PS	Z	15:56:56.6								
	e (SS)	E	16:01:52.0								
	e LR	Z	16:13:31.5								
	e L	Z	16:23:08.5			22.0	2809			5.5	
BRG	e P	Z	15:46:19.4	77.3	33.9	1.1	79			5.8	
CLZ	e P	Z	15:46:22.3	77.7	31.7	1.1	215			6.2	
IBBN	e P	Z	15:46:24.4	78.1	29.9	1.0	237			6.3	
WERD	e P	Z	15:46:24.5	78.2	32.8	1.1	68			5.6	
GUNZ	e P	Z	15:46:25.1	78.3	32.8	1.1	78			5.7	
MOX	e P	Z	15:46:25.1	78.3	32.4	1.1	88			5.7	
UBBA	e P	Z	15:46:26.9	78.7	31.3	1.3	53			5.4	
BUG	e P	Z	15:46:29.0	79.0	29.5	1.1	144			5.9	
GEC2	e P	Z	15:46:29.3	79.1	33.5	1.1	62			5.6	
WET	e P	Z	15:46:30.2	79.1	33.0	1.0	154			6.0	
GRA1	e P	Z	15:46:30.5	79.2	32.0	1.0	226			6.0	
	e pP	Z	15:46:41.9								
	e sP	Z	15:46:46.9								
	e L	Z	16:24:48.5			21.1	1966			5.4	
FUR	e P	Z	15:46:37.6	80.5	31.9	1.1	194			6.1	
STU	e P	Z	15:46:38.4	80.7	30.6	0.9	112			5.9	
WLF	e P	Z	15:46:39.5	80.9	28.6	1.2	57			5.5	
BFO	e P	Z	15:46:41.6	81.4	30.0	1.1	65			5.7	

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/21 17:21: 9.6 60.940N 148.230W 33.0G 5.4 4.2
 Kenai Peninsula, Alaska, United States SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	17:31:41.8	63.9	348.6	1.0	21	5.3		
IBBN	e P	Z	17:31:50.1	65.1	347.4	1.1	35	5.5		
NRDL	e P	Z	17:31:50.6	65.3	348.6	1.2	34	5.4		
RUE	e P	Z	17:31:53.6	65.7	350.5	1.0	42	5.6		
BUG	e P	Z	17:31:54.8	65.9	347.3	0.8	32	5.6		
CLZ	e P	Z	17:31:55.4	65.9	348.8	1.0	39	5.6		
CLL	e P	Z	17:31:59.9	66.7	350.2	1.0	23	5.4		
UBBA	e P	Z	17:32:00.7	66.9	348.7	1.3	15	5.1		
MOX	e P	Z	17:32:03.4	67.2	349.5	1.1	42	5.6		
	e pP	Z	17:32:12.4							
BRG	e P	Z	17:32:03.3	67.3	350.7	1.4	46	5.5		
WLF	e P	Z	17:32:05.0	67.5	346.9	0.9	29	5.5		
WERD	e P	Z	17:32:05.1	67.5	349.9	1.0	18	5.2		
	e pP	Z	17:32:14.4							
GUNZ	e P	Z	17:32:05.8	67.6	349.9	1.1	26	5.4		
GRA1	e P	Z	17:32:09.2	68.1	349.4	0.9	24	5.4		
	e L	Z	18:03:35.7			22.0	162			4.2

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

43

STU	e P	Z	17:32:13.0	68.8	348.5	1.1	20	5.3
WET	e P	Z	17:32:13.9	68.9	350.3	1.3	38	5.5
BFO	e P	Z	17:32:14.7	69.1	348.1	1.1	17	5.2
GEC2	e P	Z	17:32:15.9	69.3	350.7	1.7	38	5.2
	e pP	Z	17:32:25.2					
FUR	e P	Z	17:32:18.8	69.6	349.5	1.1	66	5.7

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/21	19:46:41.0	1.600N	127.400E	119.0N				NEIR-M

Halmahera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PP	Z 20:05:03.8	105.3	68.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/22	20:47:37.0	43.527N	127.494W	33.0N	4.7			SZGRF

Off coast of Oregon, United States

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 20:59:43.7	80.1	330.9	1.1	12	4.7		
	e	Z 21:00:02.8							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/22								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BFO	e PKP	Z 21:23:32.9							
FUR	e PKP	Z 21:23:36.9							
GRA1	e PKP	Z 21:23:39.2							
	e L	Z 22:44:46.9			19.8	1110			
IBBN	e PKP	Z 21:23:40.1							
MOX	e PKP	Z 21:23:42.0							
STU	e PKP	Z 21:23:35.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/22	23:53:29.1	15.300S	167.600E	33.0N				GSRC-M

Vanuatu Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 00:12:56.2	140.6	37.5					

	e LR	Z	16:14:54.3								
	e L	Z	16:35:17.2			22.0	303456		8.1		
	e R3	Z	19:24:34.3								
	e R4	Z	19:47:07.3								
RGN	e PP	Z	15:23:27.7	161.0	89.5						
GUNZ	e PKPdf	Z	15:19:03.0	161.2	101.1						
WERD	e PKPdf	Z	15:19:03.2	161.2	100.8						
FUR	e PKPdf	Z	15:19:04.1	161.3	107.1						
	e PP	Z	15:23:29.8								
MOX	e PKPdf	Z	15:19:03.6	161.7	99.9						
GRA1	e PKPdf	Z	15:19:05.4	161.8	102.6						
	e PP	Z	15:23:33.1								
	e SS	N	15:43:38.5								
	e SSS	Z	15:49:46.7								
	e L	Z	16:36:13.7			22.0	271524		8.1		
CLZ	e PKPdf	Z	15:19:04.9	162.6	95.6						
	e PP	Z	15:23:37.9								
UBBA	e PP	Z	15:23:36.5	162.7	98.7						
BSEG	e PKPdf	Z	15:19:04.1	162.8	88.8						
STU	e PKPdf	Z	15:19:06.2	162.8	104.9						
	e PP	Z	15:23:37.5								
NRDL	e PKPdf	Z	15:19:05.4	162.9	93.3						
	e PP	Z	15:23:36.1								
BFO	e PKPdf	Z	15:19:06.7	163.3	106.1						
	e PP	Z	15:23:40.3								
IBBN	e PKPdf	Z	15:19:05.8	164.3	92.4						
	e PP	Z	15:23:44.9								
BUG	e PKPdf	Z	15:19:05.9	164.5	95.1						
	e PP	Z	15:23:45.6								
WLF	e PKPdf	Z	15:19:07.5	165.0	101.1						
	e PP	Z	15:23:48.4								

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/23 19:50:17.3 33.271N 44.303W 33.0N 4.5
 North Atlantic Ocean

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 19:58:18.4	43.6	269.5	1.8	18	4.5		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/23 19:50: 2.3 49.900S 161.700E 33.0N
 North of Macquarie Island

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 20:09:59.1	161.1	102.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/23	22:04:37.0							SZGRF
North of Macquarie Island								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 22:10:55.6							
GEC2	e P	Z 22:11:13.3							
GRA1	e P	Z 22:11:08.2							
GUNZ	e P	Z 22:11:00.9							
MOX	e P	Z 22:10:58.6							
NOTT	e P	Z 22:11:05.8							
TANN	e P	Z 22:11:01.2							
WERD	e P	Z 22:11:00.4							
WET	e P	Z 22:11:10.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/24	05:31:55.9	50.200S	158.810E	33.0N				SZGRF
North of Macquarie Island								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e PKPab	Z 05:52:18.5	157.5	106.8					
BRG	e PKPab	Z 05:52:20.5	157.9	102.1					
WET	e PKPab	Z 05:52:21.5	158.1	105.8					
RUE	e PKPab	Z 05:52:21.8	158.3	98.1					
GUNZ	e PKPab	Z 05:52:24.2	158.8	102.6					
WERD	e PKPab	Z 05:52:24.3	158.8	102.4					
FUR	e PKPab	Z 05:52:24.5	158.9	107.8					
MOX	e PKPab	Z 05:52:26.4	159.3	101.6					
GRA1	e PKPab	Z 05:52:26.9	159.3	103.9					
CLZ	e PKPab	Z 05:52:29.8	160.2	97.8					
UBBA	e PKPab	Z 05:52:31.0	160.3	100.4					
STU	e PKPab	Z 05:52:31.1	160.3	105.7					
BSEG	e PKPab	Z 05:52:31.8	160.4	91.9					
NRDL	e PKPab	Z 05:52:31.9	160.5	95.8					
BFO	e PKPab	Z 05:52:33.0	160.8	106.7					
IBBN	e PKPab	Z 05:52:37.7	161.9	94.9					
BUG	e PKPab	Z 05:52:38.8	162.1	97.3					
WLF	e PKPab	Z 05:52:40.7	162.5	102.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/24	13:31:10.3	21.335S	177.374W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	13:50:49.0	146.9	13.2					
RUE	e PKPbc	Z	13:50:50.8	147.7	19.7					
NRDL	e PKPbc	Z	13:50:52.9	148.3	13.3					
CLL	e PKPbc	Z	13:50:54.6	149.0	19.0					
	e PKPab	Z	13:50:58.6							
BRG	e PKPbc	Z	13:50:55.1	149.2	20.9					
MOX	e PKPbc	Z	13:50:56.7	149.9	16.8					
	e PKPab	Z	13:51:02.4							
UBBA	e PKPbc	Z	13:50:56.7	150.0	13.8					
GRA1	e PKPbc	Z	13:50:59.4	150.8	16.6					
	e PKPab	Z	13:51:07.0							
WET	e PKPab	Z	13:51:07.8	151.0	20.0					
GEC2	e PKPbc	Z	13:50:59.4	151.1	21.7					
WLF	e PKPbc	Z	13:51:01.3	151.5	6.9					
	e PKPab	Z	13:51:10.4							
STU	e PKPbc	Z	13:51:02.1	152.1	13.1					
	e PKPab	Z	13:51:12.0							
FUR	e PKPab	Z	13:51:13.5	152.3	17.5					
BFO	e PKPbc	Z	13:51:03.0	152.6	11.6					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/24 13:38:34.9 21.840S 178.020W 613.5 SZGRF
 Fiji Islands region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	13:58:14.8	147.3	14.4					
RUE	e PKPbc	Z	13:58:16.6	148.0	21.0					
NRDL	e PKPbc	Z	13:58:18.8	148.7	14.6					
IBBN	e PKPdf	Z	13:58:16.3	149.2	10.5					
	e PKPbc	Z	13:58:20.0							
	e PKPab	Z	13:58:24.5							
CLZ	e PKPdf	Z	13:58:16.3	149.3	15.4					
	e PKPbc	Z	13:58:20.1							
CLL	e PKPdf	Z	13:58:16.8	149.3	20.3					
	i PKPbc	- Z	13:58:20.2			1.0	224			
	e PKPab	Z	13:58:24.8							
	e pPKPbc	Z	14:00:40.0							
	e SKPbc	Z	14:01:00.9							
	e PP	Z	14:01:48.8							
BRG	e PKPbc	Z	13:58:20.5	149.5	22.3					
BUG	e PKPdf	Z	13:58:17.9	150.1	9.9					
	e PKPbc	Z	13:58:22.1							
MOX	e PKPbc	Z	13:58:22.5	150.2	18.2					
WERD	e PKPbc	Z	13:58:22.6	150.3	19.6					
GUNZ	e PKPbc	Z	13:58:22.9	150.3	19.7					

	e	PKPab	Z	13:58:29.4					
UBBA	e	PKPbc	Z	13:58:23.0	150.3	15.2			
GRA1	e	PKPbc	Z	13:58:25.3	151.2	18.0			
	e	PKPab	Z	13:58:32.6					
WET	e	PKPbc	Z	13:58:25.8	151.4	21.5			
	e	PKPab	Z	13:58:33.7					
GEC2	e	PKPbc	Z	13:58:25.5	151.4	23.2			
WLF	e	PKPbc	Z	13:58:27.3	152.0	8.3			
	e	PKPab	Z	13:58:36.3					
STU	e	PKPdf	Z	13:58:22.2	152.5	14.6			
	e	PKPbc	Z	13:58:27.9					
FUR	e	PKPbc	Z	13:58:28.2	152.6	19.0			
	e	PKPab	Z	13:58:38.9					
BFO	e	PKPbc	Z	13:58:28.9	153.0	13.1			

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/24 13:48:48.2 21.180S 175.090W 33.0N
 Tonga Islands SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e	PKPbc	Z 14:08:27.8	147.0	9.3					
RUE	e	PKPbc	Z 14:08:29.8	148.0	15.7					
NRDL	e	PKPbc	Z 14:08:31.4	148.4	9.3					
IBBN	e	PKPbc	Z 14:08:33.3	148.8	5.1					
CLL	e	PKPbc	Z 14:08:33.2	149.2	14.9	0.7	62			
	i	PKPab	Z 14:08:37.8							
	e	pPKPbc	Z 14:10:54.3							
	e	SKPbc	Z 14:11:15.2							
BRG	e	PKPbc	Z 14:08:34.0	149.5	16.8					
BUG	e	PKPbc	Z 14:08:35.4	149.7	4.4					
MOX	e	PKPbc	Z 14:08:35.1	150.1	12.6					
UBBA	e	PKPbc	Z 14:08:35.5	150.1	9.6					
WERD	e	PKPbc	Z 14:08:35.8	150.2	14.0					
	e	PKPab	Z 14:08:41.6							
GUNZ	e	PKPbc	Z 14:08:36.1	150.2	14.0					
	e	PKPab	Z 14:08:42.2							
GRA1	e	PKPbc	Z 14:08:37.7	151.1	12.2					
WET	e	PKPab	Z 14:08:46.7	151.3	15.6					
GEC2	e	PKPbc	Z 14:08:38.2	151.5	17.4					
WLF	e	PKPbc	Z 14:08:39.9	151.5	2.4					
STU	e	PKPbc	Z 14:08:40.6	152.2	8.6					
FUR	e	PKPab	Z 14:08:51.9	152.5	13.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/24

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 19:56:09.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/25								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:35:50.3							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/25	02:43: 9.4	45.377N	151.234E	33.0N	4.9			SZGRF
Kuril Islands, Russia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:55:09.2	78.8	27.4	0.9	13	4.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/25								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e PKP	Z 22:45:09.7							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	00:58:48.2	2.757N	96.915E	33.0N	7.1	8.6		SZGRF
Northern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:11:12.0	83.4	93.7	1.4	1765	7.1		
	e S	N 01:21:40.1							
GEC2	e P	Z 01:11:12.3	83.5	93.3	1.4	3286	7.4		
	e S	N 01:21:40.5							
	e L	Z 01:53:33.8			21.2	2204429		8.5	
RUE	e P	Z 01:11:13.2	83.6	93.8	1.5	5034	7.5		
WET	e P	Z 01:11:14.9	84.0	92.7	1.3	1360	7.0		
	e S	N 01:21:47.5							
RGN	e P	Z 01:11:15.1	84.0	93.6	1.6	4403	7.4		
	e S	N 01:21:44.2							
CLL	e P	Z 01:11:16.1	84.0	93.0	1.2	964	6.9		
	e S	N 01:21:44.8							
	e L	Z 01:57:34.7			21.9	3418210		8.7	

WERD	e P	Z	01:11:16.3	84.4	92.4	1.5	1310	6.9		
MOX	e P	Z	01:11:19.7	84.9	91.9	1.5	1780	7.1		
	e S	N	01:21:52.8							
	e L	Z	01:58:05.2			19.8	4281420		8.8	
FUR	e P	Z	01:11:20.0	85.0	91.4	1.5	2116	7.1		
GRA1	e P	Z	01:11:21.2	85.1	91.5	1.2	1793	7.2		
	e S	N	01:21:58.6							
	e L	Z	01:58:35.0			19.2	3111190		8.7	
CLZ	e P	Z	01:11:22.8	85.7	91.0	1.4	1996	7.0		
	e S	N	01:22:02.1							
BSEG	e P	Z	01:11:23.6	85.8	91.1	1.5	3231	7.2		
	e S	N	01:22:03.1							
NRDL	e P	Z	01:11:24.7	85.9	90.9	1.5	3096	7.2		
	e S	N	01:22:03.7							
UBBA	e P	Z	01:11:25.0	85.9	90.6	1.8	1614	6.9		
	e S	N	01:22:04.2							
STU	e P	Z	01:11:27.2	86.4	89.9	1.9	2839	7.1		
	e S	N	01:22:08.2							
	e L	Z	01:59:31.4			21.6	2212330		8.5	
BFO	e P	Z	01:11:29.7	87.0	89.2	1.1	616	6.7		
	e S	N	01:22:15.3							
HLG	e S	N	01:22:18.4	87.2	89.2					
IBBN	e P	Z	01:11:31.7	87.3	89.0	1.2	1895	7.1		
	e S	N	01:22:15.8							
BUG	e P	Z	01:11:33.6	87.6	88.6	1.6	2772	7.3		
	e S	N	01:22:21.2							
	e L	Z	02:01:19.0			21.8	2580959		8.6	
WLF	e P	Z	01:11:36.9	88.4	87.6	1.3	1088	7.0		
	e S	N	01:22:30.5							

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 01:21:58.8 12.169N 92.522E 33.0N 6.3
 Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 01:33:38.2	75.1	88.6	1.6	521	6.3		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 01:25:48.8 5.434N 94.499E 33.0N 6.1
 Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:37:54.2	79.8	93.9	1.4	262	6.0		
GEC2	e P	Z 01:37:54.1	79.9	93.4	1.2	297	6.1		
RUE	e P	Z 01:37:55.0	80.0	94.1	1.0	282	6.2		

WET	e P	Z	01:37:57.2	80.4	92.8	1.2	182	5.9
CLL	e P	Z	01:37:56.8	80.4	93.2	1.3	212	5.9
WERD	e P	Z	01:37:59.1	80.8	92.6	1.3	122	5.8
FUR	e P	Z	01:38:02.0	81.4	91.4	1.7	367	6.1
GRA1	e P	Z	01:38:03.4	81.5	91.6	1.3	334	6.3
CLZ	e P	Z	01:38:06.1	82.1	91.2	1.2	217	6.2
BSEG	e P	Z	01:38:06.3	82.2	91.5	1.1	256	6.3
NRDL	e P	Z	01:38:07.3	82.3	91.1	1.4	284	6.2
IBBN	e P	Z	01:38:14.4	83.7	89.2	1.6	473	6.5
BUG	e P	Z	01:38:16.2	84.0	88.8	1.4	333	6.4
WLF	e P	Z	01:38:20.4	84.8	87.7	1.9	576	6.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	01:48:49.5	5.010N	94.310E	33.0N	5.6			SZGRF
Northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:00:55.7	80.0	94.3	0.7	32	5.3		
GEC2	e P	Z	02:00:56.1	80.1	93.8	0.8	77	5.7		
RUE	e P	Z	02:00:56.6	80.3	94.5	0.7	124	6.0		
WET	e P	Z	02:00:58.9	80.6	93.2	0.8	38	5.5		
CLL	e P	Z	02:00:58.5	80.7	93.7	0.9	27	5.3		
MOX	e P	Z	02:01:03.3	81.5	92.5	0.7	21	5.4		
FUR	e P	Z	02:01:03.8	81.6	91.8	0.7	38	5.6		
GRA1	e P	Z	02:01:05.2	81.7	92.0	0.8	56	5.8		
CLZ	e P	Z	02:01:07.7	82.3	91.7	0.7	35	5.6		
BSEG	e P	Z	02:01:08.3	82.4	91.9	0.9	60	5.7		
NRDL	e P	Z	02:01:09.0	82.5	91.5	1.5	212	6.2		
UBBA	e P	Z	02:01:08.5	82.5	91.2	0.7	8	5.1		
STU	e P	Z	02:01:11.1	83.0	90.4	0.7	32	5.7		
BFO	e P	Z	02:01:13.9	83.6	89.7	0.7	28	5.6		
IBBN	e P	Z	02:01:16.1	83.9	89.7	0.7	47	5.8		
BUG	e P	Z	02:01:17.7	84.2	89.2	1.0	59	5.8		
WLF	e P	Z	02:01:21.9	85.0	88.2	0.8	22	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	01:59:21.5	9.470N	91.770E	33.0N	5.0			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:11:00.3	75.0	93.4	1.0	12	4.9		
GEC2	e P	Z	02:11:00.7	75.0	92.7	0.9	15	5.0		
RUE	e P	Z	02:11:01.2	75.2	93.7	0.8	23	5.2		
WET	e P	Z	02:11:03.9	75.6	92.1	0.9	12	5.0		
CLL	e P	Z	02:11:03.5	75.6	92.8	0.9	9	4.9		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

52

MOX	e P	Z	02:11:08.9	76.5	91.5	0.8	5	4.7
FUR	e P	Z	02:11:09.1	76.6	90.7	0.8	12	5.1
GRA1	e P	Z	02:11:10.5	76.7	91.0	0.9	20	5.2
CLZ	e P	Z	02:11:13.3	77.3	90.8	0.9	10	5.0
BSEG	e P	Z	02:11:13.6	77.3	91.3	0.9	15	5.1
NRDL	e P	Z	02:11:14.2	77.4	90.8	1.2	13	5.0
BFO	e P	Z	02:11:20.3	78.6	88.5	1.0	11	4.8
BUG	e P	Z	02:11:23.8	79.2	88.3	1.0	10	4.8
WLF	e P	Z	02:11:28.3	80.0	87.1	1.1	16	4.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:00:39.1	6.110N	94.270E	33.0N	5.9			SZGRF
Nicobar Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 02:12:40.4	79.2	93.6	1.1	103	5.8		
GEC2	e P	Z 02:12:40.8	79.2	93.1	1.0	108	5.8		
RUE	e P	Z 02:12:41.2	79.4	93.8	1.0	329	6.3		
WET	e P	Z 02:12:43.7	79.8	92.5	0.9	67	5.6		
CLL	e P	Z 02:12:43.3	79.8	93.0	1.0	73	5.6		
RGN	e P	Z 02:12:43.6	79.8	93.8	0.9	154	5.9		
MOX	e P	Z 02:12:48.2	80.6	91.8	1.1	85	5.7		
FUR	e P	Z 02:12:49.0	80.8	91.1	1.1	163	6.0		
GRA1	e P	Z 02:12:50.0	80.8	91.3	0.9	162	6.0		
CLZ	e P	Z 02:12:52.5	81.4	91.0	1.0	142	6.0		
BSEG	e P	Z 02:12:53.0	81.5	91.3	0.9	251	6.3		
NRDL	e P	Z 02:12:53.8	81.6	90.9	1.1	228	6.2		
UBBA	e P	Z 02:12:52.3	81.6	90.6	1.0	14	5.0		
STU	e P	Z 02:12:55.3	82.2	89.7	1.0	76	5.8		
BFO	e P	Z 02:12:59.2	82.7	88.9	0.9	79	5.9		
IBBN	e P	Z 02:13:01.0	83.0	89.0	0.9	213	6.4		
BUG	e P	Z 02:13:02.7	83.4	88.5	0.9	139	6.2		
WLF	e P	Z 02:13:07.3	84.1	87.5	1.1	123	6.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:13:32.8	3.799N	97.730E	33.0N	4.8			SZGRF
Northern Sumatera, Indonesia								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GRA1	e P	Z 02:26:04.5	84.8	90.2	0.8	5	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:15:23.0	5.660N	93.140E	33.0N	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:27:23.0	78.8	94.2	1.0	44	5.4		
BRG	e P	Z 02:27:22.9	78.8	94.8	1.1	48	5.4		
RUE	e P	Z 02:27:24.0	79.0	95.0	1.0	98	5.8		
WET	e P	Z 02:27:25.7	79.4	93.7	1.1	42	5.4		
CLL	e P	Z 02:27:25.9	79.4	94.2	1.1	40	5.4		
MOX	e P	Z 02:27:30.9	80.3	93.0	1.1	35	5.2		
FUR	e P	Z 02:27:31.3	80.4	92.3	1.0	41	5.3		
GRA1	e P	Z 02:27:32.6	80.5	92.5	1.1	85	5.6		
CLZ	e P	Z 02:27:35.3	81.1	92.2	1.0	55	5.5		
BSEG	e P	Z 02:27:35.9	81.2	92.5	0.9	102	5.8		
NRDL	e P	Z 02:27:36.4	81.3	92.1	1.2	80	5.6		
STU	e P	Z 02:27:38.6	81.8	90.8					
BFO	e P	Z 02:27:41.5	82.3	90.1	1.0	20	5.2		
IBBN	e P	Z 02:27:43.8	82.7	90.2	0.9	68	5.9		
BUG	e P	Z 02:27:45.3	83.0	89.7	1.0	36	5.5		
WLF	e P	Z 02:27:49.4	83.7	88.6	1.1	28	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:22:4.4	8.700N	92.280E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 02:33:48.4	75.9	93.5	0.9	32	5.5		
GEC2	e P	Z 02:33:48.7	76.0	92.8	0.9	44	5.6		
RUE	e P	Z 02:33:49.4	76.1	93.8	0.8	74	5.9		
WET	e P	Z 02:33:51.9	76.5	92.3	0.9	32	5.4		
CLL	e P	Z 02:33:51.5	76.5	92.9	1.0	25	5.3		
MOX	e P	Z 02:33:56.6	77.4	91.6	0.9	16	5.2		
FUR	e P	Z 02:33:57.2	77.5	90.8	0.9	36	5.5		
GRA1	e P	Z 02:33:58.5	77.6	91.1	0.9	50	5.6		
CLZ	e P	Z 02:34:01.1	78.2	90.9	0.8	30	5.5		
BSEG	e P	Z 02:34:01.7	78.3	91.3	0.9	46	5.6		
NRDL	e P	Z 02:34:02.1	78.3	90.9	1.2	58	5.6		
UBBA	e P	Z 02:34:02.0	78.4	90.4	0.7	6	4.8		
STU	e P	Z 02:34:05.0	78.9	89.4	0.8	21	5.2		
BFO	e P	Z 02:34:08.0	79.5	88.7	1.0	25	5.1		
IBBN	e P	Z 02:34:09.8	79.8	89.0	0.9	41	5.3		
BUG	e P	Z 02:34:11.4	80.1	88.4	0.9	24	5.1		
WLF	e P	Z 02:34:16.5	80.9	87.3	1.0	28	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:26:47.5	3.934N	94.345E	33.0N	4.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:38:58.4	80.9	94.5	0.8	10	4.9		
BRG	e P	Z 02:38:58.0	80.9	95.0	0.9	7	4.7		
RUE	e P	Z 02:38:59.0	81.1	95.1	0.8	17	5.1		
WET	e P	Z 02:39:01.1	81.4	93.9	0.8	5	4.6		
CLL	e P	Z 02:39:00.9	81.5	94.3	0.9	5	4.6		
MOX	e P	Z 02:39:05.7	82.4	93.1	0.8	4	4.5		
FUR	e P	Z 02:39:05.7	82.4	92.5	0.8	4	4.6		
GRA1	e P	Z 02:39:07.5	82.6	92.7	0.9	9	5.0		
CLZ	e P	Z 02:39:10.2	83.2	92.3	0.8	8	5.0		
BSEG	e P	Z 02:39:10.7	83.3	92.5	0.8	10	5.1		
NRDL	e P	Z 02:39:10.9	83.4	92.2	0.9	5	4.7		
STU	e P	Z 02:39:13.4	83.8	91.0	1.1	7	4.8		
BFO	e P	Z 02:39:16.2	84.4	90.4	0.7	3	4.6		
IBBN	e P	Z 02:39:18.6	84.8	90.3	0.8	9	5.1		
BUG	e P	Z 02:39:20.1	85.1	89.8	0.9	9	5.0		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:34:51.8	3.620N	94.060E	33.0G	5.4			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:47:03.1	80.9	94.9	0.9	60	5.6		
BRG	e P	Z 02:47:03.2	81.0	95.4	0.9	29	5.3		
RUE	e P	Z 02:47:04.5	81.2	95.5	0.9	64	5.7		
WET	e P	Z 02:47:06.1	81.5	94.3	1.0	32	5.4		
CLL	e P	Z 02:47:05.9	81.6	94.7	0.9	28	5.4		
MOX	e P	Z 02:47:10.8	82.4	93.6	0.8	16	5.2		
FUR	e P	Z 02:47:10.8	82.5	93.0	0.9	31	5.5		
GRA1	e P	Z 02:47:12.5	82.6	93.1	0.9	47	5.7		
CLZ	e P	Z 02:47:15.0	83.3	92.7	0.9	30	5.5		
BSEG	e P	Z 02:47:15.9	83.4	92.9	0.9	44	5.7		
UBBA	e P	Z 02:47:15.7	83.4	92.3	0.7	4	4.7		
NRDL	e P	Z 02:47:16.4	83.4	92.6	1.1	37	5.5		
STU	e P	Z 02:47:18.3	83.9	91.5	0.9	15	5.3		
BFO	e P	Z 02:47:21.0	84.5	90.8	0.9	17	5.3		
IBBN	e P	Z 02:47:23.5	84.9	90.7	0.9	36	5.6		
BUG	e P	Z 02:47:24.8	85.2	90.2	1.0	52	5.7		
WLF	e P	Z 02:47:29.1	85.9	89.2	1.0	25	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	02:36: 9.2	12.090N	92.920E	33.0N	5.6			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:47:40.7	73.7	90.8					
RUE	e P	Z	02:47:41.0	73.8	91.1					
CLL	e P	Z	02:47:43.5	74.3	90.2					
WET	e P	Z	02:47:44.6	74.4	89.5					
MOX	e P	Z	02:47:48.8	75.2	88.9					
GRA1	e P	Z	02:47:50.3	75.5	88.4	0.8	30	5.5		
FUR	e P	Z	02:47:50.7	75.5	88.0					
BSEG	e P	Z	02:47:53.7	75.9	88.7					
CLZ	e P	Z	02:47:53.3	75.9	88.2	1.1	119	5.9		
NRDL	e P	Z	02:47:54.2	76.1	88.2					
STU	e P	Z	02:47:58.9	76.8	86.6					
BFO	e P	Z	02:48:01.4	77.4	85.9	1.1	30	5.3		
IBBN	e P	Z	02:48:02.2	77.5	86.3					
BUG	e P	Z	02:48:04.2	77.9	85.7					
WLF	e P	Z	02:48:09.2	78.7	84.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 02:38:7.6 7.721N 92.132E 33.0N 5.4
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:49:54.1	76.6	94.3					
GEC2	e P	Z	02:49:54.6	76.6	93.6					
RUE	e P	Z	02:49:55.5	76.8	94.5					
WET	e P	Z	02:49:57.5	77.1	93.0					
CLL	e P	Z	02:49:57.4	77.2	93.6					
MOX	e P	Z	02:50:02.5	78.0	92.4					
FUR	e P	Z	02:50:03.0	78.2	91.6					
GRA1	e P	Z	02:50:04.4	78.2	91.9	1.0	65	5.7		
CLZ	e P	Z	02:50:07.0	78.8	91.7	0.9	32	5.4		
BSEG	e P	Z	02:50:07.6	79.0	92.0					
NRDL	e P	Z	02:50:08.4	79.0	91.6					
STU	e P	Z	02:50:11.0	79.6	90.2					
BFO	e P	Z	02:50:13.9	80.1	89.5	0.9	25	5.1		
IBBN	e P	Z	02:50:15.6	80.5	89.7					
BUG	e P	Z	02:50:17.6	80.8	89.2					
WLF	e P	Z	02:50:22.0	81.5	88.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 02:45:10.8 7.450N 93.410E 33.0N 4.9
 Nicobar Islands, India, region

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

56

BRG	e P	Z	02:57:03.7	77.6	93.5						
GEC2	e P	Z	02:57:04.3	77.6	92.8						
RUE	e P	Z	02:57:05.1	77.8	93.7						
WET	e P	Z	02:57:07.3	78.2	92.3						
CLL	e P	Z	02:57:06.7	78.2	92.8						
MOX	e P	Z	02:57:11.8	79.0	91.6						
FUR	e P	Z	02:57:12.6	79.2	90.9						
GRA1	e P	Z	02:57:13.6	79.3	91.1	0.7		12		5.0	
CLZ	e P	Z	02:57:16.0	79.9	90.8	0.8		12		4.9	
BSEG	e P	Z	02:57:16.8	79.9	91.2						
UBBA	e P	Z	02:57:17.2	80.1	90.4						
BFO	e P	Z	02:57:23.4	81.2	88.7	0.9		8		4.8	
IBBN	e P	Z	02:57:25.3	81.5	88.9						

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 02:52:2.5 11.770N 91.970E 33.0N 5.5
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:03:32.1	73.4	91.7					
GEC2	e P	Z	03:03:32.8	73.5	90.9					
RUE	e P	Z	03:03:32.7	73.5	92.1					
CLL	e P	Z	03:03:35.1	74.0	91.1					
WET	e P	Z	03:03:36.0	74.0	90.4					
MOX	e P	Z	03:03:40.6	74.8	89.9					
FUR	e P	Z	03:03:41.8	75.1	88.9					
GRA1	e P	Z	03:03:42.6	75.1	89.3	1.0	56	5.6		
CLZ	e P	Z	03:03:45.1	75.6	89.2	0.9	62	5.7		
BSEG	e P	Z	03:03:45.3	75.6	89.7					
NRDL	e P	Z	03:03:46.2	75.7	89.2					
STU	e P	Z	03:03:49.5	76.4	87.5					
BFO	e P	Z	03:03:53.0	77.0	86.8	1.1	29	5.3		
IBBN	e P	Z	03:03:54.1	77.2	87.3					
BUG	e P	Z	03:03:56.0	77.5	86.7					
WLF	e P	Z	03:04:01.1	78.4	85.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 02:59:16.3 2.840N 93.640E 33.0N 5.3
 Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	03:11:28.9	81.2	95.7	0.9	51	5.6		
BRG	e P	Z	03:11:29.1	81.3	96.2	0.9	22	5.2		
RUE	e P	Z	03:11:30.1	81.6	96.3	0.9	52	5.7		
WET	e P	Z	03:11:31.8	81.8	95.2	1.0	28	5.3		

CLL	e P	Z	03:11:32.1	81.9	95.6	0.8	11	5.1
MOX	e P	Z	03:11:36.8	82.8	94.4	0.9	15	5.2
GRA1	e P	Z	03:11:37.8	82.9	94.0	1.0	42	5.6
CLZ	e P	Z	03:11:40.9	83.6	93.5	0.9	25	5.4
BSEG	e P	Z	03:11:41.6	83.8	93.7	0.9	26	5.4
UBBA	e P	Z	03:11:41.7	83.8	93.1	0.9	4	4.7
NRDL	e P	Z	03:11:42.0	83.8	93.4	1.3	62	5.7
STU	e P	Z	03:11:43.3	84.2	92.3	0.9	13	5.2
BFO	e P	Z	03:11:46.0	84.8	91.6	0.8	12	5.2
IBBN	e P	Z	03:11:49.2	85.2	91.5	1.0	42	5.6
BUG	e P	Z	03:11:50.5	85.5	91.1	0.9	26	5.3
WLF	e P	Z	03:11:55.2	86.2	90.1	1.1	26	5.3

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:02:40.9	8.700N	92.140E	33.0N	5.6			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:14:23.5	75.8	93.6					
GEC2	e P	Z	03:14:23.6	75.9	92.9					
RUE	e P	Z	03:14:24.3	76.0	93.9					
WET	e P	Z	03:14:27.0	76.4	92.4					
CLL	e P	Z	03:14:26.3	76.4	93.0					
WERD	e P	Z	03:14:29.2	76.8	92.2					
MOX	e P	Z	03:14:31.7	77.3	91.8					
FUR	e P	Z	03:14:32.2	77.4	90.9					
GRA1	e P	Z	03:14:33.6	77.5	91.2	1.2	139	6.0		
CLZ	e P	Z	03:14:36.2	78.1	91.0	1.0	54	5.6		
BSEG	e P	Z	03:14:36.5	78.2	91.4					
UBBA	e P	Z	03:14:36.7	78.3	90.5					
STU	e P	Z	03:14:40.0	78.8	89.5					
BFO	e P	Z	03:14:43.2	79.4	88.8	1.0	32	5.3		
IBBN	e P	Z	03:14:45.2	79.7	89.1					
BUG	e P	Z	03:14:46.8	80.0	88.5					
WLF	e P	Z	03:14:51.2	80.8	87.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:08:41.3	12.850N	92.880E	33.0N	6.2			SZGRF
Andaman Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:20:09.2	73.1	90.3	1.0	211	6.2		
RUE	e P	Z	03:20:09.4	73.2	90.6	1.0	489	6.6		
GEC2	e P	Z	03:20:10.2	73.3	89.5	1.0	260	6.3		
RGN	e P	Z	03:20:11.8	73.5	90.9	1.3	316	6.2		

CLL	e P	Z	03:20:12.2	73.7	89.7	1.2	193	6.0
WET	e P	Z	03:20:13.3	73.8	89.0	1.1	219	6.1
WERD	e P	Z	03:20:15.2	74.1	88.9	1.0	180	6.0
MOX	e P	Z	03:20:17.7	74.6	88.4	1.0	150	6.0
GRA1	e P	Z	03:20:20.0	74.9	87.9	1.1	292	6.2
FUR	e P	Z	03:20:19.3	74.9	87.5	1.0	190	6.1
BSEG	e P	Z	03:20:21.7	75.3	88.3	1.0	344	6.3
CLZ	e P	Z	03:20:22.1	75.3	87.8	1.1	262	6.2
NRDL	e P	Z	03:20:23.0	75.5	87.7	1.4	404	6.4
UBBA	e P	Z	03:20:23.1	75.6	87.2	1.6	134	5.8
STU	e P	Z	03:20:26.9	76.2	86.1	1.2	107	5.9
BFO	e P	Z	03:20:30.4	76.8	85.4	1.3	102	5.8
IBBN	e P	Z	03:20:31.0	76.9	85.9	1.2	436	6.4
BUG	e P	Z	03:20:33.1	77.3	85.3	1.1	274	6.3
WLF	e P	Z	03:20:38.3	78.1	84.0	1.9	363	6.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:24:56.5	4.200N	93.560E	33.0N	5.9			SZGRF
Off west coast of northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	03:37:04.2	80.2	94.9	1.1	195	6.0		
BRG	e P	Z	03:37:04.0	80.2	95.4	1.1	104	5.7		
RUE	e P	Z	03:37:05.2	80.5	95.6	1.0	230	6.1		
WET	e P	Z	03:37:07.1	80.7	94.3	1.3	124	5.8		
CLL	e P	Z	03:37:07.1	80.8	94.8	1.0	81	5.7		
RGN	e P	Z	03:37:08.4	80.9	95.5	1.0	167	6.0		
WERD	e P	Z	03:37:09.2	81.2	94.1	1.1	61	5.5		
MOX	e P	Z	03:37:11.5	81.6	93.6	2.0	237	6.0		
FUR	e P	Z	03:37:11.9	81.7	92.9	1.2	138	6.0		
GRA1	e P	Z	03:37:13.3	81.8	93.1	1.0	164	6.1		
CLZ	e P	Z	03:37:16.0	82.5	92.8	0.9	106	6.1		
BSEG	e P	Z	03:37:16.8	82.6	93.0	1.0	154	6.2		
UBBA	e P	Z	03:37:17.3	82.7	92.3	1.9	93	5.7		
NRDL	e P	Z	03:37:17.3	82.7	92.6	1.4	174	6.1		
STU	e P	Z	03:37:19.5	83.1	91.5	0.9	42	5.7		
BFO	e P	Z	03:37:22.0	83.7	90.8	1.0	70	5.8		
IBBN	e P	Z	03:37:24.5	84.1	90.7	1.1	152	6.1		
BUG	e P	Z	03:37:25.8	84.4	90.3	1.0	138	6.1		
WLF	e P	Z	03:37:30.4	85.1	89.3	1.2	96	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:40:15.0	5.190N	94.280E	33.0N	5.8			SZGRF
Northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:52:20.8	79.9	94.2					
GEC2	e P	Z	03:52:21.3	79.9	93.7					
RUE	e P	Z	03:52:21.9	80.1	94.4					
WET	e P	Z	03:52:24.1	80.5	93.1					
CLL	e P	Z	03:52:23.6	80.5	93.6					
RGN	e P	Z	03:52:24.4	80.5	94.4					
MOX	e P	Z	03:52:28.5	81.3	92.4					
FUR	e P	Z	03:52:29.1	81.5	91.7					
GRA1	e P	Z	03:52:30.3	81.6	91.9	0.9	99	5.9		
CLZ	e P	Z	03:52:33.0	82.2	91.6	0.8	67	5.8		
BSEG	e P	Z	03:52:33.5	82.3	91.8					
NRDL	e P	Z	03:52:33.9	82.3	91.5					
UBBA	e P	Z	03:52:33.6	82.4	91.1					
STU	e P	Z	03:52:36.4	82.9	90.3					
BFO	e P	Z	03:52:39.2	83.4	89.6	0.8	38	5.7		
IBBN	e P	Z	03:52:41.3	83.8	89.6					
BUG	e P	Z	03:52:42.9	84.1	89.1					
WLF	e P	Z	03:52:47.2	84.8	88.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:46:40.3	6.181N	92.943E	33.0N	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:58:36.5	78.3	94.6					
GEC2	e P	Z	03:58:36.8	78.3	94.0					
RUE	e P	Z	03:58:37.3	78.5	94.8					
WET	e P	Z	03:58:39.9	78.8	93.5					
CLL	e P	Z	03:58:39.6	78.9	94.0					
MOX	e P	Z	03:58:44.4	79.7	92.8					
FUR	e P	Z	03:58:44.8	79.8	92.1					
GRA1	e P	Z	03:58:46.5	79.9	92.3	0.9	17	5.0		
CLZ	e P	Z	03:58:48.9	80.6	92.0	0.9	13	5.0		
BSEG	e P	Z	03:58:49.4	80.7	92.3					
NRDL	e P	Z	03:58:50.4	80.7	91.9					
STU	e P	Z	03:58:52.4	81.2	90.6					
BFO	e P	Z	03:58:55.2	81.8	89.9	0.9	6	4.7		
IBBN	e P	Z	03:58:57.7	82.2	90.0					
BUG	e P	Z	03:58:59.3	82.5	89.5					
WLF	e P	Z	03:59:03.7	83.2	88.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:50:15.5	4.450N	94.430E	33.0N	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:02:24.6	80.6	94.6					
GEC2	e P	Z	04:02:24.9	80.6	94.1	0.9	44	5.5		
RUE	e P	Z	04:02:25.7	80.8	94.7					
WET	e P	Z	04:02:27.7	81.1	93.5					
CLL	e P	Z	04:02:27.4	81.2	93.9					
WERD	e P	Z	04:02:29.8	81.6	93.2					
MOX	e P	Z	04:02:32.3	82.0	92.7					
FUR	e P	Z	04:02:32.9	82.1	92.1					
GRA1	e P	Z	04:02:34.1	82.2	92.3					
CLZ	e P	Z	04:02:36.8	82.8	91.9	0.8	28	5.5		
BSEG	e P	Z	04:02:37.5	82.9	92.1					
STU	e P	Z	04:02:39.9	83.5	90.6					
BFO	e P	Z	04:02:42.9	84.1	89.9	0.8	21	5.4		
IBBN	e P	Z	04:02:45.1	84.4	89.9					
BUG	e P	Z	04:02:46.8	84.8	89.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	03:51: 9.0	4.290N	94.970E	33.0N	5.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:03:20.9	81.0	94.3					
GEC2	e P	Z	04:03:21.2	81.0	93.8					
RUE	e P	Z	04:03:21.9	81.2	94.4					
WET	e P	Z	04:03:24.1	81.6	93.2					
CLL	e P	Z	04:03:23.7	81.6	93.6					
WERD	e P	Z	04:03:26.2	82.0	92.9					
MOX	e P	Z	04:03:28.5	82.5	92.4					
FUR	e P	Z	04:03:29.0	82.6	91.8					
GRA1	e P	Z	04:03:30.2	82.7	92.0	1.0	105	6.0		
CLZ	e P	Z	04:03:32.7	83.3	91.6	1.1	75	5.8		
BSEG	e P	Z	04:03:33.4	83.4	91.8					
NRDL	e P	Z	04:03:33.8	83.5	91.5					
STU	e P	Z	04:03:36.3	84.0	90.3					
BFO	e P	Z	04:03:39.0	84.6	89.7	0.9	58	5.8		
IBBN	e P	Z	04:03:41.1	84.9	89.6					
BUG	e P	Z	04:03:42.6	85.2	89.1					
WLF	e P	Z	04:03:46.6	86.0	88.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:00:37.9	3.354N	94.448E	33.0N	5.4			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:12:51.6	81.4	94.8					
BRG	e P	Z	04:12:51.5	81.4	95.3					
RUE	e P	Z	04:12:52.5	81.7	95.4					
WET	e P	Z	04:12:54.5	82.0	94.2					
CLL	e P	Z	04:12:54.3	82.0	94.6					
MOX	e P	Z	04:12:58.9	82.9	93.4					
FUR	e P	Z	04:12:59.5	82.9	92.9					
GRA1	e P	Z	04:13:00.5	83.1	93.0	0.9	34	5.6		
CLZ	e P	Z	04:13:03.4	83.7	92.6	0.8	18	5.3		
BSEG	e P	Z	04:13:04.1	83.8	92.8					
NRDL	e P	Z	04:13:04.7	83.9	92.4					
STU	e P	Z	04:13:06.6	84.4	91.4					
BFO	e P	Z	04:13:09.4	84.9	90.7	0.8	14	5.2		
IBBN	e P	Z	04:13:11.9	85.3	90.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:02:52.4	4.760N	94.740E	33.0N	5.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:15:02.6	80.5	94.1	1.0	98	5.8		
GEC2	e P	Z	04:15:02.8	80.5	93.6	1.0	256	6.2		
RUE	e P	Z	04:15:03.6	80.7	94.3	0.7	222	6.3		
WET	e P	Z	04:15:05.7	81.1	93.0	1.1	146	5.9		
CLL	e P	Z	04:15:05.4	81.1	93.5	1.1	92	5.7		
WERD	e P	Z	04:15:07.4	81.5	92.8	1.1	74	5.7		
MOX	e P	Z	04:15:10.1	82.0	92.3	1.3	96	5.8		
FUR	e P	Z	04:15:10.6	82.1	91.7	0.9	99	5.9		
GRA1	e P	Z	04:15:11.8	82.2	91.9	1.2	234	6.2		
CLZ	e P	Z	04:15:14.5	82.8	91.5	1.2	168	6.1		
BSEG	e P	Z	04:15:15.0	82.9	91.7	1.1	197	6.2		
NRDL	e P	Z	04:15:15.4	83.0	91.4					
UBBA	e P	Z	04:15:15.1	83.0	91.1	2.0	100	5.7		
STU	e P	Z	04:15:18.0	83.5	90.2					
BFO	e P	Z	04:15:20.8	84.1	89.5					
IBBN	e P	Z	04:15:22.9	84.4	89.5					
BUG	e P	Z	04:15:24.3	84.7	89.0					
WLF	e P	Z	04:15:28.7	85.5	88.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:02:50.9	4.480N	95.000E	33.0N	6.1			SZGRF

Northern Sumatera, Indonesia

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

62

BRG	e P	Z	04:15:02.4	80.9	94.1					
GEC2	e P	Z	04:15:02.9	80.9	93.6					
RUE	e P	Z	04:15:03.5	81.1	94.2					
WET	e P	Z	04:15:05.6	81.5	93.0					
CLL	e P	Z	04:15:05.1	81.5	93.4					
MOX	e P	Z	04:15:09.9	82.3	92.3					
FUR	e P	Z	04:15:10.6	82.5	91.7					
GRA1	e P	Z	04:15:11.8	82.6	91.8	1.2		234		6.3
CLZ	e P	Z	04:15:14.3	83.2	91.5	1.2		168		6.1
BSEG	e P	Z	04:15:14.9	83.3	91.7					
NRDL	e P	Z	04:15:15.3	83.3	91.3					
UBBA	e P	Z	04:15:15.0	83.4	91.0					
STU	e P	Z	04:15:17.8	83.9	90.2					
BFO	e P	Z	04:15:20.4	84.4	89.5	1.1		82		5.9
IBBN	e P	Z	04:15:22.7	84.8	89.4					
BUG	e P	Z	04:15:24.2	85.1	89.0					
WLF	e P	Z	04:15:28.3	85.8	88.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:10:12.1	6.090N	93.550E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 04:22:12.1	78.7	94.2					
GEC2	e P	Z 04:22:12.4	78.7	93.6					
RUE	e P	Z 04:22:13.0	78.9	94.4					
WET	e P	Z 04:22:15.1	79.3	93.1					
CLL	e P	Z 04:22:14.9	79.3	93.6					
WERD	e P	Z 04:22:17.6	79.7	92.9					
MOX	e P	Z 04:22:19.9	80.2	92.4					
FUR	e P	Z 04:22:20.2	80.3	91.7					
GRA1	e P	Z 04:22:22.0	80.4	91.9	1.1	87		5.6	
CLZ	e P	Z 04:22:24.5	81.0	91.6	1.2	65		5.5	
BSEG	e P	Z 04:22:24.8	81.1	91.9					
BFO	e P	Z 04:22:30.3	82.3	89.5	1.2	24		5.2	
IBBN	e P	Z 04:22:32.7	82.6	89.6					
BUG	e P	Z 04:22:34.5	82.9	89.1					
WLF	e P	Z 04:22:38.9	83.7	88.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:18: 6.5	9.310N	91.850E	33.0N	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 04:29:45.5	75.2	93.5					

GEC2	e P	Z	04:29:45.7	75.2	92.7				
RUE	e P	Z	04:29:46.3	75.4	93.7				
WET	e P	Z	04:29:48.0	75.8	92.2				
CLL	e P	Z	04:29:48.5	75.8	92.8				
MOX	e P	Z	04:29:53.6	76.6	91.6				
FUR	e P	Z	04:29:54.1	76.8	90.7				
GRA1	e P	Z	04:29:55.7	76.9	91.1	0.8	17	5.2	
CLZ	e P	Z	04:29:57.8	77.4	90.9	0.7	21	5.4	
BSEG	e P	Z	04:29:58.4	77.5	91.3				
NRDL	e P	Z	04:29:59.7	77.6	90.8				
STU	e P	Z	04:30:02.4	78.2	89.3				
BFO	e P	Z	04:30:05.4	78.8	88.6	0.9	7	4.7	
IBBN	e P	Z	04:30:06.7	79.0	88.9				
BUG	e P	Z	04:30:08.8	79.4	88.4				
WLF	e P	Z	04:30:13.3	80.1	87.2				

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 04:21:27.1 6.300N 92.650E 33.0N 6.4
 Nicobar Islands, India, region SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:33:22.8	78.0	94.2	1.4	400	6.4		
BRG	e P	Z	04:33:22.5	78.0	94.8	1.9	520	6.3		
RUE	e P	Z	04:33:23.7	78.2	95.0	2.5	2640	6.9		
WET	e P	Z	04:33:26.0	78.6	93.6	1.9	726	6.4		
CLL	e P	Z	04:33:25.4	78.6	94.1	1.8	433	6.2		
RGN	e P	Z	04:33:27.0	78.7	95.0	7.3	49674	7.6		
WERD	e P	Z	04:33:28.1	79.0	93.4	1.8	398	6.1		
MOX	e P	Z	04:33:30.5	79.5	92.9	1.7	473	6.2		
FUR	e P	Z	04:33:31.1	79.6	92.2	1.8	930	6.4		
GRA1	e P	Z	04:33:31.8	79.7	92.4	1.9	1090	6.5		
CLZ	e P	Z	04:33:34.9	80.3	92.2	1.8	544	6.2		
BSEG	e P	Z	04:33:35.4	80.4	92.5	1.5	516	6.2		
NRDL	e P	Z	04:33:36.2	80.5	92.1	1.8	806	6.4		
UBBA	e P	Z	04:33:35.7	80.5	91.7	2.2	542	6.2		
STU	e P	Z	04:33:38.5	81.0	90.7	1.7	449	6.2		
BFO	e P	Z	04:33:41.4	81.5	90.0	1.5	228	6.1		
IBBN	e P	Z	04:33:43.6	81.9	90.2	1.6	621	6.5		
BUG	e P	Z	04:33:45.4	82.2	89.7	1.6	383	6.3		
WLF	e P	Z	04:33:49.8	82.9	88.6	1.8	644	6.6		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 04:26: 2.5 7.432N 94.213E 33.0N 5.1
 Nicobar Islands, India, region SZGRF

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:37:58.4	78.1	92.8	0.9	13	5.1		
GEC2	e P	Z	04:37:58.9	78.2	92.2	0.8	18	5.2		
CLL	e P	Z	04:38:01.5	78.7	92.2	0.9	14	5.0		
WET	e P	Z	04:38:01.8	78.7	91.7	0.8	10	4.9		
MOX	e P	Z	04:38:06.0	79.6	91.0					
GRA1	e P	Z	04:38:07.9	79.8	90.5	0.9	16	5.0		
CLZ	e P	Z	04:38:10.4	80.4	90.2	0.8	14	4.9		
BSEG	e P	Z	04:38:11.0	80.4	90.5	0.9	39	5.3		
IBBN	e P	Z	04:38:19.4	82.0	88.2	1.0	28	5.3		
BUG	e P	Z	04:38:21.0	82.3	87.7	1.2	40	5.4		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 04:31:23.1 5.815N 93.518E 33.0N 5.0
 Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:43:22.9	78.9	94.4					
GEC2	e P	Z	04:43:23.4	78.9	93.8	0.8	13	5.0		
WET	e P	Z	04:43:26.4	79.5	93.3					
MOX	e P	Z	04:43:31.0	80.4	92.6					
FUR	e P	Z	04:43:31.6	80.5	91.9					
GRA1	e P	Z	04:43:32.8	80.6	92.1	0.8	14	5.1		
CLZ	e P	Z	04:43:35.5	81.2	91.8	1.1	17	5.0		
BSEG	e P	Z	04:43:35.8	81.3	92.1					
STU	e P	Z	04:43:39.3	81.9	90.4					
BFO	e P	Z	04:43:41.9	82.5	89.7	1.0	9	4.8		
IBBN	e P	Z	04:43:44.2	82.8	89.8					
BUG	e P	Z	04:43:45.8	83.1	89.3					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 04:40:10.4 8.340N 93.150E 33.0N 5.2
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:51:58.6	76.7	93.1					
GEC2	e P	Z	04:51:59.3	76.8	92.4	1.0	17	5.1		
WET	e P	Z	04:52:02.1	77.3	91.9					
CLL	e P	Z	04:52:01.6	77.3	92.4					
MOX	e P	Z	04:52:06.7	78.2	91.2					
FUR	e P	Z	04:52:07.8	78.4	90.4					
GRA1	e P	Z	04:52:08.8	78.4	90.7	1.0	21	5.2		
CLZ	e P	Z	04:52:11.3	79.0	90.5	2.2	128	5.6		
BSEG	e P	Z	04:52:11.5	79.1	90.8					
STU	e P	Z	04:52:15.3	79.8	89.0					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

65

BFO	e P	Z	04:52:18.2	80.3	88.3	1.3	25	5.0
IBBN	e P	Z	04:52:20.0	80.6	88.5			
BUG	e P	Z	04:52:21.9	80.9	88.0			
WLF	e P	Z	04:52:26.1	81.7	86.8			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:46:30.0	9.230N	92.960E	35.2				SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 04:58:13.6	75.9	92.6					
GEC2	e P	Z 04:58:14.0	76.0	91.9	1.1	37			
CLL	e P	Z 04:58:16.7	76.5	92.0					
WET	e P	Z 04:58:17.1	76.6	91.4					
MOX	e P	Z 04:58:21.5	77.4	90.8					
FUR	e P	Z 04:58:22.2	77.6	90.0					
GRA1	e P	Z 04:58:24.0	77.6	90.3	1.2	51			
	e pP	Z 04:58:34.1							
CLZ	e P	Z 04:58:25.9	78.2	90.1	1.0	30			
BSEG	e P	Z 04:58:26.2	78.2	90.5					
STU	e P	Z 04:58:30.6	79.0	88.5					
BFO	e P	Z 04:58:33.6	79.6	87.8	1.3	30			
IBBN	e P	Z 04:58:35.0	79.8	88.1					
BUG	e P	Z 04:58:36.8	80.1	87.6					
WLF	e P	Z 04:58:41.1	80.9	86.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	04:49:1.8	9.320N	92.980E	33.3	5.3			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 05:00:45.4	75.9	92.6					
GEC2	e P	Z 05:00:46.2	76.0	91.9	1.3	32	5.3		
CLL	e P	Z 05:00:48.6	76.5	91.9					
WET	e P	Z 05:00:49.3	76.5	91.3					
FUR	e P	Z 05:00:54.8	77.5	89.9					
GRA1	e P	Z 05:00:54.8	77.6	90.2	1.3	53	5.5		
	e pP	Z 05:01:04.3							
CLZ	e P	Z 05:00:58.0	78.1	90.0	1.5	57	5.5		
BSEG	e P	Z 05:00:58.5	78.2	90.4					
BFO	e P	Z 05:01:05.7	79.5	87.7	1.2	18	4.9		
IBBN	e P	Z 05:01:06.9	79.7	88.0					
BUG	e P	Z 05:01:08.8	80.1	87.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:08:4.4	8.764N	92.528E	36.0	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 05:19:48.4	76.0	93.3					
GEC2	e P	Z 05:19:48.6	76.1	92.6	0.9	11	5.0		
WET	e P	Z 05:19:51.8	76.6	92.0					
CLL	e P	Z 05:19:51.4	76.6	92.7					
MOX	e P	Z 05:19:56.6	77.5	91.4					
FUR	e P	Z 05:19:57.4	77.7	90.6					
GRA1	e P	Z 05:19:58.3	77.7	90.9	0.9	14	5.1		
	e pP	Z 05:20:08.7							
CLZ	e P	Z 05:20:01.0	78.3	90.7	0.8	11	5.0		
BSEG	e P	Z 05:20:01.2	78.3	91.1					
STU	e P	Z 05:20:05.1	79.0	89.2					
BFO	e P	Z 05:20:08.3	79.6	88.4	0.9	6	4.5		
IBBN	e P	Z 05:20:09.9	79.9	88.7					
BUG	e P	Z 05:20:11.7	80.2	88.2					
WLF	e P	Z 05:20:16.2	81.0	87.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:09:32.0	8.620N	93.530E	30.0	5.0			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 05:21:21.1	76.8	92.6					
GEC2	e P	Z 05:21:21.8	76.8	91.9	0.8	17	5.2		
CLL	e P	Z 05:21:24.0	77.4	92.0					
WET	e P	Z 05:21:24.9	77.4	91.4					
MOX	e P	Z 05:21:29.4	78.2	90.7					
FUR	e P	Z 05:21:30.2	78.4	90.0					
GRA1	e P	Z 05:21:30.9	78.5	90.2					
	e pP	Z 05:21:39.5			0.8	18			
CLZ	e P	Z 05:21:33.4	79.0	90.0	0.7	18	5.2		
BSEG	e P	Z 05:21:33.9	79.1	90.4					
STU	e P	Z 05:21:37.7	79.8	88.5					
BFO	e P	Z 05:21:41.0	80.4	87.8	0.9	7	4.6		
IBBN	e P	Z 05:21:42.3	80.6	88.0					
BUG	e P	Z 05:21:44.4	80.9	87.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:16:20.2	10.600N	92.750E	26.6	5.6			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:28:00.2	74.7	91.9					
GEC2	e P	Z	05:28:00.7	74.8	91.2	0.9	50	5.6		
CLL	e P	Z	05:28:03.2	75.3	91.3					
WET	e P	Z	05:28:03.9	75.4	90.6					
MOX	e P	Z	05:28:08.5	76.2	90.0					
FUR	e P	Z	05:28:09.4	76.5	89.2					
GRA1	e P	Z	05:28:10.1	76.5	89.5	1.0	40	5.5		
	e pP	Z	05:28:17.7							
CLZ	e P	Z	05:28:12.7	77.0	89.3	1.1	62	5.7		
BSEG	e P	Z	05:28:13.0	77.0	89.8					
STU	e P	Z	05:28:17.2	77.8	87.8					
BFO	e P	Z	05:28:20.4	78.4	87.0	1.7	74	5.5		
IBBN	e P	Z	05:28:21.3	78.6	87.4					
BUG	e P	Z	05:28:23.5	78.9	86.8					
WLF	e P	Z	05:28:28.9	79.7	85.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:32: 8.6	7.370N	94.030E	30.1	4.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:44:04.6	78.0	93.0					
GEC2	e P	Z	05:44:05.2	78.1	92.4	0.8	4	4.7		
CLL	e P	Z	05:44:07.5	78.6	92.4					
WET	e P	Z	05:44:08.1	78.6	91.8					
MOX	e P	Z	05:44:12.4	79.5	91.2					
GRA1	e P	Z	05:44:13.8	79.7	90.7	0.9	4	4.4		
	e pP	Z	05:44:22.5							
CLZ	e P	Z	05:44:16.9	80.3	90.4	0.8	5	4.5		
BSEG	e P	Z	05:44:17.2	80.4	90.7					
BFO	e P	Z	05:44:23.8	81.6	88.3	1.0	4	4.5		
IBBN	e P	Z	05:44:25.6	81.9	88.4					
BUG	e P	Z	05:44:27.3	82.2	87.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:42:45.0	4.600N	94.640E	33.0N	5.2			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:54:54.5	80.6	94.3					
GEC2	e P	Z	05:54:54.9	80.6	93.8	0.9	26	5.2		
WET	e P	Z	05:54:57.8	81.1	93.2					
CLL	e P	Z	05:54:57.3	81.2	93.7					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

68

MOX	e P	Z	05:55:02.2	82.0	92.5				
FUR	e P	Z	05:55:02.7	82.2	91.9				
GRA1	e P	Z	05:55:03.9	82.2	92.0	1.2	43	5.4	
CLZ	e P	Z	05:55:06.6	82.8	91.7	0.9	16	5.2	
BSEG	e P	Z	05:55:07.1	82.9	91.9				
STU	e P	Z	05:55:10.0	83.5	90.4				
BFO	e P	Z	05:55:12.9	84.1	89.7	0.9	10	5.0	
IBBN	e P	Z	05:55:15.0	84.5	89.6				
BUG	e P	Z	05:55:16.5	84.8	89.2				
WLF	e P	Z	05:55:20.3	85.5	88.2				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:51:41.6	7.170N	93.800E	31.2	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:03:38.2	78.0	93.3					
GEC2	e P	Z 06:03:38.7	78.1	92.7	1.3	67	5.6		
WET	e P	Z 06:03:41.4	78.6	92.1					
CLL	e P	Z 06:03:41.2	78.7	92.7					
MOX	e P	Z 06:03:46.2	79.5	91.5					
FUR	e P	Z 06:03:47.3	79.7	90.8					
GRA1	e P	Z 06:03:48.0	79.7	91.0	1.0	24	5.1		
	e pP	Z 06:03:57.0			1.2	46			
CLZ	e P	Z 06:03:50.6	80.3	90.7	1.5	76	5.4		
BSEG	e P	Z 06:03:51.0	80.4	91.0					
STU	e P	Z 06:03:54.7	81.1	89.3					
BFO	e P	Z 06:03:57.2	81.6	88.6					
IBBN	e P	Z 06:03:59.2	81.9	88.7					
BUG	e P	Z 06:04:01.0	82.2	88.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	05:55:48.3	2.420N	94.020E	33.0N	5.0			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 06:08:04.2	81.8	95.7	0.8	16	5.2		
BRG	e P	Z 06:08:04.3	81.9	96.2					
WET	e P	Z 06:08:07.0	82.4	95.1					
CLL	e P	Z 06:08:07.1	82.5	95.5					
MOX	e P	Z 06:08:12.0	83.3	94.4					
FUR	e P	Z 06:08:11.7	83.4	93.8					
GRA1	e P	Z 06:08:13.7	83.5	93.9	0.8	12	5.2		
CLZ	e P	Z 06:08:16.1	84.2	93.5	0.9	7	4.9		
BSEG	e P	Z 06:08:16.9	84.3	93.7					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

69

BFO	e P	Z	06:08:21.6	85.3	91.6	0.8	4	4.7
IBBN	e P	Z	06:08:24.6	85.8	91.5			
BUG	e P	Z	06:08:26.0	86.1	91.0			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:02:32.2	8.180N	93.180E	33.0N	5.7			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:14:21.4	76.9	93.2	1.6	157	5.9		
GEC2	e P	Z 06:14:21.8	76.9	92.5	1.4	123	5.8		
WET	e P	Z 06:14:24.6	77.5	91.9	1.4	77	5.7		
CLL	e P	Z 06:14:24.0	77.5	92.5	1.4	80	5.6		
MOX	e P	Z 06:14:29.4	78.3	91.3	1.2	48	5.5		
FUR	e P	Z 06:14:30.4	78.5	90.5	1.5	153	5.8		
GRA1	e P	Z 06:14:31.3	78.6	90.8	1.7	215	5.9		
CLZ	e P	Z 06:14:33.8	79.1	90.6	1.4	104	5.7		
BSEG	e P	Z 06:14:34.2	79.2	90.9	1.1	139	5.9		
STU	e P	Z 06:14:37.7	79.9	89.1	1.4	87	5.5		
BFO	e P	Z 06:14:40.9	80.5	88.4	1.3	49	5.4		
IBBN	e P	Z 06:14:42.6	80.7	88.6	1.3	159	5.9		
BUG	e P	Z 06:14:44.2	81.1	88.1	1.4	104	5.7		
WLF	e P	Z 06:14:48.9	81.9	86.9	1.5	143	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:09:27.2	5.610N	93.480E	33.0N	4.6			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:21:28.6	79.1	94.6					
GEC2	e P	Z 06:21:28.8	79.1	94.0	0.9	8	4.8		
WET	e P	Z 06:21:32.0	79.6	93.4					
CLL	e P	Z 06:21:31.4	79.7	93.9					
MOX	e P	Z 06:21:36.4	80.5	92.7					
FUR	e P	Z 06:21:36.8	80.6	92.1					
GRA1	e P	Z 06:21:37.8	80.7	92.3	0.9	7	4.7		
CLZ	e P	Z 06:21:40.5	81.3	91.9	0.8	4	4.5		
BSEG	e P	Z 06:21:41.4	81.4	92.2					
STU	e P	Z 06:21:44.4	82.0	90.6					
BFO	e P	Z 06:21:47.1	82.6	89.9	0.8	3	4.5		
IBBN	e P	Z 06:21:49.6	83.0	89.9					
BUG	e P	Z 06:21:51.0	83.3	89.5					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

70

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:11:4.3	8.590N	93.350E	26.9	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:22:53.3	76.7	92.8					
GEC2	e P	Z	06:22:53.5	76.7	92.1	1.2	26	5.2		
CLL	e P	Z	06:22:56.1	77.3	92.1					
WET	e P	Z	06:22:56.7	77.3	91.5					
MOX	e P	Z	06:23:00.9	78.1	90.9					
FUR	e P	Z	06:23:02.4	78.3	90.1					
GRA1	e P	Z	06:23:03.1	78.4	90.4	1.6	78	5.6		
	e pP	Z	06:23:10.8							
CLZ	e P	Z	06:23:05.6	78.9	90.2	1.2	32	5.2		
BSEG	e P	Z	06:23:06.1	79.0	90.5					
STU	e P	Z	06:23:09.9	79.7	88.7					
BFO	e P	Z	06:23:13.0	80.3	88.0	1.4	29	5.0		
IBBN	e P	Z	06:23:14.3	80.5	88.2					
BUG	e P	Z	06:23:16.4	80.9	87.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:22:3.4	10.670N	91.550E	29.8	5.3			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:33:36.6	73.9	92.8					
GEC2	e P	Z	06:33:37.4	74.0	92.0	0.9	26	5.3		
CLL	e P	Z	06:33:39.7	74.5	92.2					
WET	e P	Z	06:33:40.4	74.6	91.5					
MOX	e P	Z	06:33:45.1	75.4	90.9					
FUR	e P	Z	06:33:46.0	75.6	90.0					
GRA1	e P	Z	06:33:46.9	75.6	90.4	1.0	35	5.5		
	e pP	Z	06:33:55.5							
CLZ	e P	Z	06:33:49.4	76.2	90.2	0.8	17	5.2		
BSEG	e P	Z	06:33:50.0	76.2	90.7					
STU	e P	Z	06:33:53.8	77.0	88.6					
BFO	e P	Z	06:33:56.8	77.6	87.9	1.0	22	5.2		
IBBN	e P	Z	06:33:58.5	77.8	88.3					
BUG	e P	Z	06:34:00.5	78.1	87.7					
WLF	e P	Z	06:34:05.4	78.9	86.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:28:51.2	5.520N	94.820E	33.0N	5.5			SZGRF

Northern Sumatera, Indonesia

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

71

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:40:57.5	80.0	93.6					
GEC2	e P	Z	06:40:57.7	80.0	93.1	1.0	72	5.6		
WET	e P	Z	06:41:00.8	80.6	92.5					
CLL	e P	Z	06:41:00.4	80.6	92.9					
MOX	e P	Z	06:41:05.0	81.4	91.7					
FUR	e P	Z	06:41:05.8	81.6	91.1					
GRA1	e P	Z	06:41:06.7	81.7	91.3	0.9	43	5.6		
CLZ	e P	Z	06:41:09.4	82.2	90.9	0.9	30	5.4		
BSEG	e P	Z	06:41:09.9	82.3	91.2					
BFO	e P	Z	06:41:15.8	83.5	88.9	0.9	15	5.2		
IBBN	e P	Z	06:41:17.5	83.8	88.9					
BUG	e P	Z	06:41:19.5	84.2	88.5					
WLF	e P	Z	06:41:23.7	84.9	87.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:38:37.7	6.550N	92.960E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:50:33.5	78.0	94.4					
GEC2	e P	Z	06:50:33.7	78.0	93.8	2.0	132	5.7		
WET	e P	Z	06:50:36.7	78.6	93.2					
CLL	e P	Z	06:50:36.4	78.6	93.7					
MOX	e P	Z	06:50:41.3	79.5	92.5					
FUR	e P	Z	06:50:41.8	79.6	91.8					
GRA1	e P	Z	06:50:43.1	79.7	92.0	1.0	44	5.4		
CLZ	e P	Z	06:50:45.8	80.3	91.8	0.9	20	5.0		
BSEG	e P	Z	06:50:46.4	80.4	92.1					
STU	e P	Z	06:50:49.3	81.0	90.3					
BFO	e P	Z	06:50:52.2	81.5	89.6	2.5	118	5.6		
IBBN	e P	Z	06:50:54.5	81.9	89.8					
BUG	e P	Z	06:50:56.0	82.2	89.3					
WLF	e P	Z	06:51:00.5	82.9	88.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	06:59:55.5	8.410N	93.130E	33.0N	5.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:11:43.9	76.7	93.0					
GEC2	e P	Z	07:11:44.5	76.7	92.4	1.8	89	5.6		
WET	e P	Z	07:11:47.5	77.3	91.8					
CLL	e P	Z	07:11:46.6	77.3	92.4					
MOX	e P	Z	07:11:51.9	78.1	91.2					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

72

FUR	e P	Z	07:11:52.5	78.3	90.4				
GRA1	e P	Z	07:11:53.9	78.4	90.7	1.3	62	5.6	
CLZ	e P	Z	07:11:56.4	78.9	90.4	1.7	71	5.4	
BSEG	e P	Z	07:11:56.8	79.0	90.8				
STU	e P	Z	07:12:00.6	79.7	89.0				
BFO	e P	Z	07:12:03.7	80.3	88.2	1.6	48	5.2	
IBBN	e P	Z	07:12:05.3	80.5	88.5				
BUG	e P	Z	07:12:07.0	80.9	87.9				
WLF	e P	Z	07:12:11.2	81.6	86.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	07:07:9.6	10.240N	93.820E	21.6	5.4			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:18:54.0	75.7	91.3					
GEC2	e P	Z	07:18:54.7	75.8	90.6	1.1	44	5.5		
CLL	e P	Z	07:18:56.9	76.3	90.7					
WET	e P	Z	07:18:57.8	76.4	90.1					
MOX	e P	Z	07:19:02.2	77.2	89.4					
FUR	e P	Z	07:19:03.4	77.4	88.6					
GRA1	e P	Z	07:19:04.3	77.4	88.9					
	e pP	Z	07:19:10.5			1.4	86			
BSEG	e P	Z	07:19:06.7	77.9	89.1					
CLZ	e P	Z	07:19:06.5	77.9	88.7	1.1	52	5.6		
STU	e P	Z	07:19:12.2	78.8	87.2					
BFO	e P	Z	07:19:14.1	79.4	86.5	1.3	36	5.2		
IBBN	e P	Z	07:19:15.4	79.5	86.8					
BUG	e P	Z	07:19:17.2	79.9	86.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	07:24:47.9	6.600N	92.850E	33.0N	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:36:43.4	77.9	94.4					
GEC2	e P	Z	07:36:43.6	77.9	93.8	0.8	14	5.1		
WET	e P	Z	07:36:46.7	78.5	93.3					
CLL	e P	Z	07:36:46.3	78.5	93.8					
MOX	e P	Z	07:36:51.2	79.3	92.6					
FUR	e P	Z	07:36:51.8	79.5	91.9					
GRA1	e P	Z	07:36:53.1	79.6	92.1	0.8	15	5.0		
CLZ	e P	Z	07:36:55.8	80.2	91.8	0.8	13	4.9		
BSEG	e P	Z	07:36:56.4	80.3	92.1					
STU	e P	Z	07:36:59.4	80.9	90.4					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

73

BFO	e P	Z	07:37:02.4	81.4	89.7	0.8	6	4.7
IBBN	e P	Z	07:37:04.6	81.8	89.8			
BUG	e P	Z	07:37:06.2	82.1	89.3			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	07:21: 6.6	22.400S	177.130W	33.0N				SZGRF
South of Fiji Islands								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z	07:40:48.6	148.0	13.1					
	e PKPab	Z	07:40:52.0							
IBBN	e PKPbc	Z	07:40:53.6	149.9	9.0					
CLZ	e PKPbc	Z	07:40:53.8	150.0	14.0					
CLL	e PKPbc	Z	07:40:53.6	150.0	19.0					
	e PKPab	Z	07:40:59.3							
BRG	e PKPbc	Z	07:40:54.2	150.2	21.0					
BUG	e PKPbc	Z	07:40:55.6	150.8	8.3					
MOX	e PKPbc	Z	07:40:55.9	150.9	16.8					
GRA1	e PKPbc	Z	07:40:58.4	151.9	16.6					
WET	e PKPbc	Z	07:40:58.5	152.1	20.1					
GEC2	e PKPbc	Z	07:40:58.5	152.2	21.9					
	e PKPab	Z	07:41:08.4							
WLF	e PKPbc	Z	07:41:00.6	152.6	6.6					
	e PKPab	Z	07:41:10.2							
FUR	e PKPbc	Z	07:41:01.5	153.4	17.6					
	e PKPab	Z	07:41:13.6							
BFO	e PKPbc	Z	07:41:02.3	153.7	11.5					
	e PKPab	Z	07:41:14.9							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	07:38:28.0	12.790N	92.470E	33.0N	5.8			SZGRF
Andaman Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:49:54.6	72.9	90.6	1.1	117	5.9		
GEC2	e P	Z	07:49:55.5	73.0	89.8	1.2	120	5.9		
CLL	e P	Z	07:49:57.6	73.5	90.0	1.2	94	5.7		
WET	e P	Z	07:49:58.7	73.6	89.3	1.2	101	5.7		
MOX	e P	Z	07:50:03.1	74.4	88.8	1.2	87	5.7		
GRA1	e P	Z	07:50:05.3	74.6	88.2	1.3	162	5.9		
FUR	e P	Z	07:50:04.5	74.7	87.8	1.3	118	5.8		
BSEG	e P	Z	07:50:07.3	75.1	88.7	1.1	163	6.0		
CLZ	e P	Z	07:50:07.4	75.1	88.1	1.2	144	5.9		
STU	e P	Z	07:50:12.6	76.0	86.5	0.8	42	5.6		
BFO	e P	Z	07:50:15.5	76.6	85.7	1.3	61	5.6		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

74

IBBN	e P	Z	07:50:16.5	76.7	86.2	1.2	227	6.2
BUG	e P	Z	07:50:18.4	77.1	85.6	1.2	117	5.9
WLF	e P	Z	07:50:23.8	77.9	84.4	1.8	192	5.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	07:52:29.2	7.220N	93.520E	33.0N	5.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	08:04:24.0	77.8	93.5	1.4	56	5.5		
GEC2	e P	Z	08:04:24.5	77.9	92.9	1.1	48	5.5		
WET	e P	Z	08:04:27.5	78.4	92.3	1.3	51	5.5		
CLL	e P	Z	08:04:27.0	78.4	92.9	1.3	42	5.4		
MOX	e P	Z	08:04:32.0	79.3	91.7	1.5	51	5.3		
FUR	e P	Z	08:04:32.7	79.5	90.9	1.5	101	5.6		
GRA1	e P	Z	08:04:33.9	79.5	91.2	1.1	25	5.0		
CLZ	e P	Z	08:04:36.4	80.1	90.9	1.7	129	5.6		
BSEG	e P	Z	08:04:36.8	80.2	91.2	1.0	93	5.7		
STU	e P	Z	08:04:40.1	80.8	89.5	1.4	62	5.4		
BFO	e P	Z	08:04:43.3	81.4	88.8	1.6	52	5.3		
IBBN	e P	Z	08:04:45.1	81.7	88.9	1.5	132	5.9		
BUG	e P	Z	08:04:46.8	82.0	88.4	1.6	132	5.8		
WLF	e P	Z	08:04:51.1	82.8	87.3	1.9	102	5.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	08:02:37.1	5.530N	94.430E	47.7	5.3			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	08:14:39.7	79.7	93.9					
GEC2	e P	Z	08:14:40.4	79.7	93.3	1.3	62	5.4		
WET	e P	Z	08:14:43.3	80.3	92.8					
CLL	e P	Z	08:14:43.1	80.3	93.2					
MOX	e P	Z	08:14:47.6	81.2	92.0					
GRA1	e P	Z	08:14:49.5	81.4	91.6	1.0	35	5.3		
	e pP	Z	08:15:03.3							
CLZ	e P	Z	08:14:52.0	82.0	91.2	1.2	30	5.3		
BSEG	e P	Z	08:14:52.6	82.1	91.5					
STU	e P	Z	08:14:55.5	82.7	89.9					
BFO	e P	Z	08:14:58.5	83.3	89.2	0.8	16	5.3		
IBBN	e P	Z	08:15:00.5	83.6	89.2					
BUG	e P	Z	08:15:02.2	83.9	88.8					
WLF	e P	Z	08:15:06.2	84.7	87.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	08:47:46.0	4.290N	94.970E	54.8	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:59:54.6	81.0	94.3					
GEC2	e P	Z 08:59:55.0	81.0	93.8	0.8	55	5.6		
WET	e P	Z 08:59:57.8	81.6	93.2					
CLL	e P	Z 08:59:57.4	81.6	93.6					
MOX	e P	Z 09:00:02.2	82.5	92.4					
FUR	e P	Z 09:00:02.7	82.6	91.8					
GRA1	e P	Z 09:00:03.8	82.7	92.0	0.8	29	5.6		
	e pP	Z 09:00:19.4							
CLZ	e P	Z 09:00:06.4	83.3	91.6	0.9	30	5.5		
BSEG	e P	Z 09:00:06.9	83.4	91.8					
STU	e P	Z 09:00:09.8	84.0	90.3					
BFO	e P	Z 09:00:12.6	84.6	89.7	0.8	20	5.4		
IBBN	e P	Z 09:00:14.8	84.9	89.6					
BUG	e P	Z 09:00:16.2	85.2	89.1					
WLF	e P	Z 09:00:20.6	86.0	88.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	09:02:39.1	7.340N	93.600E	28.6	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 09:14:35.2	77.8	93.4					
GEC2	e P	Z 09:14:35.7	77.8	92.8	0.8	5	4.7		
WET	e P	Z 09:14:38.7	78.4	92.2					
MOX	e P	Z 09:14:43.1	79.3	91.5					
FUR	e P	Z 09:14:44.0	79.4	90.8					
GRA1	e P	Z 09:14:44.9	79.5	91.0	0.8	7	4.6		
	e pP	Z 09:14:53.2							
CLZ	e P	Z 09:14:47.4	80.1	90.8	0.8	6	4.6		
BSEG	e P	Z 09:14:48.1	80.1	91.1					
BFO	e P	Z 09:14:54.8	81.4	88.6	0.9	3	4.4		
IBBN	e P	Z 09:14:56.5	81.7	88.8					
BUG	e P	Z 09:14:58.0	82.0	88.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	09:20: 3.0	8.500N	92.500E	33.0G	6.0			SZGRF

Nicobar Islands, India, region

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

76

BRG	e P	Z	09:31:47.1	76.2	93.5				
GEC2	e P	Z	09:31:47.3	76.2	92.8	1.0	188	6.2	
WET	e P	Z	09:31:50.5	76.8	92.2				
CLL	e P	Z	09:31:50.1	76.8	92.8				
MOX	e P	Z	09:31:55.3	77.7	91.6				
FUR	e P	Z	09:31:55.8	77.8	90.8				
GRA1	e P	Z	09:31:57.0	77.9	91.1	1.0	157	6.1	
	e pP	Z	09:32:03.6			1.0	260		
CLZ	e P	Z	09:31:59.6	78.5	90.9	1.0	146	6.0	
BSEG	e P	Z	09:32:00.1	78.5	91.3				
STU	e P	Z	09:32:03.5	79.2	89.4				
BFO	e P	Z	09:32:06.6	79.8	88.6	1.1	126	5.8	
IBBN	e P	Z	09:32:08.5	80.1	88.9				
BUG	e P	Z	09:32:10.1	80.4	88.4				
WLF	e P	Z	09:32:14.8	81.2	87.2				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	09:38:37.3	8.307N	92.406E	33.0N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 09:50:22.6	76.3	93.7					
GEC2	e P	Z 09:50:22.9	76.3	93.0	0.8	9	5.0		
WET	e P	Z 09:50:26.1	76.9	92.4					
CLL	e P	Z 09:50:25.6	76.9	93.0					
MOX	e P	Z 09:50:30.2	77.8	91.8					
GRA1	e P	Z 09:50:32.7	78.0	91.3	0.9	13	5.1		
CLZ	e P	Z 09:50:35.2	78.6	91.1	0.8	8	4.8		
BSEG	e P	Z 09:50:35.7	78.6	91.5					
BFO	e P	Z 09:50:42.3	79.9	88.8	0.9	5	4.5		
IBBN	e P	Z 09:50:44.2	80.2	89.1					
BUG	e P	Z 09:50:46.0	80.5	88.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	09:38:37.3	8.650N	92.600E	33.0N	4.9			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 09:50:22.6	76.2	93.3					
GEC2	e P	Z 09:50:22.9	76.2	92.6	0.8	9	5.0		
WET	e P	Z 09:50:26.1	76.8	92.1					
CLL	e P	Z 09:50:25.6	76.8	92.7					
MOX	e P	Z 09:50:30.2	77.6	91.4					
GRA1	e P	Z 09:50:32.7	77.8	90.9	0.9	13	5.1		
CLZ	e P	Z 09:50:35.2	78.4	90.7	0.8	8	4.9		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

77

BSEG	e P	Z	09:50:35.7	78.5	91.1				
BFO	e P	Z	09:50:42.3	79.7	88.5	0.9	5	4.5	
BUG	e P	Z	09:50:45.8	80.3	88.2				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	10:19:30.9	12.860N	92.520E	33.0N	6.3			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:30:57.4	72.9	90.6	1.2	310	6.3		
GEC2	e P	Z	10:30:58.4	73.0	89.8	1.2	292	6.3		
CLL	e P	Z	10:31:00.5	73.5	90.0	1.3	277	6.1		
WET	e P	Z	10:31:01.6	73.6	89.2	1.2	249	6.1		
MOX	e P	Z	10:31:06.0	74.3	88.7	1.3	287	6.1		
GRA1	e P	Z	10:31:08.2	74.6	88.1	1.3	396	6.3		
FUR	e P	Z	10:31:07.5	74.6	87.7	1.2	234	6.1		
BSEG	e P	Z	10:31:10.2	75.1	88.6	1.3	627	6.5		
CLZ	e P	Z	10:31:10.3	75.1	88.1	1.2	384	6.3		
STU	e P	Z	10:31:15.3	76.0	86.4	2.1	617	6.4		
BFO	e P	Z	10:31:18.6	76.6	85.6	1.4	141	5.9		
IBBN	e P	Z	10:31:19.4	76.7	86.1	1.3	582	6.6		
BUG	e P	Z	10:31:21.3	77.0	85.5	1.3	345	6.3		
WLF	e P	Z	10:31:26.8	77.9	84.3	1.6	408	6.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	10:33: 4.7	8.710N	92.230E	34.5	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:44:49.6	75.9	93.6					
GEC2	e P	Z	10:44:49.9	75.9	92.9	1.5	70	5.6		
WET	e P	Z	10:44:53.1	76.5	92.3					
CLL	e P	Z	10:44:52.5	76.5	92.9					
MOX	e P	Z	10:44:57.8	77.3	91.7					
FUR	e P	Z	10:44:58.4	77.5	90.9					
GRA1	e P	Z	10:44:59.6	77.6	91.2	1.3	53	5.5		
	e pP	Z	10:45:09.5							
CLZ	e P	Z	10:45:02.2	78.1	91.0	1.4	47	5.4		
BSEG	e P	Z	10:45:02.6	78.2	91.4					
STU	e P	Z	10:45:06.1	78.9	89.4					
BFO	e P	Z	10:45:09.1	79.5	88.7	1.3	27	5.0		
IBBN	e P	Z	10:45:11.0	79.7	89.0					
BUG	e P	Z	10:45:12.6	80.1	88.5					
WLF	e P	Z	10:45:17.4	80.8	87.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	10:43:29.0	6.200N	92.850E	38.2	5.3			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	10:55:24.9	78.2	94.1	0.9	40	5.6		
BRG	e P	Z	10:55:24.7	78.2	94.7					
WET	e P	Z	10:55:27.9	78.8	93.5					
CLL	e P	Z	10:55:27.7	78.8	94.0					
MOX	e P	Z	10:55:32.6	79.7	92.8					
FUR	e P	Z	10:55:32.9	79.8	92.1					
GRA1	e P	Z	10:55:34.3	79.9	92.4	0.9	34	5.3		
	e pP	Z	10:55:45.3							
CLZ	e P	Z	10:55:37.0	80.5	92.1	1.1	34	5.3		
BSEG	e P	Z	10:55:37.6	80.6	92.4					
STU	e P	Z	10:55:40.4	81.2	90.7					
BFO	e P	Z	10:55:43.4	81.7	89.9	0.8	13	5.1		
IBBN	e P	Z	10:55:45.7	82.1	90.1					
BUG	e P	Z	10:55:47.3	82.4	89.6					
WLF	e P	Z	10:55:51.6	83.1	88.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	10:51:20.7	7.570N	92.690E	33.0N	5.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	11:03:10.7	77.0	93.9					
GEC2	e P	Z	11:03:10.9	77.1	93.3	1.4	77	5.7		
WET	e P	Z	11:03:14.0	77.6	92.7					
CLL	e P	Z	11:03:13.6	77.7	93.3					
MOX	e P	Z	11:03:18.8	78.5	92.1					
FUR	e P	Z	11:03:19.2	78.6	91.3					
GRA1	e P	Z	11:03:20.5	78.7	91.6	1.2	77	5.6		
CLZ	e P	Z	11:03:23.1	79.3	91.3	1.5	71	5.5		
BSEG	e P	Z	11:03:23.6	79.4	91.7					
STU	e P	Z	11:03:27.0	80.0	89.9					
BFO	e P	Z	11:03:29.8	80.6	89.1	1.5	50	5.3		
IBBN	e P	Z	11:03:32.0	80.9	89.3					
BUG	e P	Z	11:03:33.5	81.2	88.8					
WLF	e P	Z	11:03:38.1	82.0	87.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	11:05: 2.2	12.800N	92.430E	33.0N	6.5			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 11:16:28.5	72.9	90.7	1.1	506	6.6		
GEC2	e P	Z 11:16:29.4	73.0	89.9	1.0	547	6.6		
CLL	e P	Z 11:16:31.5	73.5	90.1	1.2	508	6.4		
WET	e P	Z 11:16:32.6	73.5	89.3	1.2	541	6.5		
MOX	e P	Z 11:16:37.0	74.3	88.8	1.1	406	6.4		
GRA1	e P	Z 11:16:38.9	74.6	88.2	1.2	658	6.5		
	e	11:16:43.2							
FUR	e P	Z 11:16:38.6	74.6	87.9	1.2	414	6.3		
BSEG	e P	Z 11:16:41.2	75.1	88.7	1.1	903	6.7		
CLZ	e P	Z 11:16:41.3	75.1	88.2	1.1	726	6.6		
STU	e P	Z 11:16:46.4	76.0	86.5	1.1	222	6.2		
BFO	e P	Z 11:16:49.6	76.6	85.7	1.2	208	6.1		
IBBN	e P	Z 11:16:50.4	76.7	86.2	1.1	914	6.8		
BUG	e P	Z 11:16:52.4	77.0	85.7	1.1	629	6.7		
WLF	e P	Z 11:16:57.8	77.9	84.4	1.7	763	6.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	11:50:28.2	7.520N	93.650E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:02:22.4	77.7	93.2					
GEC2	e P	Z 12:02:22.6	77.7	92.6	1.3	44	5.4		
WET	e P	Z 12:02:25.0	78.3	92.0					
CLL	e P	Z 12:02:25.3	78.3	92.6					
MOX	e P	Z 12:02:30.1	79.1	91.4					
GRA1	e P	Z 12:02:32.0	79.4	90.9	1.6	64	5.4		
CLZ	e P	Z 12:02:34.8	79.9	90.6	1.5	48	5.2		
BSEG	e P	Z 12:02:34.7	80.0	90.9					
BFO	e P	Z 12:02:41.4	81.3	88.5	2.8	188	5.6		
IBBN	e P	Z 12:02:43.0	81.5	88.6					
BUG	e P	Z 12:02:45.1	81.9	88.1					
WLF	e P	Z 12:02:49.2	82.7	87.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	12:09:51.2	12.839N	92.047E	33.0N	4.9			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:21:14.1	72.6	90.9					
GEC2	e P	Z 12:21:14.8	72.7	90.1	0.9	12	5.1		
CLL	e P	Z 12:21:17.1	73.2	90.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

80

WET	e P	Z	12:21:18.0	73.3	89.6				
MOX	e P	Z	12:21:22.5	74.1	89.1				
GRA1	e P	Z	12:21:25.9	74.3	88.5	0.8	13	5.0	
FUR	e P	Z	12:21:23.7	74.3	88.1				
BSEG	e P	Z	12:21:27.0	74.8	89.0				
CLZ	e P	Z	12:21:26.9	74.8	88.4	0.8	17	5.1	
STU	e P	Z	12:21:33.5	75.7	86.7				
BFO	e P	Z	12:21:34.7	76.3	86.0	0.9	4	4.6	
IBBN	e P	Z	12:21:35.9	76.4	86.5				
BUG	e P	Z	12:21:38.8	76.8	85.9				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	12:11:55.6	10.920N	92.240E	27.2	5.5			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:23:30.6	74.2	92.1					
GEC2	e P	Z 12:23:31.1	74.3	91.3	1.2	50	5.4		
CLL	e P	Z 12:23:33.7	74.8	91.5					
WET	e P	Z 12:23:34.3	74.8	90.8					
MOX	e P	Z 12:23:39.0	75.6	90.2					
GRA1	e P	Z 12:23:41.0	75.9	89.7	1.2	74	5.7		
	e pP	Z 12:23:48.8							
CLZ	e P	Z 12:23:43.5	76.4	89.5	1.3	69	5.6		
BSEG	e P	Z 12:23:43.7	76.4	90.0					
BFO	e P	Z 12:23:51.1	77.8	87.2	1.2	31	5.3		
IBBN	e P	Z 12:23:52.5	78.0	87.6					
BUG	e P	Z 12:23:54.3	78.4	87.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	13:16:45.1	12.470N	93.030E	33.0N	4.6			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 13:28:15.3	73.5	90.4					
GEC2	e P	Z 13:28:16.1	73.6	89.6	0.8	6	4.6		
CLL	e P	Z 13:28:18.5	74.1	89.8					
WET	e P	Z 13:28:19.2	74.2	89.1					
MOX	e P	Z 13:28:23.7	75.0	88.6					
GRA1	e P	Z 13:28:25.5	75.2	88.0	0.8	4	4.5		
BSEG	e P	Z 13:28:27.9	75.7	88.4					
CLZ	e P	Z 13:28:28.0	75.7	87.9	0.7	5	4.7		
IBBN	e P	Z 13:28:37.0	77.3	86.0					
BUG	e P	Z 13:28:39.2	77.7	85.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	13:29: 2.6	8.280N	93.470E	33.0N	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 13:40:52.7	77.0	92.9					
GEC2	e P	Z 13:40:53.1	77.0	92.2	1.0	23	5.3		
CLL	e P	Z 13:40:55.6	77.6	92.2					
WET	e P	Z 13:40:56.1	77.6	91.7					
MOX	e P	Z 13:41:01.0	78.4	91.0					
GRA1	e P	Z 13:41:02.9	78.7	90.5	1.3	47	5.4		
CLZ	e P	Z 13:41:05.0	79.2	90.3	1.1	20	5.0		
BSEG	e P	Z 13:41:05.7	79.3	90.6					
BFO	e P	Z 13:41:12.3	80.6	88.1	1.4	32	5.2		
IBBN	e P	Z 13:41:13.9	80.8	88.3					
BUG	e P	Z 13:41:15.5	81.2	87.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	13:44: 2.2	2.720N	94.670E	36.2	5.1			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 13:56:19.6	82.0	95.0	0.9	17	5.2		
BRG	e P	Z 13:56:19.5	82.0	95.5					
WET	e P	Z 13:56:22.5	82.6	94.4					
CLL	e P	Z 13:56:22.2	82.7	94.8					
MOX	e P	Z 13:56:26.9	83.5	93.7					
FUR	e P	Z 13:56:26.9	83.6	93.1					
GRA1	e P	Z 13:56:28.5	83.7	93.2	0.9	16	5.3		
	e pP	Z 13:56:39.1							
CLZ	e P	Z 13:56:31.3	84.3	92.8	0.8	10	5.1		
BSEG	e P	Z 13:56:32.0	84.5	93.0					
STU	e P	Z 13:56:34.6	85.0	91.6					
BFO	e P	Z 13:56:37.1	85.5	90.9	0.8	6	4.8		
IBBN	e P	Z 13:56:39.7	86.0	90.8					
BUG	e P	Z 13:56:41.0	86.3	90.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	13:56:33.8	1.950N	95.070E	33.0N	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 14:08:56.0	82.9	95.2	1.1	73	5.8		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

82

BRG	e P	Z	14:08:56.0	82.9	95.7				
WET	e P	Z	14:08:58.8	83.4	94.6				
CLL	e P	Z	14:08:58.7	83.5	95.0				
MOX	e P	Z	14:09:03.3	84.3	93.8				
GRA1	e P	Z	14:09:04.7	84.5	93.4	1.4	77	5.7	
CLZ	e P	Z	14:09:07.6	85.2	93.0	1.1	32	5.5	
BSEG	e P	Z	14:09:08.4	85.3	93.1				
BFO	e P	Z	14:09:13.2	86.4	91.1	1.1	17	5.1	
IBBN	e P	Z	14:09:15.9	86.8	90.9				
BUG	e P	Z	14:09:17.2	87.1	90.5				

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 14:14:23.4 14.060N 92.800E 33.0N 4.8
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	14:25:45.5	72.1	89.5					
GEC2	e P	Z	14:25:46.5	72.3	88.7	0.9	9	4.9		
CLL	e P	Z	14:25:48.6	72.7	88.9					
WET	e P	Z	14:25:49.7	72.9	88.2					
MOX	e P	Z	14:25:54.1	73.6	87.7					
GRA1	e P	Z	14:25:56.3	73.9	87.1	1.0	12	4.9		
BSEG	e P	Z	14:25:58.3	74.3	87.6					
CLZ	e P	Z	14:25:58.5	74.3	87.0	1.0	13	4.9		
BFO	e P	Z	14:26:06.9	75.9	84.6	1.0	2	4.3		
IBBN	e P	Z	14:26:07.5	75.9	85.1					
BUG	e P	Z	14:26:09.5	76.3	84.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/26 14:39: 6.3 8.140N 92.480E 33.0N 5.1
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	14:50:53.6	76.5	93.7					
GEC2	e P	Z	14:50:53.8	76.5	93.1	0.9	19	5.2		
WET	e P	Z	14:50:57.0	77.1	92.5					
CLL	e P	Z	14:50:56.6	77.1	93.1					
MOX	e P	Z	14:51:01.8	77.9	91.9					
FUR	e P	Z	14:51:02.5	78.1	91.1					
GRA1	e P	Z	14:51:03.5	78.2	91.4	1.2	44	5.5		
CLZ	e P	Z	14:51:06.1	78.7	91.1	0.8	14	5.0		
BSEG	e P	Z	14:51:06.7	78.8	91.5					
STU	e P	Z	14:51:09.9	79.5	89.6					
BFO	e P	Z	14:51:13.2	80.0	88.9	1.0	11	4.8		
IBBN	e P	Z	14:51:15.0	80.3	89.2					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

83

BUG	e P	Z	14:51:16.7	80.7	88.6
WLF	e P	Z	14:51:21.0	81.4	87.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	14:40:29.4	10.580N	91.430E	33.0N	5.2			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 14:52:02.0	73.9	92.9					
GEC2	e P	Z 14:52:02.5	74.0	92.2	1.1	21	5.1		
CLL	e P	Z 14:52:05.1	74.5	92.3					
WET	e P	Z 14:52:05.7	74.5	91.6					
MOX	e P	Z 14:52:10.4	75.4	91.1					
FUR	e P	Z 14:52:11.3	75.6	90.2					
GRA1	e P	Z 14:52:12.4	75.6	90.5	1.3	39	5.4		
CLZ	e P	Z 14:52:14.9	76.2	90.4	1.2	33	5.3		
BSEG	e P	Z 14:52:15.2	76.2	90.9					
STU	e P	Z 14:52:19.0	77.0	88.8					
BFO	e P	Z 14:52:22.4	77.5	88.0	1.0	9	4.9		
IBBN	e P	Z 14:52:24.0	77.8	88.4					
BUG	e P	Z 14:52:25.8	78.1	87.9					
WLF	e P	Z 14:52:30.7	78.9	86.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	14:48:43.8	13.120N	92.520E	33.0N	6.1			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 15:00:09.3	72.7	90.4	1.0	190	6.2		
GEC2	e P	Z 15:00:10.2	72.8	89.6	1.0	198	6.2		
CLL	e P	Z 15:00:12.3	73.3	89.8	1.2	188	6.1		
WET	e P	Z 15:00:13.4	73.4	89.0	1.2	177	6.1		
MOX	e P	Z 15:00:17.9	74.1	88.5	1.0	150	6.0		
GRA1	e P	Z 15:00:20.1	74.4	87.9	1.2	260	6.2		
FUR	e P	Z 15:00:19.4	74.5	87.6	1.2	158	5.9		
BSEG	e P	Z 15:00:22.0	74.9	88.4	1.1	304	6.2		
CLZ	e P	Z 15:00:22.1	74.9	87.9	1.1	216	6.1		
STU	e P	Z 15:00:27.5	75.8	86.2	0.8	76	5.9		
BFO	e P	Z 15:00:30.4	76.4	85.4	1.3	96	5.8		
IBBN	e P	Z 15:00:31.3	76.5	86.0	1.2	338	6.4		
BUG	e P	Z 15:00:33.2	76.8	85.4	1.1	197	6.2		
WLF	e P	Z 15:00:38.7	77.7	84.1	1.5	241	6.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	15:06:32.1	3.410N	94.130E	18.8	5.6			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	15:18:47.0	81.1	95.0	1.1	104	5.8		
BRG	e P	Z	15:18:46.9	81.2	95.5					
WET	e P	Z	15:18:49.9	81.7	94.4					
CLL	e P	Z	15:18:49.7	81.8	94.8					
MOX	e P	Z	15:18:54.5	82.6	93.6					
FUR	e P	Z	15:18:54.5	82.7	93.1					
GRA1	e P	Z	15:18:55.9	82.8	93.2	1.1	71	5.8		
	e pP	Z	15:19:01.4							
CLZ	e P	Z	15:18:58.7	83.5	92.8	1.2	55	5.7		
BSEG	e P	Z	15:18:59.5	83.6	93.0					
STU	e P	Z	15:19:01.9	84.1	91.6					
BFO	e P	Z	15:19:04.5	84.7	90.9	1.1	21	5.3		
IBBN	e P	Z	15:19:07.1	85.1	90.8					
BUG	e P	Z	15:19:08.5	85.4	90.3					
WLF	e P	Z	15:19:12.5	86.1	89.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	15:12:21.7	4.550N	90.990E	33.0N	4.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	15:24:18.7	78.2	96.6	0.9	11	5.0		
BRG	e P	Z	15:24:18.5	78.3	97.2					
WET	e P	Z	15:24:21.9	78.8	96.1					
CLL	e P	Z	15:24:22.7	79.0	96.6					
MOX	e P	Z	15:24:26.3	79.8	95.4					
GRA1	e P	Z	15:24:28.0	79.9	94.9	0.9	15	4.9		
CLZ	e P	Z	15:24:31.5	80.6	94.6	1.0	9	4.8		
BSEG	e P	Z	15:24:32.8	80.8	94.9					
BFO	e P	Z	15:24:37.0	81.7	92.5	0.8	4	4.6		
WLF	e P	Z	15:24:45.3	83.2	91.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	16:21:26.4	5.040N	94.160E	40.8	5.6			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	16:33:32.5	79.9	94.4					
GEC2	e P	Z	16:33:32.7	79.9	93.9	1.6	136	5.6		
WET	e P	Z	16:33:35.6	80.5	93.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

85

CLL	e P	Z	16:33:35.3	80.5	93.8				
MOX	e P	Z	16:33:40.2	81.4	92.6				
FUR	e P	Z	16:33:40.5	81.5	91.9				
GRA1	e P	Z	16:33:41.8	81.6	92.1	1.6	122	5.8	
	e pP	Z	16:33:53.7						
CLZ	e P	Z	16:33:44.4	82.2	91.8	1.2	52	5.5	
BSEG	e P	Z	16:33:45.0	82.3	92.0				
STU	e P	Z	16:33:47.9	82.9	90.5				
BFO	e P	Z	16:33:50.6	83.5	89.8	0.9	18	5.3	
IBBN	e P	Z	16:33:52.9	83.8	89.8				
BUG	e P	Z	16:33:54.4	84.1	89.3				
WLF	e P	Z	16:33:58.6	84.9	88.2				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	16:48:20.8	7.000N	93.250E	33.0N	4.6			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	17:00:15.0	77.8	93.9					
GEC2	e P	Z	17:00:15.3	77.9	93.2	0.7	6	4.8		
WET	e P	Z	17:00:18.3	78.4	92.7					
CLL	e P	Z	17:00:17.9	78.4	93.2					
MOX	e P	Z	17:00:22.5	79.3	92.0					
GRA1	e P	Z	17:00:24.7	79.5	91.5	0.8	8	4.7		
CLZ	e P	Z	17:00:27.4	80.1	91.2	0.8	4	4.4		
BSEG	e P	Z	17:00:28.0	80.2	91.6					
BFO	e P	Z	17:00:34.0	81.4	89.1	0.8	3	4.4		
BUG	e P	Z	17:00:38.1	82.0	88.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	16:55:16.7	3.670N	94.450E	33.0N	5.4			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	17:07:29.8	81.2	94.6	1.1	58	5.5		
BRG	e P	Z	17:07:29.7	81.2	95.1					
WET	e P	Z	17:07:32.7	81.7	94.0					
CLL	e P	Z	17:07:32.4	81.8	94.4					
MOX	e P	Z	17:07:37.2	82.6	93.2					
FUR	e P	Z	17:07:37.3	82.7	92.6					
GRA1	e P	Z	17:07:38.6	82.8	92.8	1.1	45	5.6		
CLZ	e P	Z	17:07:41.0	83.5	92.4	1.0	27	5.4		
BSEG	e P	Z	17:07:42.1	83.6	92.6					
STU	e P	Z	17:07:44.6	84.1	91.1					
BFO	e P	Z	17:07:47.3	84.7	90.5	1.4	20	5.2		

IBBN	e P	Z	17:07:49.8	85.1	90.4
BUG	e P	Z	17:07:51.2	85.4	89.9
WLF	e P	Z	17:07:55.3	86.1	88.9

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	17:44:59.7	10.100N	93.370E	23.7	5.3			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 17:56:42.8	75.5	91.7					
GEC2	e P	Z 17:56:43.6	75.6	91.0	1.3	38	5.4		
CLL	e P	Z 17:56:45.7	76.1	91.1					
WET	e P	Z 17:56:46.6	76.2	90.5					
MOX	e P	Z 17:56:51.3	77.0	89.9					
GRA1	e P	Z 17:56:53.0	77.2	89.4	1.4	54	5.5		
	e pP	Z 17:56:59.8							
CLZ	e P	Z 17:56:55.8	77.8	89.2	1.5	51	5.4		
BSEG	e P	Z 17:56:55.8	77.8	89.6					
STU	e P	Z 17:57:00.2	78.6	87.6					
BFO	e P	Z 17:57:03.2	79.2	86.9	1.3	24	5.1		
IBBN	e P	Z 17:57:04.3	79.4	87.2					
BUG	e P	Z 17:57:06.0	79.7	86.7					
WLF	e P	Z 17:57:10.9	80.5	85.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	17:50: 5.8	12.060N	92.960E	28.7	5.0			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:01:38.1	73.8	90.8					
GEC2	e P	Z 18:01:39.1	73.9	90.0	0.7	13	5.0		
CLL	e P	Z 18:01:41.1	74.4	90.1					
WET	e P	Z 18:01:42.3	74.4	89.4					
MOX	e P	Z 18:01:46.7	75.2	88.9					
GRA1	e P	Z 18:01:48.9	75.5	88.3	0.8	14	5.2		
	e pP	Z 18:01:57.1							
FUR	e P	Z 18:01:48.2	75.5	88.0					
BSEG	e P	Z 18:01:50.8	76.0	88.7					
CLZ	e P	Z 18:01:51.0	76.0	88.2	0.7	14	5.2		
STU	e P	Z 18:01:55.8	76.9	86.6					
BFO	e P	Z 18:01:59.2	77.5	85.9	0.8	5	4.7		
IBBN	e P	Z 18:02:00.1	77.6	86.3					
BUG	e P	Z 18:02:02.1	77.9	85.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	17:56:38.2	13.320N	91.920E	33.0N	5.3			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	18:08:00.5	72.1	90.7					
GEC2	e P	Z	18:08:01.2	72.3	89.9	0.8	26	5.4		
CLL	e P	Z	18:08:03.5	72.7	90.1					
WET	e P	Z	18:08:04.4	72.8	89.4					
MOX	e P	Z	18:08:09.2	73.6	88.8					
GRA1	e P	Z	18:08:11.0	73.9	88.3	0.9	26	5.3		
BSEG	e P	Z	18:08:13.5	74.3	88.8					
CLZ	e P	Z	18:08:13.4	74.4	88.2	0.9	29	5.3		
STU	e P	Z	18:08:18.5	75.3	86.5					
IBBN	e P	Z	18:08:22.5	75.9	86.3					
BUG	e P	Z	18:08:24.9	76.3	85.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	18:10:49.4	9.180N	92.920E	35.1	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	18:22:33.4	75.9	92.7					
GEC2	e P	Z	18:22:34.0	76.0	92.0	1.4	41	5.4		
CLL	e P	Z	18:22:36.4	76.6	92.1					
WET	e P	Z	18:22:37.0	76.6	91.5					
MOX	e P	Z	18:22:41.5	77.4	90.8					
FUR	e P	Z	18:22:42.4	77.6	90.0					
GRA1	e P	Z	18:22:42.8	77.7	90.3	1.2	17	5.1		
	e pP	Z	18:22:52.9							
CLZ	e P	Z	18:22:45.8	78.2	90.1	0.9	22	5.3		
BSEG	e P	Z	18:22:46.2	78.2	90.5					
BFO	e P	Z	18:22:53.1	79.6	87.9	1.3	23	5.0		
IBBN	e P	Z	18:22:54.7	79.8	88.2					
BUG	e P	Z	18:22:56.4	80.1	87.6					
WLF	e P	Z	18:23:01.2	80.9	86.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	18:31:42.3	5.860N	93.340E	33.0N	5.3			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	18:43:41.7	78.8	94.5					
GEC2	e P	Z	18:43:42.0	78.8	93.9	1.2	55	5.4		

WET	e P	Z	18:43:45.0	79.3	93.4				
CLL	e P	Z	18:43:44.6	79.4	93.9				
MOX	e P	Z	18:43:49.6	80.2	92.7				
FUR	e P	Z	18:43:50.1	80.3	92.0				
GRA1	e P	Z	18:43:51.3	80.4	92.2	1.0	46	5.4	
CLZ	e P	Z	18:43:54.0	81.1	91.9	1.0	30	5.3	
BSEG	e P	Z	18:43:54.6	81.2	92.2				
STU	e P	Z	18:43:57.3	81.7	90.5				
BFO	e P	Z	18:44:00.4	82.3	89.8	1.3	28	5.2	
IBBN	e P	Z	18:44:02.6	82.7	89.9				
BUG	e P	Z	18:44:04.1	83.0	89.4				
WLF	e P	Z	18:44:08.5	83.7	88.3				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	18:42:45.6	13.430N	92.350E	28.5	5.5			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:54:09.4	72.3	90.3					
GEC2	e P	Z 18:54:10.4	72.5	89.5	1.1	73	5.7		
CLL	e P	Z 18:54:12.4	72.9	89.7					
WET	e P	Z 18:54:13.6	73.0	89.0					
MOX	e P	Z 18:54:18.0	73.8	88.4					
GRA1	e P	Z 18:54:20.2	74.1	87.9	1.1	62	5.6		
	e pP	Z 18:54:28.3							
FUR	e P	Z 18:54:19.6	74.1	87.5					
BSEG	e P	Z 18:54:22.1	74.5	88.3					
CLZ	e P	Z 18:54:22.3	74.5	87.8	1.2	64	5.5		
STU	e P	Z 18:54:27.6	75.5	86.1					
BFO	e P	Z 18:54:30.6	76.1	85.3	1.2	27	5.3		
IBBN	e P	Z 18:54:31.4	76.1	85.9					
BUG	e P	Z 18:54:33.4	76.5	85.3					
WLF	e P	Z 18:54:39.0	77.4	84.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	18:47:54.1	6.860N	94.340E	33.0N	4.6			SZGRF
Nicobar Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:59:52.4	78.6	93.1					
GEC2	e P	Z 18:59:52.9	78.7	92.5	0.7	6	4.7		
WET	e P	Z 18:59:55.6	79.2	91.9					
CLL	e P	Z 18:59:55.0	79.2	92.5					
MOX	e P	Z 19:00:00.2	80.1	91.2					
GRA1	e P	Z 19:00:02.1	80.3	90.8	0.8	6	4.6		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

89

CLZ	e P	Z	19:00:04.7	80.9	90.5	0.9	6	4.6
BSEG	e P	Z	19:00:05.0	80.9	90.8			
BFO	e P	Z	19:00:11.3	82.2	88.4	0.9	3	4.5
IBBN	e P	Z	19:00:13.1	82.5	88.5			
BUG	e P	Z	19:00:15.0	82.8	88.0			
WLF	e P	Z	19:00:19.0	83.6	86.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	18:59:14.6	3.810N	95.620E	33.0N	4.7			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:11:30.4	81.8	94.1					
GEC2	e P	Z 19:11:30.7	81.8	93.6	0.8	7	4.8		
WET	e P	Z 19:11:33.6	82.4	93.0					
CLL	e P	Z 19:11:33.2	82.4	93.4					
MOX	e P	Z 19:11:38.0	83.3	92.2					
GRA1	e P	Z 19:11:39.6	83.5	91.8	0.8	6	4.9		
CLZ	e P	Z 19:11:42.3	84.1	91.4	0.9	3	4.6		
BSEG	e P	Z 19:11:42.7	84.2	91.6					
BFO	e P	Z 19:11:48.4	85.4	89.5	0.8	3	4.5		
IBBN	e P	Z 19:11:50.5	85.7	89.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	19:03:48.2	3.810N	94.340E	34.6	5.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 19:16:00.0	81.0	94.6	1.6	185	5.9		
BRG	e P	Z 19:16:00.0	81.0	95.1					
WET	e P	Z 19:16:02.9	81.5	94.0					
CLL	e P	Z 19:16:02.7	81.6	94.4					
MOX	e P	Z 19:16:07.5	82.4	93.2					
FUR	e P	Z 19:16:07.7	82.5	92.6					
GRA1	e P	Z 19:16:09.0	82.6	92.8	1.7	173	6.0		
	e pP	Z 19:16:19.0							
CLZ	e P	Z 19:16:11.7	83.3	92.4	1.2	58	5.7		
BSEG	e P	Z 19:16:12.4	83.4	92.6					
STU	e P	Z 19:16:15.1	83.9	91.1					
BFO	e P	Z 19:16:17.7	84.5	90.4	1.6	40	5.4		
IBBN	e P	Z 19:16:20.2	84.9	90.4					
BUG	e P	Z 19:16:21.5	85.2	89.9					
WLF	e P	Z 19:16:25.6	85.9	88.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	19:19:52.0	1.840N	94.110E	33.0N	5.1			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 19:32:11.1	82.3	96.0	0.9	26	5.4		
BRG	e P	Z 19:32:11.1	82.4	96.5					
WET	e P	Z 19:32:14.0	82.9	95.4					
CLL	e P	Z 19:32:13.9	83.0	95.8					
MOX	e P	Z 19:32:18.5	83.8	94.6					
FUR	e P	Z 19:32:18.5	83.9	94.1					
GRA1	e P	Z 19:32:20.0	84.0	94.2	1.0	17	5.2		
CLZ	e P	Z 19:32:22.9	84.7	93.8	0.8	9	5.0		
BSEG	e P	Z 19:32:23.6	84.9	93.9					
STU	e P	Z 19:32:24.7	85.3	92.6					
BFO	e P	Z 19:32:28.4	85.8	91.9	0.8	5	4.7		
IBBN	e P	Z 19:32:31.1	86.3	91.8					
BUG	e P	Z 19:32:32.4	86.6	91.3					
WLF	e P	Z 19:32:36.4	87.3	90.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	19:55:12.3	10.790N	92.060E	28.2	4.6			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 20:06:47.5	74.2	92.3					
GEC2	e P	Z 20:06:48.0	74.3	91.6	0.8	5	4.6		
CLL	e P	Z 20:06:50.5	74.8	91.7					
WET	e P	Z 20:06:51.2	74.8	91.0					
MOX	e P	Z 20:06:55.9	75.6	90.4					
FUR	e P	Z 20:06:57.1	75.9	89.5					
GRA1	e P	Z 20:06:57.9	75.9	89.9	0.8	6	4.8		
	e pP	Z 20:07:06.0							
CLZ	e P	Z 20:07:00.4	76.4	89.8	0.7	5	4.7		
BSEG	e P	Z 20:07:00.6	76.4	90.2					
STU	e P	Z 20:07:05.1	77.2	88.1					
BFO	e P	Z 20:07:07.9	77.8	87.4	0.9	3	4.4		
IBBN	e P	Z 20:07:09.4	78.0	87.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	20:50:31.4	6.154N	126.970E	94.0G	5.1			NEIC-M

Mindanao, Philippine Islands

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

BRG	e Pdiff	Z	21:04:03.1	99.3	68.0				
CLL	e Pdiff	Z	21:04:03.2	99.7	67.2				
BSEG	e Pdiff	Z	21:04:06.6	100.1	64.5				
GEC2	e Pdiff	Z	21:04:07.1	100.2	68.1	1.0	10	5.2	
WET	e Pdiff	Z	21:04:09.2	100.6	67.4				
MOX	e Pdiff	Z	21:04:09.2	100.8	66.2				
CLZ	e Pdiff	Z	21:04:10.5	101.0	64.9	0.9	9	5.1	
GRA1	e Pdiff	Z	21:04:12.6	101.4	66.0	0.7	4	4.9	
IBBN	e Pdiff	Z	21:04:15.7	102.2	62.6				
STU	e Pdiff	Z	21:04:19.3	103.0	64.5				
WLF	e Pdiff	Z	21:04:25.8	104.4	61.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	21:06:46.8	3.800N	96.080E	33.0N	5.6			SZGRF
Northern Sumatera, Indonesia								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	21:19:04.5	82.1	93.7					
GEC2	e P	Z	21:19:04.9	82.1	93.2	1.4	77	5.6		
WET	e P	Z	21:19:07.7	82.7	92.7					
CLL	e P	Z	21:19:07.2	82.7	93.0					
MOX	e P	Z	21:19:12.0	83.6	91.9					
FUR	e P	Z	21:19:12.6	83.7	91.3					
GRA1	e P	Z	21:19:13.7	83.8	91.5	1.2	67	5.7		
CLZ	e P	Z	21:19:16.1	84.4	91.0	1.1	47	5.6		
BSEG	e P	Z	21:19:16.5	84.4	91.2					
STU	e P	Z	21:19:19.8	85.1	89.8					
BFO	e P	Z	21:19:22.4	85.7	89.1	1.0	31	5.4		
IBBN	e P	Z	21:19:24.4	86.0	89.0					
BUG	e P	Z	21:19:25.9	86.3	88.6					
WLF	e P	Z	21:19:29.7	87.1	87.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	21:20:37.1	7.400N	92.300E	33.0N	4.7			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	21:32:26.7	76.9	94.4					
GEC2	e P	Z	21:32:26.9	76.9	93.7	0.9	7	4.8		
WET	e P	Z	21:32:30.1	77.5	93.1					
CLL	e P	Z	21:32:29.8	77.5	93.7					
MOX	e P	Z	21:32:34.6	78.4	92.5					
FUR	e P	Z	21:32:35.3	78.5	91.7					
GRA1	e P	Z	21:32:36.7	78.6	92.0	0.9	9	4.8		
CLZ	e P	Z	21:32:39.3	79.2	91.7	0.8	11	4.9		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

92

BSEG	e P	Z	21:32:39.9	79.3	92.1				
BFO	e P	Z	21:32:46.1	80.5	89.5	0.8	3	4.4	
IBBN	e P	Z	21:32:48.4	80.8	89.8				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	23:04:30.1	9.260N	91.590E	49.8	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:16:06.9	75.0	93.7					
GEC2	e P	Z	23:16:07.1	75.1	93.0	1.1	16	5.0		
WET	e P	Z	23:16:10.3	75.6	92.4					
CLL	e P	Z	23:16:10.0	75.7	93.1					
MOX	e P	Z	23:16:14.9	76.5	91.8					
FUR	e P	Z	23:16:15.9	76.7	91.0					
GRA1	e P	Z	23:16:17.1	76.7	91.3	1.1	26	5.3		
	e pP	Z	23:16:31.4							
CLZ	e P	Z	23:16:19.6	77.3	91.1	0.8	14	5.1		
BSEG	e P	Z	23:16:20.2	77.4	91.5					
STU	e P	Z	23:16:23.6	78.0	89.5					
BFO	e P	Z	23:16:26.7	78.6	88.8	1.0	11	4.9		
IBBN	e P	Z	23:16:28.8	78.9	89.2					
BUG	e P	Z	23:16:30.2	79.2	88.6					
WLF	e P	Z	23:16:34.8	80.0	87.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/26	23:31:43.6	8.500N	92.500E	33.0N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	23:43:28.7	76.2	93.5					
GEC2	e P	Z	23:43:29.0	76.2	92.8	1.8	52	5.4		
WET	e P	Z	23:43:32.2	76.8	92.2					
CLL	e P	Z	23:43:31.8	76.8	92.8					
MOX	e P	Z	23:43:37.2	77.7	91.6					
GRA1	e P	Z	23:43:38.8	77.9	91.1	0.7	5	4.7		
CLZ	e P	Z	23:43:41.4	78.5	90.9	0.7	3	4.4		
BSEG	e P	Z	23:43:41.9	78.5	91.3					
STU	e P	Z	23:43:45.3	79.2	89.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	00:24:33.1	4.650N	94.010E	33.0N	5.4			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	00:36:40.6	80.1	94.2					
BRG	e P	Z	00:36:40.4	80.1	94.8					
RUE	e P	Z	00:36:41.5	80.4	94.9					
WET	e P	Z	00:36:43.5	80.7	93.7					
CLL	e P	Z	00:36:43.2	80.8	94.1	1.0	24	5.3		
GUNZ	e P	Z	00:36:45.7	81.1	93.4					
WERD	e P	Z	00:36:45.6	81.1	93.4					
MOX	e P	Z	00:36:48.0	81.6	92.9					
FUR	e P	Z	00:36:48.2	81.7	92.3					
GRA1	e P	Z	00:36:49.6	81.8	92.5	1.1	47	5.6		
CLZ	e P	Z	00:36:52.3	82.4	92.1	1.1	31	5.5		
BSEG	e P	Z	00:36:53.1	82.5	92.4					
BFO	e P	Z	00:36:58.3	83.7	90.1	1.0	16	5.2		
IBBN	e P	Z	00:37:00.8	84.0	90.1					
BUG	e P	Z	00:37:02.3	84.3	89.6					
WLF	e P	Z	00:37:06.4	85.1	88.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	00:32:15.5	5.200N	94.470E	33.0N	6.2			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	00:44:22.0	80.0	94.1					
GEC2	e P	Z	00:44:22.2	80.0	93.5	1.5	580	6.3		
WET	e P	Z	00:44:25.2	80.6	93.0					
CLL	i P	+ Z	00:44:24.8	80.6	93.4	1.3	164			
	e pP	Z	00:44:35.0							
	e		00:44:43.3							
	e S	N	00:54:23.3							
	e (SS)	N	00:59:37.7							
	e L	Z	01:24:11.6			22.0	1072		5.2	
MOX	e P	Z	00:44:29.6	81.5	92.2					
FUR	e P	Z	00:44:30.1	81.6	91.6					
GRA1	e P	Z	00:44:31.3	81.7	91.8	1.4	423	6.4		
	e		00:44:41.0							
CLZ	e P	Z	00:44:33.9	82.3	91.4	1.4	271	6.2		
BSEG	e P	Z	00:44:34.4	82.4	91.7					
STU	e P	Z	00:44:37.5	83.0	90.1					
BFO	e P	Z	00:44:40.2	83.6	89.4	1.0	109	6.0		
IBBN	i P	+ Z	00:44:42.3	83.9	89.4					
BUG	e P	Z	00:44:43.8	84.2	88.9					
WLF	e P	Z	00:44:48.2	85.0	87.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	00:39:44.4	8.860N	93.840E	33.0N	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	00:51:33.6	76.8	92.2					
GEC2	e P	Z	00:51:33.8	76.9	91.5	1.1	40	5.4		
CLL	e P	Z	00:51:36.4	77.4	91.6					
WET	e P	Z	00:51:36.9	77.4	91.0					
MOX	e P	Z	00:51:41.3	78.2	90.3					
FUR	e P	Z	00:51:42.5	78.5	89.6					
GRA1	e P	Z	00:51:43.5	78.5	89.8	1.1	34	5.3		
CLZ	e P	Z	00:51:45.2	79.0	89.6					
BSEG	e P	Z	00:51:46.0	79.0	90.0					
BFO	e P	Z	00:51:52.8	80.4	87.4	1.2	18	4.9		
IBBN	e P	Z	00:51:54.6	80.6	87.6					
BUG	e P	Z	00:51:56.4	81.0	87.1					
WLF	e P	Z	00:52:01.2	81.8	86.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	00:49:28.8	12.460N	92.090E	31.0	6.0			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	01:00:55.4	72.9	91.2					
GEC2	e P	Z	01:00:56.2	73.0	90.4	1.3	177	6.0		
CLL	i P	- Z	01:00:58.6	73.5	90.6	1.5	207	6.0		
	e sP	Z	01:01:07.5							
	e S	E	01:10:24.8							
	e SS	Z	01:15:14.4							
	e L	Z	01:38:05.0			20.0	1991		5.4	
WET	e P	Z	01:00:59.4	73.6	89.8					
MOX	e P	Z	01:01:04.0	74.4	89.3					
GRA1	e P	Z	01:01:06.1	74.6	88.7	1.5	289	6.1		
	e pP	Z	01:01:15.0							
FUR	e P	Z	01:01:05.2	74.6	88.3					
BSEG	e P	Z	01:01:08.3	75.1	89.2					
CLZ	e P	Z	01:01:08.3	75.1	88.7	1.4	261	6.1		
STU	e P	Z	01:01:13.2	76.0	87.0					
BFO	e P	Z	01:01:16.3	76.6	86.2	1.4	93	5.7		
IBBN	e P	Z	01:01:17.4	76.7	86.7					
BUG	e P	Z	01:01:19.3	77.1	86.1					
WLF	e P	Z	01:01:24.8	77.9	84.9					

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

2004/12/27 01:46: 1.8 14.212N 93.841E 33.0N 4.7 SZGRF
Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:57:26.1	72.7	88.6					
GEC2	e P	Z 01:57:27.2	72.9	87.8					
CLL	e P	Z 01:57:29.2	73.3	88.0					
MOX	e P	Z 01:57:34.7	74.2	86.8					
GRA1	e P	Z 01:57:37.2	74.5	86.2	0.9	8	4.7		
BSEG	e P	Z 01:57:38.4	74.8	86.7					
CLZ	e P	Z 01:57:38.8	74.9	86.1					
IBBN	e P	Z 01:57:47.6	76.4	84.2					
BUG	e P	Z 01:57:50.1	76.8	83.6					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/27 02:04:29.2 8.041N 92.507E 33.0N 5.2 SZGRF
Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 02:16:16.7	76.6	93.1					
WET	e P	Z 02:16:19.6	77.1	92.5					
CLL	e P	Z 02:16:18.7	77.2	93.1					
MOX	e P	Z 02:16:24.2	78.0	91.9					
FUR	e P	Z 02:16:24.5	78.2	91.1					
GRA1	e P	Z 02:16:26.0	78.2	91.4	1.3	28	5.2		
CLZ	e P	Z 02:16:28.5	78.8	91.2					
BSEG	e P	Z 02:16:29.0	78.9	91.5					
BFO	e P	Z 02:16:35.8	80.1	89.0					
IBBN	e P	Z 02:16:37.8	80.4	89.2					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/27 02:53: 1.8 5.500N 94.500E 33.0N 5.1 SZGRF
Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 03:05:06.5	79.8	93.9					
GEC2	e P	Z 03:05:07.0	79.8	93.3	0.9	24	5.2		
WET	e P	Z 03:05:09.8	80.4	92.7					
CLL	e P	Z 03:05:09.4	80.4	93.2					
MOX	e P	Z 03:05:14.3	81.2	92.0					
GRA1	e P	Z 03:05:16.2	81.5	91.6	0.7	18	5.2		
CLZ	e P	Z 03:05:18.6	82.1	91.2	0.8	16	5.2		
BSEG	e P	Z 03:05:19.2	82.1	91.5					
BFO	e P	Z 03:05:25.0	83.4	89.2	1.1	11	5.0		
IBBN	e P	Z 03:05:27.3	83.7	89.2					

BUG e P Z 03:05:28.9 84.0 88.7

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 03:08:53.0 4.418N 94.323E 33.6 4.9
 Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 03:21:01.8	80.5	94.2	1.2	16	4.9		
BRG	e P	Z 03:21:01.8	80.5	94.7					
WET	e P	Z 03:21:04.9	81.1	93.6					
CLL	e P	Z 03:21:04.6	81.1	94.0					
MOX	e P	Z 03:21:09.1	82.0	92.8					
FUR	e P	Z 03:21:09.9	82.1	92.2					
GRA1	e P	Z 03:21:11.0	82.2	92.4	0.9	12	5.0		
CLZ	e P	Z 03:21:13.7	82.8	92.0					
BSEG	e P	Z 03:21:14.5	82.9	92.2					
STU	e P	Z 03:21:17.0	83.5	90.7					
BFO	e P	Z 03:21:20.2	84.0	90.0	0.8	3	4.7		
	e pP	Z 03:21:30.0							
BUG	e P	Z 03:21:23.7	84.7	89.5					
WLF	e P	Z 03:21:27.8	85.5	88.5					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 03:23:26.7							
BSEG	e PKP	Z 03:23:26.4							
BUG	e PKP	Z 03:23:33.2							
CLL	e PKP	Z 03:23:27.2							
CLZ	e PKP	Z 03:23:29.1							
FUR	e PKP	Z 03:23:33.8							
GEC2	e PKP	Z 03:23:29.7							
GRA1	e PKP	Z 03:23:31.5							
STU	e PKP	Z 03:23:34.3							
WET	e PKP	Z 03:23:31.4							
WLF	e PKP	Z 03:23:36.1							

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 03:46: 6.7 4.351N 95.034E 33.0N 4.7
 Northern Sumatera, Indonesia

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

97

BRG	e P	Z	03:58:18.2	81.0	94.2					
GEC2	e P	Z	03:58:18.8	81.0	93.7	0.7		5	4.7	
WET	e P	Z	03:58:21.7	81.6	93.1					
MOX	e P	Z	03:58:26.1	82.5	92.3					
GRA1	e P	Z	03:58:27.7	82.7	91.9	0.7		3	4.7	
CLZ	e P	Z	03:58:30.3	83.3	91.5					
BSEG	e P	Z	03:58:30.9	83.4	91.7					
BFO	e P	Z	03:58:36.9	84.6	89.6	0.6		2	4.6	

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	04:22:15.7	2.052N	94.639E	33.7	4.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:34:36.3	82.5	95.5					
WET	e P	Z	04:34:39.0	83.1	94.9					
MOX	e P	Z	04:34:43.9	84.0	94.1					
FUR	e P	Z	04:34:43.8	84.0	93.6					
GRA1	e P	Z	04:34:44.1	84.2	93.7	0.7		6	4.9	
	e pP	Z	04:34:53.9							
BSEG	e P	Z	04:34:48.8	85.0	93.4					
STU	e P	Z	04:34:51.5	85.5	92.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	04:26:12.5	7.760N	92.400E	33.0N	4.7			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	04:38:01.4	76.7	93.4	0.9		8	4.8	
WET	e P	Z	04:38:04.5	77.3	92.8					
CLL	e P	Z	04:38:03.9	77.3	93.4					
GRA1	e P	Z	04:38:10.6	78.4	91.7	0.9		10	5.0	
CLZ	e P	Z	04:38:13.5	79.0	91.4	1.1		8	4.7	
BSEG	e P	Z	04:38:14.0	79.1	91.8					
BFO	e P	Z	04:38:20.0	80.3	89.2	1.0		4	4.3	
IBBN	e P	Z	04:38:22.3	80.6	89.5					
BUG	e P	Z	04:38:24.8	80.9	88.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	05:10:38.0	3.518N	94.830E	31.7	4.7			SZGRF

Off west coast of northern Sumatera, Indonesia

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

98

GEC2	e P	Z	05:22:52.5	81.5	94.4	0.8	6	4.8
BRG	e P	Z	05:22:52.3	81.5	94.9			
WET	e P	Z	05:22:55.3	82.1	93.8			
MOX	e P	Z	05:22:59.8	83.0	93.0			
GRA1	e P	Z	05:23:01.3	83.2	92.6	0.9	7	4.9
	e pP	Z	05:23:10.5					
CLZ	e P	Z	05:23:03.8	83.8	92.2			
BSEG	e P	Z	05:23:05.1	83.9	92.4			
BFO	e P	Z	05:23:10.6	85.0	90.3	0.7	3	4.5

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	05:16:37.3	14.210N	92.770E	33.0N	4.4			SZGRF
Andaman Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:27:58.7	72.0	89.4					
GEC2	e P	Z	05:27:59.7	72.2	88.6	0.8	3	4.5		
CLL	e P	Z	05:28:02.2	72.6	88.9					
WET	e P	Z	05:28:02.8	72.7	88.1					
MOX	e P	Z	05:28:06.9	73.5	87.6					
GRA1	e P	Z	05:28:09.6	73.8	87.0	0.8	3	4.4		
BSEG	e P	Z	05:28:11.3	74.1	87.5					
CLZ	e P	Z	05:28:11.5	74.2	87.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	05:50:12.2	8.500N	92.500E	33.0N	4.7			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:01:58.3	76.2	93.5					
GEC2	e P	Z	06:01:58.6	76.2	92.8	0.9	7	4.8		
WET	e P	Z	06:02:01.8	76.8	92.2					
CLL	e P	Z	06:02:01.2	76.8	92.8					
FUR	e P	Z	06:02:06.7	77.8	90.8					
GRA1	e P	Z	06:02:08.4	77.9	91.1	0.8	8	4.9		
CLZ	e P	Z	06:02:10.7	78.5	90.9	1.0	7	4.7		
BSEG	e P	Z	06:02:11.4	78.5	91.3					
BFO	e P	Z	06:02:18.1	79.8	88.6	1.0	4	4.3		
BUG	e P	Z	06:02:21.6	80.4	88.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	06:06:46.9	6.181N	92.943E	33.0N	4.7			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:18:43.4	78.3	94.6					
GEC2	e P	Z	06:18:43.9	78.3	94.0	0.8	10	5.0		
WET	e P	Z	06:18:47.1	78.8	93.5					
CLL	e P	Z	06:18:46.5	78.9	94.0					
FUR	e P	Z	06:18:51.9	79.8	92.1					
GRA1	e P	Z	06:18:53.0	79.9	92.3	1.0	10	4.7		
CLZ	e P	Z	06:18:55.3	80.6	92.0	0.8	5	4.6		
BSEG	e P	Z	06:18:56.8	80.7	92.3					
STU	e P	Z	06:18:59.7	81.2	90.6					
BFO	e P	Z	06:19:02.4	81.8	89.9	0.8	2	4.4		
BUG	e P	Z	06:19:06.7	82.5	89.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	06:40:48.9	10.120N	93.270E	33.0N	4.7			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:52:30.5	75.4	91.8					
GEC2	e P	Z	06:52:31.5	75.5	91.1	0.7	5	4.7		
WET	e P	Z	06:52:34.4	76.1	90.6					
MOX	e P	Z	06:52:39.2	76.9	89.9					
FUR	e P	Z	06:52:40.8	77.2	89.1					
GRA1	e P	Z	06:52:41.1	77.2	89.4	0.7	9	5.0		
CLZ	e P	Z	06:52:43.3	77.7	89.2	0.7	7	4.9		
BSEG	e P	Z	06:52:43.9	77.7	89.7					
BFO	e P	Z	06:52:51.1	79.1	87.0	0.8	2	4.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	06:59:12.3	2.050N	95.390E	29.6	5.3			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	07:11:35.0	83.0	94.9	1.1	38	5.5		
BRG	e P	Z	07:11:34.7	83.0	95.4					
WET	e P	Z	07:11:37.6	83.6	94.3					
CLL	e P	Z	07:11:37.7	83.6	94.7					
MOX	e P	Z	07:11:42.1	84.5	93.5					
GRA1	e P	Z	07:11:43.3	84.7	93.1	1.0	33	5.5		
	e pP	Z	07:11:51.9							
CLZ	e P	Z	07:11:46.4	85.3	92.7	1.0	23	5.3		
BSEG	e P	Z	07:11:47.0	85.4	92.8					
STU	e P	Z	07:11:49.4	86.0	91.5					
BFO	e P	Z	07:11:52.1	86.5	90.8	1.0	14	5.0		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

100

IBBN	e P	Z	07:11:54.7	86.9	90.6
BUG	e P	Z	07:11:56.0	87.2	90.2

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	07:15:33.6	15.020N	88.800E	33.0N	4.8			SZGRF

Bay of Bengal

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 07:26:36.3	68.9	92.0					
GEC2	e P	Z 07:26:37.0	69.0	91.0					
CLL	e P	Z 07:26:39.4	69.5	91.4					
WET	e P	Z 07:26:40.0	69.5	90.5					
GRA1	e P	Z 07:26:46.6	70.6	89.4	1.0	7	4.8		
CLZ	e P	Z 07:26:49.5	71.1	89.5					
BSEG	e P	Z 07:26:49.7	71.2	90.2					
BFO	e P	Z 07:26:57.1	72.5	86.8					
WLF	e P	Z 07:27:07.0	73.9	85.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	07:47:46.5	4.470N	93.820E	25.4	4.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 07:59:53.5	80.1	94.5	0.8	7	4.6		
BRG	e P	Z 07:59:53.4	80.2	95.1					
WET	e P	Z 07:59:56.4	80.7	93.9					
MOX	e P	Z 08:00:01.0	81.6	93.2					
GRA1	e P	Z 08:00:02.4	81.8	92.8	0.8	10	5.0		
	e pP	Z 08:00:09.8							
CLZ	e P	Z 08:00:05.4	82.4	92.4	0.8	5	4.7		
BSEG	e P	Z 08:00:06.5	82.6	92.6					
BUG	e P	Z 08:00:15.5	84.4	89.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	08:10:53.4	4.061N	95.281E	33.0N	5.0			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:23:06.6	81.4	94.2					
GEC2	e P	Z 08:23:06.9	81.4	93.7					
WET	e P	Z 08:23:09.8	82.0	93.1					
CLL	e P	Z 08:23:09.6	82.0	93.5					
MOX	e P	Z 08:23:15.7	82.8	92.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

101

GRA1	e P	Z	08:23:16.0	83.1	91.9	0.8	9	5.0
CLZ	e P	Z	08:23:18.8	83.7	91.5			
BSEG	e P	Z	08:23:19.4	83.8	91.7			
BFO	e P	Z	08:23:24.9	84.9	89.6			
IBBN	e P	Z	08:23:26.3	85.3	89.5			
WLF	e P	Z	08:23:33.0	86.3	88.0			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	08:21:30.3	4.660N	95.840E	33.0N	5.5			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:33:43.7	81.3	93.3					
GEC2	e P	Z 08:33:43.9	81.3	92.9	1.4	73	5.5		
WET	e P	Z 08:33:46.8	81.9	92.3					
CLL	e P	Z 08:33:46.3	81.9	92.7					
MOX	e P	Z 08:33:51.1	82.7	91.5					
GRA1	e P	Z 08:33:53.0	83.0	91.1	1.2	43	5.6		
CLZ	e P	Z 08:33:55.3	83.5	90.7	1.3	34	5.4		
BSEG	e P	Z 08:33:55.9	83.6	90.9					
BFO	e P	Z 08:34:01.9	84.9	88.8	1.2	24	5.3		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	08:37:34.6	5.920N	93.830E	33.0N	4.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 08:49:35.6	79.0	94.1					
GEC2	e P	Z 08:49:36.1	79.1	93.5					
WET	e P	Z 08:49:39.2	79.6	93.0					
CLL	e P	Z 08:49:38.9	79.7	93.5					
MOX	e P	Z 08:49:43.8	80.5	92.3					
GRA1	e P	Z 08:49:45.7	80.7	91.8	0.9	9	4.8		
CLZ	e P	Z 08:49:48.2	81.3	91.5					
BSEG	e P	Z 08:49:48.7	81.4	91.7					
BFO	e P	Z 08:49:54.4	82.6	89.4					
IBBN	e P	Z 08:49:56.8	82.9	89.5					
WLF	e P	Z 08:50:02.2	84.0	87.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	09:39: 6.5	5.280N	94.570E	33.0N	6.5			SZGRF

Northern Sumatera, Indonesia

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

102

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	09:51:13.2	80.0	93.9					
GEC2	e P	Z	09:51:13.6	80.0	93.4	1.8	1307	6.7		
WET	e P	Z	09:51:16.4	80.6	92.8					
CLL	i P	+ Z	09:51:16.1	80.6	93.3	1.9	536	6.3		
	e PP	Z	09:54:15.1							
	e S	N	10:01:17.5							
	e SS	N	10:06:42.5							
	e LR	Z	10:19:39.5							
	e L	Z	10:33:34.8			20.0	2860		5.6	
MOX	e P	Z	09:51:20.9	81.5	92.1					
FUR	e P	Z	09:51:21.3	81.6	91.5					
GRA1	e P	Z	09:51:22.5	81.7	91.6	1.8	959	6.7		
CLZ	e P	Z	09:51:25.1	82.3	91.3	1.8	700	6.6		
BSEG	e P	Z	09:51:25.6	82.4	91.5					
STU	e P	Z	09:51:28.7	83.0	90.0					
BFO	e P	Z	09:51:31.4	83.6	89.3	1.4	198	6.1		
IBBN	e P	Z	09:51:33.6	83.9	89.3					
BUG	e P	Z	09:51:35.0	84.2	88.8					
WLF	e P	Z	09:51:39.4	85.0	87.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 09:57:52.3 6.880N 92.980E 33.0G 5.2
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:09:46.0	77.8	94.2					
GEC2	e P	Z	10:09:46.2	77.8	93.5	0.9	28	5.4		
WET	e P	Z	10:09:49.3	78.3	93.0					
CLL	e P	Z	10:09:48.9	78.4	93.5					
MOX	e P	Z	10:09:54.0	79.2	92.3					
FUR	e P	Z	10:09:54.5	79.4	91.6					
GRA1	e P	Z	10:09:55.8	79.4	91.8	1.0	33	5.3		
CLZ	e P	Z	10:09:58.4	80.0	91.5	0.9	22	5.1		
BSEG	e P	Z	10:09:59.0	80.1	91.9					
BFO	e P	Z	10:10:05.2	81.3	89.4	0.9	13	4.9		
IBBN	e P	Z	10:10:07.3	81.6	89.5					
BUG	e P	Z	10:10:08.8	82.0	89.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 10:06:24.4 6.760N 93.040E 53.6 5.8
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	10:17:14.2	77.9	93.6	1.4	270	6.2		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

103

WET	e P	Z	10:17:17.1	78.5	93.0					
CLL	i P	+ Z	10:17:16.9	78.5	93.5	1.3	98	5.7		
	e L	Z	10:50:56.4			20.0	2740		5.6	
MOX	e P	Z	10:17:21.5	79.3	92.3					
FUR	e P	Z	10:17:21.9	79.5	91.6					
GRA1	e P	Z	10:17:23.1	79.6	91.8	1.8	349	6.0		
	e pP	Z	10:17:38.3							
CLZ	e P	Z	10:17:25.7	80.2	91.6	1.3	134	5.7		
BSEG	e P	Z	10:17:26.1	80.3	91.9					
STU	e P	Z	10:17:29.2	80.9	90.1					
BFO	e P	Z	10:17:31.8	81.4	89.4	1.3	63	5.5		
IBBN	e P	Z	10:17:34.0	81.8	89.6					
BUG	e P	Z	10:17:35.4	82.1	89.1					
WLF	e P	Z	10:17:39.7	82.8	88.0					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 10:46:38.9 13.330N 92.620E 33.0 5.5
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:58:03.5	72.6	90.2					
GEC2	e P	Z	10:58:04.6	72.7	89.3	1.1	42	5.5		
CLL	e P	Z	10:58:06.6	73.2	89.6					
WET	e P	Z	10:58:07.7	73.3	88.8					
MOX	e P	Z	10:58:11.9	74.1	88.3					
GRA1	e P	Z	10:58:14.3	74.3	87.7	2.1	135	5.6		
	e pP	Z	10:58:23.7							
BSEG	e P	Z	10:58:16.4	74.7	88.2					
CLZ	e P	Z	10:58:16.6	74.8	87.7	1.1	32	5.3		
BFO	e P	Z	10:58:24.9	76.3	85.2	2.5	78	5.4		
IBBN	e P	Z	10:58:25.4	76.4	85.7					
BUG	e P	Z	10:58:27.6	76.7	85.2					
WLF	e P	Z	10:58:32.9	77.6	83.9					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 11:57:54.4 7.750N 92.660E 29.8 5.3
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	12:09:43.1	76.9	93.8					
GEC2	e P	Z	12:09:43.4	76.9	93.2	1.0	27	5.3		
WET	e P	Z	12:09:46.2	77.5	92.6					
CLL	e P	Z	12:09:45.8	77.5	93.2					
MOX	e P	Z	12:09:51.2	78.3	92.0					
GRA1	e P	Z	12:09:52.8	78.6	91.5	1.0	38	5.4		

	e pP	Z	12:10:01.3							
CLZ	e P	Z	12:09:55.7	79.2	91.2	1.0	23	5.2		
BSEG	e P	Z	12:09:56.3	79.2	91.6					
BFO	e P	Z	12:10:02.6	80.5	89.0					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	12:14:3.1	12.140N	91.530E	33.0N	5.2			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:25:27.5	72.8	91.8					
GEC2	e P	Z 12:25:28.3	72.9	91.0	1.1	24	5.3		
CLL	e P	Z 12:25:30.5	73.4	91.2					
WET	e P	Z 12:25:31.5	73.4	90.5					
MOX	e P	Z 12:25:36.0	74.3	89.9					
FUR	e P	Z 12:25:36.0	74.5	89.0					
GRA1	e P	Z 12:25:38.1	74.5	89.4	1.1	25	5.1		
CLZ	e P	Z 12:25:40.4	75.0	89.3	0.8	24	5.3		
BSEG	e P	Z 12:25:40.4	75.1	89.8					
IBBN	e P	Z 12:25:49.5	76.6	87.4					
BUG	e P	Z 12:25:51.3	77.0	86.8					
WLF	e P	Z 12:25:56.9	77.8	85.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	14:31:14.2	16.490N	92.460E	33.0N	5.4			SZGRF

Bay of Bengal

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 14:42:23.5	70.1	88.1					
GEC2	e P	Z 14:42:24.1	70.3	87.2					
WET	e P	Z 14:42:27.6	70.8	86.7					
GRA1	e P	Z 14:42:35.2	71.9	85.6	1.4	40	5.4		
BSEG	e P	Z 14:42:35.9	72.1	86.3					
CLZ	e P	Z 14:42:36.0	72.3	85.7					
IBBN	e P	Z 14:42:45.4	73.8	83.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	14:30:50.0	11.205N	92.729E	33.0N	5.2			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 14:42:23.5	74.3	91.5					
GEC2	e P	Z 14:42:24.2	74.4	90.8					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

105

WET	e P	Z	14:42:27.1	74.9	90.2				
GRA1	e P	Z	14:42:34.3	76.0	89.1	1.6	32	5.2	
CLZ	e P	Z	14:42:36.0	76.5	89.0				
BSEG	e P	Z	14:42:36.3	76.5	89.4				
IBBN	e P	Z	14:42:45.5	78.1	87.0				
WLF	e P	Z	14:42:52.1	79.3	85.3				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	14:46:46.7	11.480N	92.180E	28.2	5.9			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	14:58:17.2	73.7	91.8					
	e pP	Z	14:58:25.1							
GEC2	e P	Z	14:58:17.9	73.8	91.0	1.0	129	5.9		
CLL	i P	- Z	14:58:20.0	74.3	91.1	1.1	107			
	e sP	Z	14:58:28.3							
	e S	N	15:07:50.2							
	e sS	N	15:08:04.0							
	e L	Z	15:34:56.1			20.0	1588		5.3	
WET	e P	Z	14:58:21.1	74.4	90.4					
MOX	e P	Z	14:58:25.7	75.2	89.9					
FUR	e P	Z	14:58:26.8	75.4	89.0					
GRA1	e P	Z	14:58:27.7	75.4	89.3	1.4	214	6.0		
	e pP	Z	14:58:35.4							
CLZ	i P	- Z	14:58:30.0	75.9	89.2	1.1	150	6.0		
	e pP	Z	14:58:38.4							
BSEG	e P	Z	14:58:30.2	76.0	89.7					
STU	e P	Z	14:58:34.6	76.8	87.6					
BFO	e P	Z	14:58:37.9	77.4	86.8	1.3	72	5.6		
IBBN	e P	Z	14:58:39.1	77.5	87.3					
	e pP	Z	14:58:47.5							
BUG	e P	Z	14:58:40.9	77.9	86.7					
WLF	e P	Z	14:58:46.2	78.7	85.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	15:20:30.1	9.570N	93.620E	33.0N	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	15:32:15.5	76.1	91.9					
GEC2	e P	Z	15:32:16.2	76.2	91.2	0.8	18	5.2		
CLL	e P	Z	15:32:18.5	76.7	91.3					
WET	e P	Z	15:32:19.3	76.7	90.7					
MOX	e P	Z	15:32:23.7	77.6	90.0					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

106

FUR	e P	Z	15:32:24.9	77.8	89.2				
GRA1	e P	Z	15:32:25.5	77.8	89.5	0.8	8	4.9	
CLZ	e P	Z	15:32:28.0	78.3	89.3	0.9	16	5.2	
BSEG	e P	Z	15:32:28.2	78.3	89.7				
BFO	e P	Z	15:32:35.6	79.7	87.1				
IBBN	e P	Z	15:32:36.9	79.9	87.4				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	16:18:7.7	3.700N	94.140E	33.0N	5.1			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 16:30:19.0	80.9	94.8	1.1	23	5.1		
BRG	e P	Z 16:30:18.8	81.0	95.3					
WET	e P	Z 16:30:21.8	81.5	94.2					
CLL	e P	Z 16:30:21.8	81.6	94.6					
MOX	e P	Z 16:30:26.7	82.4	93.4					
FUR	e P	Z 16:30:26.8	82.5	92.9					
GRA1	e P	Z 16:30:28.2	82.6	93.0	0.9	15	5.2		
CLZ	e P	Z 16:30:31.1	83.2	92.6	0.9	10	5.1		
BSEG	e P	Z 16:30:31.7	83.4	92.8					
BFO	e P	Z 16:30:37.0	84.5	90.7					
IBBN	e P	Z 16:30:39.2	84.9	90.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	17:39:52.6	3.630N	94.610E	24.2	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 17:52:06.2	81.3	94.5	1.2	52	5.4		
BRG	e P	Z 17:52:05.9	81.3	95.0					
WET	e P	Z 17:52:09.1	81.8	93.9					
CLL	e P	Z 17:52:08.9	81.9	94.3					
MOX	e P	Z 17:52:13.5	82.8	93.1					
GRA1	e P	Z 17:52:15.3	83.0	92.7	1.5	79	5.7		
	e pP	Z 17:52:22.4							
CLZ	e P	Z 17:52:18.0	83.6	92.3	1.5	43	5.5		
BSEG	e P	Z 17:52:18.8	83.7	92.5					
BFO	e P	Z 17:52:23.9	84.8	90.4	1.5	36	5.4		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	18:37:54.3	3.840N	94.340E	29.4	5.2			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	18:50:05.9	81.0	94.5	1.2	37	5.3		
BRG	e P	Z	18:50:05.8	81.0	95.0					
WET	e P	Z	18:50:08.4	81.5	94.0					
CLL	e P	Z	18:50:08.7	81.6	94.4					
MOX	e P	Z	18:50:13.4	82.4	93.2					
GRA1	e P	Z	18:50:14.7	82.6	92.8	1.0	25	5.4		
	e pP	Z	18:50:23.4							
CLZ	e P	Z	18:50:17.9	83.3	92.4	1.1	14	5.1		
BSEG	e P	Z	18:50:18.3	83.4	92.6					
BFO	e P	Z	18:50:23.6	84.5	90.4	1.0	10	5.0		
WLF	e P	Z	18:50:31.5	85.9	88.9					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 19:13:31.0 13.510N 91.810E 26.2 4.8
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	19:24:52.0	71.9	90.7					
GEC2	e P	Z	19:24:52.6	72.1	89.8	0.9	13	5.0		
CLL	e P	Z	19:24:55.1	72.5	90.1					
WET	e P	Z	19:24:55.8	72.6	89.3					
GRA1	e P	Z	19:25:02.6	73.7	88.2	0.8	10	4.9		
	e pP	Z	19:25:10.0							
FUR	e P	Z	19:25:02.4	73.7	87.8					
BSEG	e P	Z	19:25:04.8	74.1	88.7					
CLZ	e P	Z	19:25:04.9	74.1	88.2	0.8	9	4.8		
BFO	e P	Z	19:25:13.6	75.6	85.7	0.9	5	4.6		
IBBN	e P	Z	19:25:14.4	75.7	86.3					
WLF	e P	Z	19:25:21.1	77.0	84.4					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 19:18:31.4 10.040N 92.400E 33.0N 5.0
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	19:30:09.9	75.0	92.5					
GEC2	e P	Z	19:30:10.0	75.0	91.8	0.8	13	5.0		
CLL	e P	Z	19:30:13.0	75.6	91.9					
WET	e P	Z	19:30:13.2	75.6	91.3					
MOX	e P	Z	19:30:18.2	76.4	90.7					
GRA1	e P	Z	19:30:19.7	76.7	90.1	0.9	15	5.1		
CLZ	e P	Z	19:30:22.4	77.2	90.0	0.8	12	5.0		
BSEG	e P	Z	19:30:23.0	77.2	90.4					

BUG e P Z 19:30:33.3 79.1 87.5

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 19:26:56.6 7.410N 91.630E 33.0N 5.3
 Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 19:38:44.5	76.5	94.2	1.4	46	5.4		
BRG	e P	Z 19:38:44.4	76.5	94.9					
WET	e P	Z 19:38:47.6	77.1	93.6					
CLL	e P	Z 19:38:47.6	77.1	94.2					
MOX	e P	Z 19:38:52.5	78.0	93.0					
FUR	e P	Z 19:38:52.8	78.1	92.2					
GRA1	e P	Z 19:38:54.2	78.2	92.5	1.2	50	5.5		
CLZ	e P	Z 19:38:57.1	78.8	92.3	1.4	31	5.2		
BSEG	e P	Z 19:38:58.0	78.9	92.6					
STU	e P	Z 19:39:00.8	79.5	90.8					
BFO	e P	Z 19:39:04.0	80.0	90.0	1.6	45	5.1		
BUG	e P	Z 19:39:07.6	80.7	89.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 19:28:47.1 7.600N 94.140E 29.8 5.4
 Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:40:42.7	77.9	92.8					
GEC2	e P	Z 19:40:43.0	78.0	92.2	1.8	93	5.6		
CLL	e P	Z 19:40:45.6	78.5	92.1					
WET	e P	Z 19:40:46.2	78.5	91.6					
MOX	e P	Z 19:40:50.6	79.4	90.9					
GRA1	e P	Z 19:40:52.3	79.6	90.4	1.3	56	5.3		
	e pP	Z 19:41:00.9							
CLZ	e P	Z 19:40:55.1	80.2	90.2	1.3	50	5.3		
BSEG	e P	Z 19:40:55.1	80.2	90.5					
BFO	e P	Z 19:41:01.8	81.6	88.0	1.2	24	5.2		
BUG	e P	Z 19:41:05.5	82.1	87.7					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 20:10:53.0 2.780N 94.950E 33.0N 5.9
 Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 20:23:11.3	82.2	94.8	1.3	160	6.0		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

109

BRG	e P	Z	20:23:11.2	82.2	95.2					
WET	e P	Z	20:23:14.2	82.7	94.2					
CLL	e P	Z	20:23:14.1	82.8	94.6	1.2	47	5.6		
	e L	Z	21:06:30.3			20.0	2646		5.6	
MOX	e P	Z	20:23:18.6	83.6	93.4					
FUR	e P	Z	20:23:18.8	83.7	92.9					
GRA1	e P	Z	20:23:20.1	83.8	93.0	1.2	145	6.1		
CLZ	e P	Z	20:23:22.8	84.5	92.5	1.2	84	5.8		
BSEG	e P	Z	20:23:23.5	84.6	92.7					
STU	e P	Z	20:23:26.0	85.1	91.4					
BFO	e P	Z	20:23:28.5	85.7	90.7	1.4	72	5.6		
IBBN	e P	Z	20:23:31.1	86.1	90.5					
BUG	e P	Z	20:23:32.4	86.4	90.1					
WLF	e P	Z	20:23:36.4	87.1	89.1					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 20:23:37.4 5.955N 92.876E 33.0N 5.0
 Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	20:35:35.2	78.4	94.2	1.1	21	5.2		
BRG	e P	Z	20:35:34.9	78.4	94.8					
WET	e P	Z	20:35:37.7	79.0	93.7					
MOX	e P	Z	20:35:42.9	79.9	93.0					
GRA1	e P	Z	20:35:44.3	80.1	92.5	0.9	25	5.1		
CLZ	e P	Z	20:35:47.5	80.7	92.2	0.9	12	4.9		
BSEG	e P	Z	20:35:47.8	80.8	92.5					
BFO	e P	Z	20:35:54.0	81.9	90.1	1.0	7	4.8		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/27 20:36:21.3 9.050N 93.170E 33.0N 5.3
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:48:07.1	76.2	92.6					
GEC2	e P	Z	20:48:07.8	76.3	91.9	1.1	30	5.3		
CLL	e P	Z	20:48:10.1	76.8	92.0					
WET	e P	Z	20:48:10.8	76.8	91.4					
MOX	e P	Z	20:48:15.5	77.7	90.7					
FUR	e P	Z	20:48:16.1	77.9	89.9					
GRA1	e P	Z	20:48:17.4	77.9	90.2	1.7	65	5.5		
CLZ	e P	Z	20:48:19.6	78.5	90.0	1.1	26	5.3		
BSEG	e P	Z	20:48:19.9	78.5	90.4					
STU	e P	Z	20:48:23.9	79.2	88.5					
BFO	e P	Z	20:48:27.0	79.8	87.8	1.5	34	5.0		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

110

BUG	e P	Z	20:48:30.4	80.4	87.5
WLF	e P	Z	20:48:34.9	81.2	86.4

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	20:41:11.2	10.000N	93.750E	33.0N	5.1			SZGRF
Andaman Islands, India, region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 20:52:55.1	75.8	91.5					
GEC2	e P	Z 20:52:55.8	76.0	90.8	1.0	14	5.0		
CLL	e P	Z 20:52:57.7	76.4	90.9					
WET	e P	Z 20:52:58.9	76.5	90.3					
MOX	e P	Z 20:53:02.6	77.3	89.7					
GRA1	e P	Z 20:53:04.7	77.6	89.1	1.3	30	5.3		
CLZ	e P	Z 20:53:07.3	78.1	88.9	1.2	15	5.0		
BSEG	e P	Z 20:53:07.5	78.1	89.3					
BFO	e P	Z 20:53:15.0	79.5	86.7					
BUG	e P	Z 20:53:18.3	80.0	86.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	21:25: 4.6	16.723N	91.090E	32.8	4.7			SZGRF
Bay of Bengal								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 21:36:07.3	69.0	89.0					
GEC2	e P	Z 21:36:08.5	69.3	88.0					
CLL	e P	Z 21:36:10.5	69.6	88.4					
WET	e P	Z 21:36:11.7	69.8	87.5					
MOX	e P	Z 21:36:16.1	70.5	87.1					
GRA1	e P	Z 21:36:18.4	70.8	86.5	1.0	7	4.7		
	e pP	Z 21:36:27.8							
BSEG	e P	Z 21:36:20.1	71.2	87.3					
CLZ	e P	Z 21:36:20.1	71.2	86.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	21:55: 5.2	21.780S	177.400W	33.0N				SZGRF
Fiji Islands region								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 22:14:45.1	147.3	13.4					
IBBN	e PKPbc	Z 22:14:50.4	149.2	9.4					
	e PKPab	Z 22:14:54.9							
CLZ	e PKPbc	Z 22:14:50.8	149.3	14.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

111

CLL	e	PKPbc	Z	22:14:50.7	149.4	19.2
BRG	e	PKPbc	Z	22:14:51.3	149.6	21.1
	e	PKPab	Z	22:14:56.4		
BUG	e	PKPbc	Z	22:14:52.7	150.1	8.7
GRA1	e	PKPbc	Z	22:14:55.8	151.3	16.8
	e	PKPab	Z	22:15:03.7		
WLF	e	PKPbc	Z	22:14:58.0	152.0	7.0
FUR	e	PKPbc	Z	22:14:58.8	152.7	17.8
	e	PKPab	Z	22:15:09.5		
BFO	e	PKPbc	Z	22:14:59.8	153.1	11.8
	e	PKPab	Z	22:15:11.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/27	23:58:5.6	7.880N	91.320E	33.0N	5.3			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	00:09:49.7	75.9	94.1	1.3	34	5.3		
BRG	e P	Z	00:09:49.9	75.9	94.8					
WET	e P	Z	00:09:53.1	76.5	93.6					
CLL	e P	Z	00:09:52.9	76.6	94.2					
MOX	e P	Z	00:09:58.0	77.4	92.9					
FUR	e P	Z	00:09:58.4	77.5	92.1					
GRA1	e P	Z	00:09:58.4	77.6	92.4	1.5	73	5.6		
CLZ	e P	Z	00:10:02.7	78.2	92.2	1.1	32	5.4		
BSEG	e P	Z	00:10:03.1	78.3	92.6					
STU	e P	Z	00:10:06.5	78.9	90.7					
BFO	e P	Z	00:10:09.2	79.5	90.0	1.2	23	5.0		
IBBN	e P	Z	00:10:11.6	79.8	90.2					
BUG	e P	Z	00:10:12.9	80.1	89.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	00:37:36.5	4.660N	95.240E	33.0N	5.6			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	00:49:47.3	80.9	93.8					
GEC2	e P	Z	00:49:48.4	80.9	93.3	1.0	39	5.4		
WET	e P	Z	00:49:51.4	81.5	92.7					
CLL	e P	Z	00:49:50.9	81.5	93.1	1.1	10	4.7		
	e pP	Z	00:49:58.0							
	e LR	Z	01:20:23.3							
	e L	Z	01:31:35.8			18.0	766		5.1	
MOX	e P	Z	00:49:55.5	82.4	92.0					
FUR	e P	Z	00:49:56.0	82.5	91.4					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

112

GRA1	e P	Z	00:49:56.2	82.6	91.5	1.2	52	5.7
CLZ	e P	Z	00:49:59.8	83.2	91.1	1.4	68	5.7
BSEG	e P	Z	00:50:00.4	83.2	91.4			
STU	e P	Z	00:50:03.9	83.9	89.9			
BFO	e P	Z	00:50:06.1	84.5	89.2	1.8	59	5.5
IBBN	e P	Z	00:50:08.5	84.8	89.1			
BUG	e P	Z	00:50:08.9	85.1	88.7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	03:21:37.7	8.910N	91.680E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	03:32:15.6	75.4	93.9					
GEC2	e P	Z	03:32:16.2	75.4	93.1	1.8	116	5.6		
WET	e P	Z	03:32:19.1	76.0	92.6					
CLL	e P	Z	03:32:18.5	76.0	93.2					
MOX	e P	Z	03:32:23.6	76.8	92.0					
FUR	e P	Z	03:32:24.2	77.0	91.1					
GRA1	e P	Z	03:32:25.3	77.1	91.5	1.6	99	5.7		
CLZ	e P	Z	03:32:28.3	77.6	91.3	1.6	59	5.5		
BSEG	e P	Z	03:32:28.6	77.7	91.7					
BFO	e P	Z	03:32:34.8	78.9	89.0	1.4	21	5.0		
IBBN	e P	Z	03:32:36.5	79.3	89.3					
WLF	e P	Z	03:32:42.3	80.3	87.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	05:36:15.4	9.410N	92.970E	33.0N	5.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	05:47:59.0	75.8	92.5					
GEC2	e P	Z	05:47:59.5	75.9	91.8	1.1	35	5.4		
CLL	e P	Z	05:48:01.8	76.4	91.9					
WET	e P	Z	05:48:02.7	76.4	91.3					
MOX	e P	Z	05:48:06.7	77.3	90.6					
FUR	e P	Z	05:48:08.0	77.5	89.8					
GRA1	e P	Z	05:48:09.0	77.5	90.1	2.5	322	6.0		
CLZ	e P	Z	05:48:11.4	78.0	89.9	1.2	39	5.4		
BSEG	e P	Z	05:48:11.8	78.1	90.3					
BFO	e P	Z	05:48:18.9	79.4	87.7	1.2	26	5.1		
BUG	e P	Z	05:48:22.6	80.0	87.4					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

113

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	09:31:11.5	37.720N	138.860E	300.0N	5.3			SZGRF

Near west coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	09:42:40.1	78.2	39.2	1.2	44	5.4		
BRG	e P	Z	09:42:44.6	79.1	41.3	1.2	21	5.0		
CLL	e P	Z	09:42:44.9	79.2	40.7	1.0	25	5.2		
CLZ	e P	Z	09:42:48.5	79.8	39.0	1.2	46	5.3		
MOX	e P	Z	09:42:50.6	80.2	39.7					
IBBN	e P	Z	09:42:51.7	80.4	37.2					
GEC2	e P	Z	09:42:53.2	80.7	40.9	1.0	15	5.0		
WET	e P	Z	09:42:54.2	80.9	40.4	1.1	17	5.0		
GRA1	e P	Z	09:42:55.6	81.1	39.3	1.1	76	5.6		
FUR	e P	Z	09:43:01.7	82.3	39.2	0.9	53	5.8		
STU	e P	Z	09:43:03.7	82.7	37.9					
BFO	e P	Z	09:43:06.5	83.4	37.2	1.0	37	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	09:42:39.2	7.220N	93.860E	33.0N	5.2			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	09:54:34.9	78.0	93.2					
GEC2	e P	Z	09:54:35.4	78.1	92.6	1.0	12	5.0		
WET	e P	Z	09:54:38.6	78.7	92.1					
MOX	e P	Z	09:54:43.1	79.5	91.4					
GRA1	e P	Z	09:54:44.5	79.7	90.9	1.0	29	5.2		
CLZ	e P	Z	09:54:47.5	80.3	90.6	1.0	18	5.0		
BSEG	e P	Z	09:54:47.7	80.4	90.9	1.0	37	5.3		
BFO	e P	Z	09:54:54.4	81.6	88.5	1.1	17	5.1		
IBBN	e P	Z	09:54:56.3	81.9	88.6	0.9	42	5.6		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	10:51:47.3	10.090N	92.040E	22.8	4.8			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	11:03:24.3	74.7	92.8					
GEC2	e P	Z	11:03:24.7	74.8	92.1	0.9	7	4.7		
CLL	e P	Z	11:03:27.2	75.3	92.2					
WET	e P	Z	11:03:27.9	75.3	91.5					
MOX	e P	Z	11:03:32.7	76.2	90.9					
GRA1	e P	Z	11:03:34.6	76.4	90.4	0.9	8	4.8		
	e pP	Z	11:03:41.1			0.9	8			

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

114

CLZ	e P	Z	11:03:37.2	76.9	90.2	0.8	6	4.8
BSEG	e P	Z	11:03:37.6	77.0	90.7			
BFO	e P	Z	11:03:44.5	78.3	87.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	11:17:42.6	4.150N	94.750E	33.0N	6.1			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 11:29:54.4	81.0	94.5					
GEC2	e P	Z 11:29:54.9	81.0	94.0	2.0	536	6.2		
WET	e P	Z 11:29:57.5	81.5	93.4					
CLL	e P	Z 11:29:57.2	81.6	93.9					
MOX	e P	Z 11:30:02.1	82.4	92.7					
FUR	e P	Z 11:30:02.3	82.6	92.1					
GRA1	e P	Z 11:30:03.5	82.7	92.2	1.2	130	6.0		
CLZ	e P	Z 11:30:06.4	83.3	91.9	2.2	426	6.3		
BSEG	e P	Z 11:30:06.8	83.4	92.1					
STU	e P	Z 11:30:09.9	84.0	90.6					
BFO	e P	Z 11:30:12.5	84.5	89.9	1.2	69	5.7		
IBBN	e P	Z 11:30:14.8	84.9	89.8					
BUG	e P	Z 11:30:16.1	85.2	89.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	11:55:38.8	6.760N	94.670E	33.0N	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 12:07:39.6	78.9	92.9					
GEC2	e P	Z 12:07:39.8	79.0	92.3	1.1	17	5.0		
CLL	e P	Z 12:07:42.8	79.5	92.3					
WET	e P	Z 12:07:42.8	79.5	91.8					
MOX	e P	Z 12:07:47.1	80.4	91.1					
GRA1	e P	Z 12:07:48.8	80.6	90.6	0.8	8	4.8		
CLZ	e P	Z 12:07:51.7	81.2	90.3	0.8	7	4.8		
BFO	e P	Z 12:07:57.7	82.5	88.2	0.8	3	4.6		
BUG	e P	Z 12:08:01.9	83.1	87.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	14:08:43.0	9.850N	92.510E	33.0N	5.2			SZGRF

Nicobar Islands, India, region

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

115

BRG	e P	Z	14:20:22.8	75.2	92.6				
GEC2	e P	Z	14:20:23.3	75.2	91.9	1.0	20	5.1	
WET	e P	Z	14:20:26.4	75.8	91.3				
MOX	e P	Z	14:20:31.2	76.6	90.7				
GRA1	e P	Z	14:20:32.4	76.9	90.2	1.2	23	5.2	
CLZ	e P	Z	14:20:35.7	77.4	90.0	1.0	24	5.3	
BSEG	e P	Z	14:20:35.7	77.5	90.4				
STU	e P	Z	14:20:39.9	78.2	88.4				
BUG	e P	Z	14:20:46.5	79.4	87.5				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	14:48:30.2	3.240N	93.710E	33.0N	5.3			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	15:00:42.0	81.0	95.4	1.4	73	5.5		
BRG	e P	Z	15:00:42.1	81.0	95.9					
WET	e P	Z	15:00:45.0	81.6	94.8					
CLL	e P	Z	15:00:45.1	81.7	95.2					
MOX	e P	Z	15:00:49.7	82.5	94.1					
GRA1	e P	Z	15:00:51.4	82.7	93.6	1.1	30	5.5		
CLZ	e P	Z	15:00:54.2	83.3	93.2	1.0	14	5.2		
BSEG	e P	Z	15:00:54.9	83.5	93.4					
BFO	e P	Z	15:00:59.8	84.5	91.3	1.3	19	5.2		
IBBN	e P	Z	15:01:02.8	85.0	91.2					
BUG	e P	Z	15:01:03.9	85.2	90.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	17:11:32.1	12.120N	91.860E	33.0N	5.5			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	17:22:59.4	73.0	91.6					
GEC2	e P	Z	17:22:59.4	73.1	90.8	1.3	50	5.5		
CLL	e P	Z	17:23:02.6	73.6	91.0					
WET	e P	Z	17:23:03.0	73.7	90.2					
FUR	e P	Z	17:23:09.1	74.7	88.8					
GRA1	e P	Z	17:23:09.4	74.8	89.1	1.5	103	5.6		
CLZ	e P	Z	17:23:11.9	75.3	89.1	1.1	49	5.4		
BSEG	e P	Z	17:23:12.0	75.3	89.6					
STU	e P	Z	17:23:16.9	76.1	87.4					
BFO	e P	Z	17:23:20.2	76.7	86.6	1.2	30	5.3		
BUG	e P	Z	17:23:23.3	77.2	86.5					
WLF	e P	Z	17:23:28.0	78.0	85.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	17:46:20.8	6.930N	90.997E	33.0N	5.1			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	17:58:07.0	76.4	95.0	1.1	20	5.2		
BRG	e P	Z	17:58:07.2	76.5	95.7					
WET	e P	Z	17:58:10.3	77.0	94.5					
CLL	e P	Z	17:58:11.0	77.1	95.0					
MOX	e P	Z	17:58:15.5	77.9	93.8					
FUR	e P	Z	17:58:15.9	78.0	93.0					
GRA1	e P	Z	17:58:17.0	78.1	93.3	1.1	35	5.4		
CLZ	e P	Z	17:58:19.9	78.8	93.1	1.1	24	5.1		
BSEG	e P	Z	17:58:20.8	78.9	93.4					
BFO	e P	Z	17:58:26.6	80.0	90.8	1.0	9	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	19:55:15.0	9.541N	93.024E	33.0N	5.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:06:57.6	75.7	92.4					
GEC2	e P	Z	20:06:58.3	75.8	91.7	0.9	26	5.4		
CLL	e P	Z	20:07:00.6	76.3	91.8					
WET	e P	Z	20:07:01.4	76.4	91.1					
MOX	e P	Z	20:07:05.8	77.2	90.5					
FUR	e P	Z	20:07:07.0	77.4	89.7					
GRA1	e P	Z	20:07:07.5	77.4	90.0	2.0	114	5.7		
CLZ	e P	Z	20:07:10.3	78.0	89.8	0.9	26	5.4		
BSEG	e P	Z	20:07:10.5	78.0	90.2					
STU	e P	Z	20:07:14.8	78.8	88.3					
BFO	e P	Z	20:07:18.0	79.4	87.5	2.6	144	5.6		
IBBN	e P	Z	20:07:19.3	79.6	87.8					
BUG	e P	Z	20:07:20.7	79.9	87.3					
WLF	e P	Z	20:07:25.9	80.7	86.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	20:33:57.0	35.690N	29.710E	33.0N	4.4			SZGRF

Eastern Mediterranean Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	20:38:00.9	17.6	132.3	1.1	24	4.2		
WET	e P	Z	20:38:07.0	18.2	131.3	1.0	28	4.3		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

117

BRG	e P	Z	20:38:15.9	18.9	137.2				
GRA1	e P	Z	20:38:20.6	19.4	129.2	1.1	27	4.4	
MOX	e P	Z	20:38:26.4	19.8	132.0	1.1	27	4.4	
STU	e P	Z	20:38:27.6	19.9	123.4	1.1	18	4.2	
CLZ	e P	Z	20:38:41.1	21.2	132.0	1.3	23	4.4	
BUG	e P	Z	20:38:53.0	22.5	125.8	1.2	40	4.7	
IBBN	e P	Z	20:38:56.6	22.7	128.3				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	21:07:45.4	54.340N	175.080W	277.9	5.7			SZGRF

Bering Sea

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	21:18:39.5	71.6	3.3					
IBBN	e P	Z	21:18:48.4	73.3	1.7					
CLZ	e P	Z	21:18:51.1	73.7	3.3	1.8	175	5.8		
CLL	e P	Z	21:18:53.6	74.1	4.9	1.8	133	5.8		
	e pP	Z	21:19:59.6							
	e (S)	E	21:28:12.7							
BUG	e P	Z	21:18:54.0	74.2	1.4					
BRG	e P	Z	21:18:55.8	74.5	5.4					
MOX	e P	Z	21:18:57.8	74.9	4.0					
GRA1	e P	Z	21:19:03.6	75.8	3.8	1.2	137	5.9		
	e pP	Z	21:20:08.0							
WLF	e P	Z	21:19:04.5	76.0	0.7					
WET	e P	Z	21:19:05.8	76.3	4.8					
GEC2	e P	Z	21:19:07.2	76.6	5.3	1.3	42	5.4		
STU	e P	Z	21:19:08.3	76.8	2.6					
BFO	e P	Z	21:19:11.2	77.3	2.0	1.9	127	5.7		
FUR	e P	Z	21:19:11.9	77.4	3.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	21:47:27.6	8.369N	93.921E	33.0N	5.3			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	21:59:18.2	77.2	92.5					
GEC2	e P	Z	21:59:18.7	77.3	91.8	1.2	41	5.4		
CLL	e P	Z	21:59:21.4	77.8	91.8					
WET	e P	Z	21:59:21.9	77.8	91.2					
MOX	e P	Z	21:59:26.2	78.7	90.6					
GRA1	e P	Z	21:59:28.1	78.9	90.1	1.1	50	5.5		
CLZ	e P	Z	21:59:30.6	79.4	89.9	1.1	46	5.4		
BSEG	e P	Z	21:59:30.4	79.5	90.2					
STU	e P	Z	21:59:34.3	80.2	88.4					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

118

BFO	e P	Z	21:59:38.4	80.8	87.7	1.2	25	5.1
IBBN	e P	Z	21:59:39.6	81.0	87.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	21:51:52.2	3.360N	94.760E	33.0N	5.2			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 22:04:07.8	81.6	94.5	1.1	34	5.4		
BRG	e P	Z 22:04:07.9	81.6	95.0					
WET	e P	Z 22:04:10.6	82.2	94.0					
CLL	e P	Z 22:04:10.6	82.2	94.3					
MOX	e P	Z 22:04:15.0	83.1	93.2					
GRA1	e P	Z 22:04:16.6	83.3	92.8	1.0	20	5.3		
CLZ	e P	Z 22:04:19.3	83.9	92.3	1.2	23	5.3		
BSEG	e P	Z 22:04:20.1	84.0	92.5					
BFO	e P	Z 22:04:25.2	85.1	90.4	0.9	8	5.0		
IBBN	e P	Z 22:04:27.8	85.5	90.3					
BUG	e P	Z 22:04:29.4	85.8	89.9					
WLF	e P	Z 22:04:33.1	86.5	88.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/28	23:35:30.4	11.313N	92.633E	33.0N	5.0			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 23:47:03.6	74.1	91.5					
CLL	e P	Z 23:47:06.8	74.7	90.9					
WET	e P	Z 23:47:07.3	74.8	90.2	1.0	9	4.8		
MOX	e P	Z 23:47:11.9	75.6	89.6					
GRA1	e P	Z 23:47:13.9	75.9	89.1	0.9	17	5.2		
CLZ	e P	Z 23:47:16.3	76.4	89.0	1.1	14	5.0		
BSEG	e P	Z 23:47:16.3	76.4	89.4					
IBBN	e P	Z 23:47:25.5	77.9	87.0					
BUG	e P	Z 23:47:27.3	78.3	86.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	01:39:47.2	9.130N	92.850E	45.0	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 01:51:29.8	75.9	92.8					
GEC2	e P	Z 01:51:30.1	76.0	92.1	1.1	59	5.6		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

119

CLL	e P	Z	01:51:33.0	76.5	92.2	1.3	31	5.3
	e sP	Z	01:51:45.7					
	e		01:52:01.6					
	e (S)	N	02:01:25.6					
	e L	Z	02:22:56.9			18.0	724	5.0
WET	e P	Z	01:51:33.2	76.6	91.5			
MOX	e P	Z	01:51:37.9	77.4	90.9			
FUR	e P	Z	01:51:38.4	77.6	90.1			
GRA1	e P	Z	01:51:39.0	77.6	90.4	1.1	48	5.5
	e pP	Z	01:51:51.9					
CLZ	e P	Z	01:51:42.1	78.2	90.2	1.1	46	5.5
BSEG	e P	Z	01:51:41.9	78.2	90.6			
STU	e P	Z	01:51:46.3	79.0	88.7			
BFO	e P	Z	01:51:49.2	79.6	88.0	1.3	45	5.2
IBBN	e P	Z	01:51:51.2	79.8	88.2			
BUG	e P	Z	01:51:52.7	80.1	87.7			
WLF	e P	Z	01:51:57.5	80.9	86.6			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	01:50:56.7	8.830N	93.430E	33.0N	6.2			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:02:44.3	76.5	92.5					
GEC2	e P	Z	02:02:44.8	76.6	91.9	1.2	253	6.2		
CLL	i P	- Z	02:02:47.1	77.1	91.9	1.5	235	6.1		
	e sP	Z	02:02:50.7							
	e (S)	E	02:12:34.3							
	e L	Z	02:42:51.8			22.0	2796		5.5	
WET	e P	Z	02:02:47.9	77.2	91.3					
MOX	e P	Z	02:02:52.4	78.0	90.7					
FUR	e P	Z	02:02:53.3	78.2	89.9					
GRA1	e P	Z	02:02:54.3	78.2	90.2	1.5	470	6.4		
CLZ	e P	Z	02:02:56.7	78.8	89.9	1.5	390	6.2		
BSEG	e P	Z	02:02:57.0	78.8	90.3					
STU	e P	Z	02:03:01.0	79.6	88.5					
BFO	e P	Z	02:03:03.9	80.2	87.7	1.4	172	5.8		
IBBN	e P	Z	02:03:05.5	80.4	88.0					
BUG	e P	Z	02:03:07.2	80.7	87.4					
WLF	e P	Z	02:03:12.1	81.5	86.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	02:13:27.4	12.400N	92.150E	33.0N	5.5			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:24:54.2	73.0	91.2					
GEC2	e P	Z	02:24:55.1	73.1	90.4	1.1	38	5.4		
CLL	e P	Z	02:24:57.3	73.6	90.6					
WET	e P	Z	02:24:58.3	73.7	89.8					
MOX	e P	Z	02:25:02.8	74.5	89.3					
GRA1	e P	Z	02:25:04.9	74.7	88.7	1.4	88	5.6		
FUR	e P	Z	02:25:04.2	74.7	88.3					
BSEG	e P	Z	02:25:07.1	75.2	89.2					
CLZ	e P	Z	02:25:07.1	75.2	88.6	1.3	64	5.5		
STU	e P	Z	02:25:12.0	76.1	87.0					
BFO	e P	Z	02:25:15.0	76.7	86.2	1.5	40	5.3		
IBBN	e P	Z	02:25:16.4	76.8	86.7					
BUG	e P	Z	02:25:18.1	77.2	86.1					
WLF	e P	Z	02:25:23.5	78.0	84.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	05:56:59.0	9.730N	91.960E	33.0N	5.8			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:08:37.5	74.9	93.1					
GEC2	e P	Z	06:08:37.9	75.0	92.4	1.1	131	5.9		
WET	e P	Z	06:08:41.0	75.5	91.8					
CLL	e P	Z	06:08:41.2	75.5	92.5	1.2	76	5.7		
	e		06:08:59.8							
	e S	N	06:18:25.0							
	e SS	N	06:23:34.9							
	e LR	Z	06:38:34.7							
	e L	Z	06:48:51.5			20.0	6989		6.0	
MOX	e P	Z	06:08:45.6	76.4	91.2					
FUR	e P	Z	06:08:46.6	76.6	90.4					
GRA1	e P	Z	06:08:47.4	76.6	90.7	1.2	154	6.0		
	e		06:09:06.6							
	e		06:09:23.8							
CLZ	e P	Z	06:08:49.9	77.2	90.5	1.0	108	5.9		
BSEG	e P	Z	06:08:50.4	77.2	91.0					
STU	e P	Z	06:08:54.3	77.9	88.9					
BFO	e P	Z	06:08:57.3	78.5	88.2	1.0	54	5.5		
IBBN	e P	Z	06:08:59.1	78.8	88.6					
BUG	e P	Z	06:09:01.7	79.1	88.0					
WLF	e P	Z	06:09:05.4	79.9	86.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	06:05:25.8	10.210N	92.350E	33.0G	5.6			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:17:04.1	74.8	92.5					
	e	06:17:21.8							
GEC2	e P	Z 06:17:03.8	74.9	91.7	1.0	73	5.6		
CLL	e P	Z 06:17:06.8	75.4	91.8					
WET	e P	Z 06:17:06.8	75.4	91.2					
MOX	e P	Z 06:17:11.2	76.3	90.6					
FUR	e P	Z 06:17:12.6	76.5	89.7					
GRA1	e P	Z 06:17:14.0	76.5	90.1	1.0	77	5.8		
CLZ	e P	Z 06:17:16.1	77.0	89.9	1.0	65	5.7		
BSEG	e P	Z 06:17:16.2	77.1	90.3					
STU	e P	Z 06:17:21.0	77.8	88.3					
BFO	e P	Z 06:17:24.0	78.4	87.6	1.1	34	5.4		
IBBN	e P	Z 06:17:25.4	78.6	88.0					
BUG	e P	Z 06:17:27.1	79.0	87.4					
WLF	e P	Z 06:17:31.6	79.8	86.2					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	06:19: 8.2	9.697N	93.412E	33.0N	5.3			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:30:51.3	75.9	92.0					
GEC2	e P	Z 06:30:51.5	76.0	91.3	1.2	24	5.2		
CLL	e P	Z 06:30:54.2	76.5	91.3					
WET	e P	Z 06:30:54.0	76.5	90.7					
MOX	e P	Z 06:30:59.0	77.3	90.1					
FUR	e P	Z 06:31:00.3	77.6	89.3					
GRA1	e P	Z 06:31:01.4	77.6	89.6	2.0	139	5.7		
CLZ	e P	Z 06:31:03.1	78.1	89.4	1.1	23	5.2		
BSEG	e P	Z 06:31:03.6	78.1	89.8					
STU	e P	Z 06:31:08.0	78.9	87.9					
BFO	e P	Z 06:31:11.1	79.5	87.2	1.8	33	5.0		
IBBN	e P	Z 06:31:12.0	79.7	87.4					
BUG	e P	Z 06:31:14.3	80.0	86.9					
WLF	e P	Z 06:31:19.4	80.9	85.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	06:30:47.9	13.610N	91.910E	33.0N	5.4			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 06:42:08.7	71.9	90.5					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

122

GEC2	e P	Z	06:42:09.6	72.1	89.7	1.0	38	5.5
CLL	e P	Z	06:42:12.1	72.5	89.9			
WET	e P	Z	06:42:12.8	72.6	89.2			
MOX	e P	Z	06:42:17.1	73.4	88.7			
GRA1	e P	Z	06:42:19.8	73.7	88.1	1.0	41	5.4
BSEG	e P	Z	06:42:21.8	74.1	88.6			
CLZ	e P	Z	06:42:21.6	74.1	88.0	1.0	44	5.4
STU	e P	Z	06:42:27.0	75.0	86.3			
BFO	e P	Z	06:42:30.6	75.6	85.5	0.4	11	5.3
IBBN	e P	Z	06:42:31.2	75.7	86.1			
BUG	e P	Z	06:42:33.1	76.1	85.5			

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/29 06:35:44.7 9.610N 92.860E 33.0N 4.9
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:47:26.7	75.6	92.5					
GEC2	e P	Z	06:47:27.2	75.7	91.8	0.9	14	5.1		
CLL	e P	Z	06:47:29.8	76.2	91.8					
WET	e P	Z	06:47:30.3	76.2	91.2					
MOX	e P	Z	06:47:34.9	77.0	90.6					
GRA1	e P	Z	06:47:36.9	77.3	90.1	0.9	13	5.0		
CLZ	e P	Z	06:47:39.4	77.8	89.9	0.6	7	5.0		
BSEG	e P	Z	06:47:39.9	77.9	90.3					
STU	e P	Z	06:47:44.1	78.6	88.4					
BFO	e P	Z	06:47:46.8	79.2	87.6	1.0	8	4.7		

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/29 07:46:35.3 2.700N 94.660E 33.0N 5.1
 Off west coast of northern Sumatra, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	07:58:52.0	82.0	95.1	1.2	21	5.1		
BRG	e P	Z	07:58:52.0	82.1	95.5					
WET	e P	Z	07:58:54.8	82.6	94.5					
CLL	e P	Z	07:58:55.2	82.7	94.8					
GRA1	e P	Z	07:59:01.6	83.7	93.3	1.2	20	5.2		
CLZ	e P	Z	07:59:04.1	84.3	92.8	1.2	18	5.2		
BSEG	e P	Z	07:59:04.7	84.5	93.0					
BFO	e P	Z	07:59:09.6	85.5	90.9	1.0	9	4.9		

Date Origin Time Lat Long Depth mb Ms ML Source

2004/12/29 07:52:59.1 5.450N 93.180E 33.0N 4.9 SZGRF
Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 08:05:00.4	79.0	94.3	1.1	16	5.0		
BRG	e P	Z 08:05:00.1	79.0	94.9					
WET	e P	Z 08:05:03.3	79.5	93.8					
CLL	e P	Z 08:05:03.5	79.6	94.3					
MOX	e P	Z 08:05:07.8	80.4	93.1					
GRA1	e P	Z 08:05:09.4	80.6	92.6	0.9	10	4.8		
CLZ	e P	Z 08:05:12.4	81.3	92.3	1.2	14	4.8		
BSEG	e P	Z 08:05:13.1	81.4	92.6					
STU	e P	Z 08:05:15.8	81.9	90.9					
BFO	e P	Z 08:05:18.6	82.5	90.2	0.9	9	5.0		
IBBN	e P	Z 08:05:19.3	82.9	90.3					
WLF	e P	Z 08:05:26.7	83.9	88.7					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/29 10:09:45.1 10.450N 91.310E 33.0N 5.2 SZGRF
Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 10:21:18.4	74.0	93.1					
GEC2	e P	Z 10:21:17.3	74.0	92.4	1.6	37	5.2		
WET	e P	Z 10:21:22.0	74.6	91.8					
CLL	e P	Z 10:21:21.4	74.6	92.5					
MOX	e P	Z 10:21:26.2	75.4	91.2					
FUR	e P	Z 10:21:27.4	75.6	90.3					
GRA1	e P	Z 10:21:28.4	75.7	90.7	1.2	30	5.3		
CLZ	e P	Z 10:21:30.3	76.2	90.6	1.7	35	5.2		
BSEG	e P	Z 10:21:31.1	76.3	91.0					
BFO	e P	Z 10:21:37.9	77.6	88.2	2.1	51	5.3		
IBBN	e P	Z 10:21:39.8	77.8	88.6					
WLF	e P	Z 10:21:46.6	78.9	86.8					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/29 10:23:56.7 7.750N 92.300E 33.0N 5.0 SZGRF
Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 10:35:46.3	76.7	94.1					
GEC2	e P	Z 10:35:46.9	76.7	93.5	0.9	11	5.0		
WET	e P	Z 10:35:49.8	77.2	92.9					
CLL	e P	Z 10:35:49.4	77.3	93.5					
MOX	e P	Z 10:35:54.5	78.1	92.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

124

GRA1	e P	Z	10:35:56.6	78.3	91.8	1.0	18	5.2
CLZ	e P	Z	10:35:59.0	78.9	91.5	0.7	9	4.9
BSEG	e P	Z	10:35:59.8	79.0	91.9			
BFO	e P	Z	10:36:05.9	80.2	89.3	1.8	30	4.9
BUG	e P	Z	10:36:10.3	80.9	89.0			
WLF	e P	Z	10:36:12.9	81.6	87.9			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	10:27:58.4	5.290N	93.910E	33.0N	4.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	10:40:03.0	79.6	94.5					
GEC2	e P	Z	10:40:03.1	79.6	93.9	1.0	17	4.9		
WET	e P	Z	10:40:05.8	80.1	93.3					
CLL	e P	Z	10:40:05.5	80.2	93.8					
MOX	e P	Z	10:40:10.6	81.0	92.6					
GRA1	e P	Z	10:40:10.7	81.2	92.1	0.9	12	4.9		
CLZ	e P	Z	10:40:15.0	81.9	91.8	1.1	16	5.1		
BSEG	e P	Z	10:40:15.5	82.0	92.1					
BFO	e P	Z	10:40:21.7	83.1	89.8	1.3	10	4.9		
BUG	e P	Z	10:40:25.1	83.8	89.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	10:52:39.3	2.380S	94.360E	33.0N	5.3			SZGRF

Southwest of Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	11:05:13.3	85.7	98.6	1.6	51	5.4		
BRG	e P	Z	11:05:13.8	85.8	99.0					
WET	e P	Z	11:05:16.2	86.2	98.0					
CLL	e P	Z	11:05:17.2	86.5	98.2					
MOX	e P	Z	11:05:21.1	87.3	97.1					
GRA1	e P	Z	11:05:22.3	87.4	96.8	1.5	46	5.4		
CLZ	e P	Z	11:05:25.8	88.2	96.2	1.4	20	5.3		
BSEG	e P	Z	11:05:26.8	88.4	96.2					
BFO	e P	Z	11:05:29.7	89.1	94.5	0.9	12	5.1		
BUG	e P	Z	11:05:33.6	90.0	93.8					
WLF	e P	Z	11:05:37.6	90.7	92.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	11:59: 1.1	15.560N	90.858E	23.7	5.3			SZGRF

Bay of Bengal

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	12:10:08.7	69.8	90.0					
GEC2	e P	Z	12:10:09.8	69.9	89.1	1.1	35	5.4		
CLL	e P	Z	12:10:12.8	70.4	89.4					
WET	e P	Z	12:10:12.9	70.5	88.6					
MOX	e P	Z	12:10:17.7	71.2	88.1					
GRA1	e P	Z	12:10:20.5	71.5	87.5	1.2	40	5.4		
	e pP	Z	12:10:27.2							
BSEG	e P	Z	12:10:21.6	71.9	88.2					
CLZ	e P	Z	12:10:22.3	72.0	87.6	0.8	24	5.4		
STU	e P	Z	12:10:28.2	72.9	85.7					
BFO	e P	Z	12:10:31.4	73.5	84.9	1.2	14	4.9		
IBBN	e P	Z	12:10:31.6	73.6	85.7					
BUG	e P	Z	12:10:33.8	73.9	85.0					
WLF	e P	Z	12:10:39.9	74.8	83.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	13:20:26.1	29.190N	131.880E	33.0N	5.9	6.1		SZGRF

Southeast of Ryukyu Islands, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	13:32:48.9	82.8	48.6	2.6	320	6.1		
BRG	e P	Z	13:32:50.2	83.1	51.0	2.2	181	5.9		
CLL	e P	Z	13:32:50.9	83.3	50.3	1.6	102	5.8		
CLL	e P	Z	13:32:51.0	83.3	50.3	2.0	188	6.0		
	e		13:33:02.1							
	e (PP)	Z	13:36:15.1							
	e S	E	13:43:25.1							
	e SS	E	13:48:49.2							
	e LR	Z	14:09:57.6							
	e L	Z	14:13:57.7			18.0	16664		6.5	
CLZ	e P	Z	13:32:56.2	84.2	48.4	2.1	350	6.2		
MOX	e P	Z	13:32:56.8	84.4	49.3	2.1	165	5.9		
GEC2	e P	Z	13:32:57.1	84.5	50.6	1.7	50	5.5		
WET	e P	Z	13:32:58.7	84.7	50.1	2.2	140	5.8		
IBBN	e P	Z	13:33:00.0	85.0	46.5	1.4	94	5.8		
GRA1	e P	Z	13:33:01.2	85.2	48.9	1.9	210	6.0		
	e S	E	13:43:33.0							
	e L	Z	14:14:55.3			18.8	7994		6.1	
BUG	e P	Z	13:33:03.9	85.9	46.1	2.1	240	6.0		
FUR	e P	Z	13:33:05.9	86.2	48.9	1.5	106	5.7		
STU	e P	Z	13:33:08.5	86.8	47.4					
BFO	e P	Z	13:33:12.2	87.5	46.7	1.7	34	5.4		
WLF	e P	Z	13:33:12.9	87.6	45.2	2.4	248	6.1		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	13:58:51.1	38.753N	142.383E	33.0N	5.3			SZGRF

Near east coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	14:10:49.6	78.6	36.2	1.1	47	5.4		
BRG	e P	Z	14:10:55.3	79.7	38.4	1.0	22	5.0		
CLL	e P	Z	14:10:55.1	79.7	37.8	0.9	36	5.3		
CLZ	e P	Z	14:10:58.9	80.2	36.0	1.0	38	5.4		
MOX	e P	Z	14:11:01.1	80.7	36.8	1.4	38	5.2		
IBBN	e P	Z	14:11:01.3	80.8	34.2	1.1	51	5.4		
GEC2	e P	Z	14:11:04.2	81.3	38.0	1.2	19	5.1		
WET	e P	Z	14:11:05.0	81.4	37.5	1.2	23	5.2		
GRA1	e P	Z	14:11:06.4	81.6	36.4	1.0	51	5.6		
BUG	e P	Z	14:11:05.8	81.7	33.8					
FUR	e P	Z	14:11:12.6	82.9	36.3	1.0	41	5.6		
STU	e P	Z	14:11:13.9	83.2	34.9	0.8	20	5.4		
BFO	e P	Z	14:11:17.4	83.9	34.3	1.0	29	5.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	14:03:23.3	3.260N	94.060E	28.8	5.6			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	14:15:36.9	81.2	95.1	1.6	148	5.8		
BRG	e P	Z	14:15:36.4	81.2	95.6					
WET	e P	Z	14:15:39.6	81.8	94.6					
CLL	e P	Z	14:15:39.5	81.9	95.0					
MOX	e P	Z	14:15:44.2	82.7	93.8					
FUR	e P	Z	14:15:44.3	82.8	93.2					
GRA1	e P	Z	14:15:45.7	82.9	93.4	1.4	87	5.8		
	e pP	Z	14:15:54.1							
CLZ	e P	Z	14:15:48.5	83.5	93.0	1.3	43	5.5		
BSEG	e P	Z	14:15:49.4	83.7	93.1					
BFO	e P	Z	14:15:54.2	84.7	91.0	1.8	56	5.5		
IBBN	e P	Z	14:15:57.0	85.2	90.9					
BUG	e P	Z	14:15:58.4	85.5	90.5					
WLF	e P	Z	14:16:02.0	86.2	89.5					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	15:36:29.2	10.890N	91.630E	27.7	5.0			SZGRF

Andaman Islands, India, region

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

127

BRG	e P	Z	15:48:01.9	73.8	92.6				
GEC2	e P	Z	15:48:02.3	73.9	91.8	1.1	9	4.7	
CLL	e P	Z	15:48:05.0	74.4	92.0				
WET	e P	Z	15:48:05.6	74.4	91.3				
MOX	e P	Z	15:48:10.3	75.3	90.7				
GRA1	e P	Z	15:48:12.2	75.5	90.2	1.6	44	5.4	
	e pP	Z	15:48:20.2						
CLZ	e P	Z	15:48:14.7	76.1	90.0	1.0	10	4.9	
BSEG	e P	Z	15:48:15.1	76.1	90.5				
BFO	e P	Z	15:48:22.5	77.5	87.6	1.3	12	4.9	
IBBN	e P	Z	15:48:24.2	77.7	88.1				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	15:50:2.6	5.430N	94.890E	33.0G	5.3			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	16:02:09.7	80.1	93.6					
GEC2	e P	Z	16:02:10.0	80.1	93.1	0.8	40	5.4		
WET	e P	Z	16:02:12.9	80.7	92.5					
CLL	e P	Z	16:02:12.5	80.7	92.9					
MOX	e P	Z	16:02:17.4	81.5	91.7					
GRA1	e P	Z	16:02:19.0	81.8	91.3	1.0	29	5.4		
CLZ	e P	Z	16:02:21.6	82.3	90.9	0.8	14	5.1		
BSEG	e P	Z	16:02:22.1	82.4	91.2					
BFO	e P	Z	16:02:27.9	83.7	88.9	0.8	14	5.2		
IBBN	e P	Z	16:02:30.0	84.0	88.9					
BUG	e P	Z	16:02:31.6	84.3	88.5					
WLF	e P	Z	16:02:35.8	85.0	87.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	17:12:33.8	9.650N	93.790E	29.5	4.8			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	17:24:19.5	76.1	91.7					
GEC2	e P	Z	17:24:20.2	76.2	91.0	1.5	42	5.4		
CLL	e P	Z	17:24:22.5	76.7	91.1					
WET	e P	Z	17:24:23.3	76.8	90.5					
MOX	e P	Z	17:24:27.8	77.6	89.9					
GRA1	e P	Z	17:24:29.7	77.9	89.3	0.9	6	4.8		
	e pP	Z	17:24:38.2							
CLZ	e P	Z	17:24:32.1	78.4	89.1	0.9	6	4.7		
BSEG	e P	Z	17:24:32.2	78.4	89.5					
BFO	e P	Z	17:24:39.6	79.8	86.9	1.1	5	4.4		

IBBN	e P	Z	17:24:40.9	80.0	87.2
BUG	e P	Z	17:24:42.7	80.3	86.6

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	18:50:19.9	5.290N	94.410E	43.3	5.8			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 19:02:24.4	79.9	94.1	1.3	95	5.6		
GEC2	e P	Z 19:02:24.7	79.9	93.5	1.6	238	5.9		
WET	e P	Z 19:02:27.7	80.5	92.9	1.5	116	5.7		
CLL	e P	Z 19:02:27.2	80.5	93.4	1.4	66	5.5		
MOX	e P	Z 19:02:32.2	81.3	92.2	1.5	102	5.6		
FUR	e P	Z 19:02:32.6	81.5	91.6	1.5	144	5.9		
GRA1	e P	Z 19:02:33.8	81.6	91.8	1.5	154	5.9		
	e pP	Z 19:02:46.3							
CLZ	e P	Z 19:02:36.4	82.2	91.4	1.5	117	5.8		
BSEG	e P	Z 19:02:36.9	82.2	91.7	1.6	188	6.0		
STU	e P	Z 19:02:40.0	82.9	90.1	1.9	143	5.9		
BFO	e P	Z 19:02:42.7	83.4	89.4	1.7	109	5.8		
IBBN	e P	Z 19:02:44.9	83.8	89.4	1.4	157	6.0		
BUG	e P	Z 19:02:46.4	84.1	88.9	1.4	114	5.9		
WLF	e P	Z 19:02:50.7	84.8	87.9	1.5	129	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	19:31:59.5	14.440N	47.780W	33.0N	5.0			SZGRF

Northern Mid-Atlantic Ridge

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WLF	e P	Z 19:41:35.2	56.0	250.8	1.8	60	5.3		
BFO	e P	Z 19:41:42.3	57.0	253.5	1.5	26	5.0		
BUG	e P	Z 19:41:44.3	57.3	250.7	1.1	20	5.1		
STU	e P	Z 19:41:46.7	57.6	254.0	1.1	23	5.1		
IBBN	e P	Z 19:41:48.1	57.8	250.6	1.3	43	5.3		
FUR	e P	Z 19:41:55.6	58.8	256.2	1.2	38	5.3		
GRA1	e P	Z 19:41:57.6	59.1	255.2	1.7	34	5.1		
CLZ	e P	Z 19:41:58.2	59.2	253.2	1.2	19	5.0		
MOX	e P	Z 19:42:01.3	59.6	255.0	1.2	12	4.8		
BSEG	e P	Z 19:42:02.1	59.8	252.0					
WET	e P	Z 19:42:03.7	60.1	256.9	1.5	16	4.9		
GEC2	e P	Z 19:42:06.6	60.5	257.8	1.5	19	4.7		
CLL	e P	Z 19:42:08.2	60.7	255.9	1.0	21	4.9		
BRG	e P	Z 19:42:11.2	61.1	256.9	1.3	16	4.7		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	20:14:34.6	4.140N	95.640E	33.0N	4.9			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	20:26:49.1	81.6	93.8					
GEC2	e P	Z	20:26:49.6	81.6	93.3	0.7	10	5.1		
WET	e P	Z	20:26:52.5	82.1	92.8					
CLL	e P	Z	20:26:52.4	82.2	93.2					
MOX	e P	Z	20:26:56.9	83.0	92.0					
GRA1	e P	Z	20:26:58.6	83.2	91.6	0.7	6	4.9		
CLZ	e P	Z	20:27:01.3	83.8	91.2	0.7	3	4.7		
BSEG	e P	Z	20:27:01.6	83.9	91.3					
STU	e P	Z	20:27:04.8	84.5	89.9					
BFO	e P	Z	20:27:07.6	85.1	89.3	0.7	4	4.8		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	21:13:1.7	4.710N	94.510E	58.3	5.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	21:25:06.8	80.4	94.4	1.5	124	5.6		
GEC2	e P	Z	21:25:07.1	80.4	93.8	1.1	200	6.0		
WET	e P	Z	21:25:10.0	81.0	93.2	1.1	86	5.7		
CLL	e P	Z	21:25:09.6	81.0	93.7	1.2	73	5.6		
MOX	e P	Z	21:25:14.5	81.9	92.5	1.7	125	5.8		
FUR	e P	Z	21:25:14.9	82.0	91.9	1.0	106	5.9		
GRA1	e P	Z	21:25:16.1	82.1	92.1	1.1	151	6.0		
	e pP	Z	21:25:32.5							
CLZ	e P	Z	21:25:18.8	82.7	91.7	1.1	72	5.8		
BSEG	e P	Z	21:25:19.3	82.8	91.9	1.5	153	6.0		
STU	e P	Z	21:25:22.2	83.4	90.4	1.0	63	5.8		
BFO	e P	Z	21:25:25.0	83.9	89.7	1.4	86	5.8		
IBBN	e P	Z	21:25:27.2	84.3	89.7	1.2	107	5.9		
BUG	e P	Z	21:25:28.7	84.6	89.2	1.3	113	5.9		
WLF	e P	Z	21:25:32.9	85.3	88.2	1.4	100	5.9		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	22:22:19.7	40.365N	33.002E	5.0G	3.7			kan-m

Turkey

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	22:26:12.7	16.1	114.6	1.0	4	3.6		
WET	e P	Z	22:26:19.1	16.7	114.1	0.9	5	3.6		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

130

GRA1	e P	Z	22:26:41.7	17.9	113.1				
CLZ	e P	Z	22:26:48.4	19.3	117.5	0.8	5	3.8	
BSEG	e P	Z	22:27:00.1	20.4	122.5				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	22:40:36.2	45.686N	10.875E	10.0G			3.5	SZGRF

Northern Italy

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
WTTA	e Pn	Z 22:41:05.4	1.7	198.7					3.3
	e Sg	E 22:41:27.0							
DAVA	e Pn	Z 22:41:07.1	1.7	156.5					3.1
	e Sg	E 22:41:33.8							
KBA	e Pn	Z 22:41:14.7	2.2	231.6					3.1
	e Sg	E 22:41:47.3							
OBKA	e Pn	Z 22:41:20.5	2.7	253.4					3.3
ARSA	e Pn	Z 22:41:31.6	3.6	245.7					
GEC2	e Pn	Z 22:41:32.8	3.7	212.3					3.6
	e Pn	E 22:41:32.8							
	e Sn	E 22:42:17.5							
WET	e Sn	N 22:42:16.9	3.7	202.1					3.6
GRA1	e Pn	Z 22:41:36.1	4.0	183.5					4.0
	e Sg	E 22:42:44.2							
GUNZ	e Pn	Z 22:41:46.6	4.8	192.3					3.7
	e Sg	N 22:43:05.6							
TANN	e Pn	Z 22:41:48.7	4.8	193.2					
WERD	e Pn	Z 22:41:48.9	4.9	191.9					
BRG	e Pn	Z 22:41:58.1	5.6	202.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	22:55:30.1	5.830N	95.040E	33.0N	4.6			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 23:07:35.5	79.9	93.2					
WET	e P	Z 23:07:39.0	80.5	92.1	0.8	2	4.2		
CLL	e P	Z 23:07:40.1	80.5	92.6					
MOX	e P	Z 23:07:43.5	81.3	91.4					
GRA1	e P	Z 23:07:45.4	81.6	90.9	0.9	7	4.8		
CLZ	e P	Z 23:07:47.9	82.1	90.6	0.7	5	4.7		
BSEG	e P	Z 23:07:48.3	82.2	90.8	0.9	10	4.9		
STU	e P	Z 23:07:52.4	82.9	89.3					
BFO	e P	Z 23:07:54.7	83.5	88.6	0.8	2	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/29	23:14:2.6	7.137N	92.118E	20.4	4.5			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 23:25:53.8	77.0	94.7					
WET	e P	Z 23:25:57.1	77.6	93.5	0.9	4	4.5		
CLL	e P	Z 23:25:56.8	77.6	94.0	0.9	3	4.5		
MOX	e P	Z 23:26:01.9	78.5	92.8					
FUR	e P	Z 23:26:02.3	78.6	92.0					
GRA1	e P	Z 23:26:03.7	78.7	92.3	0.9	8	4.7		
	e pP	Z 23:26:09.5							
	e sP	Z 23:26:12.7							
CLZ	e P	Z 23:26:06.4	79.3	92.1	1.0	5	4.5		
BSEG	e P	Z 23:26:07.0	79.4	92.4					
STU	e P	Z 23:26:10.0	80.0	90.6					
BFO	e P	Z 23:26:13.1	80.6	89.9	0.8	2	4.1		
IBBN	e P	Z 23:26:15.2	80.9	90.1					
BUG	e P	Z 23:26:16.8	81.2	89.5					
WLF	e P	Z 23:26:21.4	82.0	88.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	01:04:54.8	4.150N	93.840E	35.9	5.5			SZGRF

Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 01:17:03.7	80.4	94.7	1.4	100	5.6		
BRG	e P	Z 01:17:03.6	80.4	95.2					
WET	e P	Z 01:17:06.7	81.0	94.1					
CLL	e P	Z 01:17:06.4	81.0	94.6					
MOX	e P	Z 01:17:11.1	81.9	93.4					
FUR	e P	Z 01:17:11.4	82.0	92.8					
GRA1	e P	Z 01:17:12.7	82.1	92.9	1.0	51	5.6		
	e pP	Z 01:17:23.0							
CLZ	e P	Z 01:17:15.5	82.7	92.6	1.1	35	5.5		
	e pP	Z 01:17:26.0							
BSEG	e P	Z 01:17:16.6	82.8	92.8					
STU	e P	Z 01:17:18.9	83.4	91.3					
BFO	e P	Z 01:17:21.8	83.9	90.6	1.0	14	5.2		
IBBN	e P	Z 01:17:24.1	84.3	90.6					
BUG	e P	Z 01:17:25.2	84.6	90.1					
WLF	e P	Z 01:17:29.5	85.3	89.1					

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

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

132

2004/12/30 01:13:52.8 20.710N 95.320E 33.0N 5.0 SZGRF
Myanmar

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	01:24:54.1	68.7	83.0	0.8	11	5.1		
GEC2	e P	Z	01:24:56.7	69.1	82.0	0.9	13	5.2		
CLL	e P	Z	01:24:57.0	69.3	82.4	0.9	7	4.9		
WET	e P	Z	01:24:59.8	69.6	81.5	0.9	9	4.9		
MOX	e P	Z	01:25:03.2	70.2	81.1	1.1	11	4.9		
BSEG	e P	Z	01:25:05.2	70.5	81.3	0.9	19	5.2		
GRA1	e P	Z	01:25:06.2	70.6	80.5	1.1	18	5.1		
CLZ	e P	Z	01:25:06.9	70.8	80.6	0.9	12	5.0		
FUR	e P	Z	01:25:07.1	70.8	80.0	0.9	7	4.8		
STU	e P	Z	01:25:14.5	72.1	78.8					
IBBN	e P	Z	01:25:15.8	72.3	78.8					
BFO	e P	Z	01:25:18.1	72.7	78.0	1.0	5	4.6		
BUG	e P	Z	01:25:18.5	72.8	78.2					
WLF	e P	Z	01:25:25.6	73.8	76.8					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/30 01:43:1.0 2.760N 94.400E 35.7 4.9
Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	01:55:15.8	81.8	95.2	0.8	7	4.9		
BRG	e P	Z	01:55:15.8	81.8	95.7					
WET	e P	Z	01:55:18.4	82.4	94.6					
CLL	e P	Z	01:55:18.7	82.5	95.0					
MOX	e P	Z	01:55:23.3	83.3	93.8					
FUR	e P	Z	01:55:23.5	83.4	93.3					
GRA1	e P	Z	01:55:24.8	83.5	93.4	0.8	10	5.1		
	e pP	Z	01:55:35.1							
CLZ	e P	Z	01:55:27.7	84.1	93.0	0.8	8	5.0		
BSEG	e P	Z	01:55:28.3	84.3	93.2					
STU	e P	Z	01:55:30.6	84.8	91.8					
BFO	e P	Z	01:55:33.6	85.3	91.1	0.8	3	4.6		
BUG	e P	Z	01:55:37.5	86.1	90.5					

Date Origin Time Lat Long Depth mb Ms ML Source
2004/12/30 04:28:56.2 7.590N 92.360E 672.3N 5.5
Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	04:39:41.9	76.8	94.2					
GEC2	e P	Z	04:39:42.2	76.8	93.5	0.8	60	5.8		

WET	e P	Z	04:39:45.1	77.4	93.0				
CLL	e P	Z	04:39:44.7	77.4	93.5				
MOX	e P	Z	04:39:49.5	78.3	92.3				
FUR	e P	Z	04:39:50.1	78.4	91.5				
GRA1	i P	+ Z	04:39:51.3	78.5	91.8	0.8	52	5.6	
CLZ	e P	Z	04:39:53.9	79.1	91.6	0.8	46	5.6	
BSEG	e P	Z	04:39:54.4	79.2	91.9				
STU	e P	Z	04:39:57.4	79.8	90.1				
BFO	e P	Z	04:40:00.2	80.4	89.4	0.7	26	5.2	
IBBN	e P	Z	04:40:02.3	80.7	89.6				
BUG	e P	Z	04:40:03.8	81.0	89.1				
WLF	e P	Z	04:40:08.2	81.8	87.9				

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/30 06:38:31.5 10.650N 91.420E 34.1 4.9
 Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:50:03.3	73.9	92.9					
	e pP	Z	06:50:13.2							
GEC2	e P	Z	06:50:03.8	73.9	92.1	1.1	13	4.8		
CLL	e P	Z	06:50:06.1	74.5	92.3					
WET	e P	Z	06:50:06.9	74.5	91.6					
MOX	e P	Z	06:50:11.8	75.3	91.0					
GRA1	e P	Z	06:50:13.2	75.6	90.5	0.9	14	5.1		
	e pP	Z	06:50:23.2							
CLZ	e P	Z	06:50:15.8	76.1	90.4	0.8	7	4.9		
BSEG	e P	Z	06:50:16.6	76.2	90.8					
BFO	e P	Z	06:50:23.4	77.5	88.0	1.1	9	4.8		
BUG	e P	Z	06:50:27.7	78.1	87.8					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/30 07:23:32.5 7.870N 94.040E 33.0N 4.6
 Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	07:35:26.4	77.7	92.7					
GEC2	e P	Z	07:35:26.8	77.7	92.1					
CLL	e P	Z	07:35:29.2	78.3	92.0					
WET	e P	Z	07:35:29.6	78.3	91.5					
MOX	e P	Z	07:35:34.2	79.1	90.8					
GRA1	e P	Z	07:35:35.7	79.4	90.3	0.7	5	4.6		
BSEG	e P	Z	07:35:39.1	80.0	90.4					
IBBN	e P	Z	07:35:47.2	81.5	88.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	09:40:14.3	37.500N	137.500E	33.0N	4.9			SZGRF

Near west coast of eastern Honshu, Japan

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	09:52:15.2	78.7	42.4					
CLL	e P	Z	09:52:15.4	78.8	41.8					
CLZ	e P	Z	09:52:19.6	79.5	40.0	0.7	7	4.7		
MOX	e P	Z	09:52:21.3	79.9	40.8					
GEC2	e P	Z	09:52:24.0	80.3	42.0	0.9	6	4.6		
WET	e P	Z	09:52:25.2	80.5	41.5					
GRA1	e P	Z	09:52:27.1	80.8	40.4	0.9	18	5.1		
FUR	e P	Z	09:52:32.5	81.9	40.3					
WLF	e P	Z	09:52:37.4	82.8	36.9					
BFO	e P	Z	09:52:37.8	83.0	38.3	0.9	14	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	i P	- Z	13:41:43.5			0.9	46	5.4		
	e pP	Z	13:42:03.1							
	e sP	Z	13:42:10.6							

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	17:34:37.3	5.200N	93.370E	35.4	5.3			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	17:46:40.1	79.3	94.4	1.1	34	5.3		
BRG	e P	Z	17:46:40.0	79.3	94.9					
WET	e P	Z	17:46:43.2	79.9	93.8					
MOX	e P	Z	17:46:47.6	80.8	93.1					
GRA1	e P	Z	17:46:49.6	81.0	92.6	1.0	30	5.3		
	e pP	Z	17:46:59.9							
CLZ	e P	Z	17:46:52.1	81.6	92.3	1.1	23	5.2		
BSEG	e P	Z	17:46:53.0	81.7	92.5					
STU	e P	Z	17:46:55.6	82.3	90.9					
BFO	e P	Z	17:46:58.6	82.8	90.2	1.8	41	5.4		
BUG	e P	Z	17:47:02.7	83.5	89.8					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

135

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	17:58:14.3	12.140N	91.720E	25.3	6.0			SZGRF

Andaman Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:09:41.1	72.9	91.7					
GEC2	e P	Z 18:09:41.7	73.0	90.9	1.1	162	6.1		
CLL	e P	Z 18:09:44.3	73.5	91.1	1.3	157	5.9		
	e (S)	N 18:19:17.5							
	e L	Z 18:46:30.7			20.0	1230		5.2	
WET	e P	Z 18:09:44.9	73.6	90.3					
MOX	e P	Z 18:09:49.6	74.4	89.8					
FUR	e P	Z 18:09:50.7	74.6	88.8					
GRA1	e P	Z 18:09:51.6	74.6	89.2	1.2	210	6.0		
CLZ	e P	Z 18:09:53.9	75.2	89.2	1.2	192	6.0		
BSEG	e P	Z 18:09:54.1	75.2	89.7					
BFO	e P	Z 18:10:01.7	76.6	86.7	1.2	92	5.8		
IBBN	e P	Z 18:10:03.0	76.7	87.2					
BUG	e P	Z 18:10:04.9	77.1	86.6					
WLF	e P	Z 18:10:10.2	77.9	85.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	19:18: 2.2	1.640N	93.790E	31.4	5.4			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 19:30:21.1	82.3	96.4	1.1	28	5.3		
BRG	e P	Z 19:30:21.2	82.3	96.9					
WET	e P	Z 19:30:24.0	82.8	95.8					
MOX	e P	Z 19:30:28.5	83.8	95.0					
	e pP	Z 19:30:37.4							
FUR	e P	Z 19:30:28.5	83.8	94.5					
GRA1	e P	Z 19:30:30.0	83.9	94.6	2.9	185	5.8		
	e pP	Z 19:30:39.0							
CLZ	e P	Z 19:30:32.8	84.6	94.2	1.2	17	5.1		
	e pP	Z 19:30:42.2							
BSEG	e P	Z 19:30:34.1	84.8	94.3					
BFO	e P	Z 19:30:38.5	85.8	92.3	3.1	154	5.6		
BUG	e P	Z 19:30:42.9	86.5	91.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30								

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e PKP	Z 21:19:50.8							

BUG	e	PKP	Z	21:19:51.2
CLL	e	PKP	Z	21:19:49.4
CLZ	e	PKP	Z	21:19:49.1
FUR	e	PKP	Z	21:19:59.0
GEC2	e	PKP	Z	21:19:56.3
GRA1	e	PKP	Z	21:19:55.3
IBBN	e	PKP	Z	21:19:48.2
WLF	e	PKP	Z	21:19:57.1

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	21:35:59.1	4.790N	94.790E	43.8	5.6			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 21:48:08.5	80.5	94.1					
GEC2	e P	Z 21:48:08.8	80.5	93.6	1.2	75	5.6		
WET	e P	Z 21:48:11.7	81.1	93.0					
CLL	e P	Z 21:48:11.3	81.1	93.4					
MOX	e P	Z 21:48:16.1	82.0	92.2					
FUR	e P	Z 21:48:16.8	82.1	91.6					
GRA1	e P	Z 21:48:17.8	82.2	91.8	1.5	104	5.7		
	e pP	Z 21:48:30.5							
CLZ	e P	Z 21:48:20.4	82.8	91.4	1.1	37	5.5		
BSEG	e P	Z 21:48:20.9	82.9	91.6					
STU	e P	Z 21:48:24.0	83.5	90.1					
BFO	e P	Z 21:48:26.6	84.1	89.4	1.0	30	5.5		
IBBN	e P	Z 21:48:28.8	84.4	89.4					
BUG	e P	Z 21:48:30.3	84.7	88.9					
WLF	e P	Z 21:48:34.6	85.5	87.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	23:04:46.0	3.624N	95.524E	33.0N	4.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 23:17:01.7	81.9	94.3					
GEC2	e P	Z 23:17:02.2	81.9	93.8					
WET	e P	Z 23:17:05.1	82.5	93.2					
MOX	e P	Z 23:17:09.4	83.3	92.4					
FUR	e P	Z 23:17:10.0	83.5	91.9					
GRA1	e P	Z 23:17:11.1	83.6	92.0	0.8	6	4.9		
CLZ	e P	Z 23:17:13.8	84.2	91.6					
BFO	e P	Z 23:17:20.1	85.4	89.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/30	23:54:40.9	18.669N	96.110E	33.0N	4.7			SZGRF

Myanmar

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	00:05:53.8	70.7	83.8					
GEC2	e P	Z	00:05:56.4	71.1	82.9					
CLL	e P	Z	00:05:56.6	71.3	83.2					
WET	e P	Z	00:05:59.8	71.6	82.4					
MOX	e P	Z	00:06:02.4	72.2	82.0					
BSEG	e P	Z	00:06:04.9	72.6	82.0					
CLZ	e P	Z	00:06:06.4	72.8	81.4	0.9	5	4.7		
STU	e P	Z	00:06:13.7	74.1	79.7					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	01:12:59.5	53.156N	151.300E	33.0N	5.0			SZGRF

Sea of Okhotsk

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
CLL	e P	Z	01:24:06.9	69.8	25.1	1.0	16	5.1		
BRG	e P	Z	01:24:08.5	70.0	25.6					
CLZ	e P	Z	01:24:08.8	70.0	23.7	1.0	19	5.2		
IBBN	e P	Z	01:24:09.5	70.2	22.2					
MOX	e P	Z	01:24:13.1	70.8	24.3					
GRA1	e P	Z	01:24:19.1	71.8	23.9	1.0	24	5.3		
WET	e P	Z	01:24:19.5	71.8	24.8	0.9	8	4.8		
GEC2	e P	Z	01:24:19.4	71.9	25.2	1.0	4	4.5		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	02:24:1.3	6.950N	92.890E	33.0N	5.7			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	02:35:55.1	77.6	94.2					
GEC2	e P	Z	02:35:55.3	77.7	93.6	1.1	86	5.8		
WET	e P	Z	02:35:58.3	78.2	93.0					
CLL	i P	+ Z	02:35:58.1	78.3	93.5	1.8	124	5.7		
	e S	N	02:45:53.6							
	e PPS	Z	02:46:48.2							
	e SS	E	02:51:20.5							
	e SSS	N	02:54:21.5							
	e LR	Z	03:06:39.9							
	e L	Z	03:16:54.9			20.0	10094		6.1	
MOX	e P	Z	02:36:03.0	79.1	92.3					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

138

FUR	e P	Z	02:36:03.5	79.2	91.6				
GRA1	e P	Z	02:36:04.8	79.3	91.8	1.6	191	5.9	
CLZ	e P	Z	02:36:07.4	79.9	91.6	0.9	62	5.5	
BSEG	e P	Z	02:36:08.0	80.0	91.9				
STU	e P	Z	02:36:11.2	80.6	90.1				
BFO	e P	Z	02:36:14.0	81.2	89.4	1.0	52	5.5	
IBBN	e P	Z	02:36:16.2	81.5	89.6				
BUG	e P	Z	02:36:17.7	81.8	89.1				
WLF	e P	Z	02:36:22.2	82.6	88.0				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	05:54:1.5	11.920N	91.530E	29.4	5.2			SZGRF

Andaman Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:05:29.0	73.0	92.0					
GEC2	e P	Z	06:05:29.7	73.1	91.2	1.5	27	5.2		
CLL	e P	Z	06:05:32.2	73.6	91.4					
WET	e P	Z	06:05:32.9	73.6	90.6					
MOX	e P	Z	06:05:37.5	74.4	90.1					
FUR	e P	Z	06:05:39.0	74.7	89.1					
GRA1	e P	Z	06:05:39.4	74.7	89.5	1.6	58	5.4		
	e pP	Z	06:05:47.7							
CLZ	e P	Z	06:05:42.2	75.2	89.4	1.7	55	5.3		
BSEG	e P	Z	06:05:42.1	75.2	90.0					
	e pP	Z	06:05:50.7							
BFO	e P	Z	06:05:49.9	76.6	87.0	1.4	25	5.1		
BUG	e P	Z	06:05:53.3	77.1	86.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	06:26:23.4	5.765N	94.476E	33.0N	4.7			SZGRF

Northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	06:38:27.6	79.6	93.7					
GEC2	e P	Z	06:38:27.7	79.6	93.1					
WET	e P	Z	06:38:30.7	80.1	92.6					
CLL	e P	Z	06:38:30.6	80.2	93.0					
FUR	e P	Z	06:38:36.0	81.2	91.2					
GRA1	e P	Z	06:38:36.5	81.2	91.4	0.8	7	4.7		
CLZ	e P	Z	06:38:39.5	81.8	91.1					
IBBN	e P	Z	06:38:48.1	83.4	89.1					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

139

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	07:26:41.0	5.387N	95.062E	47.5	4.6			SZGRF

Northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 07:38:48.2	80.2	93.5					
GEC2	e P	Z 07:38:48.4	80.3	93.0					
WET	e P	Z 07:38:51.3	80.8	92.4					
CLL	e P	Z 07:38:50.9	80.8	92.8					
GRA1	e P	Z 07:38:57.7	81.9	91.2	0.7	4	4.6		
	e pP	Z 07:39:11.4							
BSEG	e P	Z 07:39:00.4	82.6	91.1					
BFO	e P	Z 07:39:06.8	83.8	88.8					
IBBN	e P	Z 07:39:08.6	84.1	88.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	08:52:18.5	4.728N	93.668E	16.6	4.9			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 09:04:24.0	79.8	94.5	0.9	19	5.0		
BRG	e P	Z 09:04:23.7	79.9	95.0					
WET	e P	Z 09:04:26.8	80.4	93.9	1.4	17	4.8		
CLL	e P	Z 09:04:26.5	80.5	94.3					
MOX	e P	Z 09:04:31.4	81.3	93.1					
GRA1	e P	Z 09:04:33.1	81.5	92.7	1.0	14	5.1		
	e pP	Z 09:04:37.9							
CLZ	e P	Z 09:04:35.8	82.1	92.3	1.0	10	4.9		
BSEG	e P	Z 09:04:36.7	82.3	92.6					
BFO	e P	Z 09:04:42.1	83.4	90.3					
IBBN	e P	Z 09:04:44.5	83.8	90.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	09:56:59.0	6.740N	93.470E	33.0N	5.4			SZGRF

Nicobar Islands, India, region

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 10:08:55.4	78.2	93.9					
GEC2	e P	Z 10:08:56.1	78.2	93.3	2.0	135	5.6		
WET	e P	Z 10:08:59.1	78.8	92.7					
CLL	e P	Z 10:08:58.6	78.8	93.2					
MOX	e P	Z 10:09:03.7	79.6	92.0					
GRA1	e P	Z 10:09:05.2	79.9	91.5	1.4	62	5.4		
CLZ	e P	Z 10:09:08.1	80.4	91.2	1.8	80	5.5		
BSEG	e P	Z 10:09:08.5	80.5	91.5					

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

140

BFO	e P	Z	10:09:14.5	81.7	89.1	1.3	26	5.2
IBBN	e P	Z	10:09:16.7	82.1	89.2			
BUG	e P	Z	10:09:18.5	82.4	88.7			

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	10:58:21.6	4.400N	94.870E	33.0N	5.8			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	11:10:33.0	80.9	94.3					
GEC2	i P	+ Z	11:10:33.4	80.9	93.8	0.9	127	6.0		
WET	e P	Z	11:10:36.2	81.4	93.2					
CLL	e P	Z	11:10:35.8	81.5	93.6					
MOX	e P	Z	11:10:40.7	82.3	92.4					
FUR	e P	Z	11:10:41.1	82.5	91.8					
GRA1	e P	Z	11:10:42.3	82.5	92.0	1.0	84	5.9		
CLZ	e P	Z	11:10:44.9	83.1	91.6	1.1	70	5.8		
BSEG	e P	Z	11:10:45.4	83.2	91.8					
STU	e P	Z	11:10:48.3	83.8	90.3					
BFO	e P	Z	11:10:51.1	84.4	89.7	0.9	38	5.6		
IBBN	e P	Z	11:10:53.3	84.8	89.6					
BUG	e P	Z	11:10:54.8	85.1	89.1					
WLF	e P	Z	11:10:59.1	85.8	88.1					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	11:27:52.4	51.530N	175.690W	33.0N	5.2			SZGRF

Andreanof Islands, Aleutian Islands, United States

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z	11:39:29.9	74.4	3.9					
IBBN	e P	Z	11:39:39.5	76.1	2.2					
CLZ	e P	Z	11:39:42.0	76.5	3.9	0.8	24	5.4		
CLL	e P	Z	11:39:43.4	76.9	5.5					
BUG	e P	Z	11:39:43.9	77.0	1.9					
BRG	e P	Z	11:39:45.7	77.3	6.1					
MOX	e P	Z	11:39:48.0	77.6	4.6					
GRA1	e P	Z	11:39:53.9	78.6	4.4	0.9	33	5.5		
WLF	e P	Z	11:39:54.5	78.8	1.2					
WET	e P	Z	11:39:55.9	79.1	5.4					
GEC2	e P	Z	11:39:57.2	79.3	5.9	2.6	60	5.2		
STU	e P	Z	11:39:58.7	79.6	3.1					
BFO	e P	Z	11:40:01.2	80.1	2.5	0.9	9	4.7		
FUR	e P	Z	11:40:01.7	80.1	4.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	12:06:19.5	8.320N	91.150E	672.3N	5.6			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	12:16:57.8	75.5	94.7					
GEC2	i P	+ Z	12:16:58.0	75.5	93.9	1.3	133	5.9		
WET	e P	Z	12:17:01.0	76.1	93.4					
CLL	i P	+ Z	12:17:00.6	76.1	94.0	1.3	49	5.4		
	e		12:17:46.9							
	e PP	Z	12:20:02.7							
	e PPP	Z	12:21:50.0							
	e S	T	12:26:57.4							
	e PS	R	12:27:39.7							
	e SS	T	12:32:01.6							
	e SSS	R	12:35:19.0							
	e LQ	T	12:44:42.2							
	e L	Z	12:57:27.0			22.0	6356		5.9	
MOX	e P	Z	12:17:05.7	76.9	92.8					
FUR	e P	Z	12:17:06.0	77.1	91.9					
GRA1	e P	Z	12:17:07.4	77.2	92.3	1.2	70	5.7		
CLZ	e P	Z	12:17:10.1	77.8	92.1	1.2	48	5.5		
BSEG	e P	Z	12:17:10.7	77.9	92.5					
STU	e P	Z	12:17:13.6	78.5	90.5					
BFO	e P	Z	12:17:16.4	79.0	89.8	1.1	21	5.1		
IBBN	e P	Z	12:17:18.8	79.4	90.1					
BUG	e P	Z	12:17:20.2	79.7	89.6					
WLF	e P	Z	12:17:24.5	80.4	88.4					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	13:09:53.6	4.483N	94.399E	33.0N	4.6			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	13:22:02.6	80.5	94.6					
GEC2	e P	Z	13:22:02.8	80.5	94.1	0.8	6	4.6		
WET	e P	Z	13:22:05.7	81.1	93.5					
CLL	e P	Z	13:22:06.3	81.1	93.9					
MOX	e P	Z	13:22:10.2	82.0	92.7					
GRA1	e P	Z	13:22:11.6	82.2	92.3	0.9	8	4.8		
CLZ	e P	Z	13:22:14.7	82.8	91.9	0.8	4	4.7		
BSEG	e P	Z	13:22:15.2	82.9	92.1					
BFO	e P	Z	13:22:21.1	84.0	89.9	0.9	2	4.4		
IBBN	e P	Z	13:22:23.2	84.4	89.9					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	13:41:45.2	2.170N	95.191E	33.0N	5.5			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	13:54:06.1	82.8	95.0	1.5	110	5.8		
BRG	e P	Z	13:54:06.0	82.8	95.4					
WET	e P	Z	13:54:09.0	83.3	94.4					
CLL	e P	Z	13:54:08.8	83.4	94.8					
MOX	e P	Z	13:54:13.5	84.3	93.6					
FUR	e P	Z	13:54:13.6	84.3	93.1					
GRA1	e P	Z	13:54:14.9	84.4	93.2	1.3	58	5.6		
CLZ	e P	Z	13:54:17.6	85.1	92.7	1.4	36	5.4		
BSEG	e P	Z	13:54:18.3	85.2	92.9					
STU	e P	Z	13:54:20.9	85.7	91.6					
BFO	e P	Z	13:54:23.4	86.3	90.9	1.7	39	5.3		
IBBN	e P	Z	13:54:26.0	86.7	90.7					
BUG	e P	Z	13:54:27.3	87.0	90.3					
WLF	e P	Z	13:54:31.3	87.7	89.3					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	14:23:49.9	6.087N	92.633E	33.0N	4.5			SZGRF

Nicobar Islands, India, region

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	14:35:45.5	78.1	94.3					
BRG	e P	Z	14:35:45.6	78.2	94.9					
WET	e P	Z	14:35:48.8	78.7	93.8					
MOX	e P	Z	14:35:53.7	79.6	93.1					
GRA1	e P	Z	14:35:55.3	79.8	92.6	0.7	4	4.5		
CLZ	e P	Z	14:35:57.7	80.4	92.3					
BSEG	e P	Z	14:35:58.8	80.6	92.6					
STU	e P	Z	14:36:01.7	81.1	90.9					
BFO	e P	Z	14:36:04.7	81.7	90.2					
BUG	e P	Z	14:36:08.6	82.4	89.8					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	14:38:42.5	4.590N	94.940E	33.0N	6.0			SZGRF

Off west coast of northern Sumatera, Indonesia

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	14:50:52.8	80.8	94.1					
GEC2	e P	Z	14:50:53.2	80.8	93.6	0.9	195	6.1		
WET	e P	Z	14:50:56.0	81.3	93.0	1.1	100	5.8		

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

143

CLL	e P	Z	14:50:55.6	81.4	93.4				
MOX	e P	Z	14:51:00.5	82.2	92.2				
FUR	e P	Z	14:51:00.9	82.4	91.7	1.1	101	5.9	
GRA1	e P	Z	14:51:02.1	82.4	91.8	1.1	167	6.1	
CLZ	e P	Z	14:51:04.7	83.0	91.4	1.2	127	6.0	
BSEG	e P	Z	14:51:05.2	83.1	91.6	1.1	150	6.1	
STU	e P	Z	14:51:08.2	83.7	90.2				
BFO	e P	Z	14:51:10.9	84.3	89.5	1.0	63	5.8	
IBBN	e P	Z	14:51:13.1	84.6	89.4				
BUG	e P	Z	14:51:14.6	85.0	89.0	1.2	139	6.1	
WLF	e P	Z	14:51:18.9	85.7	87.9				

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	14:54:56.8	6.258N	91.445E	33.0N	4.6			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z	15:06:47.7	77.2	95.1	0.9	8	4.8		
BRG	e P	Z	15:06:47.8	77.3	95.8					
WET	e P	Z	15:06:50.9	77.8	94.6					
CLL	e P	Z	15:06:51.0	77.9	95.1					
GRA1	e P	Z	15:06:57.3	78.9	93.4	0.8	5	4.6		
	e		15:07:35.1							
CLZ	e P	Z	15:07:00.5	79.6	93.1	0.9	5	4.5		
BSEG	e P	Z	15:07:01.5	79.7	93.5					
BUG	e P	Z	15:07:10.8	81.5	90.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	16:15:47.6	7.563N	93.576E	33.0N	5.0			SZGRF
Nicobar Islands, India, region								

Sta	Phase		Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z	16:27:40.5	77.6	93.2					
GEC2	e P	Z	16:27:40.9	77.7	92.6	1.1	22	5.2		
WET	e P	Z	16:27:43.9	78.2	92.1					
CLL	e P	Z	16:27:43.4	78.2	92.6					
MOX	e P	Z	16:27:48.4	79.1	91.4					
FUR	e P	Z	16:27:49.7	79.2	90.7					
GRA1	e P	Z	16:27:50.3	79.3	90.9	1.1	23	5.1		
CLZ	e P	Z	16:27:52.8	79.9	90.6	2.0	47	5.1		
BSEG	e P	Z	16:27:53.3	79.9	91.0					
STU	e P	Z	16:27:56.9	80.6	89.2					
BFO	e P	Z	16:27:59.9	81.2	88.5	1.1	10	4.8		
IBBN	e P	Z	16:28:01.6	81.5	88.7					
BUG	e P	Z	16:28:03.5	81.8	88.1					

WLF e P Z 16:28:07.9 82.6 87.0

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/31 17:29:2.9 22.530S 178.900W 33.0N
 South of Fiji Islands

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e PKPbc	Z 17:48:44.4	147.8	16.1					
CLL	e PKPbc	Z 17:48:49.5	149.8	22.2					
	e PKPab	Z 17:48:54.7							
CLZ	e PKPbc	Z 17:48:49.8	149.8	17.2					
BRG	e PKPbc	Z 17:48:50.0	149.9	24.2					
MOX	e PKPbc	Z 17:48:51.9	150.7	20.2					
GRA1	e PKPbc	Z 17:48:54.2	151.7	20.0					
	e PKPab	Z 17:49:03.3							
GEC2	e PKPbc	Z 17:48:54.5	151.9	25.3					
STU	e PKPbc	Z 17:48:57.0	153.0	16.6					
FUR	e PKPbc	Z 17:48:57.2	153.1	21.2					
BFO	e PKPbc	Z 17:48:58.3	153.6	15.1					
	e PKPab	Z 17:49:10.2							

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/31 17:47:56.1 3.054N 95.616E 33.0N 5.5
 Off west coast of northern Sumatra, Indonesia

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 18:00:14.6	82.4	94.5					
GEC2	e P	Z 18:00:14.9	82.4	94.1	1.2	80	5.7		
WET	e P	Z 18:00:17.7	82.9	93.5					
CLL	e P	Z 18:00:17.4	83.0	93.9					
MOX	e P	Z 18:00:22.2	83.8	92.7					
FUR	e P	Z 18:00:22.6	84.0	92.2					
GRA1	e P	Z 18:00:23.7	84.0	92.3	1.2	69	5.7		
CLZ	e P	Z 18:00:26.4	84.7	91.9	1.2	38	5.5		
BSEG	e P	Z 18:00:26.9	84.8	92.0					
BFO	e P	Z 18:00:32.5	85.9	90.0	0.9	16	5.2		
IBBN	e P	Z 18:00:34.7	86.3	89.8					
BUG	e P	Z 18:00:36.1	86.6	89.4					

Date Origin Time Lat Long Depth mb Ms ML Source
 2004/12/31 18:01:56.3 5.920N 93.037E 33.0N 4.7
 Off west coast of northern Sumatra, Indonesia

./2004/bul0412.txt

Thu Apr 23 08:38:25 2020

145

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
GEC2	e P	Z 18:13:54.3	78.5	94.1	0.9	9	4.8		
BRG	e P	Z 18:13:54.1	78.5	94.7					
WET	e P	Z 18:13:57.4	79.1	93.6					
CLL	e P	Z 18:13:57.1	79.2	94.1					
MOX	e P	Z 18:14:02.1	80.0	92.9					
FUR	e P	Z 18:14:02.5	80.1	92.2					
GRA1	e P	Z 18:14:03.8	80.2	92.4	0.9	12	4.8		
CLZ	e P	Z 18:14:06.6	80.8	92.1	0.9	7	4.7		
BSEG	e P	Z 18:14:07.2	80.9	92.4					
BFO	e P	Z 18:14:13.1	82.1	90.0	0.8	2	4.4		
BUG	e P	Z 18:14:16.9	82.7	89.6					

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	20:13:43.1	37.010N	140.790E	33.0N	5.2			SZGRF

Eastern Honshu, Japan

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BSEG	e P	Z 20:25:49.1	79.5	38.1	1.2	29	5.1		
BRG	e P	Z 20:25:53.9	80.5	40.4					
CLL	e P	Z 20:25:54.1	80.6	39.8					
CLZ	e P	Z 20:25:57.7	81.2	38.0	1.4	28	5.1		
MOX	e P	Z 20:25:59.8	81.6	38.7					
IBBN	e P	Z 20:26:00.5	81.8	36.1					
GEC2	e P	Z 20:26:02.5	82.2	40.0	1.0	8	4.8		
WET	e P	Z 20:26:03.4	82.3	39.5					
GRA1	e P	Z 20:26:05.2	82.5	38.4	1.5	61	5.6		
FUR	e P	Z 20:26:10.9	83.7	38.3	0.8	20	5.4		
BFO	e P	Z 20:26:15.9	84.8	36.3	1.0	16	5.2		

Date	Origin Time	Lat	Long	Depth	mb	Ms	ML	Source
2004/12/31	22:10:19.4	16.978N	88.849E	33.0N	5.1			SZGRF

Bay of Bengal

Sta	Phase	Time	Dist	BAz	T[s]	A[nm]	mb	MS	ML
BRG	e P	Z 22:21:11.4	67.4	90.6					
GEC2	e P	Z 22:21:12.6	67.6	89.5	0.8	9	5.1		
CLL	e P	Z 22:21:15.7	68.0	90.0					
WET	e P	Z 22:21:16.3	68.1	89.0					
MOX	e P	Z 22:21:22.0	68.9	88.7					
GRA1	e P	Z 22:21:23.2	69.2	88.0	1.0	17	5.2		
FUR	e P	Z 22:21:23.3	69.2	87.5					
CLZ	e P	Z 22:21:25.0	69.7	88.2	0.9	16	5.2		
STU	e P	Z 22:21:31.4	70.6	86.2					
BFO	e P	Z 22:21:34.5	71.2	85.4	1.0	9	4.9		

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-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