

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

(produced by SZO/BGR - HANNOVER)

April 2019 UPDATED 26.February 20201

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

Event 90401002 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/01	01:23:57.31			6.8100	94.4800				33.0				16	78.78	82.40	m i ke	BGR
OrigID 90401008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90401008
Ms	4.7		BGR	90401008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	80.86		P	01:36:08.098	-0.1	90.9		5.36		TAS		23.5	1.23	m_e mb	5.1
BFO	82.40		P	01:36:16.231		90.9		5.36		TAS		12.6	1.02	m_e mb	5.0
BRG	78.78		P	01:35:57.162	-0.6	90.9		5.36		TAS		12.5	1.08	m_e mb	4.9
BSEG	81.10		P	01:36:09.760	0.4	90.9		5.36		TAS		30.5	0.96	m_e mb	5.3
CLL	79.39		P	01:36:00.142	0.2	90.9		5.36		TAS		6.9	0.93	m_e mb	4.7
CLZ	81.05		P	01:36:09.559	0.5	90.9		5.36		TAS		14.3	0.95	m_e mb	5.0
FLT1	80.52		P	01:36:05.657	-0.3	90.9		5.36		TAS		23.9	1.61	m_e mb	5.0
GEC2	78.84		P	01:35:57.671		90.9		5.36		TAS		18.7	0.92	m_e mb	5.1
GRA1	80.49		P	01:36:06.786		90.9		5.36		TAS		21.0	1.01	m_e mb	5.0
GRA1	80.49		L	02:03:51.480						T__		297.5	20.90	a_e Ms	4.6
MANZ	79.92		P	01:36:03.806		90.9		5.36		TAS		5.0	1.14	m_e mb	4.3
MOX	80.25		L	02:15:05.999						T__		429.6	18.60	a_e Ms	4.8
NRDL	81.21		P	01:36:10.651	-0.9	90.9		5.36		TAS		26.1	1.24	m_e mb	5.1
RETH	81.67		P	01:36:12.635	-0.1	90.9		5.36		TAS		102.1	1.28	m_e mb	5.8
RJOB	79.41		P	01:35:59.917		90.9		5.36		TAS		10.7	0.99	m_e mb	4.8
ROTZ	79.85		P	01:36:03.359		90.9		5.36		TAS		2.8	0.94	m_e mb	4.2
RUE	78.97		P	01:35:58.074	-0.3	90.9		5.36		TAS		37.7	0.95	m_e mb	5.4
WET	79.39		P	01:36:00.633		90.9		5.36		TAS		12.7	1.02	m_e mb	4.9

Event 90402001 Near Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/02	21:35:35.49			51.9030	174.1450				10.0			31		72.72	79.86	m i ke	BGR
OrigID 90402007																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.2		BGR	90402007
MBB	6.4		BGR	90402007
Ms	6.3		BGR	90402007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	75.41		P	21:47:17.349	0.1	10.7		5.60		TAS		605.3	1.52	m_e	MBB 6.5
BFO	79.41		P	21:47:39.614	0.2	10.7		5.60		TAS		230.9	1.23	m_e	MBB 6.1
BRG	76.24		P	21:47:21.723	-1.1	10.7		5.60		TAS		136.2	1.01	m_e	MBB 6.1
BSEG	73.67		P	21:47:07.729	0.1	10.7		5.60		TAS		606.1	0.99	m_e	MBB 6.7
BUG	76.44		P	21:47:21.911	0.2	10.7		5.60		TAS				m_e	
CLL	75.94		P	21:47:19.794	0.4	10.7		5.60		TAS		125.4	1.14	m_e	MBB 6.4
CLZ	75.73		P	21:47:19.625	-0.5	10.7		5.60		TAS		403.6	0.96	m_e	MBB 6.6
FLT1	75.15		P	21:47:14.114	-0.0	10.7		5.60		TAS		242.3	0.96	m_e	MBB 6.3
FUR	79.24		P	21:47:39.493	0.5	10.7		5.60		TAS		279.7	1.02	m_e	MBB 6.4
GEC2	78.25		P	21:47:33.407	-1.2	10.7		5.60		TAS		240.7	1.48	m_e	MBB 6.3
GRA1	77.75		P	21:47:30.827	0.6	10.7		5.60		TAS		382.9	1.20	m_e	mb 6.4
GRA1	77.75		L	22:33:05.568						T__		11702.9	18.00	a_e	Ms 6.2
GTTG	76.06		P	21:47:21.392	0.3	10.7		5.60		TAS		475.5	1.20	m_e	MBB 6.5
HLG	73.66		P	21:47:11.247	3.7	10.7		5.60		TAS		534.2	1.01	m_e	MBB 6.7
IBBN	75.53		P	21:47:18.053	0.5	10.7		5.60		TAS		673.6	0.95	m_e	MBB 6.9
KAST	76.56		P	21:47:23.967	0.0	10.7		5.60		TAS		214.3	1.18	m_e	MBB 6.5
MANZ	77.35		P	21:47:28.359	0.4	10.7		5.60		TAS		31.5	1.10	m_e	MBB 5.7
MOX	76.76		P	21:47:24.983	-0.3	10.7		5.60		TAS		158.4	0.98	m_e	MBB 6.5
MOX	76.76		L	22:32:18.407						T__		13431.6	18.50	a_e	Ms 6.3
NEUB	76.20		P	21:47:22.115	-0.3	10.7		5.60		TAS		474.6	1.18	m_e	MBB 6.5
NRDL	75.11		P	21:47:13.405	-1.8	10.7		5.60		TAS		293.7	1.01	m_e	MBB 6.3
PLN	76.85		P	21:47:25.447	0.2	10.7		5.60		TAS		30.2	0.93	m_e	MBB 6.0
RGN	72.72		P	21:47:02.001	-0.3	10.7		5.60		TAS		782.5	0.91	m_e	MBB 7.0
RJOB	79.46		P	21:47:40.529	-0.1	10.7		5.60		TAS		102.0	0.93	m_e	MBB 6.0
RJOB	79.46		S	21:57:50.541						T__				m_e	
ROTZ	77.55		P	21:47:29.754	0.1	10.7		5.60		TAS		44.4	1.22	m_e	MBB 5.8
RUE	74.69		P	21:47:12.898	-0.4	10.7		5.60		TAS		244.4	0.98	m_e	MBB 6.6
STU	78.89		P	21:47:36.732	0.7	10.7		5.60		TAS		492.7	0.95	m_e	MBB 6.6
TANN	76.88		P	21:47:25.791	0.1	10.7		5.60		TAS		260.3	1.45	m_e	MBB 6.5
TNS	77.53		P	21:47:29.309	0.4	10.7		5.60		TAS		190.5	0.93	m_e	MBB 6.3
UBBA	76.78		P	21:47:24.707	0.0	10.7		5.60		TAS		238.1	1.38	m_e	MBB 6.5
UBR	79.86		P	21:47:42.481		10.7		5.60		TAS		246.9	1.25	m_e	MBB 6.2
UBR	79.86		S	21:57:51.608						T__				m_e	
WET	78.07		P	21:47:32.836	0.1	10.7		5.60		TAS		104.3	1.15	m_e	MBB 6.4
WLF	78.30		P	21:47:32.265	-0.1	10.7		5.60		TAS		234.1	1.06	m_e	MBB 6.6

Event 90403001 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/03	01:52:57.13		22.3100	121.1800				10.0				29		82.58	88.15	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	90403007
MBB	6.0		BGR	90403007
Ms	5.6		BGR	90403007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	84.42		P	02:05:26.686	-0.1	60.9		4.98		TAS		110.4	1.64	m_e	MBB	6.1
BFO	87.64		P	02:05:42.293	-0.7	60.9		4.98		TAS		52.1	1.72	m_e	MBB	5.8
BRG	83.22		P	02:05:20.340	-0.1	60.9		4.98		TAS		97.4	1.53	m_e	MBB	6.1
BSEG	83.72		P	02:05:23.014	0.1	60.9		4.98		TAS		59.7	1.17	m_e	MBB	6.2
BUG	86.59		P	02:05:37.360	-0.2	60.9		4.98		TAS		104.6	1.26	m_e	MBB	5.8
CLL	83.54		P	02:05:21.685	-0.3	60.9		4.98		TAS		64.8	1.08	m_e	MBB	6.0
CLZ	84.73		P	02:05:28.762	-0.6	60.9		4.98		TAS		104.8	1.12	m_e	MBB	6.2
FLT1	84.02		P	02:05:23.926	0.4	60.9		4.98		TAS		65.5	1.18	m_e	MBB	6.0
FUR	86.03		P	02:05:35.451		60.9		4.98		TAS		149.5	1.20	m_e	MBB	6.3
GEC2	84.28		P	02:05:26.133	0.8	60.9		4.98		TAS		65.2	1.13	m_e	MBB	6.1
GRA1	85.31		P	02:05:31.304	-0.0	60.9		4.98		TAS		145.5	1.51	m_e	mb	6.0
GRA1	85.31		L	02:49:08.222						T__		1858.6	18.70	a_e	Ms	5.5
GTTG	85.09		P	02:05:30.437	-0.2	60.9		4.98		TAS		69.3	1.01	m_e	MBB	6.2
IBBN	85.88		P	02:05:33.934	0.6	60.9		4.98		TAS		312.6	1.84	m_e	MBB	6.0
KAST	86.10		P	02:05:34.778	-0.1	60.9		4.98		TAS		123.4	1.91	m_e	MBB	6.0
MANZ	84.67		P	02:05:27.960	0.2	60.9		4.98		TAS		11.8	1.20	m_e	MBB	5.3
MOX	84.63		P	02:05:27.583	0.0	60.9		4.98		TAS				m_e		
MOX	84.63		L	02:47:46.755						T__		2401.4	18.20	a_e	Ms	5.6
NEUB	84.28		P	02:05:25.737	-0.1	60.9		4.98		TAS		117.7	1.19	m_e	MBB	6.2
NRDL	84.54		P	02:05:27.984	-0.7	60.9		4.98		TAS		107.9	1.31	m_e	MBB	6.3
PLN	84.40		P	02:05:26.469	0.1	60.9		4.98		TAS		22.4	1.26	m_e	MBB	5.7
RJOB	85.34		P	02:05:31.355		60.9		4.98		TAS		39.4	1.06	m_e	MBB	6.1
ROTZ	84.72		P	02:05:28.217	0.1	60.9		4.98		TAS		16.7	1.13	m_e	MBB	5.4
RUE	82.58		P	02:05:17.634	0.0	60.9		4.98		TAS		87.2	1.09	m_e	mb	5.9
STU	86.92		P	02:05:39.108	0.2	60.9		4.98		TAS		84.5	1.33	m_e	MBB	6.0
TANN	84.26		P	02:05:25.902	0.1	60.9		4.98		TAS		61.4	1.37	m_e	MBB	6.2
TNS	86.59		P	02:05:37.478	0.1	60.9		4.98		TAS		84.1	1.63	m_e	MBB	6.1
UBBA	85.44		P	02:05:31.664	0.0	60.9		4.98		TAS		178.5	1.74	m_e	MBB	6.0
UBR	86.95		P	02:05:38.575		60.9		4.98		TAS		48.8	1.20	m_e	MBB	5.9
WET	84.62		P	02:05:27.761	-0.4	60.9		4.98		TAS		79.9	1.49	m_e	MBB	6.0
WLF	88.15		P	02:05:45.323	0.2	60.9		4.98		TAS		112.0	1.39	m_e	MBB	6.2

Event 90404002 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/04	01:56:56.58			22.1630	121.6820				33.0			28		83.61	88.54	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	90404008
Ms	5.0		BGR	90404008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	84.81		P	02:09:26.510	-0.5	60.5		4.97		TAS		38.5	1.37	m_e	mb	5.5
BFO	88.04		P	02:09:42.233		60.5		4.97		TAS		44.8	1.99	m_e	mb	5.5
BRG	83.61		P	02:09:20.399	-0.2	60.5		4.97		TAS		25.6	1.22	m_e	mb	5.3
BSEG	84.10		P	02:09:23.187	0.3	60.5		4.97		TAS		34.2	1.36	m_e	mb	5.4
BUG	86.98		P	02:09:37.285	-0.3	60.5		4.97		TAS		36.7	1.19	m_e	mb	5.4
CLL	83.94		P	02:09:21.785	-0.1	60.5		4.97		TAS		29.4	1.12	m_e	mb	5.4
CLZ	85.12		P	02:09:28.391	0.2	60.5		4.97		TAS		42.2	1.08	m_e	mb	5.6
FLT1	84.41		P	02:09:24.064	-0.1	60.5		4.97		TAS		23.5	1.07	m_e	mb	5.3
FUR	86.43		P	02:09:35.164		60.5		4.97		TAS		44.2	1.08	m_e	mb	5.5
GEC2	84.69		P	02:09:25.958	-0.2	60.5		4.97		TAS		24.0	1.08	m_e	mb	5.3
GOR1	84.05		P	02:09:23.016	0.1	60.5		4.97		TAS		67.3	1.33	m_e	mb	5.7
GRA1	85.71		P	02:09:31.612	0.4	60.5		4.97		TAS		52.3	1.31	m_e	mb	5.5
GRA1	85.71		L	02:51:38.762						T__		511.3	20.70	a_e	Ms	4.9
GTTG	85.48		P	02:09:30.222	-0.1	60.5		4.97		TAS		18.2	0.78	m_e	mb	5.4
IBBN	86.26		P	02:09:33.860	0.3	60.5		4.97		TAS		38.8	1.15	m_e	mb	5.4
KAST	86.49		P	02:09:35.163	-0.2	60.5		4.97		TAS		22.0	1.32	m_e	mb	5.1
MANZ	85.07		P	02:09:28.071	0.2	60.5		4.97		TAS		5.5	1.19	m_e	mb	4.7
MOX	85.03		P	02:09:27.497	0.1	60.5		4.97		TAS		34.1	1.36	m_e	mb	5.4
MOX	85.03		L	02:51:36.715						T__		801.2	18.10	a_e	Ms	5.2
NEUB	84.67		P	02:09:25.843	-0.1	60.5		4.97		TAS		43.7	0.98	m_e	mb	5.7
NRDL	84.93		P	02:09:27.514	-0.1	60.5		4.97		TAS		33.5	1.21	m_e	mb	5.4
PLN	84.80		P	02:09:26.454	0.2	60.5		4.97		TAS		8.1	1.23	m_e	mb	4.8
RJOB	85.75		P	02:09:31.504		60.5		4.97		TAS		22.3	1.05	m_e	mb	5.2
ROTZ	85.12		P	02:09:28.413	-0.1	60.5		4.97		TAS		6.1	1.09	m_e	mb	4.8
TANN	84.66		P	02:09:25.701	-0.2	60.5		4.97		TAS		25.0	1.35	m_e	mb	5.3
TNS	86.99		P	02:09:37.615	0.5	60.5		4.97		TAS		19.0	1.36	m_e	mb	5.0
UBBA	85.83		P	02:09:31.585	0.2	60.5		4.97		TAS		26.9	1.31	m_e	mb	5.2
UBR	87.36		P	02:09:39.150		60.5		4.97		TAS		15.6	1.11	m_e	mb	5.0
WET	85.03		P	02:09:27.895	0.2	60.5		4.97		TAS		32.2	1.51	m_e	mb	5.3
WLF	88.54		P	02:09:44.925	-0.5	60.5		4.97		TAS		44.2	1.35	m_e	mb	5.5

Event 90404003 Turkey

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
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OrigID
 2019/04/04 17:31:12.95 37.5880 38.5170 33.0 24 21.20 25.34 m i ke BGR
 90404009

Magnitude Err Nsta Author OrigID
 mb 5.0 BGR 90404009
 Ms 4.5 BGR 90404009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	24.41		P	17:36:29.392		111.4		10.14		TAS		127.2	1.87	m_e	mb 5.1
BRG	21.93		P	17:36:02.901	-0.1	111.4		10.14		TAS		44.0	1.33	m_e	mb 4.7
BSEG	25.34		P	17:36:36.329	-0.0	111.4		10.14		TAS		191.0	2.26	m_e	mb 5.4
CLL	22.65		P	17:36:10.119	-1.4	111.4		10.14		TAS		22.6	0.97	m_e	mb 4.7
CLZ	24.36		P	17:36:27.811	0.2	111.4		10.14		TAS		33.1	1.15	m_e	mb 4.8
FLT1	24.10		P	17:36:24.952	-0.6	111.4		10.14		TAS		54.0	1.52	m_e	mb 4.8
FUR	22.48		P	17:36:11.118		111.4		10.14		TAS		1002.6	2.43	m_e	mb 5.8
GEC2	21.20		P	17:35:55.955		111.4		10.14		TAS		161.3	1.67	m_e	mb 5.1
GOR1	24.36		P	17:36:29.673	-0.4	111.4		10.14		TAS		113.6	2.01	m_e	mb 5.0
GRA1	23.02		P	17:36:15.148		111.4		10.14		TAS		89.5	0.97	m_e	mb 5.3
GRA1	23.02		L	17:46:46.062						T__		1152.5	18.80	a_e	Ms 4.3
GTTG	24.47		P	17:36:28.757	-0.8	111.4		10.14		TAS		37.2	1.03	m_e	mb 4.9
KAST	25.24		P	17:36:36.369	-0.2	111.4		10.14		TAS		62.1	1.04	m_e	mb 5.3
MANZ	22.60		P	17:36:10.748	0.3	111.4		10.14		TAS		5.4	0.94	m_e	mb 4.1
MOX	23.16		P	17:36:16.642	-0.8	111.4		10.14		TAS		47.3	1.40	m_e	mb 4.8
MOX	23.16		L	17:47:16.518						T__		2143.9	18.90	a_e	Ms 4.6
NEUB	23.30		P	17:36:20.219	0.3	111.4		10.14		TAS		50.6	1.08	m_e	mb 5.0
PLN	22.78		P	17:36:11.800	-0.5	111.4		10.14		TAS		11.3	1.19	m_e	mb 4.3
RJOB	21.37		P	17:35:58.371		111.4		10.14		TAS		31.7	0.97	m_e	mb 4.6
ROTZ	22.46		P	17:36:09.835	1.1	111.4		10.14		TAS		22.1	1.09	m_e	mb 4.5
STU	23.98		P	17:36:24.104		111.4		10.14		TAS		182.5	1.17	m_e	mb 5.5
TANN	22.57		P	17:36:09.854	0.8	111.4		10.14		TAS		54.1	1.37	m_e	mb 4.9
TNS	24.89		P	17:36:32.841	1.8	111.4		10.14		TAS		111.8	1.59	m_e	mb 5.3
UBBA	24.17		P	17:36:26.498	-1.2	111.4		10.14		TAS		72.7	1.74	m_e	mb 4.9
UBR	23.09		P	17:36:16.051		111.4		10.14		TAS		64.9	1.26	m_e	mb 5.0
WET	21.82		P	17:36:01.793		111.4		10.14		TAS		72.0	1.32	m_e	mb 4.9

Event 90405002 Pakistan
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/04/05 02:20:05.64 24.5150 67.1120 33.0 49.80 49.80 m i ke BGR
 90405008

Magnitude Err Nsta Author OrigID
 mb 4.2 BGR 90405008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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GRA1 49.80 P 02:28:54.948 99.1 7.61 TAS 4.5 1.01 m_e mb 4.2

Event 90405004 Southeast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/05	09:56:58.06			31.5800	139.2600				420.1	14.6		31		82.43	89.14	m i ke	BGR
OrigID 90405010																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.2		BGR	90405010
MBB	6.5		BGR	90405010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	85.29		S	10:18:44.520		43.4		9.94		TAS					m_e
ASSE	85.29		P	10:08:48.992	0.3	41.9		4.77		TAS		120.2	1.20	a_e	MBB 6.4
BFO	89.14		P	10:09:07.042	-0.1	41.9		4.77		TAS		324.5	0.98	a_e	MBB 6.7
BRG	84.80		S	10:18:41.151	-2.8	43.4		9.94		TAS					m_e
BRG	84.80		P	10:08:46.592	0.0	41.9		4.77		TAS		272.3	1.07	a_e	MBB 6.6
BSEG	84.08		S	10:18:34.630	-1.5	43.4		9.94		TAS					m_e
BSEG	84.08		P	10:08:43.492	0.2	41.9		4.77		TAS		181.1	0.92	a_e	MBB 6.7
BSEG	84.08		pP	10:10:16.475						T__					m_e
BSEG	84.08		PP	10:12:03.970	-0.5	45.5		7.16		TAS					m_e
BUG	87.19		P	10:08:57.692	-0.4	41.9		4.77		TAS		142.4	0.93	a_e	MBB 6.3
BUG	87.19		PP	10:12:26.074		45.5		7.16		TAS					m_e
CLL	84.90		S	10:18:40.064		43.4		9.94		TAS					m_e
CLL	84.90		P	10:08:46.892	0.1	41.9		4.77		TAS		391.6	1.11	a_e	MBB 6.7
CLZ	85.62		S	10:18:47.889		43.4		9.94		TAS					m_e
CLZ	85.62		P	10:08:50.942	0.2	41.9		4.77		TAS		235.6	1.18	a_e	MBB 6.4
CLZ	85.62		pP	10:10:27.643						T__					m_e
FLT1	84.90		S	10:18:39.847	-1.5	43.4		9.94		TAS					m_e
FLT1	84.90		P	10:08:46.742	-0.1	41.9		4.77		TAS		214.6	1.05	a_e	MBB 6.5
FLT1	84.90		pP	10:10:22.059						T__					m_e
FUR	87.97		P	10:09:01.842	-0.2	41.9		4.77		TAS		473.0	0.93	a_e	MBB 7.0
GEC2	86.37		P	10:08:53.692	-0.3	41.9		4.77		TAS		99.5	0.79	a_e	MBB 6.3
GEC2	86.37		pP	10:10:30.668						T__					m_e
GOR1	84.39		P	10:08:44.992	0.1	41.9		4.77		TAS		389.8	1.36	a_e	MBB 6.7
GOR1	84.39		pP	10:10:19.965						T__					m_e
GRA1	86.86		P	10:08:56.942	1.8	41.9		4.77		TAS		354.2	1.18	a_e	MBB 6.6
GTTG	86.01		P	10:08:52.712	-0.4	41.9		4.77		TAS		94.1	1.09	m_e	MBB 6.3
GTTG	86.01		PP	10:12:18.163		45.5		7.16		TAS					m_e
HLG	84.84		S	10:18:41.151	-0.1	43.4		9.94		TAS					m_e
IBBN	86.33		S	10:18:52.454		43.4		9.94		TAS					m_e
IBBN	86.33		P	10:08:53.992	-0.5	41.9		4.77		TAS		346.5	1.05	a_e	MBB 6.5
KAST	86.91		P	10:08:56.842	-0.1	41.9		4.77		TAS		59.7	0.96	a_e	MBB 6.0
KAST	86.91		pP	10:10:34.158						T__					m_e
KAST	86.91		PP	10:12:24.910		45.5		7.16		TAS					m_e

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MANZ	86.26	P	10:08:53.792	0.2	41.9	4.77	TAS	20.5	0.96	a_e	MBB	5.7
MANZ	86.26	pP	10:10:28.806				T__			m_e		
MOX	85.99	S	10:18:50.715		43.4	9.94	TAS			m_e		
MOX	85.99	P	10:08:52.392	0.0	41.9	4.77	TAS	85.2	1.06	a_e	MBB	6.3
MOX	85.99	pP	10:10:28.341				T__			m_e		
NEUB	85.52	P	10:08:50.092	-0.2	41.9	4.77	TAS	242.8	0.95	a_e	MBB	6.5
NEUB	85.52	pP	10:10:25.782				T__			m_e		
NRDL	85.25	S	10:18:42.890		43.4	9.94	TAS			m_e		
NRDL	85.25	P	10:08:48.942	-0.0	41.9	4.77	TAS	88.3	1.17	a_e	MBB	6.2
NRDL	85.25	pP	10:10:24.618				T__			m_e		
NRDL	85.25	PP	10:12:11.881	-0.5	45.5	7.16	TAS			m_e		
PLN	85.87	S	10:18:50.172		43.4	9.94	TAS			m_e		
PLN	85.87	P	10:08:51.892	-0.1	41.9	4.77	TAS	41.0	1.16	a_e	mb	5.5
PLN	85.87	PP	10:12:14.440		45.5	7.16	TAS			m_e		
RGN	82.43	P	10:08:35.242	-0.2	41.9	4.77	TAS	579.5	0.87	a_e	MBB	6.9
RJOB	87.59	P	10:08:59.942		41.9	4.77	TAS	283.6	0.92	a_e	MBB	6.7
ROTZ	86.37	S	10:18:54.302		43.4	9.94	TAS			m_e		
ROTZ	86.37	P	10:08:54.492	0.3	41.9	4.77	TAS	98.1	1.39	a_e	MBB	5.9
RUE	83.73	S	10:18:31.370	1.7	43.4	9.94	TAS			m_e		
RUE	83.73	P	10:08:41.642	0.0	41.9	4.77	TAS	436.8	0.96	a_e	MBB	6.8
RUE	83.73	PP	10:12:02.108	-0.4	45.5	7.16	TAS			m_e		
STU	88.43	P	10:09:03.842	-0.5	41.9	4.77	TAS	738.0	0.94	a_e	MBB	7.1
TANN	85.79	S	10:18:49.194		43.4	9.94	TAS			m_e		
TANN	85.79	P	10:08:51.442	-0.0	41.9	4.77	TAS	94.2	1.14	m_e	MBB	6.1
TNS	87.65	P	10:09:00.292	0.0	41.9	4.77	TAS	43.9	0.84	a_e	MBB	6.3
TNS	87.65	PP	10:12:30.262		45.5	7.16	TAS			m_e		
UBBA	86.55	S	10:18:55.592		43.4	9.94	TAS			m_e		
UBBA	86.55	P	10:08:55.092	-0.1	41.9	4.77	TAS			a_e		
UBBA	86.55	pP	10:10:32.297				T__			m_e		
UBBA	86.55	PP	10:12:20.722		45.5	7.16	TAS			m_e		
WET	86.53	S	10:18:56.244		43.4	9.94	TAS			m_e		
WET	86.53	P	10:08:55.001	-0.6	41.9	4.77	TAS	82.2	1.03	m_e	MBB	6.3
WET	86.53	PP	10:12:20.257		45.5	7.16	TAS			m_e		
WLF	89.02	S	10:19:25.314		43.4	9.94	TAS			m_e		
WLF	89.02	P	10:09:07.192	0.3	41.9	4.77	TAS	315.8	1.28	a_e	MBB	6.5

Event 90405007 South Sandwich Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/05	16:14:16.00			-55.9300	-27.8500				58.0					110.17	110.17	m i ke	NEIC
	90405046																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	110.17		PP	16:33:01.499		200.5		7.89		TAS				m_e	

GRA1 110.17 PKKP 16:43:52.418 26.8 4.00 TAS m_e

Event 90406001 Mid-Indian Ridge

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/06 07:47:42.69 -11.5050 66.3260 33.0 77.67 77.67 m i ke BGR
90406007

Magnitude Err Nsta Author OrigID
mb 5.3 BGR 90406007

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 77.67 P 07:59:37.359 124.9 6.56 TAS 28.5 1.08 m_e mb 5.3

Event 90406002 Mid-Indian Ridge

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/06 12:03:40.70 -10.2950 66.2380 26.9 76.62 76.62 m i ke BGR
90406008

Magnitude Err Nsta Author OrigID
mb 5.1 BGR 90406008

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 76.62 P 12:15:29.422 124.6 6.62 TAS 18.3 1.10 m_e mb 5.1
GRA1 76.62 pP 12:15:37.134 T__ m_e

Event 90406004 Banda Sea

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/06 21:55:01.60 -6.8500 125.0400 539.0 110.52 110.52 m i ke NEIC
90406043

Magnitude Err Nsta Author OrigID

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 110.52 PP 22:13:14.834 T__ m_e
GRA1 110.52 PKKP 22:23:46.835 87.8 8.12 TAS m_e

Event 90407001 Alaska Peninsula, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	03:00:08.89			57.6770	-156.9690				33.0					72.55	72.55	m i ke	BGR
OrigID 90407007																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90407007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	72.55		P	03:11:30.922		348.2		5.38		TAS		5.2	0.87	m_e mb	4.7

Event 90407002 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	07:02:15.30			-32.0500	-178.0700				10.0					161.05	161.05	m i ke	NEIC
OrigID 90407041																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	161.05		PKPab	07:22:56.279		25.0		4.02		TAS				m_e	

Event 90407003 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	10:56:34.24			-21.8800	169.5500				33.0				21	145.31	149.63	m i ke	BGR
OrigID 90407009																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.68		PKPbc	11:16:08.934	0.2	37.4		2.81		TAS				m_e	
BFO	149.63		PKPbc	11:16:19.847		37.4		2.81		TAS				m_e	
BRG	145.35		PKPbc	11:16:07.851	-0.1	37.4		2.81		TAS				m_e	
CLL	145.41		PKPbc	11:16:07.743	0.4	37.4		2.81		TAS				m_e	
CLZ	146.02		PKPbc	11:16:10.287	-0.1	37.4		2.81		TAS				m_e	
FLT1	145.31		PKPbc	11:16:07.364	0.1	37.4		2.81		TAS				m_e	
GEC2	146.93		PKPbc	11:16:12.939		37.4		2.81		TAS				m_e	
GRA1	147.38		PKPbc	11:16:14.238		37.4		2.81		TAS				m_e	
GTTG	146.41		PKPbc	11:16:11.586	0.3	37.4		2.81		TAS				m_e	

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IBBN	146.53	PKPbc	11:16:11.598	-0.5	37.4	2.81	TAS	m_e
MANZ	146.79	PKPbc	11:16:12.182	0.3	37.4	2.81	TAS	m_e
MOX	146.49	PKPbc	11:16:11.532	-0.0	37.4	2.81	TAS	m_e
NEUB	146.00	PKPbc	11:16:10.341	0.5	37.4	2.81	TAS	m_e
NRDL	145.58	PKPbc	11:16:08.663	0.2	37.4	2.81	TAS	m_e
PLN	146.39	PKPbc	11:16:11.315	0.4	37.4	2.81	TAS	m_e
RJOB	148.15	PKPbc	11:16:16.092		37.4	2.81	TAS	m_e
ROTZ	146.91	PKPbc	11:16:13.048	-0.3	37.4	2.81	TAS	m_e
TANN	146.32	PKPbc	11:16:10.991	0.0	37.4	2.81	TAS	m_e
UBBA	146.98	PKPbc	11:16:13.039		37.4	2.81	TAS	m_e
UBR	149.41	PKPbc	11:16:19.218		37.4	2.81	TAS	m_e
WET	147.09	PKPbc	11:16:13.589		37.4	2.81	TAS	m_e

Event 90407005 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	15:19:23.07			-21.3600	170.0200				135.6	2.4		22		145.00	149.34	m i ke	BGR
OrigID 90407011																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.37		PKPbc	15:38:43.491	0.1	36.7		3.05		TAS					m_e
BFO	149.34		PKPab	15:38:59.349						T__					m_e
BRG	145.09		PKPbc	15:38:42.892	0.2	36.7		3.05		TAS					m_e
CLL	145.14		PKPbc	15:38:42.620	0.4	36.7		3.05		TAS					m_e
CLL	145.14		pPKPbc	15:39:18.880						T__					m_e
CLZ	145.71		PKPbc	15:38:45.233	0.0	36.7		3.05		TAS					m_e
CLZ	145.71		pPKPbc	15:39:20.777						T__					m_e
FLT1	145.00		PKPbc	15:38:42.130	0.3	36.7		3.05		TAS					m_e
GEC2	146.70		PKPbc	15:38:48.064	-0.6	36.7		3.05		TAS					m_e
GRA1	147.11		PKPbc	15:38:49.479		36.7		3.05		TAS					m_e
GTTG	146.10		PKPbc	15:38:46.485	0.4	36.7		3.05		TAS					m_e
IBBN	146.20		PKPbc	15:38:46.594	-0.2	36.7		3.05		TAS					m_e
MANZ	146.52		PKPbc	15:38:47.574	0.3	36.7		3.05		TAS					m_e
MOX	146.21		PKPbc	15:38:46.812	0.0	36.7		3.05		TAS					m_e
NEUB	145.71		PKPbc	15:38:45.070	0.4	36.7		3.05		TAS					m_e
NRDL	145.26		PKPbc	15:38:43.446	0.4	36.7		3.05		TAS					m_e
PLN	146.11		PKPbc	15:38:46.267	0.3	36.7		3.05		TAS					m_e
PLN	146.11		pPKPbc	15:39:21.830						T__					m_e
ROTZ	146.65		PKPbc	15:38:48.227	-0.0	36.7		3.05		TAS					m_e
ROTZ	146.65		pPKPbc	15:39:23.734						T__					m_e
STU	148.65		PKPbc	15:38:53.850		36.7		3.05		TAS					m_e
STU	148.65		PKPab	15:38:56.463						T__					m_e
TANN	146.05		PKPbc	15:38:46.431	0.1	36.7		3.05		TAS					m_e
TANN	146.05		pPKPbc	15:39:21.979						T__					m_e

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UBBA	146.68	PKPbc	15:38:48.123	-0.1	36.7	3.05	TAS	m_e
UBR	149.15	PKPbc	15:38:54.907		36.7	3.05	TAS	m_e
UBR	149.15	PKPab	15:38:58.352				T__	m_e
WET	146.84	PKPbc	15:38:48.553		36.7	3.05	TAS	m_e
WLF	148.99	PKPbc	15:38:54.884		36.7	3.05	TAS	m_e
WLF	148.99	PKPab	15:38:58.096				T__	m_e

Event 90407006 West Chile Rise

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	15:45:07.00			-41.2900	-87.4800				6.0					125.02	125.64	m i ke	NEIC
OrigID 90407045																	

Magnitude	Err	Nsta	Author	OrigID
Ms	5.5		BGR	90407012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	125.02		PKPdf	16:04:06.924		245.5		1.91		TAS				m_e	
GRA1	125.02		L	16:56:52.986						T__		831.4	21.10	a_e Ms	5.4
MOX	125.64		L	16:56:56.061						T__		1254.8	20.20	a_e Ms	5.6

Event 90407008 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/07	19:15:05.98			-19.5100	-174.1300				67.8	0.9		26		145.47	151.69	m i ke	BGR
OrigID 90407014																	

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	147.23		PKPbc	19:34:40.816	-0.1	9.1		2.65		TAS				m_e	
BFO	151.18		PKPbc	19:34:50.847		9.1		2.65		TAS				m_e	
BRG	148.06		PKPbc	19:34:43.324	0.6	9.1		2.65		TAS				m_e	
BSEG	145.47		PKPbc	19:34:35.408	0.1	9.1		2.65		TAS				m_e	
CLL	147.77		PKPbc	19:34:42.070	0.5	9.1		2.65		TAS				m_e	
CLL	147.77		pPKPbc	19:35:01.592	0.3					T__				m_e	
CLZ	147.54		PKPbc	19:34:41.599	0.3	9.1		2.65		TAS				m_e	
FLT1	146.98		PKPbc	19:34:39.653	0.2	9.1		2.65		TAS				m_e	
FUR	151.08		PKPbc	19:34:51.004		9.1		2.65		TAS				m_e	
GEC2	150.06		PKPbc	19:34:48.183		9.1		2.65		TAS				m_e	
GEC2	150.06		pPKPbc	19:35:07.661	0.3					T__				m_e	
GTTG	147.87		PKPbc	19:34:42.462	0.4	9.1		2.65		TAS				m_e	
IBBN	147.24		PKPbc	19:34:40.817	0.3	9.1		2.65		TAS				m_e	

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KAST	148.31	PKPbc	19:34:43.637	0.1	9.1	2.65	TAS	m_e
MANZ	149.19	PKPbc	19:34:46.458		9.1	2.65	TAS	m_e
MOX	148.60	PKPbc	19:34:44.342	-0.4	9.1	2.65	TAS	m_e
MOX	148.60	pPKPbc	19:35:03.924	0.3			T__	m_e
NEUB	148.04	PKPbc	19:34:43.245	0.6	9.1	2.65	TAS	m_e
NRDL	146.91	PKPbc	19:34:39.567	0.3	9.1	2.65	TAS	m_e
PLN	148.69	PKPbc	19:34:44.969	0.0	9.1	2.65	TAS	m_e
RETH	146.73	PKPbc	19:34:39.117	0.3	9.1	2.65	TAS	m_e
RJOB	151.28	PKPbc	19:34:50.926		9.1	2.65	TAS	m_e
ROTZ	149.39	PKPbc	19:34:46.615		9.1	2.65	TAS	m_e
TANN	148.72	PKPbc	19:34:45.126	-0.7	9.1	2.65	TAS	m_e
TANN	148.72	pPKPbc	19:35:04.298	0.3			T__	m_e
TNS	149.29	PKPbc	19:34:46.380	-0.5	9.1	2.65	TAS	m_e
UBBA	148.59	PKPbc	19:34:44.225	0.3	9.1	2.65	TAS	m_e
UBR	151.69	PKPbc	19:34:52.101		9.1	2.65	TAS	m_e
WET	149.90	PKPbc	19:34:48.575		9.1	2.65	TAS	m_e
WLF	149.91	PKPbc	19:34:48.731		9.1	2.65	TAS	m_e
WLF	149.91	pPKPbc	19:35:07.968	0.3			T__	m_e

Event 90408001 Andaman Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	01:54:52.30			13.1300	95.4100				10.0					76.05	76.37	m i ke	NEIC
OrigID 90408040																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90408007
Ms	4.4		BGR	90408007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	76.37		P	02:06:41.993		85.8		4.88		TAS		38.7	1.74	m_e	mb 5.2
GRA1	76.37		L	02:44:41.060						T__		203.2	21.10	a_e	Ms 4.4
MOX	76.05		L	02:45:40.231						T__		223.4	21.00	a_e	Ms 4.5

Event 90408002 Mauritius - Reunion region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	03:14:11.27			-17.9100	66.0750				33.0					82.90	82.90	m i ke	BGR
OrigID 90408008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90408008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	82.90		P	03:26:34.189		126.6		6.22		TAS		4.5	1.14	m_e	mb 4.6

Event 90408003 Near coast of Ecuador

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	03:23:49.80			-2.1200	-80.3200				53.0					92.60	92.60	m i ke	NEIC
OrigID 90408042																	

Magnitude	Err	Nsta	Author	OrigID
mb 4.7			BGR	90408009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	92.60		P	03:36:55.938		269.8		5.69		TAS		4.6	1.30	m_e	mb 4.7

Event 90408004 Southeast of Ryukyu Islands, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	04:12:42.31			26.6300	130.3900				33.0				28	82.82	89.14	m i ke	BGR
OrigID 90408010																	

Magnitude	Err	Nsta	Author	OrigID
mb 5.6			BGR	90408010
Ms 5.4			BGR	90408010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	85.56		P	04:25:18.417	-0.6	51.3		4.89		TAS		211.3	2.08	m_e	mb 6.0
BFO	89.14		P	04:25:35.260		51.3		4.89		TAS		27.4	1.36	m_e	mb 5.3
BRG	84.70		S	04:35:39.424	4.5	39.9		5.98		TAS				m_e	
BRG	84.70		P	04:25:13.417	0.1	51.3		4.89		TAS		31.9	1.03	m_e	mb 5.5
BSEG	84.59		S	04:35:39.897	1.7	39.9		5.98		TAS				m_e	
BSEG	84.59		P	04:25:13.285	0.6	51.3		4.89		TAS		58.6	0.92	m_e	mb 5.8
BUG	87.62		S	04:35:55.536		39.9		5.98		TAS				m_e	
BUG	87.62		P	04:25:27.365		51.3		4.89		TAS		113.9	1.70	m_e	mb 5.9
CLL	84.92		S	04:35:42.425	2.6	39.9		5.98		TAS				m_e	
CLL	84.92		P	04:25:14.075	0.0	51.3		4.89		TAS		78.3	1.18	m_e	mb 5.8
CLZ	85.88		S	04:35:54.272		39.9		5.98		TAS				m_e	
CLZ	85.88		P	04:25:19.865		51.3		4.89		TAS		170.1	1.44	m_e	mb 6.0
FLT1	85.16		S	04:35:44.636	3.1	39.9		5.98		TAS				m_e	
FLT1	85.16		P	04:25:15.391	0.4	51.3		4.89		TAS		51.3	1.01	m_e	mb 5.7
FUR	87.73		P	04:25:28.023		51.3		4.89		TAS		69.8	1.07	m_e	mb 5.9
GEC2	86.04		S	04:35:56.641		39.9		5.98		TAS				m_e	
GEC2	86.04		P	04:25:20.259		51.3		4.89		TAS		22.0	0.97	m_e	mb 5.2

GRA1 84.64 P 07:10:50.088 64.8 4.98 TAS 5.8 1.00 m_e mb 4.8

Event 90408006 South of Aleutian Islands

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/08 10:41:27.66 51.6400 -166.2500 33.0 79.02 79.02 m i ke BGR
90408012

Magnitude Err Nsta Author OrigID
mb 5.0 BGR 90408012

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 79.02 P 10:53:26.745 356.3 5.00 TAS 14.5 0.91 m_e mb 5.0

Event 90408007 Southern Xinjiang, China

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/08 16:26:16.42 41.3700 81.9180 33.0 48.53 48.53 m i ke BGR
90408013

Magnitude Err Nsta Author OrigID
mb 4.7 BGR 90408013

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 48.53 P 16:34:55.257 76.7 6.81 TAS 8.7 1.17 m_e mb 4.7

Event 90408008 Brazil

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/08 18:31:39.68 -5.0970 -36.6580 33.0 68.48 68.48 m i ke BGR
90408014

Magnitude Err Nsta Author OrigID
mb 4.8 BGR 90408014

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 68.48 P 18:42:39.945 225.7 6.14 TAS 8.5 1.28 m_e mb 4.8

Event 90408009 Gulf of Alaska

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	19:57:51.69			57.1850	-150.6650				33.0					72.44	72.44	m i ke	BGR
OrigID 90408015																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90408015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	72.44		P	20:09:13.054		348.9		5.41		TAS		4.6	0.80	m_e	mb 4.7

Event 90408010 Vanuatu Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	20:15:44.80			-15.5800	172.8500				10.0					141.89	142.84	m i ke	NEIC
OrigID 90408049																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.5		BGR	90408016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	142.84		PKP	20:35:24.275		30.2		2.77		TAS				m_e	
GRA1	142.84		L	21:41:21.496						T__		79.1	21.50	a_e	Ms 4.4
MOX	141.89		L	21:41:51.919						T__		92.9	20.10	a_e	Ms 4.5

Event 90408012 Samoa Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/08	23:05:53.40			-15.6000	-172.9800				10.0					145.83	145.83	m i ke	NEIC
OrigID 90408051																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	145.83		PKP	23:25:34.993		7.2		3.11		TAS				m_e	

Event 90409001 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
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OrigID
 2019/04/09 02:57:58.30 -14.3000 167.3300 226.0 139.66 139.66 m i ke EMSC
 90409033

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	139.66		PKP	03:16:59.489		37.3		1.16		TAS					m_e

Event 90409004 South Sandwich Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/09	17:53:59.70			-58.6100	-25.4600				44.0			31		109.90	117.05	m i ke	EMSC

OrigID
90409036

Magnitude Err Nsta Author OrigID
 Ms 6.4 BGR 90409010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	114.22		PS	18:23:01.363	-0.2	199.1		10.26		TAS					m_e
BFO	110.14		PS	18:22:18.242	5.2	199.1		10.26		TAS					m_e
BRG	113.76		PS	18:22:57.520	-2.3	199.1		10.26		TAS					m_e
BSEG	115.85		PS	18:23:23.704	-1.2	199.1		10.26		TAS					m_e
BUG	112.89		PS	18:22:46.732	5.0	199.1		10.26		TAS					m_e
CLL	113.96		PS	18:22:59.350	-0.8	199.1		10.26		TAS					m_e
CLZ	113.89		PS	18:22:55.883	-0.3	199.1		10.26		TAS					m_e
FLT1	114.53		PS	18:23:01.191	1.0	199.1		10.26		TAS					m_e
FUR	110.61		PS	18:22:23.854	0.6	199.1		10.26		TAS					m_e
GEC2	111.81		PS	18:22:35.384	-4.2	199.1		10.26		TAS					m_e
GRA1	112.04		PS	18:22:41.417	0.7	199.1		10.26		TAS					m_e
GRA1	112.04		Pdiff	18:08:34.822		196.4		5.22		TAS					m_e
GRA1	112.04		PP	18:13:02.321		200.1		7.36		TAS					m_e
GRA1	112.04		PKKP	18:23:21.855		199.1		10.26		TAS					m_e
GRA1	112.04		L	18:55:14.513						T__		10927.1	20.40	a_e Ms	6.4
GTTG	113.53		PS	18:22:50.566		199.1		10.26		TAS					m_e
HLG	115.62		PS	18:23:21.507		199.1		10.26		TAS					m_e
IBBN	113.81		PS	18:22:57.531		199.1		10.26		TAS					m_e
KAST	112.89		PS	18:22:46.724		199.1		10.26		TAS					m_e
MANZ	112.52		PS	18:22:43.071		199.1		10.26		TAS					m_e
MOX	113.03		PS	18:22:50.200		199.1		10.26		TAS					m_e
MOX	113.03		L	18:54:29.936						T__		10692.8	21.70	a_e Ms	6.4
NEUB	113.58		PS	18:22:55.334		199.1		10.26		TAS					m_e
NRDL	114.45		PS	18:23:03.742		199.1		10.26		TAS					m_e
PLN	113.00		PS	18:22:48.370		199.1		10.26		TAS					m_e
RGN	117.05		PS	18:23:26.266		199.1		10.26		TAS					m_e
RJOB	110.56		PS	18:22:24.769		199.1		10.26		TAS					m_e

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ROTZ	112.33	PS	18:22:39.777	199.1	10.26	TAS	m_e
RUE	115.22	PS	18:23:14.918	199.1	10.26	TAS	m_e
STU	110.74	PS	18:22:26.416	199.1	10.26	TAS	m_e
TANN	113.00	PS	18:22:49.294	199.1	10.26	TAS	m_e
TNS	111.96	PS	18:22:40.326	199.1	10.26	TAS	m_e
UBBA	112.85	PS	18:22:43.247	199.1	10.26	TAS	m_e
UBR	109.90	PS	18:22:19.341	199.1	10.26	TAS	m_e
WET	111.90	PS	18:22:40.319	199.1	10.26	TAS	m_e
WLF	110.98	PS	18:22:29.527	199.1	10.26	TAS	m_e

Event 90411001 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	02:39:29.20			7.6600	94.1900				10.0					79.66	79.66	m i ke	EMSC
90411033																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.4		BGR	90411007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.66		P	02:51:36.851		90.4		4.44		TAS		5.0	1.01	m_e mb	4.4

Event 90411003 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	03:50:38.95			8.5890	95.9630				33.0					80.11	80.11	m i ke	BGR
90411009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.5		BGR	90411009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	80.11		P	04:02:45.778		101.3		4.55		TAS		4.9	0.74	m_e mb	4.5

Event 90411004 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	03:55:14.50			7.7800	94.3200				10.0					79.65	79.65	m i ke	EMSC
90411036																	

Magnitude Err Nsta Author OrigID
 mb 4.3 BGR 90411010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.65		P	04:07:26.991		90.2		5.60		TAS		3.2	0.83	m_e	mb 4.3

Event 90411006 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	08:18:28.55			41.5500	143.2100				33.0			33		75.13	82.03	m i ke	BGR
				90411012													

Magnitude Err Nsta Author OrigID
 mb 5.7 BGR 90411012
 MBB 6.3 BGR 90411012
 Ms 6.3 BGR 90411012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	78.03		S	08:40:20.340	-0.4	34.5		10.27		TAS				m_e	
ASSE	78.03		P	08:30:24.229	0.3	34.5		5.41		TAS		81.8	1.30	a_e	MBB 6.4
ASSE	78.03		PP	08:33:14.074	-1.8	36.6		8.97		TAS				m_e	
BFO	82.03		S	08:40:59.723		34.5		10.27		TAS				m_e	
BFO	82.03		P	08:30:45.579		34.5		5.41		TAS		70.0	1.11	a_e	MBB 6.5
BFO	82.03		PP	08:33:52.798	1.2	36.6		8.97		TAS				m_e	
BRG	77.87		S	08:40:17.842	1.8	34.5		10.27		TAS				m_e	
BRG	77.87		P	08:30:23.229	-0.0	34.5		5.41		TAS		58.5	1.20	a_e	MBB 6.3
BRG	77.87		PP	08:33:17.131	3.4	36.6		8.97		TAS				m_e	
BSEG	76.66		S	08:40:05.792	-1.5	34.5		10.27		TAS				m_e	
BSEG	76.66		P	08:30:16.979	0.1	34.5		5.41		TAS		183.4	1.25	a_e	MBB 6.5
BSEG	76.66		PP	08:33:06.941	3.0	36.6		8.97		TAS				m_e	
BUG	79.76		S	08:40:37.064		34.5		10.27		TAS				m_e	
BUG	79.76		P	08:30:33.429		34.5		5.41		TAS		110.2	1.16	a_e	MBB 6.3
BUG	79.76		PP	08:33:35.474	3.7	36.6		8.97		TAS				m_e	
CLL	77.86		S	08:40:17.548	0.2	34.5		10.27		TAS				m_e	
CLL	77.86		P	08:30:22.979	0.1	34.5		5.41		TAS		74.5	0.96	a_e	MBB 6.3
CLL	77.86		PP	08:33:14.074	0.1	36.6		8.97		TAS				m_e	
CLZ	78.37		S	08:40:23.867	0.4	34.5		10.27		TAS				m_e	
CLZ	78.37		P	08:30:26.479	0.1	34.5		5.41		TAS		128.6	1.14	a_e	MBB 6.4
CLZ	78.37		PP	08:33:17.131	-1.8	36.6		8.97		TAS				m_e	
FLT1	77.66		S	08:40:15.785	0.5	34.5		10.27		TAS				m_e	
FLT1	77.66		P	08:30:21.779	0.1	34.5		5.41		TAS		80.0	0.86	a_e	MBB 6.4
FLT1	77.66		PP	08:33:16.112	3.5	36.6		8.97		TAS				m_e	
FUR	81.08		S	08:40:50.318		34.5		10.27		TAS				m_e	
FUR	81.08		P	08:30:40.879		34.5		5.41		TAS		141.8	0.96	a_e	MBB 6.6
FUR	81.08		PP	08:33:41.588	-0.9	36.6		8.97		TAS				m_e	
GEC2	79.60		S	08:40:37.211		34.5		10.27		TAS				m_e	

GEC2	79.60	P	08:30:32.629		34.5	5.41	TAS	47.2	1.08	m_e	mb	5.3
GEC2	79.60	PP	08:33:30.379	1.5	36.6	8.97	TAS			m_e		
GOR1	77.10	P	08:30:19.494	0.1	34.5	5.41	TAS	161.0	1.34	m_e	MBB	6.6
GOR1	77.10	PP	08:33:06.941	-0.7	36.6	8.97	TAS			m_e		
GRA1	79.84	S	08:40:37.093		34.5	10.27	TAS			m_e		
GRA1	79.84	P	08:30:34.579		34.5	5.41	TAS	203.8	1.15	a_e	MBB	6.5
GRA1	79.84	PP	08:33:34.455	2.8	36.6	8.97	TAS			m_e		
GRA1	79.84	L	09:12:22.532				T__	13197.0	18.80	a_e	Ms	6.3
GTTG	78.76	P	08:30:28.379		34.5	5.41	TAS	118.1	1.27	a_e	MBB	6.2
GTTG	78.76	PP	08:33:21.207	-1.2	36.6	8.97	TAS			m_e		
HLG	77.24	S	08:40:12.111	-1.6	34.5	10.27	TAS			m_e		
HLG	77.24	PP	08:33:09.998	0.6	36.6	8.97	TAS			m_e		
IBBN	78.87	S	08:40:28.276		34.5	10.27	TAS			m_e		
IBBN	78.87	P	08:30:28.829		34.5	5.41	TAS	115.0	0.96	a_e	MBB	6.3
IBBN	78.87	PP	08:33:20.188	-3.6	36.6	8.97	TAS			m_e		
KAST	79.58	S	08:40:35.182		34.5	10.27	TAS			m_e		
KAST	79.58	P	08:30:32.544		34.5	5.41	TAS	58.9	1.19	m_e	MBB	6.2
KAST	79.58	PP	08:33:31.398	1.4	36.6	8.97	TAS			m_e		
MANZ	79.27	S	08:40:31.068		34.5	10.27	TAS			m_e		
MANZ	79.27	P	08:30:31.079		34.5	5.41	TAS	13.2	1.08	a_e	MBB	5.6
MANZ	79.27	PP	08:33:20.188	-6.3	36.6	8.97	TAS			m_e		
MOX	78.91	S	08:40:28.569		34.5	10.27	TAS			m_e		
MOX	78.91	P	08:30:29.079		34.5	5.41	TAS	73.7	1.24	a_e	MBB	6.2
MOX	78.91	PP	08:33:23.245	-0.2	36.6	8.97	TAS			m_e		
MOX	78.91	L	09:11:21.132				T__	12574.2	18.70	a_e	Ms	6.3
NEUB	78.41	S	08:40:21.663		34.5	10.27	TAS			m_e		
NEUB	78.41	P	08:30:26.129		34.5	5.41	TAS	110.7	1.03	a_e	MBB	6.4
NEUB	78.41	PP	08:33:17.131	-1.9	36.6	8.97	TAS			m_e		
NRDL	77.92	S	08:40:16.666	-0.9	34.5	10.27	TAS			m_e		
NRDL	77.92	P	08:30:23.729	-0.1	34.5	5.41	TAS	61.5	1.23	a_e	MBB	6.3
NRDL	77.92	PP	08:33:16.112	1.0	36.6	8.97	TAS			m_e		
PLN	78.84	S	08:40:28.422		34.5	10.27	TAS			m_e		
PLN	78.84	P	08:30:28.779		34.5	5.41	TAS	33.9	1.49	a_e	MBB	5.8
PLN	78.84	PP	08:33:22.226	-0.5	36.6	8.97	TAS			m_e		
RETH	77.97	P	08:30:24.079	0.0	34.5	5.41	TAS	403.1	1.18	a_e	MBB	7.0
RETH	77.97	PP	08:33:12.036	-3.6	36.6	8.97	TAS			m_e		
RGN	75.13	P	08:30:08.429	-0.1	34.5	5.41	TAS	198.0	1.04	a_e	MBB	6.7
RGN	75.13	PP	08:32:51.655	1.7	36.6	8.97	TAS			m_e		
RJOB	80.85	S	08:40:47.202		34.5	10.27	TAS			m_e		
RJOB	80.85	P	08:30:39.779		34.5	5.41	TAS	104.9	0.87	a_e	MBB	6.5
RJOB	80.85	PP	08:33:41.588	1.6	36.6	8.97	TAS			m_e		
ROTZ	79.42	S	08:40:35.182		34.5	10.27	TAS			m_e		
ROTZ	79.42	P	08:30:31.884		34.5	5.41	TAS	26.9	1.31	m_e	MBB	5.7
ROTZ	79.42	PP	08:33:26.303	-1.4	36.6	8.97	TAS			m_e		
RUE	76.64	S	08:40:02.106	0.2	34.5	10.27	TAS			m_e		
RUE	76.64	P	08:30:16.679	-0.5	34.5	5.41	TAS	160.2	1.23	a_e	MBB	6.6
RUE	76.64	PP	08:33:02.865	-0.2	36.6	8.97	TAS			m_e		
STU	81.35	S	08:40:53.519		34.5	10.27	TAS			m_e		
STU	81.35	P	08:30:41.979		34.5	5.41	TAS	528.8	1.42	a_e	MBB	6.8

BFO	88.35	P	18:05:41.029		54.3	4.98	TAS	10.5	1.19	a_e	mb	5.0
BRG	83.90	P	18:05:18.803	-0.4	54.3	4.98	TAS	27.6	1.27	m_e	mb	5.3
BRG	83.90	pP	18:05:32.192	-0.1			T__				m_e	
BSEG	83.98	P	18:05:19.200	0.3	54.3	4.98	TAS	69.6	1.64	m_e	mb	5.6
BSEG	83.98	pP	18:05:32.392	-0.1			T__				m_e	
BUG	86.97	P	18:05:34.579		54.3	4.98	TAS	15.0	1.11	a_e	mb	5.0
CLL	84.15	P	18:05:20.229	-0.5	54.3	4.98	TAS	31.3	1.13	a_e	mb	5.4
CLL	84.15	pP	18:05:33.117	-0.1			T__				m_e	
CLZ	85.19	P	18:05:26.129	0.1	54.3	4.98	TAS	24.0	1.01	a_e	mb	5.4
FLT1	84.47	P	18:05:21.629	-0.1	54.3	4.98	TAS	28.1	1.19	a_e	mb	5.4
FLT1	84.47	pP	18:05:34.609	-0.1			T__				m_e	
FUR	86.87	P	18:05:34.429	-0.5	54.3	4.98	TAS	23.8	0.73	a_e	mb	5.4
GEC2	85.16	P	18:05:25.579	-0.0	54.3	4.98	TAS	22.2	1.17	m_e	mb	5.3
GEC2	85.16	pP	18:05:38.430	-0.1			T__				m_e	
GOR1	84.05	P	18:05:20.379	-0.4	54.3	4.98	TAS	74.9	1.40	a_e	mb	5.7
GOR1	84.05	pP	18:05:33.283	-0.1			T__				m_e	
GRA1	86.01	P	18:05:30.279	0.3	54.3	4.98	TAS	24.4	0.96	a_e	mb	5.3
GTTG	85.57	P	18:05:27.879	0.4	54.3	4.98	TAS	21.1	1.11	a_e	mb	5.2
MANZ	85.37	P	18:05:26.779	0.3	54.3	4.98	TAS	4.5	1.09	a_e	mb	4.6
MANZ	85.37	pP	18:05:39.662	-0.1			T__				m_e	
MOX	85.25	P	18:05:26.029	0.2	54.3	4.98	TAS	23.6	1.49	a_e	mb	5.2
NEUB	84.85	P	18:05:23.979	0.1	54.3	4.98	TAS	52.3	1.43	a_e	mb	5.6
NRDL	84.93	P	18:05:24.679	0.0	54.3	4.98	TAS	31.5	1.55	a_e	mb	5.3
PLN	85.06	P	18:05:25.129	-0.0	54.3	4.98	TAS	5.9	1.17	a_e	mb	4.7
RETH	85.15	P	18:05:25.479	0.4	54.3	4.98	TAS	177.9	1.77	a_e	mb	6.0
RJOB	86.28	P	18:05:31.129	0.1	54.3	4.98	TAS	15.9	0.92	a_e	mb	5.1
ROTZ	85.45	P	18:05:27.329	0.1	54.3	4.98	TAS	5.6	1.07	a_e	mb	4.7
RUE	83.10	P	18:05:15.429	-0.5	54.3	4.98	TAS	116.1	1.40	a_e	mb	5.9
STU	87.63	P	18:05:37.479		54.3	4.98	TAS	38.4	1.06	a_e	mb	5.7
TANN	84.94	P	18:05:24.529	0.0	54.3	4.98	TAS	15.7	1.12	a_e	mb	5.2
TNS	87.13	P	18:05:35.529		54.3	4.98	TAS	25.6	1.58	a_e	mb	5.1
UBBA	85.98	P	18:05:29.779	-0.1	54.3	4.98	TAS	22.6	1.57	a_e	mb	5.1
WET	85.44	P	18:05:27.229	0.3	54.3	4.98	TAS	27.6	1.64	a_e	mb	5.2

Event 90411009 Ryukyu Islands, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	19:53:50.58			25.7390	128.5630				33.0					85.82	86.59	m i ke	BGR
90411015																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90411015
Ms	4.7		BGR	90411015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	86.59		P	20:06:29.782		61.1		4.80		TAS		7.4	1.14	m_e	mb	4.7

GRA1	86.59	L	20:49:19.560	T__	416.1	18.70	a_e	Ms	4.9
MOX	85.82	L	20:49:24.112	T__	232.1	18.10	a_e	Ms	4.6

Event 90411010 Southwest Indian Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/11	22:28:09.00			-31.9400	57.1500				2.0					90.93	90.93	m i ke	EMSC

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90411016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	90.93		P	22:41:16.655		142.3		5.53		TAS		6.6	1.15	m_e	mb 4.9

Event 90412001 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/12	02:27:43.77			-18.9520	-178.4500				33.0				14	144.43	150.51	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	150.18		PKPbc	02:47:31.720		17.6		2.75		TAS				m_e	
BRG	146.66		PKPbc	02:47:22.422	-0.4	17.6		2.75		TAS				m_e	
BSEG	144.43		PKPbc	02:47:15.553	-0.7	17.6		2.75		TAS				m_e	
CLL	146.47		PKPbc	02:47:21.847	0.3	17.6		2.75		TAS				m_e	
CLZ	146.45		PKPbc	02:47:22.280	0.2	17.6		2.75		TAS				m_e	
FLT1	145.84		PKPbc	02:47:19.783	0.3	17.6		2.75		TAS				m_e	
GEC2	148.60		PKPbc	02:47:27.757		17.6		2.75		TAS				m_e	
KAST	147.36		PKPbc	02:47:24.605	-0.0	17.6		2.75		TAS				m_e	
MANZ	147.90		PKPbc	02:47:25.938		17.6		2.75		TAS				m_e	
RJOB	149.86		PKPbc	02:47:30.769		17.6		2.75		TAS				m_e	
ROTZ	148.09		PKPbc	02:47:26.730		17.6		2.75		TAS				m_e	
TANN	147.42		PKPbc	02:47:24.750		17.6		2.75		TAS				m_e	
UBR	150.51		PKPbc	02:47:32.540		17.6		2.75		TAS				m_e	
WLF	149.14		PKPbc	02:47:29.827		17.6		2.75		TAS				m_e	

Event 90413002 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/13	16:13:08.71			8.5260	92.8680				24.1	1.4		12		76.45	78.89	m i ke	BGR
OrigID 90413008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	90413008
Ms	4.8		BGR	90413008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	78.53		P	16:25:06.400	-0.1	90.8		5.54		TAS		24.2	1.28	m_e	mb	5.1
ASSE	78.53		pP	16:25:13.252						T__				m_e		
BRG	76.45		P	16:24:55.345		90.8		5.54		TAS		28.8	1.31	m_e	mb	5.2
BSEG	78.78		P	16:25:08.145	0.2	90.8		5.54		TAS		64.3	1.17	m_e	mb	5.5
CLL	77.06		P	16:24:58.254	-0.4	90.8		5.54		TAS		27.2	1.43	m_e	mb	5.2
CLL	77.06		pP	16:25:05.594						T__				m_e		
CLZ	78.72		P	16:25:07.418	0.5	90.8		5.54		TAS		36.8	1.35	m_e	mb	5.2
GEC2	76.50		P	16:24:55.781		90.8		5.54		TAS		69.1	1.49	m_e	mb	5.6
GRA1	78.15		L	17:06:55.064						T__		352.4	18.80	a_e	Ms	4.7
MANZ	77.58		P	16:25:01.998		90.8		5.54		TAS		6.6	1.14	m_e	mb	4.7
MOX	77.92		L	17:06:39.023						T__		612.9	18.70	a_e	Ms	5.0
NRDL	78.89		P	16:25:09.018	-0.3	90.8		5.54		TAS		68.6	1.46	m_e	mb	5.5
NRDL	78.89		pP	16:25:15.757						T__				m_e		
RJOB	77.07		P	16:24:58.254		90.8		5.54		TAS				m_e		
RUE	76.64		P	16:24:56.072	-0.3	90.8		5.54		TAS		106.4	1.40	m_e	mb	5.8
TANN	77.37		P	16:25:00.290		90.8		5.54		TAS		27.1	1.59	m_e	mb	5.1
WET	77.06		P	16:24:58.836		90.8		5.54		TAS		10.9	1.03	m_e	mb	4.9
WET	77.06		pP	16:25:05.591						T__				m_e		

Event 90414001 Near Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/14	15:30:51.28			53.3810	174.8140				33.0			21		72.28	76.90	m i ke	BGR
OrigID 90414007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	90414007
Ms	4.5		BGR	90414007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	74.03		P	15:42:22.072	-0.3	10.0		5.70		TAS		124.5	1.53	m_e	mb	5.7
BRG	74.88		P	15:42:26.599	-0.2	10.0		5.70		TAS		15.0	0.95	m_e	mb	5.0
BSEG	72.28		P	15:42:12.093	0.0	10.0		5.70		TAS		53.9	0.95	m_e	mb	5.7
CLL	74.57		P	15:42:24.751	-0.1	10.0		5.70		TAS		56.4	1.56	m_e	mb	5.4
CLZ	74.34		P	15:42:24.012	-0.2	10.0		5.70		TAS		53.1	1.06	m_e	mb	5.5
FLT1	73.77		P	15:42:20.039	0.1	10.0		5.70		TAS		31.5	1.11	m_e	mb	5.2

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GEC2	76.90	P	15:42:38.426		10.0	5.70	TAS	55.3	1.66	m_e	mb	5.4
GOR1	73.11	P	15:42:17.082	-0.2	10.0	5.70	TAS	86.5	1.37	m_e	mb	5.7
GRA1	76.37	P	15:42:35.562		10.0	5.70	TAS	2642.3	4.78	m_e	mb	6.6
GRA1	76.37	L	16:18:23.977				T__	213.5	20.60	a_e	Ms	4.4
GTTG	74.68	P	15:42:25.768	-0.2	10.0	5.70	TAS	65.1	1.34	m_e	mb	5.5
MANZ	75.98	P	15:42:32.883		10.0	5.70	TAS	7.6	1.52	m_e	mb	4.6
MOX	75.39	P	15:42:29.649	0.2	10.0	5.70	TAS	79.1	1.88	m_e	mb	5.4
MOX	75.39	L	16:17:34.015				T__	243.8	19.90	a_e	Ms	4.5
NEUB	74.83	P	15:42:26.322	0.1	10.0	5.70	TAS	64.9	1.24	m_e	mb	5.5
NRDL	73.72	P	15:42:20.039	-0.5	10.0	5.70	TAS	27.7	1.03	m_e	mb	5.2
PLN	75.48	P	15:42:30.295	0.1	10.0	5.70	TAS	29.2	1.95	m_e	mb	5.0
RETH	73.56	P	15:42:19.300	0.3	10.0	5.70	TAS	190.5	1.26	m_e	mb	6.0
ROTZ	76.18	P	15:42:34.361		10.0	5.70	TAS	9.7	1.43	m_e	mb	4.7
RUE	73.33	P	15:42:18.284	0.1	10.0	5.70	TAS	49.0	1.15	m_e	mb	5.5
TANN	75.51	P	15:42:30.573	0.1	10.0	5.70	TAS	30.0	1.38	m_e	mb	5.2
UBBA	75.39	P	15:42:29.556	0.1	10.0	5.70	TAS	71.6	1.56	m_e	mb	5.5
WET	76.71	P	15:42:37.410		10.0	5.70	TAS	112.4	2.00	m_e	mb	5.7

Event 90414002 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/14	20:28:34.24			43.4500	144.8900				33.0			19		75.50	80.06	m i ke	BGR
90414008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90414008
Ms	4.8		BGR	90414008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	76.91		P	20:40:23.226	-0.4	32.7		5.59		TAS		16.7	1.06	m_e	mb	5.1
BRG	76.83		P	20:40:22.598	-0.1	32.7		5.59		TAS		11.0	0.95	m_e	mb	5.0
BSEG	75.50		P	20:40:15.485	-0.0	32.7		5.59		TAS		34.5	1.07	m_e	mb	5.3
BUG	78.60		P	20:40:32.221	-0.2	32.7		5.59		TAS		17.1	0.79	m_e	mb	5.1
CLL	76.81		P	20:40:22.284	-0.0	32.7		5.59		TAS		50.3	1.15	m_e	mb	5.5
CLZ	77.25		P	20:40:25.527	-0.4	32.7		5.59		TAS		97.9	1.62	m_e	mb	5.7
FLT1	76.55		P	20:40:20.820	0.2	32.7		5.59		TAS		45.3	1.21	m_e	mb	5.5
FUR	80.06		P	20:40:40.589		32.7		5.59		TAS		20.6	0.74	m_e	mb	5.2
GEC2	78.60		P	20:40:32.535		32.7		5.59		TAS		9.7	0.88	m_e	mb	4.8
GOR1	75.97		P	20:40:18.414	0.2	32.7		5.59		TAS		46.0	1.25	m_e	mb	5.5
GRA1	78.78		P	20:40:33.999		32.7		5.59		TAS		28.7	0.92	m_e	mb	5.3
GRA1	78.78		L	21:19:08.231						T__		476.6	18.10	a_e	Ms	4.9
GTTG	77.64		P	20:40:27.514	-0.4	32.7		5.59		TAS		29.5	1.06	m_e	mb	5.3
MANZ	78.23		P	20:40:30.547		32.7		5.59		TAS		4.5	1.40	m_e	mb	4.4
MOX	77.84		L	21:18:19.513						T__		413.9	20.70	a_e	Ms	4.7
NEUB	77.33		P	20:40:25.213	0.2	32.7		5.59		TAS		28.8	0.92	m_e	mb	5.4
NRDL	76.79		P	20:40:22.703	-0.4	32.7		5.59		TAS		15.6	0.97	m_e	mb	5.1

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RETH	76.82	P	20:40:22.703	-0.0	32.7	5.59	TAS	74.7	0.89	m_e	mb	5.8
RJOB	79.86	P	20:40:39.961		32.7	5.59	TAS	22.5	0.89	m_e	mb	5.1
RUE	75.57	P	20:40:15.695	-0.0	32.7	5.59	TAS	21.0	0.73	m_e	mb	5.4
WET	78.65	P	20:40:33.162		32.7	5.59	TAS	26.5	1.08	m_e	mb	5.2

Event 90416001 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/16	02:01:48.65			-22.4710	-178.5890				33.0			11		147.87	151.93	m i ke	BGR
OrigID 90416007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	150.01		PKPbc	02:21:36.042	0.0	19.4		2.40		TAS				m_e	
BSEG	147.87		PKPbc	02:21:30.677	-0.2	19.4		2.40		TAS				m_e	
CLL	149.84		PKPbc	02:21:35.561	-0.1	19.4		2.40		TAS				m_e	
CLZ	149.87		PKPbc	02:21:35.972	0.1	19.4		2.40		TAS				m_e	
FLT1	149.25		PKPbc	02:21:33.862	0.4	19.4		2.40		TAS				m_e	
GEC2	151.93		PKPbc	02:21:40.217		19.4		2.40		TAS				m_e	
KAST	150.81		PKPbc	02:21:37.844	0.1	19.4		2.40		TAS				m_e	
MANZ	151.28		PKPbc	02:21:39.067	-0.4	19.4		2.40		TAS				m_e	
MOX	150.77		PKPbc	02:21:37.754	0.1	19.4		2.40		TAS				m_e	
PLN	150.80		PKPbc	02:21:37.935	0.1	19.4		2.40		TAS				m_e	
TANN	150.79		PKPbc	02:21:37.943	0.1	19.4		2.40		TAS				m_e	

Event 90416002 Tristan da Cunha region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/16	07:30:47.64			-34.7450	-14.3430				33.0					87.07	88.06	m i ke	BGR
OrigID 90416008																	

Magnitude Err Nsta Author OrigID

mb	5.3		BGR	90416008
Ms	5.0		BGR	90416008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	87.07		P	07:43:32.034		198.8		5.22		TAS		34.5	1.23	m_e	mb	5.3
GRA1	87.07		L	08:20:14.388						T__		349.0	19.40	a_e	Ms	4.8
MOX	88.06		L	08:21:57.804						T__		812.8	18.00	a_e	Ms	5.2

Event 90418001 Fox Islands, Aleutian Islands, United States
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/04/18 02:44:45.78 52.4590 -167.8160 33.0 78.22 78.22 m i ke BGR
 90418007

Magnitude Err Nsta Author OrigID
 mb 4.9 BGR 90418007

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
 GRA1 78.22 P 02:56:40.447 0.4 0.4 4.96 TAS 10.8 1.04 m_e mb 4.9

Event 90418002 Taiwan region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/04/18 05:01:02.79 23.2800 122.3500 33.0 30 82.43 88.00 m i ke BGR
 90418008

Magnitude Err Nsta Author OrigID
 mb 6.2 BGR 90418008
 MBB 6.5 BGR 90418008
 Ms 6.8 BGR 90418008

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
 ASSE 84.26 P 05:13:31.099 0.1 61.4 5.23 TAS 545.5 2.25 m_e MBB 6.6
 BFO 87.54 P 05:13:46.726 61.4 5.23 TAS 264.2 1.97 m_e MBB 6.6
 BRG 83.10 P 05:13:25.017 -0.3 61.4 5.23 TAS 431.1 2.18 m_e MBB 6.4
 BSEG 83.51 P 05:13:27.551 -0.0 61.4 5.23 TAS 307.1 2.25 m_e MBB 6.5
 BUG 86.42 P 05:13:41.489 0.2 61.4 5.23 TAS 421.2 1.91 m_e MBB 6.7
 CLL 83.41 P 05:13:26.031 -0.0 61.4 5.23 TAS 381.1 2.11 m_e MBB 6.4
 CLZ 84.57 P 05:13:33.126 0.5 61.4 5.23 TAS 626.5 2.10 m_e MBB 6.6
 FLT1 83.86 P 05:13:28.396 -0.0 61.4 5.23 TAS 593.2 2.54 m_e MBB 6.5
 FUR 85.96 P 05:13:40.222 61.4 5.23 TAS m_e
 GEC2 84.22 P 05:13:30.843 61.4 5.23 TAS 607.8 2.37 m_e MBB 6.5
 GRA1 85.21 P 05:13:36.080 -0.2 61.4 5.23 TAS 688.6 2.09 m_e mb 6.4
 GRA1 85.21 L 05:55:17.646 T__ 28160.0 20.30 a_e Ms 6.7
 GTTG 84.94 P 05:13:34.900 0.2 61.4 5.23 TAS 443.1 2.04 m_e MBB 6.7
 IBBN 85.69 P 05:13:38.363 1.0 61.4 5.23 TAS 825.1 2.19 m_e MBB 6.8
 KAST 85.94 P 05:13:40.369 0.2 61.4 5.23 TAS 395.0 2.12 m_e MBB 6.7
 MANZ 84.56 P 05:13:32.701 61.4 5.23 TAS 126.7 2.35 m_e MBB 5.9
 MOX 84.50 P 05:13:32.632 -0.2 61.4 5.23 TAS 376.4 2.18 m_e MBB 6.5
 MOX 84.50 L 05:54:42.701 T__ 56785.0 18.40 a_e Ms 7.0
 NEUB 84.14 P 05:13:30.592 -0.2 61.4 5.23 TAS 765.9 2.34 m_e MBB 6.6
 NRDL 84.37 P 05:13:32.366 0.0 61.4 5.23 TAS 609.5 2.19 m_e MBB 6.7
 PLN 84.28 P 05:13:31.434 0.7 61.4 5.23 TAS 131.9 2.09 m_e MBB 6.1

RETH	84.63	P	05:13:33.042	0.1	61.4	5.23	TAS	2936.6	2.55	m_e	MBB	7.3
RJOB	85.29	P	05:13:36.758		61.4	5.23	TAS			m_e		
ROTZ	84.62	P	05:13:32.870		61.4	5.23	TAS	130.0	2.16	m_e	MBB	5.9
RUE	82.43	P	05:13:22.124	1.0	61.4	5.23	TAS			m_e		
STU	86.82	P	05:13:43.516		61.4	5.23	TAS			m_e		
TANN	84.15	P	05:13:30.677	-0.2	61.4	5.23	TAS	328.9	2.14	m_e	MBB	6.5
TNS	86.45	P	05:13:41.827	-0.2	61.4	5.23	TAS	438.3	2.20	m_e	MBB	6.7
UBBA	85.30	P	05:13:36.505	-0.2	61.4	5.23	TAS	462.0	2.19	m_e	MBB	6.6
UBR	86.88	P	05:13:44.647		61.4	5.23	TAS	335.6	1.96	m_e	MBB	6.7
WET	84.54	P	05:13:32.645		61.4	5.23	TAS	512.2	2.24	m_e	MBB	6.5
WLF	88.00	P	05:13:49.767	-0.2	61.4	5.23	TAS			m_e		

Event 90418003 West of Macquarie Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/18	14:46:00.83			-52.5830	141.1890				10.0			9		147.15	152.00	m i ke	BGR
OrigID 90418009																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.3		BGR	90418009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	150.11		PKPbc	15:05:49.088		114.9		2.66		TAS				m_e	
BRG	147.88		PKPbc	15:05:42.217		114.9		2.66		TAS				m_e	
BSEG	151.05		PKPbc	15:05:51.918		114.9		2.66		TAS				m_e	
BUG	151.98		PKPbc	15:05:54.347		114.9		2.66		TAS				m_e	
CLL	148.60		PKPbc	15:05:44.628		114.9		2.66		TAS				m_e	
CLZ	150.32		PKPbc	15:05:49.460		114.9		2.66		TAS				m_e	
FLT1	150.00		PKPbc	15:05:48.343		114.9		2.66		TAS				m_e	
FUR	148.28		PKPbc	15:05:43.612		114.9		2.66		TAS				m_e	
GEC2	147.15		PKPbc	15:05:40.057		114.9		2.66		TAS				m_e	
GRA1	148.98		PKPbc	15:05:45.505		114.9		2.66		TAS				m_e	
GRA1	148.98		L	16:15:16.236						T__		5323.4	21.90	a_e Ms	6.3
IBBN	152.00		PKPbc	15:05:54.015		114.9		2.66		TAS				m_e	
KAST	151.22		PKPbc	15:05:52.002		114.9		2.66		TAS				m_e	
MANZ	148.58		PKPbc	15:05:44.647		114.9		2.66		TAS				m_e	
MOX	149.14		L	16:15:59.162						T__		4792.7	21.60	a_e Ms	6.2
NEUB	149.26		PKPbc	15:05:46.355		114.9		2.66		TAS				m_e	
NRDL	150.70		PKPbc	15:05:51.220		114.9		2.66		TAS				m_e	
RJOB	147.18		PKPbc	15:05:40.010		114.9		2.66		TAS				m_e	
ROTZ	148.43		PKPbc	15:05:43.584		114.9		2.66		TAS				m_e	
RUE	148.59		PKPbc	15:05:44.378	-0.6	114.9		2.66		TAS				m_e	
TANN	148.55		PKPbc	15:05:44.221		114.9		2.66		TAS				m_e	
TNS	150.83		PKPbc	15:05:50.945		114.9		2.66		TAS				m_e	
UBR	148.75		PKPbc	15:05:44.565		114.9		2.66		TAS				m_e	
WET	147.77		PKPbc	15:05:41.654		114.9		2.66		TAS				m_e	

WLF 151.97 PKPbc 15:05:54.142 114.9 2.66 TAS m_e

Event 90418004 Southwest of Sumatera, Indonesia

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/18 21:51:23.69 -9.1620 99.7060 33.0 11 94.20 96.97 m i ke BGR
90418010

Magnitude Err Nsta Author OrigID
mb 4.8 BGR 90418010

Table with 16 columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Rows include station data for BSEG, CLL, CLZ, GEC2, GRA1, MANZ, RGN, RJOB, ROTZ, UBR, WET.

Event 90418005 Nicobar Islands, India, region

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/18 21:57:54.76 6.0430 93.5840 33.0 10 78.80 82.37 m i ke BGR
90418011

Magnitude Err Nsta Author OrigID
mb 4.2 BGR 90418011

Table with 16 columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Rows include station data for BFO, BRG, BSEG, CLZ, GEC2, MANZ, MOX, RJOB, ROTZ.

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UBR	81.17	P	22:10:06.930	91.9	5.36	TAS	3.1	0.69	m_e	mb	4.5
WET	79.38	P	22:09:57.846	0.1 91.9	5.36	TAS	2.4	0.77	m_e	mb	4.3

Event 90419001 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/19	04:14:56.63			43.3260	147.4390				43.1	0.8		9		76.40	81.89	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	4.5		BGR	90419007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	81.89		P	04:27:11.567		30.8		5.44		TAS		2.6	0.81	m_e	mb	4.4
BRG	77.84		P	04:26:49.537	-0.3	30.8		5.44		TAS		2.2	0.76	m_e	mb	4.4
BSEG	76.40		P	04:26:41.585	0.5	30.8		5.44		TAS		7.9	0.78	m_e	mb	4.9
BUG	79.49		P	04:26:58.404		30.8		5.44		TAS		6.0	0.72	m_e	mb	4.7
CLL	77.79		P	04:26:49.158	0.3	30.8		5.44		TAS		10.1	0.77	m_e	mb	5.0
CLL	77.79		sP	04:27:06.653						T__				m_e		
CLZ	78.19		P	04:26:51.671		30.8		5.44		TAS		7.2	0.72	m_e	mb	4.9
FLT1	77.49		P	04:26:47.642	-0.4	30.8		5.44		TAS		7.6	0.79	m_e	mb	4.9
GEC2	79.63		P	04:26:59.557		30.8		5.44		TAS		1.9	0.95	m_e	mb	4.0
GRA1	79.76		P	04:26:59.983	0.5	30.8		5.44		TAS		5.8	0.73	m_e	mb	4.6
GTTG	78.57		P	04:26:53.496		30.8		5.44		TAS		8.0	0.72	m_e	mb	4.8
IBBN	78.58		P	04:26:53.664		30.8		5.44		TAS		9.5	0.76	m_e	mb	4.9
IBBN	78.58		sP	04:27:11.364						T__				m_e		
MANZ	79.21		P	04:26:57.277		30.8		5.44		TAS		0.4	0.70	m_e	mb	3.5
MOX	78.81		P	04:26:55.004		30.8		5.44		TAS		2.1	0.66	m_e	mb	4.3
RJOB	80.89		P	04:27:06.439		30.8		5.44		TAS		3.1	0.79	m_e	mb	4.4
ROTZ	79.37		P	04:26:57.590		30.8		5.44		TAS		0.6	0.82	m_e	mb	3.7
STU	81.23		P	04:27:08.011		30.8		5.44		TAS		13.7	0.72	m_e	mb	5.1
STU	81.23		sP	04:27:25.170						T__				m_e		
TANN	78.73		P	04:26:54.188		30.8		5.44		TAS				m_e		
TNS	80.20		P	04:27:02.449		30.8		5.44		TAS		2.8	0.77	m_e	mb	4.3
UBBA	79.19		P	04:26:56.595		30.8		5.44		TAS		1.6	0.70	m_e	mb	4.2
WET	79.67		P	04:26:59.309	0.5	30.8		5.44		TAS		3.3	0.87	m_e	mb	4.3
WET	79.67		sP	04:27:16.954						T__				m_e		

Event 90419003 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/19	07:05:52.37			43.5390	141.8990				33.0			1		77.64	77.64	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90419009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	77.64		P	07:17:44.060		36.2		4.90		TAS	2.3	8.8	0.76	m_e	mb 5.0

Event 90419004 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/19	22:28:21.22			-18.1910	175.2880				33.0					146.06	146.06	m i ke	BGR
OrigID 90419010																	

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	146.06		PKPbc	22:47:57.074		21.5		3.02		TAS				m_e	

Event 90419005 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/19	23:02:05.99			-20.7790	-175.8830				33.0				15	146.56	152.73	m i ke	BGR
OrigID 90419011																	

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	152.30		PKPbc	23:21:58.576		13.6		2.51		TAS				m_e	
BRG	148.99		PKPbc	23:21:50.517	0.4	13.6		2.51		TAS				m_e	
BSEG	146.56		PKPbc	23:21:44.163	0.2	13.6		2.51		TAS				m_e	
CLL	148.75		PKPbc	23:21:49.416	0.4	13.6		2.51		TAS				m_e	
CLZ	148.62		PKPbc	23:21:49.022	0.2	13.6		2.51		TAS				m_e	
FLT1	148.03		PKPbc	23:21:47.676	0.3	13.6		2.51		TAS				m_e	
FUR	152.08		PKPbc	23:21:58.052		13.6		2.51		TAS				m_e	
GEC2	150.96		PKPbc	23:21:55.440		13.6		2.51		TAS				m_e	
GRA1	150.60		PKPbc	23:21:54.363	-0.2	13.6		2.51		TAS				m_e	
GTTG	148.95		PKPbc	23:21:50.219	0.2	13.6		2.51		TAS				m_e	
KAST	149.45		PKPbc	23:21:51.895	0.1	13.6		2.51		TAS				m_e	
MANZ	150.17		PKPbc	23:21:53.672	-0.1	13.6		2.51		TAS				m_e	
MOX	149.61		PKPbc	23:21:52.054	-0.2	13.6		2.51		TAS				m_e	
NEUB	149.06		PKPbc	23:21:50.251	0.3	13.6		2.51		TAS				m_e	
RJOB	152.20		PKPbc	23:21:58.345		13.6		2.51		TAS				m_e	
ROTZ	150.37		PKPbc	23:21:54.270	0.2	13.6		2.51		TAS				m_e	

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STU	151.78	PKPbc	23:21:57.171		13.6	2.51	TAS	m_e
TANN	149.70	PKPbc	23:21:52.133	-0.2	13.6	2.51	TAS	m_e
TNS	150.42	PKPbc	23:21:54.035	-0.2	13.6	2.51	TAS	m_e
UBBA	149.66	PKPbc	23:21:52.150	-0.2	13.6	2.51	TAS	m_e
UBR	152.73	PKPbc	23:21:59.456		13.6	2.51	TAS	m_e
WET	150.84	PKPbc	23:21:54.979	-0.2	13.6	2.51	TAS	m_e
WLF	151.13	PKPbc	23:21:56.485	-0.3	13.6	2.51	TAS	m_e

Event 90420001 New Ireland, Papua New Guinea, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	01:03:35.48			-2.4400	150.8800				33.0		24		119.36	124.21	m i k e	BGR
90420007																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	120.43		PKPdf	01:22:23.587	0.4	49.7		1.91		TAS					m_e
BFO	124.11		PKPdf	01:22:30.471	0.1	49.7		1.91		TAS					m_e
BRG	119.68		PKPdf	01:22:21.890	0.2	49.7		1.91		TAS					m_e
BSEG	119.36		PKPdf	01:22:21.453	-0.2	49.7		1.91		TAS					m_e
BUG	122.44		PKPdf	01:22:27.416	0.2	49.7		1.91		TAS					m_e
CLL	119.87		PKPdf	01:22:22.146	-0.1	49.7		1.91		TAS					m_e
CLZ	120.77		PKPdf	01:22:24.165	0.1	49.7		1.91		TAS					m_e
FLT1	120.04		PKPdf	01:22:22.352	0.0	49.7		1.91		TAS					m_e
GEC2	121.06		PKPdf	01:22:24.822		49.7		1.91		TAS					m_e
GRA1	121.78		PKPdf	01:22:25.988		49.7		1.91		TAS					m_e
GTTG	121.15		PKPdf	01:22:25.027	-0.3	49.7		1.91		TAS					m_e
IBBN	121.61		PKPdf	01:22:25.775	0.1	49.7		1.91		TAS					m_e
KAST	122.09		PKPdf	01:22:26.271	0.2	49.7		1.91		TAS					m_e
MANZ	121.15		PKPdf	01:22:25.165	-0.0	49.7		1.91		TAS					m_e
MOX	120.97		PKPdf	01:22:24.241		49.7		1.91		TAS					m_e
NRDL	120.44		PKPdf	01:22:23.377	0.1	49.7		1.91		TAS					m_e
RJOB	122.21		PKPdf	01:22:26.724		49.7		1.91		TAS					m_e
ROTZ	121.25		PKPdf	01:22:25.233		49.7		1.91		TAS					m_e
STU	123.39		PKPdf	01:22:29.073	0.1	49.7		1.91		TAS					m_e
TANN	120.71		PKPdf	01:22:23.861	0.1	49.7		1.91		TAS					m_e
TNS	122.76		PKPdf	01:22:27.850		49.7		1.91		TAS					m_e
UBR	123.65		PKPdf	01:22:29.704		49.7		1.91		TAS					m_e
WET	121.30		PKPdf	01:22:25.165		49.7		1.91		TAS					m_e
WLF	124.21		PKPdf	01:22:30.938		49.7		1.91		TAS					m_e

Event 90420002 Eastern Arabian Peninsula

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Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	02:40:58.01			25.4700	55.9200				10.0				17	40.24	45.21	m i ke	BGR
OrigID 90420008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.2		BGR	90420008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BRG	40.83		P	02:48:36.664	-0.2	108.9		8.12		TAS		3.4	0.59	m_e	mb	4.3
BSEG	44.04		P	02:49:02.299	-0.4	108.9		8.12		TAS		2.4	1.09	m_e	mb	3.8
BUG	44.98		P	02:49:10.835	0.2	108.9		8.12		TAS		3.1	0.68	m_e	mb	4.3
CLL	41.54		P	02:48:42.857	0.3	108.9		8.12		TAS		2.9	0.59	m_e	mb	4.2
CLZ	43.27		P	02:48:57.160	0.6	108.9		8.12		TAS		12.9	0.57	m_e	mb	4.9
FLT1	42.94		P	02:48:54.020	0.2	108.9		8.12		TAS				m_e		
GEC2	40.24		P	02:48:31.693	-0.5	108.9		8.12		TAS		1.6	0.60	m_e	mb	3.8
GRA1	42.06		P	02:48:46.784	-0.1	108.9		8.12		TAS		5.2	0.60	m_e	mb	4.4
KAST	44.22		P	02:49:04.620	0.1	108.9		8.12		TAS		2.9	0.64	m_e	mb	4.2
NEUB	42.22		P	02:48:48.351	0.2	108.9		8.12		TAS		10.1	0.52	m_e	mb	4.8
NRDL	43.64		P	02:48:59.735	0.2	108.9		8.12		TAS				m_e		
RJOB	40.46		P	02:48:34.115	0.5	108.9		8.12		TAS		2.5	0.57	m_e	mb	4.0
ROTZ	41.47		P	02:48:42.246	0.1	108.9		8.12		TAS		0.6	0.63	m_e	mb	3.5
UBBA	43.15		P	02:48:55.312	-0.5	108.9		8.12		TAS		2.8	0.58	m_e	mb	4.2
UBR	42.18		P	02:48:47.797	0.4	108.9		8.12		TAS		4.5	0.68	m_e	mb	4.3
WET	40.85		P	02:48:36.539	-0.6	108.9		8.12		TAS		1.5	0.56	m_e	mb	3.9
WLF	45.21		P	02:49:11.930	-0.5	108.9		8.12		TAS				m_e		

Event 90420004 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	06:51:51.56			-18.0690	175.6790				33.0					146.06	146.06	m i ke	BGR
OrigID 90420010																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	146.06		PKPbc	07:11:27.415		27.1		3.82		TAS				m_e		

Event 90420003 Vanuatu Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	06:51:51.58			-19.2360	172.2970				33.0					146.04	146.04	m i ke	BGR
OrigID 90420009																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	146.04		PKPbc	07:11:27.432		26.9		3.80		TAS					m_e

Event 90420005 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	13:55:24.15			-16.8140	-177.6200				33.0					146.43	146.43	m i ke	BGR
OrigID 90420011																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	146.43		PKPdf	14:15:01.103		15.4		1.73		TAS					m_e

Event 90420006 Northwest of Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	20:43:20.13			47.3930	147.5860				33.0				8	72.75	78.29	m i ke	BGR
OrigID 90420012																	

Magnitude Err Nsta Author OrigID

mb 4.4 BGR 90420012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	78.29		P	20:55:15.714		28.8		5.71		TAS		3.8	0.97	m_e mb	4.5
BSEG	72.75		P	20:54:43.711	0.4	28.8		5.71		TAS		4.0	0.77	m_e mb	4.6
BUG	75.82		P	20:55:01.241		28.8		5.71		TAS		5.2	0.89	m_e mb	4.7
CLL	74.23		P	20:54:51.935		28.8		5.71		TAS		5.4	0.80	m_e mb	4.6
CLZ	74.57		P	20:54:54.170	-0.3	28.8		5.71		TAS		4.2	0.77	m_e mb	4.5
FLT1	73.88		P	20:54:50.183	-0.1	28.8		5.71		TAS		4.1	0.85	m_e mb	4.5
FUR	77.52		P	20:55:11.163		28.8		5.71		TAS		7.0	0.93	m_e mb	4.8
GEC2	76.13		P	20:55:03.016		28.8		5.71		TAS		1.5	0.85	m_e mb	4.2
GRA1	76.20		P	20:55:03.611		28.8		5.71		TAS		6.1	0.76	m_e mb	4.8
GTTG	74.95		P	20:54:56.284		28.8		5.71		TAS		4.1	0.95	m_e mb	4.4
MANZ	75.66		P	20:55:00.372		28.8		5.71		TAS		0.3	0.86	m_e mb	3.5
NRDL	74.07		P	20:54:51.190		28.8		5.71		TAS		3.0	0.72	m_e mb	4.4
RJOB	77.39		P	20:55:10.413		28.8		5.71		TAS		1.9	0.80	m_e mb	4.3
ROTZ	75.82		P	20:55:01.353		28.8		5.71		TAS		0.3	0.87	m_e mb	3.4
TANN	75.17		P	20:54:57.622		28.8		5.71		TAS				m_e	
TNS	76.57		P	20:55:05.839		28.8		5.71		TAS		3.7	0.84	m_e mb	4.5

UBBA	75.58	P	20:54:59.781	0.2	28.8	5.71	TAS	2.0	0.63	m_e mb	4.4
WET	76.14	P	20:55:03.280		28.8	5.71	TAS	4.0	0.91	m_e mb	4.5

Event 90420007 Near east coast of Kamchatka Peninsula, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	22:12:29.71			55.7010	161.6970				33.0			11		70.22	74.27	m i ke	BGR
OrigID 90420013																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.4		BGR	90420013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	70.46		P	22:23:39.196	-0.4	17.0		6.01		TAS		3.3	1.01	m_e mb	4.4
CLL	70.24		P	22:23:37.814	-0.2	17.0		6.01		TAS		4.8	0.95	m_e mb	4.6
CLZ	70.22		P	22:23:37.631	0.3	17.0		6.01		TAS		8.3	1.06	m_e mb	4.8
GEC2	72.44		P	22:23:51.143		17.0		6.01		TAS		4.1	1.02	m_e mb	4.5
GRA1	72.13		P	22:23:49.247	0.2	17.0		6.01		TAS		7.4	0.97	m_e mb	4.8
MANZ	71.67		P	22:23:46.618	-0.1	17.0		6.01		TAS		0.8	0.96	m_e mb	3.8
MOX	71.14		P	22:23:43.500	0.2	17.0		6.01		TAS		2.7	0.84	m_e mb	4.4
RJOB	73.68		P	22:23:58.683		17.0		6.01		TAS		5.1	0.80	m_e mb	4.6
ROTZ	71.86		P	22:23:47.820	-0.1	17.0		6.01		TAS		0.7	1.03	m_e mb	3.7
TANN	71.20		P	22:23:43.398	-0.1	17.0		6.01		TAS		1.9	0.89	m_e mb	4.2
UBR	74.27		P	22:24:01.903		17.0		6.01		TAS		3.4	0.94	m_e mb	4.4
WET	72.32		P	22:23:50.187	-0.3	17.0		6.01		TAS		5.8	1.02	m_e mb	4.7

Event 90420008 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	22:34:49.91			55.9080	165.1420				33.0			16		67.52	74.68	m i ke	BGR
OrigID 90420014																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90420014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	70.28		P	22:45:58.103	0.3	15.0		5.98		TAS		7.6	0.95	m_e mb	4.8
BFO	74.33		P	22:46:22.738		15.0		5.98		TAS		10.4	0.82	m_e mb	4.9
BRG	70.93		P	22:46:02.180	-0.1	15.0		5.98		TAS		7.3	0.73	m_e mb	4.9
BSEG	68.59		P	22:45:48.017	0.3	15.0		5.98		TAS		17.6	0.86	m_e mb	5.3
BUG	71.46		P	22:46:05.560	0.3	15.0		5.98		TAS		13.4	0.79	m_e mb	5.1
CLL	70.68		P	22:46:00.689	0.5	15.0		5.98		TAS		10.6	0.92	m_e mb	5.0
CLZ	70.61		P	22:46:00.099	0.3	15.0		5.98		TAS		15.6	0.82	m_e mb	5.2

Station	Mag	Type	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
FLT1	69.99	P	22:45:56.601	-0.2	15.0															
FUR	74.02	P	22:46:20.529		15.0															
GEC2	72.92	P	22:46:14.301		15.0															
GRA1	72.55	P	22:46:11.944		15.0															
GTTG	70.96	P	22:46:02.250	0.3	15.0															
IBBN	70.54	P	22:45:59.828	0.3	15.0															
KAST	71.52	P	22:46:05.890	0.3	15.0															
MANZ	72.11	P	22:46:09.443		15.0															
MOX	71.56	P	22:46:06.076	0.4	15.0															
NEUB	71.00	P	22:46:02.541	0.3	15.0															
NRDL	70.01	P	22:45:56.711	0.3	15.0															
RGN	67.52	P	22:45:41.979	-0.0	15.0															
RJOB	74.16	P	22:46:21.452		15.0															
ROTZ	72.31	P	22:46:10.453		15.0															
STU	73.77	P	22:46:19.303		15.0															
TANN	71.64	P	22:46:06.653	-0.3	15.0															
TNS	72.47	P	22:46:11.675	0.3	15.0															
UBBA	71.66	P	22:46:06.485	0.3	15.0															
UBR	74.68	P	22:46:24.546		15.0															
WET	72.79	P	22:46:13.628		15.0															
WLF	73.35	P	22:46:17.228	0.3	15.0															

Event 90420009 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/20	22:46:45.18			55.8510	167.4780				33.0					72.98	72.98	m i ke	BGR
90420015																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90420015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	72.98		P	22:58:09.771		13.2		5.15		TAS		4.4	0.80	m_e mb	4.6

Event 90421001 Andreanof Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/04/21	06:31:38.17			52.5800	-179.8200				33.0					29	72.68	79.76	m i ke	BGR
90421007																		

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90421007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	75.29		P	06:43:19.057	0.3	6.9		5.58		TAS		1.3	0.65	m_e mb	4.1
BFO	79.23		P	06:43:41.787		6.9		5.58		TAS				m_e	
BRG	76.27		P	06:43:25.065	-0.3	6.9		5.58		TAS		6.3	0.80	m_e mb	4.8
BSEG	73.52		P	06:43:09.379	0.3	6.9		5.58		TAS		16.6	0.81	m_e mb	5.1
BUG	76.18		P	06:43:24.554	0.3	6.9		5.58		TAS		4.1	0.79	m_e mb	4.6
CLL	75.92		P	06:43:22.832	-0.5	6.9		5.58		TAS		7.3	0.76	m_e mb	4.9
CLZ	75.60		P	06:43:20.972	-0.6	6.9		5.58		TAS		14.6	0.78	m_e mb	5.2
FLT1	75.05		P	06:43:17.722	-0.5	6.9		5.58		TAS		10.4	0.66	m_e mb	5.0
FUR	79.19		P	06:43:41.400		6.9		5.58		TAS				m_e	
GEC2	78.30		P	06:43:36.490		6.9		5.58		TAS		6.0	0.69	m_e mb	4.8
GRA1	77.68		P	06:43:32.772		6.9		5.58		TAS		17.4	0.79	m_e mb	5.2
GTTG	75.92		P	06:43:22.901	0.3	6.9		5.58		TAS		10.7	0.84	m_e mb	5.0
IBBN	75.29		P	06:43:19.644	0.3	6.9		5.58		TAS		24.7	0.91	m_e mb	5.2
KAST	76.36		P	06:43:25.399	0.3	6.9		5.58		TAS		5.3	0.89	m_e mb	4.7
MANZ	77.31		P	06:43:30.759	0.3	6.9		5.58		TAS		1.1	0.80	m_e mb	4.0
MOX	76.70		P	06:43:27.326	0.3	6.9		5.58		TAS		8.3	0.89	m_e mb	4.9
NEUB	76.14		P	06:43:24.218	-0.1	6.9		5.58		TAS		16.2	0.89	m_e mb	5.2
NRDL	74.97		P	06:43:17.520	0.3	6.9		5.58		TAS		9.0	0.71	m_e mb	4.9
RGN	72.68		P	06:43:04.935	0.2	6.9		5.58		TAS		31.3	0.69	m_e mb	5.6
RJOB	79.48		P	06:43:43.027		6.9		5.58		TAS				m_e	
ROTZ	77.52		P	06:43:31.990	0.3	6.9		5.58		TAS		1.3	0.90	m_e mb	4.1
RUE	74.70		P	06:43:16.144	-0.1	6.9		5.58		TAS		14.2	0.76	m_e mb	5.1
STU	78.74		P	06:43:38.831		6.9		5.58		TAS				m_e	
TANN	76.86		P	06:43:28.220	-0.4	6.9		5.58		TAS		6.9	1.16	m_e mb	4.7
TNS	77.34		P	06:43:30.840	-0.1	6.9		5.58		TAS		11.6	0.75	m_e mb	5.1
UBBA	76.64		P	06:43:26.925	1.1	6.9		5.58		TAS		2.6	0.81	m_e mb	4.4
UBR	79.76		P	06:43:44.602		6.9		5.58		TAS				m_e	
WET	78.08		P	06:43:35.262		6.9		5.58		TAS				m_e	
WLF	78.01		P	06:43:35.183	0.3	6.9		5.58		TAS		7.9	0.76	m_e mb	4.9

Event 90421002 Tonga Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/21	07:25:55.81			-18.7170	-171.8810				33.0			17		144.60	151.07	m i ke	BGR
90421008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	146.60		PKPbc	07:45:33.743	-0.2	5.7		2.68		TAS				m_e	
BFO	150.46		PKPbc	07:45:44.057		5.7		2.68		TAS				m_e	
BRG	147.58		PKPbc	07:45:36.220	-0.5	5.7		2.68		TAS				m_e	
BSEG	144.81		PKPbc	07:45:28.436	-0.1	5.7		2.68		TAS				m_e	
BUG	147.34		PKPbc	07:45:35.561		5.7		2.68		TAS				m_e	
CLL	147.25		PKPbc	07:45:35.179	0.2	5.7		2.68		TAS				m_e	

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CLZ	146.90	PKPbc	07:45:34.105		5.7	2.68	TAS	m_e
FLT1	146.37	PKPbc	07:45:32.535	-0.7	5.7	2.68	TAS	m_e
FUR	150.52	PKPbc	07:45:43.754		5.7	2.68	TAS	m_e
GEC2	149.61	PKPbc	07:45:41.738		5.7	2.68	TAS	m_e
GRA1	149.00	PKPbc	07:45:40.000		5.7	2.68	TAS	m_e
GTTG	147.21	PKPbc	07:45:35.220		5.7	2.68	TAS	m_e
HLG	144.60	PKPbc	07:45:28.280		5.7	2.68	TAS	m_e
KAST	147.59	PKPbc	07:45:36.267	0.6	5.7	2.68	TAS	m_e
MANZ	148.64	PKPbc	07:45:39.064		5.7	2.68	TAS	m_e
MOX	148.02	PKPbc	07:45:37.134	-0.5	5.7	2.68	TAS	m_e
NEUB	147.47	PKPbc	07:45:35.945	0.2	5.7	2.68	TAS	m_e
NRDL	146.26	PKPbc	07:45:32.535		5.7	2.68	TAS	m_e
RJOB	150.80	PKPbc	07:45:44.500		5.7	2.68	TAS	m_e
ROTZ	148.85	PKPbc	07:45:39.612		5.7	2.68	TAS	m_e
RUE	146.02	PKPbc	07:45:31.759	0.4	5.7	2.68	TAS	m_e
STU	150.01	PKPbc	07:45:42.942		5.7	2.68	TAS	m_e
TANN	148.19	PKPbc	07:45:37.775	0.1	5.7	2.68	TAS	m_e
TNS	148.57	PKPbc	07:45:39.144	0.1	5.7	2.68	TAS	m_e
UBR	151.07	PKPbc	07:45:45.437		5.7	2.68	TAS	m_e
WET	149.41	PKPbc	07:45:41.043		5.7	2.68	TAS	m_e
WLF	149.09	PKPbc	07:45:41.205		5.7	2.68	TAS	m_e

Event 90421003 Marshall Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/21	09:25:47.60			10.0300	172.2130				33.0					118.24	118.24	m i ke	BGR
OrigID 90421009																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	118.24		PKPdf	09:44:31.166		29.0		1.55		TAS					m_e

Event 90422001 Priamurye-Northeastern China border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/22	00:47:06.91			42.6070	130.5380				33.0					73.85	73.85	m i ke	BGR
OrigID 90422007																	

Magnitude Err Nsta Author OrigID

mb	4.7		BGR	90422007
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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GRA1 73.85 P 00:58:37.034 41.1 4.84 TAS 6.1 0.73 m_e mb 4.7

Event 90422002 Fiji Islands region

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/22 02:06:09.31 -21.7020 -177.0300 33.0 14 148.76 153.45 m i ke BGR
90422008

Magnitude Err Nsta Author OrigID

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Lists station data for event 90422002.

Event 90422003 Southeast of Loyalty Islands

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/22 04:37:55.73 -22.8200 171.6600 33.0 22 145.88 151.29 m i ke BGR
90422009

Magnitude Err Nsta Author OrigID

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Lists station data for event 90422003.

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ASSE	147.29	PKPbc	04:57:35.549	0.3	35.7	2.69	TAS	m_e
BFO	151.29	PKPbc	04:57:46.283	0.0	35.7	2.69	TAS	m_e
BRG	147.06	PKPbc	04:57:34.854	-0.2	35.7	2.69	TAS	m_e
BSEG	145.88	PKPbc	04:57:31.484	-0.9	35.7	2.69	TAS	m_e
BUG	148.97	PKPbc	04:57:40.178	0.4	35.7	2.69	TAS	m_e
CLL	147.10	PKPbc	04:57:34.969	0.2	35.7	2.69	TAS	m_e
CLZ	147.63	PKPbc	04:57:36.418	0.3	35.7	2.69	TAS	m_e
FLT1	146.93	PKPbc	04:57:34.330	-0.4	35.7	2.69	TAS	m_e
GEC2	148.70	PKPbc	04:57:39.758	-0.5	35.7	2.69	TAS	m_e
GTTG	148.02	PKPbc	04:57:37.307	0.4	35.7	2.69	TAS	m_e
IBBN	148.07	PKPbc	04:57:38.108	0.1	35.7	2.69	TAS	m_e
KAST	148.82	PKPbc	04:57:39.642	0.4	35.7	2.69	TAS	m_e
MANZ	148.49	PKPbc	04:57:38.646	-0.1	35.7	2.69	TAS	m_e
MOX	148.16	PKPbc	04:57:37.789	0.2	35.7	2.69	TAS	m_e
NEUB	147.66	PKPbc	04:57:36.520	0.1	35.7	2.69	TAS	m_e
NRDL	147.17	PKPbc	04:57:35.127	0.0	35.7	2.69	TAS	m_e
RJOB	149.93	PKPbc	04:57:42.738		35.7	2.69	TAS	m_e
ROTZ	148.63	PKPbc	04:57:39.180	0.0	35.7	2.69	TAS	m_e
TANN	148.01	PKPbc	04:57:37.683	0.6	35.7	2.69	TAS	m_e
UBBA	148.61	PKPbc	04:57:38.773	-0.2	35.7	2.69	TAS	m_e
UBR	151.13	PKPbc	04:57:45.558		35.7	2.69	TAS	m_e
WET	148.83	PKPbc	04:57:39.918	-0.4	35.7	2.69	TAS	m_e

Event 90422004 Cebu, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/22	09:10:53.71			11.4490	123.0960				20.0			30		92.43	97.98	m i ke	BGR
90422010																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.1		BGR	90422010
MBB	6.3		BGR	90422010
Ms	6.3		BGR	90422010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	94.32		P	09:24:09.369	0.7	65.9		4.55		TAS		106.2	1.42	m_e	MBB 6.3
BFO	97.31		P	09:24:22.807	-2.6	65.9		4.55		TAS		87.8	1.44	m_e	MBB 6.4
BRG	92.94		P	09:24:02.151	-0.7	65.9		4.55		TAS		111.8	1.33	m_e	MBB 6.4
BSEG	93.75		P	09:24:06.148	-0.4	65.9		4.55		TAS		79.7	1.10	m_e	MBB 6.3
BUG	96.52		P	09:24:19.081	-0.1	65.9		4.55		TAS		85.9	1.35	m_e	MBB 6.4
CLL	93.32		P	09:24:03.934	-0.7	65.9		4.55		TAS		62.4	1.23	m_e	MBB 6.4
CLZ	94.60		P	09:24:10.371	-0.1	65.9		4.55		TAS		183.6	1.47	m_e	MBB 6.4
FLT1	93.92		P	09:24:07.117	-0.2	65.9		4.55		TAS		92.1	1.43	m_e	MBB 6.1
FUR	95.59		P	09:24:14.776	0.6	65.9		4.55		TAS		289.8	1.48	m_e	MBB 6.8
GEC2	93.84		P	09:24:07.105	0.1	65.9		4.55		TAS		239.5	1.97	m_e	MBB 6.2
GRA1	95.00		P	09:24:12.644	0.4	65.9		4.55		TAS		124.7	1.44	m_e	mb 6.1

GRA1	95.00	L	10:10:06.964							T__	9586.6	18.90	a_e	Ms	6.3
GTTG	94.96	P	09:24:12.250	0.2	65.9	4.55				TAS	181.8	1.48	m_e	MBB	6.4
IBBN	95.85	P	09:24:16.331	0.2	65.9	4.55				TAS	137.3	1.39	m_e	MBB	6.5
KAST	95.98	P	09:24:16.557	-0.2	65.9	4.55				TAS	126.2	1.61	m_e	MBB	6.3
MANZ	94.36	P	09:24:09.545	0.2	65.9	4.55				TAS	38.3	1.75	m_e	MBB	5.6
MOX	94.39	P	09:24:09.363	-0.1	65.9	4.55				TAS	103.1	1.45	m_e	MBB	6.1
MOX	94.39	L	10:04:46.337							T__	9804.2	20.80	a_e	Ms	6.2
NEUB	94.07	P	09:24:08.111	0.1	65.9	4.55				TAS	126.6	1.27	m_e	MBB	6.3
NRDL	94.48	P	09:24:09.892	0.0	65.9	4.55				TAS	181.4	1.56	m_e	MBB	6.3
PLN	94.13	P	09:24:08.338	0.1	65.9	4.55				TAS	44.0	1.55	m_e	MBB	5.8
RETH	94.78	P	09:24:11.154	-0.1	65.9	4.55				TAS	492.0	1.64	m_e	MBB	6.9
RJOB	94.82	P	09:24:11.733	-0.4	65.9	4.55				TAS	77.0	1.24	m_e	MBB	6.3
ROTZ	94.39	P	09:24:09.797	0.3	65.9	4.55				TAS	27.2	1.29	m_e	MBB	5.7
RUE	92.43	P	09:24:00.566	0.0	65.9	4.55				TAS	175.5	1.29	m_e	MBB	6.5
STU	96.60	P	09:24:19.762	1.1	65.9	4.55				TAS	324.0	1.46	m_e	MBB	6.9
TANN	93.98	P	09:24:07.652	0.1	65.9	4.55				TAS	67.0	1.39	m_e	MBB	6.1
TNS	96.40	P	09:24:19.195	0.6	65.9	4.55				TAS	122.1	1.43	m_e	MBB	6.4
UBBA	95.25	P	09:24:13.472	0.1	65.9	4.55				TAS	154.8	1.53	m_e	MBB	6.3
UBR	96.51	P	09:24:19.199	0.1	65.9	4.55				TAS	124.6	1.23	m_e	MBB	6.7
WET	94.23	P	09:24:08.998	0.3	65.9	4.55				TAS	123.0	1.52	m_e	MBB	6.2
WLF	97.98	P	09:24:26.165	0.4	65.9	4.55				TAS	127.1	1.28	m_e	MBB	6.7

Event 90422005 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/22	11:12:07.35			-20.5540	-176.3520				33.0			22		146.29	152.44	m i ke	BGR
	90422011																

Magnitude Err Nsta Author

OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.01		PKPbc	11:31:49.817	0.3	14.4		2.54		TAS				m_e	
BFO	152.03		PKPbc	11:31:59.697	-0.5	14.4		2.54		TAS				m_e	
BRG	148.67		PKPbc	11:31:51.486	0.3	14.4		2.54		TAS				m_e	
BSEG	146.29		PKPbc	11:31:44.852	-0.8	14.4		2.54		TAS				m_e	
BUG	149.04		PKPbc	11:31:52.648		14.4		2.54		TAS				m_e	
CLL	148.44		PKPbc	11:31:51.003	-0.3	14.4		2.54		TAS				m_e	
CLZ	148.33		PKPbc	11:31:50.393	0.0	14.4		2.54		TAS				m_e	
FLT1	147.74		PKPbc	11:31:48.807	0.1	14.4		2.54		TAS				m_e	
FUR	151.78		PKPbc	11:31:59.001		14.4		2.54		TAS				m_e	
GEC2	150.64		PKPbc	11:31:56.448	0.0	14.4		2.54		TAS				m_e	
GTTG	148.68		PKPbc	11:31:51.486	0.2	14.4		2.54		TAS				m_e	
IBBN	148.15		PKPbc	11:31:50.254	0.0	14.4		2.54		TAS				m_e	
KAST	149.18		PKPbc	11:31:52.963		14.4		2.54		TAS				m_e	
MANZ	149.87		PKPbc	11:31:54.485	0.2	14.4		2.54		TAS				m_e	
MOX	149.32		PKPbc	11:31:53.068	0.5	14.4		2.54		TAS				m_e	

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NRDL	147.73	PKPbc	11:31:48.752	0.1	14.4	2.54	TAS	m_e
RJOB	151.89	PKPbc	11:31:59.170		14.4	2.54	TAS	m_e
ROTZ	150.06	PKPbc	11:31:55.131	-0.1	14.4	2.54	TAS	m_e
STU	151.50	PKPbc	11:31:58.643	-0.5	14.4	2.54	TAS	m_e
TANN	149.40	PKPbc	11:31:53.506	0.2	14.4	2.54	TAS	m_e
TNS	150.15	PKPbc	11:31:55.438	0.5	14.4	2.54	TAS	m_e
UBBA	149.38	PKPbc	11:31:52.891	0.1	14.4	2.54	TAS	m_e
UBR	152.44	PKPbc	11:32:00.488		14.4	2.54	TAS	m_e
WET	150.53	PKPbc	11:31:56.404	-0.3	14.4	2.54	TAS	m_e
WLF	150.88	PKPbc	11:31:57.897	0.0	14.4	2.54	TAS	m_e

Event 90422006 Primorye, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/22	17:46:04.17			46.0800	136.2300				33.0			21		70.27	75.56	m i ke	BGR
	90422012																

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90422012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	71.59		P	17:57:22.797		38.0		6.04		TAS					m_e
BFO	75.56		P	17:57:45.286		38.0		6.04		TAS		3.6	0.78	m_e mb	4.6
BRG	71.34		P	17:57:21.135	0.1	38.0		6.04		TAS		4.3	0.77	m_e mb	4.7
BSEG	70.27		P	17:57:14.501	0.1	38.0		6.04		TAS		14.2	0.88	m_e mb	5.1
BUG	73.38		P	17:57:33.237		38.0		6.04		TAS		8.9	0.96	m_e mb	4.9
CLL	71.37		P	17:57:21.240	-0.2	38.0		6.04		TAS		9.3	0.87	m_e mb	4.9
CLZ	71.93		P	17:57:24.224	0.1	38.0		6.04		TAS		10.5	0.72	m_e mb	5.1
GEC2	73.04		P	17:57:31.336		38.0		6.04		TAS		2.8	0.78	m_e mb	4.5
GRA1	73.34		P	17:57:32.823		38.0		6.04		TAS				m_e	
GTTG	72.32		P	17:57:26.799		38.0		6.04		TAS		6.7	0.74	m_e mb	4.9
IBBN	72.50		P	17:57:28.148		38.0		6.04		TAS		13.6	0.81	m_e mb	5.1
KAST	73.17		P	17:57:31.638	0.1	38.0		6.04		TAS		3.0	0.76	m_e mb	4.5
MANZ	72.76		P	17:57:29.622		38.0		6.04		TAS		0.2	0.72	m_e mb	3.3
MOX	72.43		P	17:57:27.997	0.1	38.0		6.04		TAS				m_e	
ROTZ	72.90		P	17:57:30.525		38.0		6.04		TAS		1.1	0.95	m_e mb	4.0
STU	74.87		P	17:57:42.072		38.0		6.04		TAS		18.3	0.75	m_e mb	5.2
TANN	72.29		P	17:57:27.295	0.1	38.0		6.04		TAS		1.8	0.81	m_e mb	4.3
TNS	73.96		P	17:57:37.430	0.1	38.0		6.04		TAS				m_e	
UBBA	72.90		P	17:57:30.647	0.1	38.0		6.04		TAS		2.3	0.89	m_e mb	4.3
UBR	75.41		P	17:57:45.403		38.0		6.04		TAS				m_e	
WET	73.13		P	17:57:31.189		38.0		6.04		TAS				m_e	

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Event 90422007 Queen Charlotte Islands, Canada, region
Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/22 21:44:51.32 51.5140 -131.8270 10.0 18 70.25 75.29 m i BGR
90422013

Magnitude Err Nsta Author OrigID
mb 5.4 BGR 90422013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	72.00		P	21:56:13.384		334.1		5.85		TAS		39.3	1.11	m_e mb	5.5
BFO	74.86		P	21:56:30.172		334.1		5.85		TAS		45.7	1.03	m_e mb	5.5
BRG	73.94		P	21:56:25.319		334.1		5.85		TAS		25.1	1.01	m_e mb	5.2
BSEG	70.25		P	21:56:03.361		334.1		5.85		TAS		38.6	1.02	m_e mb	5.5
BUG	71.74		P	21:56:12.169		334.1		5.85		TAS		58.9	1.31	m_e mb	5.6
CLL	73.32		P	21:56:21.578		334.1		5.85		TAS		15.7	0.97	m_e mb	5.1
CLZ	72.18		P	21:56:15.530		334.1		5.85		TAS		44.7	0.97	m_e mb	5.6
FLT1	71.95		P	21:56:13.114		334.1		5.85		TAS		33.8	1.00	m_e mb	5.4
GRA1	74.37		P	21:56:28.410		334.1		5.85		TAS		54.9	1.32	m_e mb	5.4
GTTG	72.35		P	21:56:16.838		334.1		5.85		TAS		60.4	1.29	m_e mb	5.6
IBBN	71.09		P	21:56:08.546		334.1		5.85		TAS		176.6	1.49	m_e mb	6.0
KAST	72.27		P	21:56:15.601		334.1		5.85		TAS		27.3	1.27	m_e mb	5.2
MOX	73.59		P	21:56:22.966		334.1		5.85		TAS		24.4	0.88	m_e mb	5.2
NRDL	71.52		P	21:56:10.724		334.1		5.85		TAS		33.6	0.91	m_e mb	5.5
TNS	73.17		P	21:56:20.918		334.1		5.85		TAS		28.5	1.02	m_e mb	5.4
UBBA	73.03		P	21:56:19.668		334.1		5.85		TAS		76.5	1.78	m_e mb	5.5
WET	75.29		P	21:56:32.475		334.1		5.85		TAS		12.7	1.00	m_e mb	4.9
WLF	73.04		P	21:56:20.049		334.1		5.85		TAS		68.0	1.67	m_e mb	5.5

Event 90422008 Off coast of Washington, United States
Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/22 21:44:45.37 46.9060 -126.3100 33.0 76.99 76.99 m i ke BGR
90422014

Magnitude Err Nsta Author OrigID
mb 5.2 BGR 90422014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	76.99		P	21:56:33.349		341.4		5.05		TAS		23.9	1.09	m_e mb	5.2

Event 90423001 Owen Fracture Zone region
Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author

OrigID
 2019/04/23 00:36:58.58 20.9360 60.7710 10.0 7 46.58 50.56 m i ke BGR
 90423007

Magnitude Err Nsta Author OrigID
 mb 4.6 BGR 90423007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	47.15	P		00:45:27.720	0.0	108.0		7.71		TAS		3.8	0.80	m_e	mb 4.6
CLL	47.86	P		00:45:33.454	-0.2	108.0		7.71		TAS		11.8	0.85	m_e	mb 5.0
CLZ	49.59	P		00:45:46.353	0.6	108.0		7.71		TAS		6.9	0.75	m_e	mb 4.7
FLT1	49.25	P		00:45:43.525	-0.0	108.0		7.71		TAS		6.8	0.68	m_e	mb 4.8
GEC2	46.58	P		00:45:23.579		108.0		7.71		TAS		3.1	0.84	m_e	mb 4.5
GTTG	49.73	P		00:45:47.537		108.0		7.71		TAS		7.2	1.00	m_e	mb 4.6
KAST	50.56	P		00:45:54.257	-0.2	108.0		7.71		TAS		4.2	0.81	m_e	mb 4.4
MANZ	47.94	P		00:45:33.828	-0.2	108.0		7.71		TAS		0.6	0.77	m_e	mb 3.8
NRDL	49.96	P		00:45:49.113	-0.7	108.0		7.71		TAS		8.3	0.85	m_e	mb 4.7
RJOB	46.80	P		00:45:24.965	-0.2	108.0		7.71		TAS		7.8	0.76	m_e	mb 4.9
ROTZ	47.81	P		00:45:32.819	-0.2	108.0		7.71		TAS		1.9	0.80	m_e	mb 4.3
UBR	48.53	P		00:45:38.246		108.0		7.71		TAS		11.9	0.89	m_e	mb 4.9
WET	47.20	P		00:45:27.979	-0.2	108.0		7.71		TAS		2.4	0.88	m_e	mb 4.3

Event 90423002 Tonga Islands region

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/04/23 04:52:07.77 -20.2720 -172.3480 33.0 26 146.33 152.59 m i ke BGR
 90423008

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.12		PKPbc	05:11:49.189	-0.2	7.0		2.60		TAS				m_e	
BFO	152.00		PKPbc	05:11:59.595	0.0	7.0		2.60		TAS				m_e	
BRG	149.06		PKPbc	05:11:52.245	0.4	7.0		2.60		TAS				m_e	
BSEG	146.33		PKPbc	05:11:44.563	-0.2	7.0		2.60		TAS				m_e	
BUG	148.89		PKPbc	05:11:51.781	0.1	7.0		2.60		TAS				m_e	
CLL	148.74		PKPbc	05:11:50.810	-0.2	7.0		2.60		TAS				m_e	
CLZ	148.42		PKPbc	05:11:49.962	-0.2	7.0		2.60		TAS				m_e	
FLT1	147.88		PKPbc	05:11:48.485	-0.2	7.0		2.60		TAS				m_e	
GEC2	151.08		PKPbc	05:11:56.939	-0.2	7.0		2.60		TAS				m_e	
GRA1	150.51		PKPbc	05:11:55.896	0.4	7.0		2.60		TAS				m_e	
GTTG	148.74		PKPbc	05:11:50.730	-0.2	7.0		2.60		TAS				m_e	
IBBN	148.03		PKPbc	05:11:49.273	-0.1	7.0		2.60		TAS				m_e	
KAST	149.13		PKPbc	05:11:51.960	-0.1	7.0		2.60		TAS				m_e	
MANZ	150.14		PKPbc	05:11:54.806	0.2	7.0		2.60		TAS				m_e	
MOX	149.53		PKPbc	05:11:53.288	0.3	7.0		2.60		TAS				m_e	

NEUB	148.97	PKPbc	05:11:51.655	0.1	7.0	2.60	TAS	m_e
NRDL	147.78	PKPbc	05:11:48.233	-0.3	7.0	2.60	TAS	m_e
RJOB	152.29	PKPbc	05:11:59.785	-0.4	7.0	2.60	TAS	m_e
ROTZ	150.35	PKPbc	05:11:55.517	0.4	7.0	2.60	TAS	m_e
RUE	147.51	PKPbc	05:11:47.754	-0.0	7.0	2.60	TAS	m_e
TANN	149.68	PKPbc	05:11:53.573	0.2	7.0	2.60	TAS	m_e
TNS	150.11	PKPbc	05:11:54.766	0.1	7.0	2.60	TAS	m_e
UBBA	149.46	PKPbc	05:11:53.117	0.3	7.0	2.60	TAS	m_e
UBR	152.59	PKPbc	05:12:00.211	-0.8	7.0	2.60	TAS	m_e
WET	150.89	PKPbc	05:11:56.802	0.2	7.0	2.60	TAS	m_e
WLF	150.65	PKPbc	05:11:56.750	0.4	7.0	2.60	TAS	m_e

Event 90423003 Luzon, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/23	05:38:09.13			14.8500	121.8900				59.9	4.5		28		88.99	94.55	m i ke	BGR
90423009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	90423009
MBB	6.2		BGR	90423009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	90.87		P	05:51:09.650	0.1	67.0		4.53		TAS		65.1	1.38	m_e	MBB 6.3
BFO	93.92		P	05:51:23.424		67.0		4.53		TAS		7.9	0.82	m_e	MBB 6.1
BFO	93.92		pP	05:51:39.359						T__					m_e
BRG	89.53		P	05:51:03.222		67.0		4.53		TAS		15.1	0.79	m_e	MBB 6.2
BRG	89.53		pP	05:51:20.728						T__					m_e
BSEG	90.28		P	05:51:06.835	0.1	67.0		4.53		TAS		23.5	1.00	m_e	MBB 6.2
BUG	93.07		P	05:51:19.390	0.1	67.0		4.53		TAS		22.3	0.86	m_e	MBB 6.3
BUG	93.07		pP	05:51:36.051						T__					m_e
CLL	89.90		P	05:51:04.536	0.1	67.0		4.53		TAS					m_e
CLL	89.90		pP	05:51:21.424						T__					m_e
CLZ	91.16		P	05:51:10.508	0.1	67.0		4.53		TAS		30.6	0.93	m_e	MBB 6.3
FLT1	90.47		P	05:51:07.685	0.1	67.0		4.53		TAS		13.3	0.75	m_e	MBB 6.2
FUR	92.22		P	05:51:15.553		67.0		4.53		TAS		59.6	0.97	m_e	MBB 6.5
GEC2	90.47		P	05:51:07.776		67.0		4.53		TAS		26.3	0.78	m_e	MBB 6.1
GRA1	91.60		P	05:51:13.257		67.0		4.53		TAS		10.8	0.82	m_e	MBB 6.3
GTTG	91.52		P	05:51:12.104	0.1	67.0		4.53		TAS		26.4	0.86	m_e	MBB 6.3
IBBN	92.39		P	05:51:16.505		67.0		4.53		TAS		33.8	0.91	m_e	MBB 6.3
IBBN	92.39		pP	05:51:33.352						T__					m_e
KAST	92.54		P	05:51:17.216	0.1	67.0		4.53		TAS		18.9	0.93	m_e	MBB 6.3
KAST	92.54		pP	05:51:34.222						T__					m_e
MANZ	90.96		P	05:51:10.210		67.0		4.53		TAS		2.6	0.86	m_e	MBB 5.7
MOX	90.97		P	05:51:09.832		67.0		4.53		TAS		11.1	0.81	m_e	MBB 6.2
NEUB	90.65		P	05:51:08.638		67.0		4.53		TAS		28.2	0.76	m_e	MBB 6.4

NRDL	91.02	P	05:51:10.081	0.1	67.0	4.53	TAS	67.1	1.28	m_e	MBB	6.4
RJOB	91.47	P	05:51:11.951		67.0	4.53	TAS	61.5	0.76	m_e	MBB	6.3
ROTZ	90.99	P	05:51:10.819		67.0	4.53	TAS	3.7	0.86	m_e	MBB	5.6
RUE	88.99	P	05:51:00.787	0.1	67.0	4.53	TAS	88.8	0.69	m_e	MBB	6.4
RUE	88.99	pP	05:51:18.377				T__			m_e		
STU	93.20	P	05:51:20.288		67.0	4.53	TAS	27.4	0.77	m_e	MBB	6.6
STU	93.20	pP	05:51:37.444				T__			m_e		
TANN	90.58	P	05:51:08.074		67.0	4.53	TAS	14.9	0.87	m_e	MBB	6.3
TNS	92.98	P	05:51:19.284		67.0	4.53	TAS	14.0	0.84	m_e	MBB	6.3
TNS	92.98	pP	05:51:36.051				T__			m_e		
UBBA	91.82	P	05:51:13.695		67.0	4.53	TAS	62.2	1.47	m_e	MBB	6.2
UBBA	91.82	pP	05:51:31.088				T__			m_e		
UBR	93.14	P	05:51:19.612		67.0	4.53	TAS	53.2	0.77	m_e	MBB	6.4
UBR	93.14	pP	05:51:36.660				T__			m_e		
WET	90.85	P	05:51:09.621		67.0	4.53	TAS	6001.7	3.38	m_e	MBB	6.2
WLF	94.55	P	05:51:26.648		67.0	4.53	TAS	52.5	0.85	m_e	MBB	6.4
WLF	94.55	pP	05:51:43.712				T__			m_e		

Event 90423004 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/23	14:20:19.42			-22.6400	-178.8500				377.2	6.1		29		147.99	154.00	m i ke	BGR
90423010																	

Magnitude Err Nsta Author

OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	149.66		PKPbc	14:39:27.483	0.0	17.5		2.11		TAS					m_e
BFO	153.73		PKPbc	14:39:36.100	0.0	17.5		2.11		TAS					m_e
BRG	150.10		PKPdf	14:39:20.775	-0.2	17.5		1.38		TAS					m_e
BRG	150.10		PKPbc	14:39:28.507	-0.1	17.5		2.11		TAS					m_e
BSEG	147.99		PKPbc	14:39:23.900	-0.0	17.5		2.11		TAS					m_e
BSEG	147.99		PKPab	14:39:31.396	-0.2	17.5		4.18		TAS					m_e
BSEG	147.99		pPKPbc	14:40:56.747	-0.2	17.5		2.79		TAS					m_e
BUG	150.86		PKPbc	14:39:29.837	-0.2	17.5		2.11		TAS					m_e
CLL	149.94		PKPbc	14:39:28.045	-0.1	17.5		2.11		TAS					m_e
CLZ	149.99		PKPdf	14:39:21.500	-0.2	17.5		1.38		TAS					m_e
CLZ	149.99		PKPbc	14:39:28.047	-0.1	17.5		2.11		TAS					m_e
FLT1	149.36		PKPdf	14:39:19.949	-0.2	17.5		1.38		TAS					m_e
FLT1	149.36		PKPbc	14:39:26.744	-0.1	17.5		2.11		TAS					m_e
FLT1	149.36		PKPab	14:39:36.442	-0.2	17.5		4.18		TAS					m_e
FLT1	149.36		pPKPbc	14:40:57.515	-0.2	17.5		2.79		TAS					m_e
FUR	153.28		PKPbc	14:39:35.165	-0.1	17.5		2.11		TAS					m_e
FUR	153.28		PKPab	14:39:53.514	-0.2	17.5		4.18		TAS					m_e
GEC2	152.01		PKPdf	14:39:23.318	-0.2	17.5		1.38		TAS					m_e
GEC2	152.01		PKPbc	14:39:32.618	-0.2	17.5		2.11		TAS					m_e

GRA1	151.86	PKPdf	14:39:23.218	-0.2	17.5	1.38	TAS	m_e
GRA1	151.86	PKPbc	14:39:32.090	-0.1	17.5	2.11	TAS	m_e
GTTG	150.35	PKPdf	14:39:21.859	-0.2	17.5	1.38	TAS	m_e
GTTG	150.35	PKPbc	14:39:28.741	-0.2	17.5	2.11	TAS	m_e
GTTG	150.35	PKPab	14:39:40.798	-0.2	17.5	4.18	TAS	m_e
HLG	148.09	PKPbc	14:39:24.318	0.1	17.5	2.11	TAS	m_e
HLG	148.09	PKPab	14:39:31.739	-0.2	17.5	4.18	TAS	m_e
IBBN	149.95	PKPbc	14:39:28.162	0.0	17.5	2.11	TAS	m_e
KAST	150.93	PKPdf	14:39:22.942	-0.2	17.5	1.38	TAS	m_e
KAST	150.93	PKPbc	14:39:30.043	-0.1	17.5	2.11	TAS	m_e
KAST	150.93	pPKPbc	14:41:02.767	-0.2	17.5	2.79	TAS	m_e
MANZ	151.38	PKPdf	14:39:23.060	-0.2	17.5	1.38	TAS	m_e
MANZ	151.38	PKPbc	14:39:31.578	0.4	17.5	2.11	TAS	m_e
MOX	150.87	PKPdf	14:39:22.280	-0.2	17.5	1.38	TAS	m_e
MOX	150.87	PKPbc	14:39:30.100	0.0	17.5	2.11	TAS	m_e
MOX	150.87	PKPab	14:39:42.810	-0.2	17.5	4.18	TAS	m_e
NEUB	150.32	PKPdf	14:39:21.625	-0.2	17.5	1.38	TAS	m_e
NEUB	150.32	PKPbc	14:39:28.787	-0.1	17.5	2.11	TAS	m_e
NRDL	149.41	PKPbc	14:39:26.835	-0.1	17.5	2.11	TAS	m_e
RJOB	153.27	PKPbc	14:39:35.422	0.0	17.5	2.11	TAS	m_e
RJOB	153.27	PKPab	14:39:53.949	-0.2	17.5	4.18	TAS	m_e
ROTZ	151.56	PKPdf	14:39:22.834	-0.2	17.5	1.38	TAS	m_e
ROTZ	151.56	PKPbc	14:39:31.712	0.1	17.5	2.11	TAS	m_e
ROTZ	151.56	PKPab	14:39:46.436	-0.2	17.5	4.18	TAS	m_e
RUE	148.67	PKPbc	14:39:25.777	0.3	17.5	2.11	TAS	m_e
STU	153.15	PKPdf	14:39:25.294	-0.2	17.5	1.38	TAS	m_e
STU	153.15	PKPbc	14:39:34.619	-0.2	17.5	2.11	TAS	m_e
STU	153.15	PKPab	14:39:52.479	-0.2	17.5	4.18	TAS	m_e
TANN	150.90	PKPdf	14:39:22.285	-0.2	17.5	1.38	TAS	m_e
TANN	150.90	PKPbc	14:39:30.327	0.1	17.5	2.11	TAS	m_e
TANN	150.90	PKPab	14:39:42.930	-0.2	17.5	4.18	TAS	m_e
TNS	151.88	PKPdf	14:39:24.130	-0.2	17.5	1.38	TAS	m_e
TNS	151.88	PKPbc	14:39:32.545	0.4	17.5	2.11	TAS	m_e
UBBA	151.04	PKPdf	14:39:22.634	-0.2	17.5	1.38	TAS	m_e
UBBA	151.04	PKPbc	14:39:30.327	-0.0	17.5	2.11	TAS	m_e
UBBA	151.04	PKPab	14:39:42.881	-0.2	17.5	4.18	TAS	m_e
UBR	154.00	PKPdf	14:39:26.094	-0.2	17.5	1.38	TAS	m_e
UBR	154.00	PKPbc	14:39:36.526	-0.2	17.5	2.11	TAS	m_e
WET	151.97	PKPbc	14:39:32.672	0.1	17.5	2.11	TAS	m_e
WLF	152.74	PKPbc	14:39:34.373	0.3	17.5	2.11	TAS	m_e

Event 90423005 Eastern Xizang-India border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/23	20:15:52.77			28.5500	94.8000				33.0			28		62.61	67.98	m i ke	BGR
90423011																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.9		BGR	90423011
MBB	6.7		BGR	90423011
Ms	6.1		BGR	90423011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	64.54		P	20:26:26.551	-1.2	76.0		6.51		TAS		46.5	1.08	m_e	MBB	6.7
BFO	67.03		P	20:26:42.228	-0.3	76.0		6.51		TAS		79.4	1.17	m_e	MBB	6.7
BRG	62.84		P	20:26:14.983	-0.3	76.0		6.51		TAS		41.1	1.11	m_e	MBB	6.5
BSEG	64.31		P	20:26:25.732	1.0	76.0		6.51		TAS		139.9	1.05	m_e	MBB	6.8
BUG	66.76		P	20:26:40.716	-0.6	76.0		6.51		TAS		130.7	1.14	m_e	MBB	6.7
CLL	63.33		P	20:26:17.963	-0.3	76.0		6.51		TAS		74.2	1.22	m_e	MBB	6.5
CLZ	64.79		P	20:26:28.712	0.3	76.0		6.51		TAS		92.0	0.97	m_e	MBB	6.7
FLT1	64.16		P	20:26:23.710	-0.3	76.0		6.51		TAS		134.8	1.18	m_e	MBB	6.6
FUR	65.19		P	20:26:31.137	0.4	76.0		6.51		TAS		125.0	1.00	m_e	MBB	6.9
GEC2	63.46		P	20:26:19.643	0.2	76.0		6.51		TAS		117.2	1.20	m_e	MBB	6.6
GRA1	64.82		P	20:26:28.712	0.7	76.0		6.51		TAS		239.0	1.34	m_e	MBB	6.7
GRA1	64.82		L	20:57:07.817						T__		15152.0	21.60	a_e	Ms	6.2
GTTG	65.12		P	20:26:30.818	0.3	76.0		6.51		TAS		215.1	1.24	m_e	MBB	6.8
IBBN	66.23		P	20:26:37.523	-0.2	76.0		6.51		TAS		175.4	1.25	m_e	MBB	6.7
KAST	66.14		P	20:26:36.906	-0.2	76.0		6.51		TAS		51.9	1.15	m_e	MBB	6.6
MANZ	64.19		P	20:26:24.539	0.1	76.0		6.51		TAS		28.1	1.26	m_e	MBB	6.0
MOX	64.34		P	20:26:24.774	-0.1	76.0		6.51		TAS		87.4	1.29	m_e	MBB	6.7
MOX	64.34		L	20:57:46.763						T__		10131.9	19.10	a_e	Ms	6.0
NEUB	64.11		P	20:26:23.794	-0.2	76.0		6.51		TAS		84.8	1.04	m_e	MBB	6.7
NRDL	64.79		P	20:26:28.605	0.6	76.0		6.51		TAS		276.6	1.16	m_e	MBB	6.9
RJOB	64.32		P	20:26:24.858	-0.0	76.0		6.51		TAS		40.0	1.05	m_e	MBB	6.7
ROTZ	64.18		P	20:26:24.645	0.3	76.0		6.51		TAS		72.8	1.29	m_e	MBB	6.1
RUE	62.61		P	20:26:13.599	-0.4	76.0		6.51		TAS		62.4	0.95	m_e	MBB	6.7
STU	66.35		P	20:26:38.268	-0.2	76.0		6.51		TAS		384.8	1.15	m_e	MBB	7.1
TANN	63.87		P	20:26:22.432	0.2	76.0		6.51		TAS		58.5	1.10	m_e	MBB	6.6
TNS	66.40		P	20:26:38.609	0.2	76.0		6.51		TAS		231.6	1.44	m_e	MBB	6.7
UBBA	65.28		P	20:26:31.350	-0.3	76.0		6.51		TAS		25.2	1.08	m_e	MBB	6.6
UBR	66.08		P	20:26:35.927	-0.5	76.0		6.51		TAS		62.0	1.08	m_e	MBB	6.7
WET	63.91		P	20:26:22.539	0.2	76.0		6.51		TAS		118.0	1.33	m_e	MBB	6.7
WLF	67.98		P	20:26:49.252	0.5	76.0		6.51		TAS		338.1	1.14	m_e	MBB	6.9

Event 90424001 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/24	23:17:15.32			-22.0500	-177.0400				495.0	2.1		27		147.68	153.43	m i ke	BGR
90424007																	

Magnitude	Err	Nsta	Author	OrigID
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2019/04/25 20:23:07.66 39.3000 130.1400 33.0 14 74.28 77.42 m i ke BGR 90425007

Magnitude Err Nsta Author OrigID
mb 4.5 BGR 90425007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	74.28		P	20:34:41.854		46.0		5.98		TAS		2.1	0.81	m_e	mb 4.2
CLL	74.40		P	20:34:42.403	-0.2	46.0		5.98		TAS		8.9	0.75	m_e	mb 4.9
CLZ	75.18		P	20:34:47.341	-0.2	46.0		5.98		TAS		5.9	0.89	m_e	mb 4.6
FLT1	74.46		P	20:34:42.885	-0.3	46.0		5.98		TAS		4.5	0.85	m_e	mb 4.5
FUR	77.42		P	20:34:59.973		46.0		5.98		TAS		8.2	0.67	m_e	mb 5.0
GEC2	75.80		P	20:34:50.707		46.0		5.98		TAS		2.4	0.63	m_e	mb 4.5
KAST	76.49		P	20:34:54.564		46.0		5.98		TAS		3.4	0.83	m_e	mb 4.5
MANZ	75.74		P	20:34:50.597	-0.1	46.0		5.98		TAS		0.8	0.82	m_e	mb 3.9
MOX	75.49		P	20:34:49.307	0.4	46.0		5.98		TAS		1.8	0.78	m_e	mb 4.2
RJOB	77.01		P	20:34:57.280		46.0		5.98		TAS		3.1	0.78	m_e	mb 4.5
ROTZ	75.85		P	20:34:51.285	-0.6	46.0		5.98		TAS		7.1	1.55	m_e	mb 4.6
TANN	75.27		P	20:34:47.747	0.2	46.0		5.98		TAS		1.4	0.74	m_e	mb 4.1
UBBA	76.08		P	20:34:52.412		46.0		5.98		TAS		100.5	2.18	m_e	mb 5.6
WET	75.97		P	20:34:51.976		46.0		5.98		TAS		1.8	0.87	m_e	mb 4.2

Event 90427001 Gansu, China

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/04/27 20:27:48.81 39.7400 96.1800 33.0 27 56.04 61.07 m i ke BGR 90427007

Magnitude Err Nsta Author OrigID
mb 5.2 BGR 90427007
Ms 4.3 BGR 90427007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	60.43		P	20:37:55.271		65.3		7.00		TAS		21.9	1.12	m_e	mb 5.1
BRG	56.04		P	20:37:24.771	0.1	65.3		7.00		TAS		22.7	1.16	m_e	mb 5.1
BSEG	56.88		P	20:37:31.202	0.3	65.3		7.00		TAS		29.6	1.03	m_e	mb 5.3
BUG	59.62		P	20:37:50.225	-0.4	65.3		7.00		TAS		38.4	1.33	m_e	mb 5.3
CLL	56.41		P	20:37:27.417	-0.0	65.3		7.00		TAS		24.7	1.13	m_e	mb 5.1
CLZ	57.70		P	20:37:36.945	-0.5	65.3		7.00		TAS		31.2	0.82	m_e	mb 5.4
FLT1	57.01		P	20:37:31.016	0.1	65.3		7.00		TAS		28.1	1.16	m_e	mb 5.2
FUR	58.75		P	20:37:44.461		65.3		7.00		TAS		59.9	1.06	m_e	mb 5.5
GEC2	57.00		P	20:37:31.782	-0.1	65.3		7.00		TAS		25.8	1.36	m_e	mb 5.1
GOR1	56.71		P	20:37:30.039	0.4	65.3		7.00		TAS		43.7	1.20	m_e	mb 5.4
GRA1	58.12		P	20:37:40.083	0.5	65.3		7.00		TAS		8.8	1.16	m_e	mb 4.7
GRA1	58.12		L	21:04:30.696						T__		255.5	18.50	a_e	Ms 4.4
GTTG	58.05		P	20:37:39.514	-0.4	65.3		7.00		TAS		40.4	1.01	m_e	mb 5.4

IBBN	58.96	P	20:37:45.525	0.3	65.3	7.00	TAS	45.9	1.34	m_e	mb	5.3
MANZ	57.47	P	20:37:35.339	0.1	65.3	7.00	TAS	6.1	1.44	m_e	mb	4.4
MOX	57.48	P	20:37:35.308	-0.1	65.3	7.00	TAS	29.4	1.45	m_e	mb	5.1
MOX	57.48	L	21:04:10.429				T__	202.1	20.00	a_e	Ms	4.2
NEUB	57.17	P	20:37:32.563	-0.4	65.3	7.00	TAS	45.8	1.29	m_e	mb	5.3
NRDL	57.58	P	20:37:36.248	-0.9	65.3	7.00	TAS	39.6	1.02	m_e	mb	5.4
PLN	57.23	P	20:37:33.206	0.4	65.3	7.00	TAS	9.5	1.44	m_e	mb	4.6
RETH	57.89	P	20:37:38.255	0.1	65.3	7.00	TAS	133.1	1.45	m_e	mb	5.8
RJOB	58.01	P	20:37:39.365		65.3	7.00	TAS	23.6	1.16	m_e	mb	5.1
ROTZ	57.50	P	20:37:35.482	-0.3	65.3	7.00	TAS	7.5	1.18	m_e	mb	4.6
STU	59.72	P	20:37:50.592		65.3	7.00	TAS	43.4	1.00	m_e	mb	5.4
TANN	57.09	P	20:37:32.142	0.3	65.3	7.00	TAS	10.2	0.94	m_e	mb	4.8
UBBA	58.34	P	20:37:40.949	0.1	65.3	7.00	TAS	30.7	1.52	m_e	mb	5.1
UBR	59.66	P	20:37:50.298		65.3	7.00	TAS	25.9	0.92	m_e	mb	5.2
WET	57.37	P	20:37:34.715	0.7	65.3	7.00	TAS	22.3	1.28	m_e	mb	5.0
WLF	61.07	P	20:38:00.317	-0.6	65.3	7.00	TAS	48.1	1.16	m_e	mb	5.2

Event 90428003 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/28	21:06:09.97			-20.1470	170.0630			33.0		11.8		23		142.88	148.25	m i ke	BGR
	90428009																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	144.26		PKPbc	21:25:39.454	-0.1	37.3		3.60		TAS		7.2	1.02	m_e	
BFO	148.25		PKPbc	21:25:55.036		37.3		3.60		TAS		8.1	0.92	m_e	
BRG	144.02		PKPbc	21:25:38.531	0.7	37.3		3.60		TAS				m_e	
BSEG	142.88		PKPbc	21:25:34.817	-0.1	37.3		3.60		TAS		7.1	0.84	m_e	
CLL	144.06		PKPbc	21:25:38.551	-0.0	37.3		3.60		TAS		10.2	0.77	m_e	
CLZ	144.61		PKPbc	21:25:40.933	0.1	37.3		3.60		TAS				m_e	
FLT1	143.90		PKPbc	21:25:37.975	-0.0	37.3		3.60		TAS				m_e	
FUR	147.22		PKPbc	21:25:51.530		37.3		3.60		TAS		21.0	0.88	m_e	
GEC2	145.65		PKPbc	21:25:43.747		37.3		3.60		TAS				m_e	
GTTG	145.00		PKPbc	21:25:42.125	0.3	37.3		3.60		TAS		41.2	0.73	m_e	
IBBN	145.07		PKPbc	21:25:42.135	0.1	37.3		3.60		TAS		52.7	0.73	m_e	
MANZ	145.45		PKPbc	21:25:43.632	0.4	37.3		3.60		TAS		1.6	1.02	m_e	
MOX	145.12		PKPbc	21:25:42.291	-0.7	37.3		3.60		TAS		8.3	0.91	m_e	
NEUB	144.63		PKPbc	21:25:40.506	0.1	37.3		3.60		TAS		30.5	0.81	m_e	
NRDL	144.16		PKPbc	21:25:39.057	0.0	37.3		3.60		TAS		6.4	0.99	m_e	
PLN	145.04		PKPbc	21:25:42.043	1.4	37.3		3.60		TAS		5.3	0.90	m_e	
RETH	144.20		PKPbc	21:25:39.166	-0.1	37.3		3.60		TAS		34.0	1.18	m_e	
RJOB	146.88		PKPbc	21:25:49.368		37.3		3.60		TAS				m_e	
ROTZ	145.58		PKPbc	21:25:44.712	-2.7	37.3		3.60		TAS		1.9	0.72	m_e	
TANN	144.97		PKPbc	21:25:41.944	1.6	37.3		3.60		TAS		13.7	0.91	m_e	

./bul1904.txt

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RUE	43.08	P	00:31:30.549	-0.6	79.5	7.89	TAS	13.9	0.61	m_e	mb	4.9
TANN	44.19	P	00:31:38.849	0.1	79.5	7.89	TAS	4.2	0.82	m_e	mb	4.2
TANN	44.19	pP	00:31:50.686				T__			m_e		
UBBA	45.66	P	00:31:50.523	0.3	79.5	7.89	TAS	22.6	1.61	m_e	mb	5.0
UBBA	45.66	pP	00:32:01.910				T__			m_e		
UBR	46.27	P	00:31:55.124		79.5	7.89	TAS	18.2	1.00	m_e	mb	5.1
WET	44.16	P	00:31:38.757	0.1	79.5	7.89	TAS	12.7	1.04	m_e	mb	4.6
WLF	48.33	P	00:32:12.148	0.7	79.5	7.89	TAS	17.9	1.11	m_e	mb	5.1
WLF	48.33	pP	00:32:23.647				T__			m_e		

Event 90429002 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/29	00:37:10.64			-17.0070	-174.9720				186.8			23		144.37	149.13	m i ke	BGR
	90429008																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	144.67		PKPbc	00:56:22.833	-0.1	10.9		2.88		TAS				m_e	
BFO	148.64		PKPbc	00:56:34.178		10.9		2.88		TAS				m_e	
BFO	148.64		pPKPbc	00:57:22.161						T__				m_e	
BRG	145.47		PKPbc	00:56:25.175	0.6	10.9		2.88		TAS				m_e	
BUG	145.60		PKPbc	00:56:25.701	0.5	10.9		2.88		TAS				m_e	
CLL	145.19		PKPbc	00:56:24.415	-1.4	10.9		2.88		TAS				m_e	
CLZ	144.99		PKPbc	00:56:24.243	0.1	10.9		2.88		TAS				m_e	
FLT1	144.41		PKPbc	00:56:21.588	0.7	10.9		2.88		TAS				m_e	
FUR	148.51		PKPbc	00:56:33.574		10.9		2.88		TAS				m_e	
GEC2	147.47		PKPbc	00:56:31.124		10.9		2.88		TAS				m_e	
GRA1	147.01		PKPbc	00:56:30.318		10.9		2.88		TAS				m_e	
GTTG	145.32		PKPbc	00:56:25.246	0.1	10.9		2.88		TAS				m_e	
IBBN	144.71		PKPbc	00:56:23.155	-0.0	10.9		2.88		TAS				m_e	
MANZ	146.61		PKPbc	00:56:27.106	-0.2	10.9		2.88		TAS				m_e	
MOX	146.03		PKPbc	00:56:26.946	0.2	10.9		2.88		TAS				m_e	
NEUB	145.47		PKPbc	00:56:25.954	0.2	10.9		2.88		TAS				m_e	
NRDL	144.37		PKPbc	00:56:21.635	0.4	10.9		2.88		TAS				m_e	
PLN	146.11		PKPbc	00:56:27.159	-0.3	10.9		2.88		TAS				m_e	
RJOB	148.69		PKPbc	00:56:34.387		10.9		2.88		TAS				m_e	
ROTZ	146.81		PKPbc	00:56:29.764	0.1	10.9		2.88		TAS				m_e	
STU	148.14		PKPbc	00:56:33.192		10.9		2.88		TAS				m_e	
TANN	146.14		PKPbc	00:56:27.699	-0.4	10.9		2.88		TAS				m_e	
UBR	149.13		PKPbc	00:56:35.843		10.9		2.88		TAS				m_e	
WLF	147.41		PKPbc	00:56:31.431		10.9		2.88		TAS				m_e	

Event 90429003 Carlsberg Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/29	14:19:52.60			10.8600	57.2800				10.0	2.4		33		52.33	58.18	m i ke	EMSC
90429035																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.9		BGR	90429009
MBB	6.2		BGR	90429009
Ms	5.8		BGR	90429009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	55.71		P	14:29:28.036	0.3	119.3		7.38		TAS		167.9	1.41	m_e	MBB	6.3
ASSE	55.71		S	14:37:08.482	-1.9	109.5		11.93		TAS				m_e		
BFO	55.26		P	14:29:24.407	0.5	119.3		7.38		TAS		172.9	1.43	m_e	MBB	6.2
BFO	55.26		S	14:37:11.624	-1.7	109.5		11.93		TAS				m_e		
BRG	53.31		P	14:29:10.487	0.0	119.3		7.38		TAS		76.9	1.23	m_e	MBB	6.1
BRG	53.31		S	14:36:42.266	-0.1	109.5		11.93		TAS				m_e		
BSEG	56.81		P	14:29:35.892	0.1	119.3		7.38		TAS		241.0	1.77	m_e	MBB	6.2
BSEG	56.81		S	14:37:19.374	-0.5	109.5		11.93		TAS				m_e		
BUG	57.24		P	14:29:38.997	0.1	119.3		7.38		TAS		268.5	1.53	m_e	MBB	6.3
BUG	57.24		S	14:37:36.184	4.2	109.5		11.93		TAS				m_e		
CLL	54.04		P	14:29:16.155	0.5	119.3		7.38		TAS		269.8	1.70	m_e	MBB	6.4
CLL	54.04		S	14:36:51.973	1.2	109.5		11.93		TAS				m_e		
CLZ	55.72		P	14:29:28.535	-0.5	119.3		7.38		TAS		182.1	1.33	m_e	MBB	6.3
CLZ	55.72		S	14:37:12.271	0.9	109.5		11.93		TAS				m_e		
FLT1	55.51		P	14:29:26.640	0.2	119.3		7.38		TAS		296.4	1.54	m_e	MBB	6.4
FLT1	55.51		S	14:37:03.494	-3.8	109.5		11.93		TAS				m_e		
FUR	53.43		P	14:29:11.216		119.3		7.38		TAS		258.5	1.18	m_e	MBB	6.5
FUR	53.43		S	14:36:47.001	-3.4	109.5		11.93		TAS				m_e		
GEC2	52.36		P	14:29:02.713	0.3	119.3		7.38		TAS		86.9	1.31	m_e	MBB	6.1
GEC2	52.36		S	14:36:35.163	-0.1	109.5		11.93		TAS				m_e		
GOR1	55.82		P	14:29:28.999	0.1	119.3		7.38		TAS		195.3	1.37	m_e	MBB	6.3
GOR1	55.82		S	14:37:05.878	-3.6	109.5		11.93		TAS				m_e		
GRA1	54.19		P	14:29:16.614	-0.7	119.3		7.38		TAS		150.2	1.28	m_e	mb	5.9
GRA1	54.19		S	14:36:57.393	0.5	109.5		11.93		TAS				m_e		
GRA1	54.19		L	14:57:25.844						T__		6268.5	20.20	a_e	Ms	5.7
GTTG	55.80		P	14:29:29.182	0.2	119.3		7.38		TAS		151.9	1.36	m_e	MBB	6.3
GTTG	55.80		S	14:37:12.271	-0.9	109.5		11.93		TAS				m_e		
HLG	58.18		S	14:37:32.095	-5.0	109.5		11.93		TAS				m_e		
IBBN	57.37		P	14:29:40.568	-0.2	119.3		7.38		TAS		138.5	1.20	m_e	MBB	6.4
IBBN	57.37		S	14:37:32.159	0.7	109.5		11.93		TAS				m_e		
KAST	56.49		P	14:29:34.038	-0.0	119.3		7.38		TAS		228.9	1.85	m_e	MBB	6.2
KAST	56.49		S	14:37:25.293	2.4	109.5		11.93		TAS				m_e		
MANZ	53.84		P	14:29:14.365	0.2	119.3		7.38		TAS		92.5	2.72	m_e	MBB	5.6
MANZ	53.84		S	14:36:57.892	6.2	109.5		11.93		TAS				m_e		
MOX	54.45		P	14:29:18.950	0.3	119.3		7.38		TAS		144.2	1.40	m_e	MBB	6.3
MOX	54.45		S	14:37:00.023	2.1	109.5		11.93		TAS				m_e		

MOX	54.45	L	14:55:47.806						T__	9833.3	18.80	a_e	Ms	5.9
NEUB	54.64	P	14:29:20.847	-0.4	119.3		7.38		TAS	368.0	1.42	m_e	MBB	6.5
NEUB	54.64	S	14:37:00.023	1.0	109.5		11.93		TAS			m_e		
NRDL	56.19	P	14:29:31.871	0.1	119.3		7.38		TAS	339.5	1.41	m_e	MBB	6.5
NRDL	56.19	S	14:37:12.271	-3.5	109.5		11.93		TAS			m_e		
PLN	54.07	P	14:29:16.489	-0.4	119.3		7.38		TAS	135.5	2.05	m_e	MBB	5.9
PLN	54.07	S	14:36:55.761	2.4	109.5		11.93		TAS			m_e		
RETH	56.71	P	14:29:35.726	0.7	119.3		7.38		TAS	1449.5	1.41	m_e	MBB	7.0
RETH	56.71	S	14:37:24.326	2.5	109.5		11.93		TAS			m_e		
RGN	55.66	S	14:37:03.274	0.8	109.5		11.93		TAS			m_e		
RJOB	52.33	P	14:29:02.942		119.3		7.38		TAS	461.0	2.35	m_e	MBB	6.2
RJOB	52.33	S	14:36:33.032	-4.2	109.5		11.93		TAS			m_e		
ROTZ	53.68	P	14:29:12.802	-0.3	119.3		7.38		TAS	22.3	1.41	m_e	MBB	5.5
ROTZ	53.68	S	14:36:54.814	4.8	109.5		11.93		TAS			m_e		
RUE	54.27	P	14:29:18.242	-0.1	119.3		7.38		TAS	332.9	1.01	m_e	MBB	6.7
RUE	54.27	S	14:36:51.263	0.8	109.5		11.93		TAS			m_e		
STU	54.94	S	14:37:07.599	-0.8	109.5		11.93		TAS			m_e		
TANN	53.87	P	14:29:14.884	-0.0	119.3		7.38		TAS	139.8	1.44	m_e	MBB	6.3
TANN	53.87	S	14:36:52.920	2.0	109.5		11.93		TAS			m_e		
TNS	56.03	P	14:29:29.915	-0.3	119.3		7.38		TAS	129.6	1.36	m_e	MBB	6.0
TNS	56.03	S	14:37:20.794	1.6	109.5		11.93		TAS			m_e		
UBBA	55.43	P	14:29:25.716	0.4	119.3		7.38		TAS	167.2	1.79	m_e	MBB	6.1
UBBA	55.43	S	14:37:07.772	-2.4	109.5		11.93		TAS			m_e		
UBR	53.90	P	14:29:14.674		119.3		7.38		TAS	110.7	1.36	m_e	MBB	6.4
UBR	53.90	S	14:36:53.867	-3.5	109.5		11.93		TAS			m_e		
WET	52.98	P	14:29:07.256	0.2	119.3		7.38		TAS	224.5	2.41	m_e	MBB	5.9
WET	52.98	S	14:36:41.319	-1.2	109.5		11.93		TAS			m_e		
WLF	57.12	P	14:29:38.351	-0.7	119.3		7.38		TAS	356.6	1.45	m_e	MBB	6.4
WLF	57.12	S	14:37:36.636	2.4	109.5		11.93		TAS			m_e		

Event 90430004 Northern Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/04/30	20:52:23.64			14.7030	-45.9170				33.0			29		54.67	60.12	m i ke	BGR
90430010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	90430010
Ms	4.8		BGR	90430010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	58.19		P	21:02:14.941	-0.0	253.8		7.03		TAS		34.8	1.33	m_e	mb 5.2
ASSE	58.19		S	21:10:20.515	-2.7	251.3		13.52		TAS				m_e	
BFO	55.59		P	21:01:56.413	-0.1	253.8		7.03		TAS		20.2	0.95	m_e	mb 5.1
BFO	55.59		S	21:09:45.177	-1.3	251.3		13.52		TAS				m_e	
BRG	59.80		P	21:02:26.121		253.8		7.03		TAS		11.8	1.20	m_e	mb 4.8

BRG	59.80	S	21:10:41.252	-3.0	251.3	13.52	TAS			m_e		
BSEG	58.57	P	21:02:17.144	-0.2	253.8	7.03	TAS	33.1	1.08	m_e mb		5.3
BSEG	58.57	S	21:10:32.295	3.8	251.3	13.52	TAS			m_e		
BUG	55.97	S	21:09:47.533	-5.6	251.3	13.52	TAS			m_e		
CLL	59.34	P	21:02:22.885		253.8	7.03	TAS	24.0	0.97	m_e mb		5.2
CLL	59.34	S	21:10:37.128	-1.2	251.3	13.52	TAS			m_e		
CLZ	57.93	P	21:02:12.730	0.3	253.8	7.03	TAS	17.2	1.16	m_e mb		5.0
CLZ	57.93	S	21:10:22.871	3.3	251.3	13.52	TAS			m_e		
FLT1	58.59	P	21:02:17.105	-0.0	253.8	7.03	TAS	22.9	1.13	m_e mb		5.1
FLT1	58.59	S	21:10:27.583	-0.9	251.3	13.52	TAS			m_e		
FUR	57.43	P	21:02:10.192	0.5	253.8	7.03	TAS	39.8	0.93	m_e mb		5.4
FUR	57.43	S	21:10:15.329	4.6	251.3	13.52	TAS			m_e		
GEC2	59.16	P	21:02:21.245	0.1	253.8	7.03	TAS	22.1	1.28	m_e mb		5.0
GEC2	59.16	S	21:10:33.527	-0.8	251.3	13.52	TAS			m_e		
GOR1	58.83	P	21:02:18.928	-0.1	253.8	7.03	TAS	28.8	1.21	m_e mb		5.2
GOR1	58.83	S	21:10:26.187	-5.7	251.3	13.52	TAS			m_e		
GRA1	57.81	P	21:02:11.970	-0.0	253.8	7.03	TAS	21.1	1.21	m_e mb		5.0
GRA1	57.81	S	21:10:20.515	3.6	251.3	13.52	TAS			m_e		
GRA1	57.81	L	21:21:15.584				T__	632.3	21.90	a_e Ms		4.7
GTTG	57.59	P	21:02:10.582	-0.2	253.8	7.03	TAS	27.1	1.25	m_e mb		5.1
GTTG	57.59	S	21:10:13.448	-1.5	251.3	13.52	TAS			m_e		
HLG	57.32	S	21:10:08.736	-2.8	251.3	13.52	TAS			m_e		
IBBN	56.56	P	21:02:03.084	-0.0	253.8	7.03	TAS	26.4	1.11	m_e mb		5.2
IBBN	56.56	S	21:09:59.312	-1.9	251.3	13.52	TAS			m_e		
KAST	56.56	P	21:02:03.253	0.2	253.8	7.03	TAS	12.0	1.18	m_e mb		4.8
KAST	56.56	S	21:10:06.380	5.3	251.3	13.52	TAS			m_e		
MANZ	58.44	P	21:02:16.167	0.3	253.8	7.03	TAS	3.4	1.36	m_e mb		4.2
MANZ	58.44	S	21:10:27.583	2.0	251.3	13.52	TAS			m_e		
MOX	58.32	P	21:02:15.684	-0.2	253.8	7.03	TAS	14.9	1.14	m_e mb		4.9
MOX	58.32	S	21:10:27.583	3.3	251.3	13.52	TAS			m_e		
MOX	58.32	L	21:23:07.109				T__	833.4	20.00	a_e Ms		4.8
NEUB	58.57	S	21:10:28.146	0.2	251.3	13.52	TAS			m_e		
NRDL	57.98	P	21:02:13.026	0.1	253.8	7.03	TAS	22.6	1.15	m_e mb		5.1
NRDL	57.98	S	21:10:27.583	7.2	251.3	13.52	TAS			m_e		
PLN	58.61	P	21:02:17.612	-0.1	253.8	7.03	TAS	7.6	1.21	m_e mb		4.6
PLN	58.61	S	21:10:27.331	-0.8	251.3	13.52	TAS			m_e		
RETH	57.63	P	21:02:10.973	-0.1	253.8	7.03	TAS	78.6	1.20	m_e mb		5.6
RETH	57.63	S	21:10:22.871	7.1	251.3	13.52	TAS			m_e		
RJOB	58.31	P	21:02:15.621	-0.4	253.8	7.03	TAS	17.1	0.89	m_e mb		5.1
RJOB	58.31	S	21:10:25.227	3.1	251.3	13.52	TAS			m_e		
ROTZ	58.44	P	21:02:16.363	-0.3	253.8	7.03	TAS	3.0	1.13	m_e mb		4.2
ROTZ	58.44	S	21:10:25.227	-0.2	251.3	13.52	TAS			m_e		
RUE	60.12	P	21:02:28.392		253.8	7.03	TAS	50.0	1.24	m_e mb		5.4
RUE	60.12	S	21:10:44.165	-5.0	251.3	13.52	TAS			m_e		
STU	56.27	P	21:02:01.053	0.8	253.8	7.03	TAS	85.6	1.14	m_e mb		5.7
STU	56.27	S	21:09:45.177	-10.7	251.3	13.52	TAS			m_e		
TANN	58.77	P	21:02:18.901	-0.0	253.8	7.03	TAS	40.9	1.57	m_e mb		5.2
TANN	58.77	S	21:10:28.985	-1.3	251.3	13.52	TAS			m_e		
TNS	56.26	P	21:02:01.014	-0.2	253.8	7.03	TAS	22.1	1.18	m_e mb		5.1

TNS	56.26	S	21:09:59.312	2.8	251.3	13.52	TAS			m_e		
UBBA	57.39	P	21:02:09.351	0.1	253.8	7.03	TAS	33.0	1.73	m_e mb		5.1
UBBA	57.39	S	21:10:11.092	-0.8	251.3	13.52	TAS			m_e		
UBR	56.54	P	21:02:03.918	0.1	253.8	7.03	TAS	20.0	0.88	m_e mb		5.2
UBR	56.54	S	21:09:56.956	-1.6	251.3	13.52	TAS			m_e		
WET	58.71	P	21:02:18.237	-0.3	253.8	7.03	TAS	11.6	1.00	m_e mb		4.9
WET	58.71	S	21:10:29.641	1.1	251.3	13.52	TAS			m_e		
WLF	54.67	P	21:01:49.531	-0.6	253.8	7.03	TAS	29.0	1.25	m_e mb		5.2
WLF	54.67	S	21:09:35.754	0.6	251.3	13.52	TAS			m_e		