

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

(produced by SZO/BGR - HANNOVER)

March 2019 UPDATED 22.March 2021

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

Event 90301001 Macquarie Island, Australia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/01	01:02:12.00			-53.4100	159.5400				10.0			12		158.21	163.07	m i ke	NEIC
OrigID 90301096																	

Magnitude	Err	Nsta	Author	OrigID
Ms 5.4			BGR	90301007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	161.19		PKPab	01:22:59.803	0.1	112.9		4.40		TAS				m_e	
ASSE	161.19		PP	01:26:41.859						T__				m_e	
BFO	161.21		PKPab	01:22:59.869	-0.9	112.9		4.40		TAS				m_e	
BFO	161.21		PP	01:26:43.312						T__				m_e	
BRG	158.85		PKPab	01:22:50.141	0.4	112.9		4.40		TAS				m_e	
BSEG	161.82		PKPab	01:23:02.853	-0.3	112.9		4.40		TAS				m_e	
BUG	163.01		PKPab	01:23:08.052	0.4	112.9		4.40		TAS				m_e	
CLL	159.56		PKPab	01:22:52.738	0.2	112.9		4.40		TAS				m_e	
CLZ	161.29		PKPab	01:23:00.409	0.3	112.9		4.40		TAS				m_e	
CLZ	161.29		PP	01:26:43.658						T__				m_e	
FLT1	160.91		PKPab	01:22:58.217	0.1	112.9		4.40		TAS				m_e	
FUR	159.37		PKPab	01:22:51.645	-0.3	112.9		4.40		TAS				m_e	
GEC2	158.21		PKPab	01:22:46.537	-0.6	112.9		4.40		TAS				m_e	
GEC2	158.21		PP	01:26:24.225	0.4					T__				m_e	
GOR1	161.04		PKPab	01:22:59.182	0.1	112.9		4.40		TAS				m_e	
GRA1	160.04		PKPab	01:22:55.097	-0.1	112.9		4.40		TAS				m_e	
GRA1	160.04		PP	01:26:34.143						T__				m_e	
GRA1	160.04		L	02:39:19.745						T__		542.6	21.30	a_e Ms	5.4
GTTG	161.44		PKPab	01:23:00.992	0.0	112.9		4.40		TAS				m_e	
IBBN	162.97		PKPab	01:23:07.892	-0.2	112.9		4.40		TAS				m_e	
KAST	162.26		PKPab	01:23:04.832	0.6	112.9		4.40		TAS				m_e	

./bul1903.txt Wed Jul 21 10:35:24 2021 2

Station	Time	Phase	Time	Residual	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
KAST	162.26	PP	01:26:46.799																
MANZ	159.63	PKPab	01:22:53.660	-0.0	112.9		4.40												
MANZ	159.63	PP	01:26:32.446	-0.1															
MOX	160.16	PKPab	01:22:55.614	0.4	112.9		4.40												
MOX	160.16	PP	01:26:35.307																
MOX	160.16	L	02:42:56.002								620.1	21.70			a_e	Ms		5.4	
NEUB	160.25	PKPab	01:22:55.898	0.3	112.9		4.40												
NRDL	161.62	PKPab	01:23:02.135	0.2	112.9		4.40												
PLN	159.78	PKPab	01:22:54.031	0.5	112.9		4.40												
RETH	162.12	PKPab	01:23:03.982	-0.4	112.9		4.40												
RJOB	158.26	PKPab	01:22:46.333		112.9		4.40												
ROTZ	159.48	PKPab	01:22:52.798	0.4	112.9		4.40												
ROTZ	159.48	PP	01:26:31.256	-0.5															
RUE	159.46	PKPab	01:22:52.381	-0.7	112.9		4.40												
STU	160.88	PKPab	01:22:58.465	-0.5	112.9		4.40												
TANN	159.57	PKPab	01:22:53.074	0.8	112.9		4.40												
TNS	161.90	PKPab	01:23:03.458	0.6	112.9		4.40												
UBBA	161.18	PKPab	01:23:00.015	0.5	112.9		4.40												
UBBA	161.18	PP	01:26:40.834																
UBR	159.85	PKPab	01:22:54.336		112.9		4.40												
UBR	159.85	PP	01:26:33.413	-0.9															
WET	158.83	PKPab	01:22:49.263	-0.3	112.9		4.40												
WET	158.83	PP	01:26:27.148	-0.0															
WLF	163.07	PKPab	01:23:08.301	-0.1	112.9		4.40												

Event 90301002 Peru-Bolivia border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/01	08:50:47.58			-14.1730	-69.2030				282.4			24		91.47	97.14	m i ke	BGR
90301008																	

Magnitude Err Nsta Author OrigID  
mb 6.5 BGR 90301008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	94.96		Pdiff	09:03:39.086	-0.0	253.6		4.53		TAS					m_e
ASSE	94.96		pP	09:04:46.691	0.3	254.1		4.65		TAS					m_e
ASSE	94.96		PP	09:07:40.088	-0.0	252.2		7.67		TAS					m_e
BFO	92.38		P	09:03:26.296	-0.1	253.5		5.09		TAS		127.1	1.33	m_e mb	6.1
BFO	92.38		pP	09:04:34.075	-0.5	254.1		4.65		TAS					m_e
BRG	96.60		Pdiff	09:03:46.253		253.6		4.53		TAS					m_e
BRG	96.60		pP	09:04:54.099	0.0	254.1		4.65		TAS					m_e
BRG	96.60		PP	09:07:51.852		252.2		7.67		TAS					m_e
BSEG	95.27		Pdiff	09:03:39.849	-0.2	253.6		4.53		TAS					m_e
BSEG	95.27		pP	09:04:47.644	-0.2	254.1		4.65		TAS					m_e
BSEG	95.27		PP	09:07:42.196	-0.2	252.2		7.67		TAS					m_e

BUG	92.74	P	09:03:28.254	-0.1	253.5	5.09	TAS	339.2	1.26	m_e	mb	6.6
BUG	92.74	pP	09:04:35.876	-0.2	254.1	4.65	TAS			m_e		
CLL	96.13	Pdiff	09:03:44.054		253.6	4.53	TAS			m_e		
CLL	96.13	pP	09:04:51.704	-0.2	254.1	4.65	TAS			m_e		
CLL	96.13	PP	09:07:48.132		252.2	7.67	TAS			m_e		
CLZ	94.70	Pdiff	09:03:37.685	0.2	253.6	4.53	TAS			m_e		
CLZ	94.70	pP	09:04:45.597	0.4	254.1	4.65	TAS			m_e		
CLZ	94.70	PP	09:07:37.761	-0.1	252.2	7.67	TAS			m_e		
FLT1	95.35	Pdiff	09:03:40.154	0.0	253.6	4.53	TAS			m_e		
FLT1	95.35	pP	09:04:47.896	-0.3	254.1	4.65	TAS			m_e		
FLT1	95.35	PP	09:07:42.483	-0.3	252.2	7.67	TAS			m_e		
FUR	94.20	Pdiff	09:03:35.285	-0.4	253.6	4.53	TAS			m_e		
FUR	94.20	pP	09:04:43.279	0.2	254.1	4.65	TAS			m_e		
FUR	94.20	PP	09:07:33.824	0.5	252.2	7.67	TAS			m_e		
GEC2	95.94	Pdiff	09:03:42.983		253.6	4.53	TAS			m_e		
GEC2	95.94	pP	09:04:50.837	-0.3	254.1	4.65	TAS			m_e		
GEC2	95.94	PP	09:07:46.212		252.2	7.67	TAS			m_e		
GOR1	95.57	Pdiff	09:03:41.350		253.6	4.53	TAS			m_e		
GOR1	95.57	pP	09:04:49.071	-0.2	254.1	4.65	TAS			m_e		
GOR1	95.57	PP	09:07:44.466		252.2	7.67	TAS			m_e		
GRA1	94.60	Pdiff	09:03:37.214	-0.4	253.6	4.53	TAS			m_e		
GRA1	94.60	pP	09:04:44.909	0.1	254.1	4.65	TAS			m_e		
GRA1	94.60	PP	09:07:34.843	-0.0	252.2	7.67	TAS			m_e		
GTTG	94.37	Pdiff	09:03:36.139	0.1	253.6	4.53	TAS			m_e		
GTTG	94.37	pP	09:04:43.883	0.2	254.1	4.65	TAS			m_e		
GTTG	94.37	PP	09:07:35.444	-0.2	252.2	7.67	TAS			m_e		
HLG	93.98	pP	09:04:42.079	0.2	254.1	4.65	TAS			m_e		
HLG	93.98	PP	09:07:32.781	0.2	252.2	7.67	TAS			m_e		
IBBN	93.31	pP	09:04:38.610	-0.1	254.1	4.65	TAS			m_e		
KAST	93.34	pP	09:04:38.439	-0.5	254.1	4.65	TAS			m_e		
KAST	93.34	PP	09:07:27.441	0.4	252.2	7.67	TAS			m_e		
MANZ	95.23	Pdiff	09:03:40.255	-0.1	253.6	4.53	TAS			m_e		
MANZ	95.23	pP	09:04:48.046	0.3	254.1	4.65	TAS			m_e		
MOX	95.11	Pdiff	09:03:39.340	-0.3	253.6	4.53	TAS			m_e		
MOX	95.11	pP	09:04:47.215	0.0	254.1	4.65	TAS			m_e		
NEUB	95.36	Pdiff	09:03:40.790	0.2	253.6	4.53	TAS			m_e		
NEUB	95.36	pP	09:04:48.394	0.1	254.1	4.65	TAS			m_e		
NRDL	94.73	Pdiff	09:03:37.979	0.0	253.6	4.53	TAS			m_e		
NRDL	94.73	pP	09:04:45.858	0.5	254.1	4.65	TAS			m_e		
NRDL	94.73	PP	09:07:38.551	0.0	252.2	7.67	TAS			m_e		
PLN	95.40	Pdiff	09:03:40.803		253.6	4.53	TAS			m_e		
PLN	95.40	pP	09:04:48.291	-0.2	254.1	4.65	TAS			m_e		
PLN	95.40	PP	09:07:42.651		252.2	7.67	TAS			m_e		
RETH	94.37	Pdiff	09:03:36.340	0.2	253.6	4.53	TAS			m_e		
RETH	94.37	pP	09:04:43.926	0.2	254.1	4.65	TAS			m_e		
RGN	97.14	Pdiff	09:03:48.924		253.6	4.53	TAS			m_e		
RGN	97.14	PP	09:07:56.504		252.2	7.67	TAS			m_e		
RJOB	95.07	Pdiff	09:03:39.125	0.3	253.6	4.53	TAS			m_e		
RJOB	95.07	pP	09:04:47.113	0.0	254.1	4.65	TAS			m_e		

RJOB	95.07	PP	09:07:39.795	0.2	252.2	7.67	TAS										m_e
ROTZ	95.24	Pdiff	09:03:40.136	0.1	253.6	4.53	TAS										m_e
ROTZ	95.24	pP	09:04:47.960	0.2	254.1	4.65	TAS										m_e
ROTZ	95.24	PP	09:07:41.211	0.1	252.2	7.67	TAS										m_e
RUE	96.89	Pdiff	09:03:47.582		253.6	4.53	TAS										m_e
RUE	96.89	pP	09:04:55.001	-0.4	254.1	4.65	TAS										m_e
RUE	96.89	PP	09:07:54.046		252.2	7.67	TAS										m_e
STU	93.06	pP	09:04:37.383	-0.3	254.1	4.65	TAS										m_e
STU	93.06	PP	09:07:24.510	0.4	252.2	7.67	TAS										m_e
TANN	95.57	Pdiff	09:03:41.873		253.6	4.53	TAS										m_e
TANN	95.57	pP	09:04:49.548	0.2	254.1	4.65	TAS										m_e
TANN	95.57	PP	09:07:44.116		252.2	7.67	TAS										m_e
TNS	93.05	P	09:03:29.926	-0.1	253.5	5.09	TAS				154.4	0.97	m_e mb			6.4	
TNS	93.05	pP	09:04:37.475	-0.1	254.1	4.65	TAS										m_e
UBBA	94.18	Pdiff	09:03:35.177	-0.2	253.6	4.53	TAS										m_e
UBBA	94.18	pP	09:04:42.849	0.0	254.1	4.65	TAS										m_e
UBBA	94.18	PP	09:07:33.817	0.6	252.2	7.67	TAS										m_e
UBR	93.31	pP	09:04:39.314	0.4	254.1	4.65	TAS										m_e
WET	95.49	Pdiff	09:03:41.152		253.6	4.53	TAS										m_e
WET	95.49	pP	09:04:49.045	0.0	254.1	4.65	TAS										m_e
WET	95.49	PP	09:07:43.028		252.2	7.67	TAS										m_e
WLF	91.47	P	09:03:22.727	-0.1	253.5	5.09	TAS				1026.8	1.76	m_e mb			6.9	
WLF	91.47	pP	09:04:30.376	0.1	254.1	4.65	TAS										m_e
WLF	91.47	PP	09:07:11.659	-0.9	252.2	7.67	TAS										m_e

Event 90301003 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/01	22:57:49.80			-24.0270	-179.5090				500.0				6	149.23	154.96	m i ke	BGR
90301009																	

Magnitude Err Nsta Author

OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	150.88		PKPbc	23:16:45.641	0.1	22.0		2.18		TAS					m_e
BFO	154.96		PKPbc	23:16:54.274		22.0		2.18		TAS					m_e
BFO	154.96		PKPab	23:17:11.942		19.6		4.27		TAS					m_e
BRG	151.25		PKPbc	23:16:46.453	0.1	22.0		2.18		TAS					m_e
BRG	151.25		pPKPab	23:18:51.726						T__					m_e
BSEG	149.23		PKPbc	23:16:41.940	-0.0	22.0		2.18		TAS					m_e
BSEG	149.23		PKPab	23:16:48.001	-0.3	19.6		4.27		TAS					m_e
CLL	151.10		PKPbc	23:16:45.957	0.1	22.0		2.18		TAS					m_e
CLL	151.10		pPKPab	23:18:51.075						T__					m_e
CLZ	151.21		PKPbc	23:16:46.544	-0.1	22.0		2.18		TAS					m_e
CLZ	151.21		pPKPab	23:18:51.726						T__					m_e
FLT1	150.57		PKPbc	23:16:44.693	0.2	22.0		2.18		TAS					m_e

FLT1	150.57	PKPab	23:16:53.056	0.0	19.6	4.27	TAS	m_e
FUR	154.44	PKPab	23:17:10.476		19.6	4.27	TAS	m_e
GEC2	153.13	PKPbc	23:16:50.407		22.0	2.18	TAS	m_e
GOR1	149.94	PKPbc	23:16:43.745	-0.0	22.0	2.18	TAS	m_e
GTTG	151.57	PKPbc	23:16:47.181	-0.1	22.0	2.18	TAS	m_e
GTTG	151.57	PKPab	23:16:57.747		19.6	4.27	TAS	m_e
IBBN	151.22	PKPbc	23:16:46.465	0.1	22.0	2.18	TAS	m_e
IBBN	151.22	PKPab	23:16:56.139		19.6	4.27	TAS	m_e
KAST	152.19	PKPbc	23:16:48.484	-0.1	22.0	2.18	TAS	m_e
MANZ	152.54	PKPbc	23:16:49.387	-0.2	22.0	2.18	TAS	m_e
MANZ	152.54	pPKPab	23:18:54.684				T__	m_e
MOX	152.06	PKPbc	23:16:48.078	0.2	22.0	2.18	TAS	m_e
MOX	152.06	PKPab	23:16:59.683		19.6	4.27	TAS	m_e
MOX	152.06	pPKPab	23:18:53.442				T__	m_e
NEUB	151.51	PKPbc	23:16:47.040	0.1	22.0	2.18	TAS	m_e
NEUB	151.51	PKPab	23:16:57.265		19.6	4.27	TAS	m_e
NRDL	150.64	PKPbc	23:16:45.099	-0.1	22.0	2.18	TAS	m_e
PLN	152.07	PKPbc	23:16:48.228	0.0	22.0	2.18	TAS	m_e
PLN	152.07	pPKPab	23:18:53.501				T__	m_e
RETH	150.55	PKPbc	23:16:44.964	-0.1	22.0	2.18	TAS	m_e
RJOB	154.39	PKPab	23:17:10.227		19.6	4.27	TAS	m_e
ROTZ	152.72	PKPbc	23:16:49.613		22.0	2.18	TAS	m_e
RUE	149.84	PKPbc	23:16:43.175	-0.2	22.0	2.18	TAS	m_e
TANN	152.06	PKPbc	23:16:48.259	0.2	22.0	2.18	TAS	m_e
TANN	152.06	pPKPab	23:18:53.678				T__	m_e
TNS	153.13	PKPbc	23:16:50.515	-0.2	22.0	2.18	TAS	m_e
TNS	153.13	PKPab	23:17:04.444		19.6	4.27	TAS	m_e
WET	153.10	PKPab	23:17:04.631		19.6	4.27	TAS	m_e
WLF	154.03	PKPbc	23:16:53.034		22.0	2.18	TAS	m_e

Event 90302001 Bougainville - Solomon Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/02	02:17:20.80			-6.9400	155.7300				50.0			19		125.46	130.36	m i ke	EMSC
90302033																	

Magnitude Err Nsta Author OrigID  
Ms 6.1 BGR 90302007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	126.60		pPKPdf	02:36:31.499	0.2	48.5		1.95		TAS				a_e	
BFO	130.36		pPKPdf	02:36:38.399		48.5		1.95		TAS				a_e	
BRG	125.95		PKPdf	02:36:17.512	0.1	46.2		1.95		TAS				m_e	
BRG	125.95		pPKPdf	02:36:30.249	-0.3	48.5		1.95		TAS				a_e	
BSEG	125.46		PKPdf	02:36:16.598	-0.2	46.2		1.95		TAS				m_e	
BSEG	125.46		pPKPdf	02:36:29.249	0.1	48.5		1.95		TAS				a_e	

BUG	128.55	PKPdf	02:36:22.375		46.2	1.95	TAS		m_e	
BUG	128.55	pPKPdf	02:36:35.099	0.1	48.5	1.95	TAS		a_e	
CLL	126.11	PKPdf	02:36:17.649	-0.0	46.2	1.95	TAS		m_e	
CLL	126.11	pPKPdf	02:36:30.199	0.1	48.5	1.95	TAS		a_e	
CLZ	126.93	PKPdf	02:36:19.805	-0.1	46.2	1.95	TAS		m_e	
CLZ	126.93	pPKPdf	02:36:32.399	0.0	48.5	1.95	TAS		a_e	
FLT1	126.21	PKPdf	02:36:17.828	-0.0	46.2	1.95	TAS		m_e	
FLT1	126.21	pPKPdf	02:36:30.449	-0.0	48.5	1.95	TAS		a_e	
FUR	129.05	pPKPdf	02:36:36.149	0.6	48.5	1.95	TAS		a_e	
GEC2	127.38	PKPdf	02:36:20.247	0.1	46.2	1.95	TAS		m_e	
GEC2	127.38	pPKPdf	02:36:32.899	0.3	48.5	1.95	TAS		a_e	
GOR1	125.71	pPKPdf	02:36:30.049	-0.2	48.5	1.95	TAS		a_e	
GRA1	128.04	pPKPdf	02:36:34.091	-0.4	48.5	1.95	TAS		m_e	
GRA1	128.04	L	04:16:07.631				T__	3678.5	20.30	a_e Ms 6.1
GTTG	127.32	PKPdf	02:36:20.373	-0.1	46.2	1.95	TAS		m_e	
GTTG	127.32	pPKPdf	02:36:33.049	0.1	48.5	1.95	TAS		a_e	
IBBN	127.70	PKPdf	02:36:20.861		46.2	1.95	TAS		m_e	
IBBN	127.70	pPKPdf	02:36:33.649	-0.0	48.5	1.95	TAS		a_e	
KAST	128.24	pPKPdf	02:36:34.749	0.1	48.5	1.95	TAS		a_e	
MANZ	127.42	PKPdf	02:36:20.425	-0.2	46.2	1.95	TAS		m_e	
MANZ	127.42	pPKPdf	02:36:33.149	-0.2	48.5	1.95	TAS		a_e	
MOX	127.20	PKPdf	02:36:19.752	0.1	46.2	1.95	TAS		m_e	
MOX	127.20	pPKPdf	02:36:32.599	0.2	48.5	1.95	TAS		a_e	
MOX	127.20	L	04:15:28.544				T__	4498.3	19.60	a_e Ms 6.2
NEUB	126.76	PKPdf	02:36:19.025	0.2	46.2	1.95	TAS		m_e	
NEUB	126.76	pPKPdf	02:36:31.599	0.1	48.5	1.95	TAS		a_e	
NRDL	126.58	PKPdf	02:36:18.879	0.0	46.2	1.95	TAS		m_e	
NRDL	126.58	pPKPdf	02:36:31.649	-0.1	48.5	1.95	TAS		a_e	
PLN	127.06	PKPdf	02:36:19.616	0.0	46.2	1.95	TAS		m_e	
PLN	127.06	pPKPdf	02:36:32.399	0.1	48.5	1.95	TAS		a_e	
RETH	126.72	PKPdf	02:36:19.016	-0.2	46.2	1.95	TAS		m_e	
RETH	126.72	pPKPdf	02:36:31.849	0.2	48.5	1.95	TAS		a_e	
RJOB	128.56	pPKPdf	02:36:34.699	0.0	48.5	1.95	TAS		a_e	
ROTZ	127.52	PKPdf	02:36:20.597		46.2	1.95	TAS		m_e	
ROTZ	127.52	pPKPdf	02:36:33.249	0.1	48.5	1.95	TAS		a_e	
STU	129.64	pPKPdf	02:36:37.299	-0.3	48.5	1.95	TAS		a_e	
TANN	126.96	PKPdf	02:36:19.500	0.1	46.2	1.95	TAS		m_e	
TANN	126.96	pPKPdf	02:36:32.249	0.1	48.5	1.95	TAS		m_e	
TNS	128.94	pPKPdf	02:36:36.099	-0.2	48.5	1.95	TAS		a_e	
UBBA	127.82	PKPdf	02:36:21.290		46.2	1.95	TAS		m_e	
UBBA	127.82	pPKPdf	02:36:33.899	-0.3	48.5	1.95	TAS		a_e	
UBR	129.95	pPKPdf	02:36:37.699		48.5	1.95	TAS		a_e	
WET	127.60	PKPdf	02:36:20.903		46.2	1.95	TAS		m_e	
WET	127.60	pPKPdf	02:36:33.549	-0.1	48.5	1.95	TAS		a_e	
WLF	130.35	pPKPdf	02:36:39.449		48.5	1.95	TAS		a_e	

Event 90302002 Off east coast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/02	03:22:51.99			40.7280	145.8150				29.3	1.2		10		78.25	83.67	m i ke	BGR
90302008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.5		BGR	90302008
MBB	6.0		BGR	90302008
Ms	5.8		BGR	90302008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	79.65		P	03:34:55.448	0.1	31.3		5.40		TAS		52.8	1.17	m_e	MBB	5.8
ASSE	79.65		pP	03:35:03.939		33.1		5.32		TAS				m_e		
BFO	83.67		P	03:35:17.064	0.4	31.3		5.40		TAS		45.7	1.07	a_e	MBB	6.2
BRG	79.55		P	03:34:55.214	-0.1	31.3		5.40		TAS		27.0	0.94	a_e	MBB	5.7
BRG	79.55		pP	03:35:03.815	-0.2	33.1		5.32		TAS				m_e		
BSEG	78.25		P	03:34:47.814	0.2	31.3		5.40		TAS		77.4	0.97	m_e	MBB	6.2
BSEG	78.25		pP	03:34:56.355	-0.0	33.1		5.32		TAS				m_e		
BUG	81.35		P	03:35:04.314	0.1	31.3		5.40		TAS		69.9	1.15	a_e	MBB	6.1
CLL	79.53		P	03:34:54.886	-0.3	31.3		5.40		TAS		73.6	0.72	m_e	MBB	6.0
CLL	79.53		pP	03:35:03.306	-0.1	33.1		5.32		TAS				m_e		
CLZ	79.99		P	03:34:57.714	-0.1	31.3		5.40		TAS		77.8	0.96	a_e	MBB	6.1
FLT1	79.29		P	03:34:53.064	0.3	31.3		5.40		TAS		58.0	0.75	a_e	MBB	6.2
FUR	82.77		P	03:35:12.914	-0.4	31.3		5.40		TAS		69.0	0.79	a_e	MBB	6.3
GEC2	81.30		P	03:35:04.964	-0.3	31.3		5.40		TAS		32.9	1.02	m_e	MBB	5.9
GOR1	78.72		P	03:34:50.853	0.1	31.3		5.40		TAS		321.2	1.77	m_e	MBB	6.3
GOR1	78.72		pP	03:34:59.224	0.1	33.1		5.32		TAS				m_e		
GRA1	81.51		P	03:35:06.264	-0.1	31.3		5.40		TAS		92.0	1.03	a_e	MBB	6.2
GRA1	81.51		L	04:16:07.621						T__		3678.5	20.30	a_e	Ms	5.7
GTTG	80.38		P	03:34:59.564	-0.3	31.3		5.40		TAS		50.6	0.77	a_e	MBB	5.9
IBBN	80.45		P	03:34:59.664	-0.1	31.3		5.40		TAS		82.4	1.00	a_e	MBB	6.1
IBBN	80.45		pP	03:35:08.399		33.1		5.32		TAS				m_e		
KAST	81.18		P	03:35:03.764	-0.2	31.3		5.40		TAS		44.1	1.06	a_e	MBB	5.9
MANZ	80.94		P	03:35:02.864	0.1	31.3		5.40		TAS		7.4	1.02	a_e	MBB	5.2
MOX	80.57		P	03:35:00.664	-0.1	31.3		5.40		TAS		34.4	0.98	a_e	MBB	5.9
MOX	80.57		pP	03:35:08.767		33.1		5.32		TAS				m_e		
MOX	80.57		L	04:15:28.564						T__		4498.2	19.60	a_e	Ms	5.8
NEUB	80.06		P	03:34:57.664	-0.1	31.3		5.40		TAS		67.6	0.83	a_e	MBB	6.0
NRDL	79.53		P	03:34:54.864	0.1	31.3		5.40		TAS		42.9	1.09	a_e	MBB	5.8
NRDL	79.53		pP	03:35:03.537	-0.1	33.1		5.32		TAS				m_e		
PLN	80.51		P	03:35:00.464	0.1	31.3		5.40		TAS		11.3	0.99	a_e	MBB	5.5
PLN	80.51		pP	03:35:08.569		33.1		5.32		TAS				m_e		
RETH	79.57		P	03:34:55.114	-0.0	31.3		5.40		TAS		254.5	1.04	a_e	MBB	6.7
RJOB	82.56		P	03:35:12.264		31.3		5.40		TAS		54.0	1.07	a_e	MBB	6.2
ROTZ	81.09		P	03:35:04.014	0.4	31.3		5.40		TAS		13.3	1.16	a_e	MBB	5.4
RUE	78.29		P	03:34:48.473	-0.6	31.3		5.40		TAS		872.1	2.32	m_e	MBB	6.4
RUE	78.29		pP	03:34:56.844	0.1	33.1		5.32		TAS				m_e		
STU	83.00		P	03:35:13.829	0.1	31.3		5.40		TAS		122.7	0.85	m_e	MBB	6.6

TANN	80.46	P	03:35:00.164	-0.0	31.3	5.40	TAS	20.6	1.03	a_e	MBB	5.6
TNS	82.01	P	03:35:08.314	0.3	31.3	5.40	TAS	40.9	1.01	a_e	MBB	6.1
UBBA	80.98	P	03:35:02.664	-0.0	31.3	5.40	TAS	23.8	0.87	a_e	MBB	5.9
UBR	83.60	P	03:35:16.814		31.3	5.40	TAS	25.7	1.08	a_e	MBB	5.9
WET	81.36	P	03:35:05.664	0.0	31.3	5.40	TAS	62.1	1.06	a_e	MBB	6.0
WLF	83.25	P	03:35:14.764	0.4	31.3	5.40	TAS	97.0	1.40	a_e	MBB	6.3

Event 90302004 Southeast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/02	15:52:00.56			31.3400	142.0600				37.4	1.0		25		85.11	90.53	m i ke	BGR
OrigID 90302010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90302010
Ms	5.0		BGR	90302010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	86.63		pP	16:04:50.812	0.0	40.5		4.87		TAS				m_e	
BFO	90.53		P	16:04:58.211		40.2		4.79		TAS				m_e	
BRG	86.23		P	16:04:38.052	-0.1	40.2		4.79		TAS		38.2	1.77	m_e	mb 5.2
BRG	86.23		pP	16:04:48.988	-0.1	40.5		4.87		TAS				m_e	
BSEG	85.38		P	16:04:33.861	0.1	40.2		4.79		TAS		98.5	1.75	m_e	mb 5.8
BSEG	85.38		pP	16:04:44.840	0.1	40.5		4.87		TAS				m_e	
CLL	86.30		P	16:04:38.064	0.0	40.2		4.79		TAS		33.6	1.34	m_e	mb 5.3
CLL	86.30		pP	16:04:48.997	-0.1	40.5		4.87		TAS				m_e	
CLZ	86.97		P	16:04:41.806	-0.1	40.2		4.79		TAS		35.3	1.49	m_e	mb 5.3
CLZ	86.97		pP	16:04:52.778	-0.2	40.5		4.87		TAS				m_e	
FLT1	86.25		P	16:04:37.582	0.0	40.2		4.79		TAS		47.1	1.46	m_e	mb 5.4
FLT1	86.25		pP	16:04:48.466	-0.0	40.5		4.87		TAS				m_e	
GEC2	87.84		P	16:04:45.474		40.2		4.79		TAS		11.1	1.47	m_e	mb 5.0
GEC2	87.84		pP	16:04:56.078		40.5		4.87		TAS				m_e	
GOR1	85.72		P	16:04:35.920	-0.1	40.2		4.79		TAS		61.0	1.39	m_e	mb 5.5
GOR1	85.72		pP	16:04:46.772	-0.5	40.5		4.87		TAS				m_e	
GRA1	88.27		P	16:04:48.128		40.2		4.79		TAS		32.6	1.50	m_e	mb 5.4
GRA1	88.27		pP	16:04:59.021		40.5		4.87		TAS				m_e	
GRA1	88.27		L	16:47:40.937						T__		513.8	18.40	a_e	Ms 5.0
GTTG	87.36		P	16:04:43.450	-0.1	40.2		4.79		TAS		16.7	1.25	m_e	mb 5.0
IBBN	87.62		P	16:04:44.548	0.3	40.2		4.79		TAS		33.2	1.14	m_e	mb 5.6
IBBN	87.62		pP	16:04:55.432	0.0	40.5		4.87		TAS				m_e	
KAST	88.24		P	16:04:47.560	0.1	40.2		4.79		TAS		5.7	1.02	m_e	mb 4.8
KAST	88.24		pP	16:04:58.660		40.5		4.87		TAS				m_e	
MANZ	87.67		P	16:04:44.925	-0.3	40.2		4.79		TAS		7.2	2.03	m_e	mb 4.7
MANZ	87.67		pP	16:04:56.062	0.2	40.5		4.87		TAS				m_e	
MOX	87.38		P	16:04:43.574	0.4	40.2		4.79		TAS		19.0	1.53	m_e	mb 5.0
MOX	87.38		pP	16:04:54.494	0.1	40.5		4.87		TAS				m_e	



MOX	87.38	L	16:47:28.869						T__	698.4	18.40	a_e	Ms	5.1
NEUB	86.90	P	16:04:41.105	-0.0	40.2	4.79			TAS	67.3	1.60	m_e	mb	5.5
NRDL	86.57	P	16:04:39.533	-0.1	40.2	4.79			TAS	54.8	1.88	m_e	mb	5.4
NRDL	86.57	pP	16:04:50.463	0.3	40.5	4.87			TAS			m_e		
PLN	87.27	P	16:04:43.133	0.2	40.2	4.79			TAS	2.7	1.33	m_e	mb	4.2
PLN	87.27	pP	16:04:54.135	0.2	40.5	4.87			TAS			m_e		
RETH	86.67	P	16:04:40.164	-0.1	40.2	4.79			TAS	121.2	1.38	m_e	mb	5.8
RETH	86.67	pP	16:04:50.890	0.2	40.5	4.87			TAS			m_e		
ROTZ	87.80	P	16:04:45.942	-0.4	40.2	4.79			TAS	4.9	1.40	m_e	mb	4.7
ROTZ	87.80	pP	16:04:56.645		40.5	4.87			TAS			m_e		
RUE	85.11	P	16:04:32.595	-0.5	40.2	4.79			TAS	107.1	1.71	m_e	mb	5.8
TANN	87.20	P	16:04:42.665	0.3	40.2	4.79			TAS	8.1	1.28	m_e	mb	4.7
TANN	87.20	pP	16:04:53.598	0.2	40.5	4.87			TAS			m_e		
TNS	89.00	P	16:04:51.164	0.2	40.2	4.79			TAS			m_e		
WET	87.98	P	16:04:46.565		40.2	4.79			TAS	186.3	3.51	m_e	mb	5.8
WET	87.98	pP	16:04:57.390		40.5	4.87			TAS			m_e		
WLF	90.34	P	16:04:57.901		40.2	4.79			TAS	24.6	1.30	m_e	mb	5.3

Event 90302005 Luzon, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/02	19:46:23.05			18.4540	120.9590				37.9	0.5		32		84.94	91.12	m i ke	BGR
90302011																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90302011
MBB	6.1		BGR	90302011
Ms	5.5		BGR	90302011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	87.43		P	19:59:05.904	0.3	63.3		4.76		TAS		121.3	1.66	a_e	MBB	5.9
ASSE	87.43		pP	19:59:16.954						T__				m_e		
BFO	90.54		P	19:59:20.204	0.3	63.3		4.76		TAS		45.9	1.38	a_e	MBB	6.2
BRG	86.13		P	19:58:59.554	-0.2	63.3		4.76		TAS		133.3	1.03	a_e	MBB	6.2
BSEG	86.80		P	19:59:02.954	0.3	63.3		4.76		TAS		109.7	1.16	a_e	MBB	6.1
BUG	89.62		P	19:59:15.954	-0.4	63.3		4.76		TAS		56.2	1.04	a_e	MBB	6.2
CLL	86.49		P	19:59:00.954	0.0	63.3		4.76		TAS		101.0	0.97	a_e	MBB	6.2
CLZ	87.73		P	19:59:07.554	0.1	63.3		4.76		TAS		292.3	2.10	a_e	MBB	6.3
FLT1	87.03		P	19:59:03.404	0.1	63.3		4.76		TAS		43.4	1.08	a_e	MBB	5.9
FUR	88.87		P	19:59:13.054	0.0	63.3		4.76		TAS		100.9	1.18	a_e	MBB	6.3
GEC2	87.12		P	19:59:04.454	-0.2	63.3		4.76		TAS		79.1	1.22	m_e	MBB	5.9
GOR1	86.70		P	19:59:02.604	0.1	63.3		4.76		TAS		219.6	1.32	a_e	MBB	6.4
GRA1	88.22		P	19:59:09.748	0.1	63.3		4.76		TAS		304.7	2.30	m_e	mb	6.2
GRA1	88.22		L	20:41:40.297						T__		1632.0	18.60	a_e	Ms	5.5
GTTG	88.09		P	19:59:09.104	-0.3	63.3		4.76		TAS		318.7	2.38	a_e	MBB	6.1
IBBN	88.93		P	19:59:12.854	-0.5	63.3		4.76		TAS		90.3	1.21	a_e	MBB	6.2

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Wed Jul 21 10:35:24 2021

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KAST	89.11	P	19:59:13.804	-0.2	63.3	4.76	TAS	20.4	0.98	a_e	MBB	5.7
MANZ	87.57	P	19:59:06.727	0.3	63.3	4.76	TAS	21.3	1.64	m_e	MBB	5.5
MANZ	87.57	pP	19:59:17.957				T__			m_e		
MOX	87.57	P	19:59:06.454	0.0	63.3	4.76	TAS	123.7	1.73	a_e	MBB	6.2
MOX	87.57	pP	19:59:17.567				T__			m_e		
MOX	87.57	L	20:45:12.688				T__	2060.4	18.90	a_e	Ms	5.6
NEUB	87.24	P	19:59:04.754	-0.1	63.3	4.76	TAS	160.3	1.37	a_e	MBB	6.1
NRDL	87.57	P	19:59:06.904	-0.1	63.3	4.76	TAS	255.5	1.92	a_e	MBB	6.4
PLN	87.33	P	19:59:05.354	-0.0	63.3	4.76	TAS	20.3	1.23	a_e	MBB	5.4
RETH	87.86	P	19:59:07.954	0.4	63.3	4.76	TAS	882.1	2.12	a_e	MBB	6.7
RETH	87.86	pP	19:59:18.940				T__			m_e		
RGN	84.94	P	19:58:53.754	-0.2	63.3	4.76	TAS	204.9	1.00	a_e	MBB	6.5
RJOB	88.14	P	19:59:09.254	-0.2	63.3	4.76	TAS	43.1	1.11	a_e	MBB	6.3
ROTZ	87.61	P	19:59:07.054	0.2	63.3	4.76	TAS	35.3	1.69	a_e	MBB	5.6
RUE	85.56	P	19:58:56.804	-0.1	63.3	4.76	TAS	239.7	0.94	a_e	MBB	6.5
STU	89.82	P	19:59:17.054	-0.4	63.3	4.76	TAS	94.3	1.28	a_e	mb	5.9
TANN	87.18	P	19:59:04.654	0.0	63.3	4.76	TAS	59.6	1.29	a_e	MBB	5.8
TNS	89.56	P	19:59:16.004	0.2	63.3	4.76	TAS	29.7	1.08	a_e	MBB	5.7
UBBA	88.40	P	19:59:10.247	-0.0	63.3	4.76	TAS	36.3	1.36	m_e	MBB	5.9
UBR	89.79	P	19:59:16.904		63.3	4.76	TAS	54.5	0.90	a_e	MBB	6.3
WET	87.49	P	19:59:06.254	0.1	63.3	4.76	TAS	64.3	1.39	m_e	MBB	5.8
WET	87.49	pP	19:59:17.271				T__			m_e		
WLF	91.12	P	19:59:23.654	0.1	63.3	4.76	TAS			a_e		

Event 90302006 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/02	20:54:39.20			-18.5800	169.3200				271.0					144.33	144.33	m i ke	EMSC
90302038																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	144.33		PKP	21:13:42.242		37.4		3.17		TAS				m_e	

Event 90303001 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/03	10:31:16.60			-30.6400	-177.9900				10.0				29	155.96	161.88	m i ke	EMSC
90303033																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	157.60		PKPab	10:51:43.972	0.0	20.3		4.37		TAS				m_e	
BFO	161.68		PKPab	10:52:01.802		20.3		4.37		TAS				m_e	
BRG	157.91		PKPab	10:51:45.604	0.3	20.3		4.37		TAS				m_e	
BRG	157.91		pPKPab	10:51:49.058	0.2	21.0		4.48		TAS				m_e	
BSEG	155.96		PKPab	10:51:37.037	-0.1	20.3		4.37		TAS				m_e	
BUG	158.85		PKPab	10:51:49.140	0.4	20.3		4.37		TAS				m_e	
CLL	157.79		PKPab	10:51:44.783	0.0	20.3		4.37		TAS				m_e	
CLL	157.79		pPKPab	10:51:48.289	0.0	21.0		4.48		TAS				m_e	
CLZ	157.93		PKPab	10:51:45.764	0.1	20.3		4.37		TAS				m_e	
FLT1	157.29		PKPab	10:51:42.235	-0.2	20.3		4.37		TAS				m_e	
FLT1	157.29		pPKPab	10:51:45.857	-0.1	21.0		4.48		TAS				m_e	
FUR	161.12		PKPab	10:51:59.899		20.3		4.37		TAS				m_e	
FUR	161.12		pPKPab	10:52:03.433		21.0		4.48		TAS				m_e	
GEC2	159.76		PKPab	10:51:53.557	-0.2	20.3		4.37		TAS				m_e	
GRA1	159.74		PKPab	10:51:53.954	-0.1	20.3		4.37		TAS				m_e	
GRA1	159.74		pPKPab	10:51:57.358		21.0		4.48		TAS				m_e	
GTTG	158.30		PKPab	10:51:47.273	-0.6	20.3		4.37		TAS				m_e	
IBBN	157.94		PKPab	10:51:45.702	0.0	20.3		4.37		TAS				m_e	
KAST	158.91		PKPab	10:51:49.571	0.5	20.3		4.37		TAS				m_e	
KAST	158.91		pPKPab	10:51:53.286		21.0		4.48		TAS				m_e	
MANZ	159.23		PKPab	10:51:51.481	0.1	20.3		4.37		TAS				m_e	
MANZ	159.23		pPKPab	10:51:54.926		21.0		4.48		TAS				m_e	
MOX	158.76		PKPab	10:51:49.149	-0.2	20.3		4.37		TAS				m_e	
MOX	158.76		pPKPab	10:51:52.547		21.0		4.48		TAS				m_e	
NEUB	158.22		PKPab	10:51:46.733	0.1	20.3		4.37		TAS				m_e	
NEUB	158.22		pPKPab	10:51:50.385	-0.1	21.0		4.48		TAS				m_e	
NRDL	157.37		PKPab	10:51:42.946	0.4	20.3		4.37		TAS				m_e	
NRDL	157.37		pPKPab	10:51:46.367	0.2	21.0		4.48		TAS				m_e	
PLN	158.77		PKPab	10:51:49.394	0.1	20.3		4.37		TAS				m_e	
PLN	158.77		pPKPab	10:51:52.997		21.0		4.48		TAS				m_e	
RETH	157.27		PKPab	10:51:42.511	-0.3	20.3		4.37		TAS				m_e	
RJOB	161.02		PKPab	10:51:59.583	0.1	20.3		4.37		TAS				m_e	
RJOB	161.02		pPKPab	10:52:03.144		21.0		4.48		TAS				m_e	
ROTZ	159.41		PKPab	10:51:52.496	0.1	20.3		4.37		TAS				m_e	
ROTZ	159.41		pPKPab	10:51:55.887		21.0		4.48		TAS				m_e	
STU	161.08		PKPab	10:51:59.243		20.3		4.37		TAS				m_e	
TANN	158.75		PKPab	10:51:49.368	-0.2	20.3		4.37		TAS				m_e	
TANN	158.75		pPKPab	10:51:52.808	0.1	21.0		4.48		TAS				m_e	
TNS	159.85		PKPab	10:51:53.877	0.2	20.3		4.37		TAS				m_e	
TNS	159.85		pPKPab	10:51:57.461		21.0		4.48		TAS				m_e	
UBBA	158.98		PKPab	10:51:49.786	-0.8	20.3		4.37		TAS				m_e	
UBR	161.88		PKPab	10:52:02.915		20.3		4.37		TAS				m_e	
WET	159.76		PKPab	10:51:54.117	0.1	20.3		4.37		TAS				m_e	
WET	159.76		pPKPab	10:51:57.513		21.0		4.48		TAS				m_e	
WLF	160.74		PKPab	10:51:57.934	0.0	20.3		4.37		TAS				m_e	

Event 90303002 Near coast of Michoacan, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/03	15:25:43.93			17.5090	-102.8100				33.0			23		88.27	93.26	m i ke	BGR
OrigID 90303008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90303008
Ms	4.5		BGR	90303008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	89.94		P	15:38:39.656	-0.3	299.4		4.63		TAS		20.9	0.93	m_e mb	5.3
BRG	92.34		P	15:38:50.503		299.4		4.63		TAS		8.7	0.93	m_e mb	5.1
BSEG	88.88		P	15:38:34.652	-0.1	299.4		4.63		TAS		23.2	0.88	m_e mb	5.4
CLL	91.61		P	15:38:46.934		299.4		4.63		TAS		5.1	0.90	m_e mb	4.8
CLZ	89.92		P	15:38:39.720	-0.4	299.4		4.63		TAS		26.1	0.96	m_e mb	5.4
FLT1	90.15		P	15:38:39.950	-0.0	299.4		4.63		TAS		13.1	1.16	m_e mb	5.0
GEC2	93.26		P	15:38:54.869		299.4		4.63		TAS		6.3	0.98	m_e mb	5.0
GRA1	91.43		L	16:17:29.548						T__		185.3	18.40	a_e Ms	4.6
GTTG	89.83		P	15:38:39.206	-0.5	299.4		4.63		TAS		15.6	1.00	m_e mb	5.2
IBBN	88.27		P	15:38:31.598	-0.1	299.4		4.63		TAS		16.0	0.93	m_e mb	5.3
KAST	89.14		P	15:38:35.591	-0.0	299.4		4.63		TAS		11.9	0.85	m_e mb	5.2
MANZ	91.79		P	15:38:47.936		299.4		4.63		TAS		1.5	0.99	m_e mb	4.3
MOX	91.18		P	15:38:45.048	0.1	299.4		4.63		TAS		8.4	1.04	m_e mb	5.0
MOX	91.18		L	16:18:57.612						T__		167.1	19.60	a_e Ms	4.5
NRDL	89.46		P	15:38:37.223	0.3	299.4		4.63		TAS		21.4	1.05	m_e mb	5.3
PLN	91.56		P	15:38:46.912	0.1	299.4		4.63		TAS		4.3	1.25	m_e mb	4.6
RETH	88.94		P	15:38:35.098	0.0	299.4		4.63		TAS		50.3	0.97	m_e mb	5.7
RGN	90.11		P	15:38:39.710	-0.1	299.4		4.63		TAS		122.7	1.17	m_e mb	6.0
ROTZ	91.95		P	15:38:48.835		299.4		4.63		TAS		1.9	1.10	m_e mb	4.3
STU	90.71		P	15:38:42.719	-0.0	299.4		4.63		TAS		28.8	1.00	m_e mb	5.6
TANN	91.77		P	15:38:47.865		299.4		4.63		TAS		7.2	0.99	m_e mb	5.0
TNS	89.60		P	15:38:37.834	0.4	299.4		4.63		TAS		14.3	0.87	m_e mb	5.2
UBR	91.76		P	15:38:47.727		299.4		4.63		TAS		16.8	1.39	m_e mb	5.2
WET	92.64		P	15:38:52.302		299.4		4.63		TAS		6.8	0.93	m_e mb	5.1
WLF	88.52		P	15:38:32.709	0.3	299.4		4.63		TAS		24.3	1.02	m_e mb	5.4

Event 90306001 Mindanao, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/06	00:13:01.20			8.5600	126.9600				20.0	1.3		29		96.96	102.52	m i ke	EMSC
OrigID 90306033																	

Magnitude	Err	Nsta	Author	OrigID
Ms	5.7		BGR	90306007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	98.83		Pdiff	00:26:40.308	0.3	64.5		4.56		TAS				m_e	
ASSE	98.83		pP	00:26:50.855	0.2	63.4		4.68		TAS				m_e	
BRG	97.51		Pdiff	00:26:34.319	-0.4	64.5		4.56		TAS				m_e	
BRG	97.51		pP	00:26:44.626	-0.5	63.4		4.68		TAS				m_e	
BSEG	98.22		Pdiff	00:26:37.542	-0.6	64.5		4.56		TAS				m_e	
BUG	101.03		Pdiff	00:26:50.211	0.3	64.5		4.56		TAS				m_e	
CLL	97.87		Pdiff	00:26:35.569	0.1	64.5		4.56		TAS				m_e	
CLL	97.87		pP	00:26:45.952	-0.2	63.4		4.68		TAS				m_e	
CLZ	99.13		Pdiff	00:26:41.962	-0.1	64.5		4.56		TAS				m_e	
CLZ	99.13		pP	00:26:52.213	-0.1	63.4		4.68		TAS				m_e	
FLT1	98.43		Pdiff	00:26:37.925	0.1	64.5		4.56		TAS				m_e	
FLT1	98.43		pP	00:26:48.253	0.2	63.4		4.68		TAS				m_e	
FUR	100.20		Pdiff	00:26:46.629	0.1	64.5		4.56		TAS				m_e	
FUR	100.20		pP	00:26:57.151		63.4		4.68		TAS				m_e	
GEC2	98.45		Pdiff	00:26:38.697	0.0	64.5		4.56		TAS				m_e	
GEC2	98.45		pP	00:26:49.000	0.2	63.4		4.68		TAS				m_e	
GOR1	98.11		Pdiff	00:26:37.193	-0.1	64.5		4.56		TAS				m_e	
GRA1	99.58		Pdiff	00:26:44.041	0.0	64.5		4.56		TAS				m_e	
GRA1	99.58		pP	00:26:54.467		63.4		4.68		TAS				m_e	
GRA1	99.58		L	01:16:38.054						T__		1976.3	18.70	a_e Ms	5.6
GTTG	99.49		Pdiff	00:26:43.369	-0.3	64.5		4.56		TAS				m_e	
IBBN	100.34		Pdiff	00:26:47.163	0.1	64.5		4.56		TAS				m_e	
IBBN	100.34		pP	00:26:57.535		63.4		4.68		TAS				m_e	
KAST	100.51		Pdiff	00:26:48.076	-0.1	64.5		4.56		TAS				m_e	
KAST	100.51		pP	00:26:58.380		63.4		4.68		TAS				m_e	
MANZ	98.94		Pdiff	00:26:41.049	-0.1	64.5		4.56		TAS				m_e	
MANZ	98.94		pP	00:26:51.536	0.1	63.4		4.68		TAS				m_e	
MOX	98.95		Pdiff	00:26:40.760	0.2	64.5		4.56		TAS				m_e	
MOX	98.95		pP	00:26:51.199	0.0	63.4		4.68		TAS				m_e	
MOX	98.95		L	01:16:58.213						T__		2246.9	19.40	a_e Ms	5.7
NEUB	98.62		Pdiff	00:26:39.211	0.1	64.5		4.56		TAS				m_e	
NEUB	98.62		pP	00:26:49.636	-0.1	63.4		4.68		TAS				m_e	
NRDL	98.98		Pdiff	00:26:41.284	0.3	64.5		4.56		TAS				m_e	
NRDL	98.98		pP	00:26:51.588	-0.2	63.4		4.68		TAS				m_e	
PLN	98.70		Pdiff	00:26:39.769	-0.0	64.5		4.56		TAS				m_e	
PLN	98.70		pP	00:26:50.103	0.3	63.4		4.68		TAS				m_e	
RETH	99.28		Pdiff	00:26:42.320	-0.3	64.5		4.56		TAS				m_e	
RJOB	99.45		Pdiff	00:26:42.933	0.3	64.5		4.56		TAS				m_e	
ROTZ	98.97		Pdiff	00:26:41.249	0.3	64.5		4.56		TAS				m_e	
ROTZ	98.97		pP	00:26:51.663	-0.1	63.4		4.68		TAS				m_e	
RUE	96.96		Pdiff	00:26:31.874	0.1	64.5		4.56		TAS				m_e	
TANN	98.55		Pdiff	00:26:39.088	-0.1	64.5		4.56		TAS				m_e	
TNS	100.95		Pdiff	00:26:50.088	-0.5	64.5		4.56		TAS				m_e	
UBBA	99.79		Pdiff	00:26:44.406	-0.1	64.5		4.56		TAS				m_e	
UBBA	99.79		pP	00:26:55.214		63.4		4.68		TAS				m_e	
UBR	101.12		Pdiff	00:26:50.316		64.5		4.56		TAS				m_e	
WET	98.83		Pdiff	00:26:40.617	0.2	64.5		4.56		TAS				m_e	

WET	98.83	pP	00:26:51.095	0.2	63.4	4.68	TAS	m_e
WLF	102.52	Pdiff	00:26:57.424		64.5	4.56	TAS	m_e
WLF	102.52	pP	00:27:07.876		63.4	4.68	TAS	m_e

Event 90306004 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/06	15:46:11.30			-32.1300	-177.7900				10.0			20		157.44	163.34	m i ke	EMSC
OrigID 90306036																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.5		BGR	90306010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	159.08		PKPab	16:06:47.159	-0.1	21.3		4.46		TAS				m_e	
BFO	163.17		PKPab	16:07:04.953		21.3		4.46		TAS				m_e	
BRG	159.36		PKPpdf	16:06:11.325	-0.1	25.9		1.22		TAS				m_e	
BRG	159.36		PKPab	16:06:48.628	0.3	21.3		4.46		TAS				m_e	
BSEG	157.44		PKPpdf	16:06:09.064	0.0	25.9		1.22		TAS				m_e	
BSEG	157.44		PKPab	16:06:39.175	0.1	21.3		4.46		TAS				m_e	
BUG	160.35		PKPpdf	16:06:12.278	-0.1	25.9		1.22		TAS				m_e	
CLL	159.25		PKPpdf	16:06:10.856	-0.2	25.9		1.22		TAS				m_e	
CLL	159.25		PKPab	16:06:47.843	0.1	21.3		4.46		TAS				m_e	
CLZ	159.41		PKPpdf	16:06:11.524	-0.4	25.9		1.22		TAS				m_e	
CLZ	159.41		PKPab	16:06:48.870	0.2	21.3		4.46		TAS				m_e	
FLT1	158.77		PKPpdf	16:06:10.244	0.2	25.9		1.22		TAS				m_e	
FLT1	158.77		PKPab	16:06:45.277	-0.1	21.3		4.46		TAS				m_e	
FUR	162.57		PKPab	16:07:03.163		21.3		4.46		TAS				m_e	
GEC2	161.19		PKPpdf	16:06:13.216		25.9		1.22		TAS				m_e	
GEC2	161.19		PKPab	16:06:56.599	0.3	21.3		4.46		TAS				m_e	
GRA1	161.21		PKPab	16:06:57.110	-0.3	21.3		4.46		TAS				m_e	
GRA1	161.21		L	17:22:27.389						T__		5813.9	20.60	a_e Ms	6.4
GTTG	159.78		PKPpdf	16:06:11.752	1.0	25.9		1.22		TAS				m_e	
GTTG	159.78		PKPab	16:06:50.371	-0.2	21.3		4.46		TAS				m_e	
IBBN	159.44		PKPpdf	16:06:11.624	0.1	25.9		1.22		TAS				m_e	
IBBN	159.44		PKPab	16:06:48.762	0.2	21.3		4.46		TAS				m_e	
KAST	160.40		PKPpdf	16:06:12.690	0.2	25.9		1.22		TAS				m_e	
MANZ	160.69		PKPpdf	16:06:13.757		25.9		1.22		TAS				m_e	
MANZ	160.69		PKPab	16:06:54.532	-0.3	21.3		4.46		TAS				m_e	
MOX	160.23		PKPpdf	16:06:12.079	-0.1	25.9		1.22		TAS				m_e	
MOX	160.23		PKPab	16:06:52.281	-0.7	21.3		4.46		TAS				m_e	
MOX	160.23		L	17:21:46.888						T__		7270.8	21.00	a_e Ms	6.5
NEUB	159.69		PKPab	16:06:49.796	0.1	21.3		4.46		TAS				m_e	
NRDL	158.85		PKPpdf	16:06:10.685	0.0	25.9		1.22		TAS				m_e	
NRDL	158.85		PKPab	16:06:45.965	0.4	21.3		4.46		TAS				m_e	
PLN	160.23		PKPab	16:06:52.488	0.4	21.3		4.46		TAS				m_e	

RETH	158.76	PKPdf	16:06:10.643	0.2	25.9	1.22	TAS	m_e
RETH	158.76	PKPab	16:06:45.782	-0.1	21.3	4.46	TAS	m_e
RJOB	162.45	PKPab	16:07:02.665		21.3	4.46	TAS	m_e
ROTZ	160.86	PKPdf	16:06:12.577		25.9	1.22	TAS	m_e
ROTZ	160.86	PKPab	16:06:55.574	-0.1	21.3	4.46	TAS	m_e
STU	162.56	PKPab	16:07:02.444		21.3	4.46	TAS	m_e
TANN	160.21	PKPdf	16:06:11.979	-0.4	25.9	1.22	TAS	m_e
TANN	160.21	PKPab	16:06:52.449	0.1	21.3	4.46	TAS	m_e
TNS	161.34	PKPdf	16:06:13.657		25.9	1.22	TAS	m_e
TNS	161.34	PKPab	16:06:57.000		21.3	4.46	TAS	m_e
UBBA	160.46	PKPdf	16:06:12.449		25.9	1.22	TAS	m_e
UBBA	160.46	PKPab	16:06:52.920	-0.1	21.3	4.46	TAS	m_e
UBR	163.34	PKPab	16:07:05.958		21.3	4.46	TAS	m_e
WET	161.21	PKPdf	16:06:13.259		25.9	1.22	TAS	m_e
WET	161.21	PKPab	16:06:57.131	-0.2	21.3	4.46	TAS	m_e
WLF	162.24	PKPdf	16:06:15.264		25.9	1.22	TAS	m_e

Event 90306005 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/06	20:19:58.70			-32.1900	-177.6900				10.0			13		157.52	163.25	m i ke	EMSC
	90306037																

Magnitude	Err	Nsta	Author	OrigID
Ms	6.0		BGR	90306011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	159.16		PKPab	20:40:34.742	-0.2	20.1		4.39		TAS				m_e	
BFO	163.25		PKPab	20:40:52.492		20.1		4.39		TAS				m_e	
BRG	159.45		PKPab	20:40:36.304	0.3	20.1		4.39		TAS				m_e	
BSEG	157.52		PKPab	20:40:27.721	0.0	20.1		4.39		TAS				m_e	
BUG	160.42		PKPdf	20:39:59.734		24.3		1.26		TAS				m_e	
BUG	160.42		PKPab	20:40:39.834	-0.8	20.1		4.39		TAS				m_e	
CLL	159.34		PKPdf	20:39:58.537	-0.2	24.3		1.26		TAS				m_e	
CLL	159.34		PKPab	20:40:35.528	-0.1	20.1		4.39		TAS				m_e	
CLZ	159.49		PKPab	20:40:36.541	0.1	20.1		4.39		TAS				m_e	
FLT1	158.85		PKPab	20:40:32.929	-0.3	20.1		4.39		TAS				m_e	
FUR	162.66		PKPab	20:40:50.772		20.1		4.39		TAS				m_e	
GEC2	161.28		PKPab	20:40:44.331	-0.2	20.1		4.39		TAS				m_e	
GRA1	161.29		PKPab	20:40:44.764	-0.0	20.1		4.39		TAS				m_e	
GRA1	161.29		L	22:03:10.694						T__		2198.4	20.10	a_e Ms	6.0
GTTG	159.86		PKPab	20:40:38.039	-0.6	20.1		4.39		TAS				m_e	
IBBN	159.51		PKPdf	20:39:59.010	0.2	24.3		1.26		TAS				m_e	
IBBN	159.51		PKPab	20:40:36.208	0.1	20.1		4.39		TAS				m_e	
KAST	160.48		PKPdf	20:40:00.179		24.3		1.26		TAS				m_e	
KAST	160.48		PKPab	20:40:40.341	0.6	20.1		4.39		TAS				m_e	

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MANZ	160.78	PKPdf	20:40:00.092		24.3	1.26	TAS										m_e
MANZ	160.78	PKPab	20:40:42.276	-0.0	20.1	4.39	TAS										m_e
MOX	160.31	PKPdf	20:39:59.722		24.3	1.26	TAS										m_e
MOX	160.31	PKPab	20:40:39.992	0.4	20.1	4.39	TAS										m_e
MOX	160.31	L	21:57:35.960				T__			1904.0	20.90	a_e	Ms				5.9
NEUB	159.77	PKPab	20:40:37.400	0.1	20.1	4.39	TAS										m_e
NRDL	158.93	PKPdf	20:39:58.018	0.1	24.3	1.26	TAS										m_e
NRDL	158.93	PKPab	20:40:33.594	0.4	20.1	4.39	TAS										m_e
PLN	160.31	PKPdf	20:39:59.747		24.3	1.26	TAS										m_e
PLN	160.31	PKPab	20:40:40.128	0.2	20.1	4.39	TAS										m_e
RETH	158.84	PKPdf	20:39:58.511	-0.0	24.3	1.26	TAS										m_e
RETH	158.84	PKPab	20:40:33.322	-0.3	20.1	4.39	TAS										m_e
RJOB	162.54	PKPdf	20:40:02.875		24.3	1.26	TAS										m_e
RJOB	162.54	PKPab	20:40:50.413		20.1	4.39	TAS										m_e
ROTZ	160.95	PKPab	20:40:43.305	0.0	20.1	4.39	TAS										m_e
STU	162.64	PKPab	20:40:49.897		20.1	4.39	TAS										m_e
TANN	160.29	PKPab	20:40:40.104	-0.1	20.1	4.39	TAS										m_e
TNS	161.41	PKPab	20:40:44.535	-0.1	20.1	4.39	TAS										m_e
UBBA	160.54	PKPdf	20:39:59.862		24.3	1.26	TAS										m_e
WET	161.29	PKPdf	20:40:00.891		24.3	1.26	TAS										m_e
WET	161.29	PKPab	20:40:44.841	0.3	20.1	4.39	TAS										m_e
WLF	162.31	PKPdf	20:40:02.743		24.3	1.26	TAS										m_e
WLF	162.31	PKPab	20:40:48.853		20.1	4.39	TAS										m_e

Event 90306006 Northern Alaska, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/06	21:33:22.22			67.1000	-157.4500				17.6	1.2		14		58.94	64.39	m i ke	BGR
	90306012																

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90306012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	64.39		P	21:43:57.058		355.4		6.73		TAS		41.2	2.01	m_e	mb 5.3
BFO	64.39		pP	21:44:01.640		354.9		6.73		TAS				m_e	
BRG	62.17		P	21:43:42.233		355.4		6.73		TAS		6.3	0.96	m_e	mb 4.8
BRG	62.17		pP	21:43:47.130		354.9		6.73		TAS				m_e	
BSEG	58.94		P	21:43:20.605	-0.1	355.4		6.73		TAS				m_e	
CLZ	61.03		P	21:43:34.901	0.2	355.4		6.73		TAS		14.2	0.89	m_e	mb 4.8
GEC2	64.19		P	21:43:55.990		355.4		6.73		TAS		31.0	1.66	m_e	mb 5.3
GEC2	64.19		pP	21:44:00.820		354.9		6.73		TAS				m_e	
KAST	61.54		P	21:43:37.942		355.4		6.73		TAS		9.9	1.08	m_e	mb 5.0
KAST	61.54		pP	21:43:42.849		354.9		6.73		TAS				m_e	
MANZ	62.97		P	21:43:47.750		355.4		6.73		TAS		1.0	1.04	m_e	mb 3.9
MANZ	62.97		pP	21:43:52.396		354.9		6.73		TAS				m_e	



MOX	62.29	P	21:43:43.071	355.4	6.73	TAS	13.0	1.38	m_e	mb	5.0
MOX	62.29	pP	21:43:47.871	354.9	6.73	TAS			m_e		
NEUB	61.75	P	21:43:39.249	355.4	6.73	TAS	8.7	0.72	m_e	mb	5.1
NEUB	61.75	pP	21:43:44.301	354.9	6.73	TAS			m_e		
PLN	62.48	P	21:43:44.258	355.4	6.73	TAS	3.9	1.26	m_e	mb	4.5
PLN	62.48	pP	21:43:49.313	354.9	6.73	TAS			m_e		
ROTZ	63.20	P	21:43:49.286	355.4	6.73	TAS	0.8	0.89	m_e	mb	3.9
ROTZ	63.20	pP	21:43:54.359	354.9	6.73	TAS			m_e		
TANN	62.56	P	21:43:45.026	355.4	6.73	TAS	13.2	1.28	m_e	mb	4.9
TANN	62.56	pP	21:43:50.094	354.9	6.73	TAS			m_e		
WET	63.85	P	21:43:53.674	355.4	6.73	TAS	3.5	0.99	m_e	mb	4.5
WET	63.85	pP	21:43:58.844	354.9	6.73	TAS			m_e		
WLF	62.90	P	21:43:47.318	355.4	6.73	TAS	19.8	1.11	m_e	mb	5.2
WLF	62.90	pP	21:43:52.150	354.9	6.73	TAS			m_e		

Event 90307002 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/07	15:27:22.40			-32.7800	-176.7400				10.0			22		159.57	164.24	m i ke	EMSC
OrigID 90307034																	

Magnitude Err Nsta Author  
Ms 5.7 BGR

OrigID  
90307008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	164.00		PKPab	15:48:26.097		22.3		4.42		TAS				m_e	
BRG	160.28		PKPab	15:48:09.351	-0.8	22.3		4.42		TAS				m_e	
CLL	160.16		PKPab	15:48:08.755	0.2	22.3		4.42		TAS				m_e	
FLT1	159.62		PKPab	15:48:06.585	-0.1	22.3		4.42		TAS				m_e	
FUR	163.48		PKPab	15:48:23.756		22.3		4.42		TAS				m_e	
GEC2	162.14		PKPab	15:48:17.159		22.3		4.42		TAS				m_e	
GRA1	162.09		PKPab	15:48:18.097		22.3		4.42		TAS				m_e	
GRA1	162.09		L	16:40:05.229						T__		853.0	19.00	a_e	Ms 5.6
GTTG	160.62		PKPab	15:48:11.576	0.2	22.3		4.42		TAS				m_e	
IBBN	160.21		PKPab	15:48:10.102	0.2	22.3		4.42		TAS				m_e	
KAST	161.21		PKPab	15:48:13.997	0.3	22.3		4.42		TAS				m_e	
MANZ	161.59		PKPab	15:48:15.440		22.3		4.42		TAS				m_e	
MOX	161.11		PKPab	15:48:13.193	-0.1	22.3		4.42		TAS				m_e	
MOX	161.11		L	16:38:13.029						T__		1495.9	20.10	a_e	Ms 5.8
NEUB	160.57		PKPab	15:48:10.953	0.6	22.3		4.42		TAS				m_e	
NRDL	159.68		PKPab	15:48:07.154	-0.1	22.3		4.42		TAS				m_e	
PLN	161.12		PKPab	15:48:13.404	0.1	22.3		4.42		TAS				m_e	
RETH	159.57		PKPab	15:48:06.786	0.3	22.3		4.42		TAS				m_e	
RJOB	163.40		PKPab	15:48:23.164		22.3		4.42		TAS				m_e	
ROTZ	161.77		PKPab	15:48:16.326		22.3		4.42		TAS				m_e	
STU	163.41		PKPab	15:48:23.645		22.3		4.42		TAS				m_e	

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TANN	161.11	PKPab	15:48:13.347	-0.3	22.3	4.42	TAS	m_e
TNS	162.15	PKPab	15:48:18.194	-0.1	22.3	4.42	TAS	m_e
UBR	164.24	PKPab	15:48:26.884		22.3	4.42	TAS	m_e

Event 90307003 Cyprus region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/07	16:25:25.23			34.8690	32.5880				33.0					21.56	21.56	m i ke	BGR
OrigID 90307009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90307009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	21.56		P	16:30:12.031		120.2		10.68		TAS		28.2	0.85	m_e mb	4.7

Event 90307004 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/07	16:29:10.20			-32.6300	-178.2200				32.0				26	157.85	163.56	m i ke	EMSC
OrigID 90307036																	

Magnitude	Err	Nsta	Author	OrigID
Ms	5.8		BGR	90307010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	159.47		PKPab	16:49:42.974	0.0	22.4		4.42		TAS				m_e	
BFO	163.56		PKPab	16:50:00.879		22.4		4.42		TAS				m_e	
BRG	159.69		PKPab	16:49:44.075	0.3	22.4		4.42		TAS				m_e	
BSEG	157.85		PKPab	16:49:36.070	-0.8	22.4		4.42		TAS				m_e	
BUG	160.78		PKPab	16:49:48.266	-0.9	22.4		4.42		TAS				m_e	
CLL	159.60		PKPab	16:49:43.413	0.1	22.4		4.42		TAS				m_e	
CLZ	159.80		PKPab	16:49:44.715	0.2	22.4		4.42		TAS				m_e	
FLT1	159.15		PKPab	16:49:41.168	-0.2	22.4		4.42		TAS				m_e	
FUR	162.90		PKPab	16:49:58.597		22.4		4.42		TAS				m_e	
GEC2	161.49		PKPab	16:49:51.842	-0.5	22.4		4.42		TAS				m_e	
GRA1	161.56		PKPab	16:49:52.796	0.0	22.4		4.42		TAS				m_e	
GRA1	161.56		L	18:09:54.353						T__		1298.3	18.90	a_e Ms	5.8
GTTG	160.17		PKPab	16:49:46.234	-0.7	22.4		4.42		TAS				m_e	
HLG	158.02		PKPab	16:49:36.106	-0.2	22.4		4.42		TAS				m_e	
IBBN	159.86		PKPab	16:49:44.892	0.1	22.4		4.42		TAS				m_e	
MANZ	161.04		PKPab	16:49:50.503	0.1	22.4		4.42		TAS				m_e	
MANZ	161.04		pPKPab	16:49:59.949						T__				m_e	

MOX	160.59	PKPab	16:49:47.968	0.4	22.4	4.42	TAS								m_e
MOX	160.59	L	18:10:54.247				T__			1449.6	18.30	a_e	Ms		5.9
NEUB	160.05	PKPab	16:49:45.533	0.1	22.4	4.42	TAS								m_e
NRDL	159.25	PKPab	16:49:42.001	0.4	22.4	4.42	TAS								m_e
PLN	160.58	PKPab	16:49:48.066	0.5	22.4	4.42	TAS								m_e
RJOB	162.75	PKPab	16:49:57.807		22.4	4.42	TAS								m_e
ROTZ	161.20	PKPab	16:49:51.171	0.1	22.4	4.42	TAS								m_e
TANN	160.55	PKPab	16:49:48.074	-0.1	22.4	4.42	TAS								m_e
TNS	161.74	PKPab	16:49:52.979		22.4	4.42	TAS								m_e
UBBA	160.84	PKPab	16:49:48.735	0.6	22.4	4.42	TAS								m_e
WET	161.53	PKPab	16:49:52.432	0.2	22.4	4.42	TAS								m_e
WLF	162.67	PKPab	16:49:57.473		22.4	4.42	TAS								m_e

Event 90307006 Northwest of Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/07	20:16:13.78			49.3110	152.5070				33.0				27	72.30	78.06	m i ke	BGR
OrigID 90307012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	90307012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	73.85		P	20:27:43.422	-0.5	24.6		5.74		TAS		22.6	0.98	m_e	mb	5.2
BFO	77.94		P	20:28:06.363	-0.3	24.6		5.74		TAS		31.8	0.91	a_e	mb	5.4
BRG	74.09		P	20:27:44.463	0.5	24.6		5.74		TAS		21.1	0.99	a_e	mb	5.1
BSEG	72.30		P	20:27:34.463	0.0	24.6		5.74		TAS		20.4	0.90	a_e	mb	5.2
BUG	75.34		P	20:27:51.713	-0.0	24.6		5.74		TAS		41.7	0.98	a_e	mb	5.4
CLL	73.97		P	20:27:43.613	-0.3	24.6		5.74		TAS		55.1	0.80	a_e	mb	5.6
CLZ	74.19		P	20:27:45.813	0.0	24.6		5.74		TAS		43.0	0.96	a_e	mb	5.5
FLT1	73.52		P	20:27:41.063	0.0	24.6		5.74		TAS		25.6	0.83	a_e	mb	5.4
FUR	77.29		P	20:28:03.113	-0.2	24.6		5.74		TAS		60.5	0.89	a_e	mb	5.7
GEC2	75.98		P	20:27:55.463	0.1	24.6		5.74		TAS		12.3	0.71	a_e	mb	5.1
GRA1	75.92		P	20:27:55.613	0.4	24.6		5.74		TAS		78.3	0.77	a_e	mb	5.9
GTTG	74.57		P	20:27:47.663	0.0	24.6		5.74		TAS		25.5	1.01	a_e	mb	5.2
IBBN	74.42		P	20:27:46.513	0.2	24.6		5.74		TAS		40.5	0.81	a_e	mb	5.5
KAST	75.27		P	20:27:51.713	-0.1	24.6		5.74		TAS		31.3	0.83	a_e	mb	5.4
MANZ	75.41		P	20:27:52.263	0.3	24.6		5.74		TAS		5.7	0.92	a_e	mb	4.6
MOX	74.95		P	20:27:49.663	-0.1	24.6		5.74		TAS		32.9	1.02	a_e	mb	5.3
NRDL	73.67		P	20:27:42.313	0.1	24.6		5.74		TAS		17.0	0.95	a_e	mb	5.0
PLN	74.94		P	20:27:49.713	-0.0	24.6		5.74		TAS		9.9	1.01	m_e	mb	4.8
RJOB	77.24		P	20:28:03.048	0.0	24.6		5.74		TAS		23.0	0.89	m_e	mb	5.3
ROTZ	75.58		P	20:27:53.563	0.4	24.6		5.74		TAS		8.9	1.03	a_e	mb	4.7
RUE	72.71		P	20:27:36.663	-0.2	24.6		5.74		TAS		34.1	0.76	a_e	mb	5.5
STU	77.31		P	20:28:02.913	-0.4	24.6		5.74		TAS		90.4	0.86	a_e	mb	5.9
TANN	74.92		P	20:27:49.528	0.1	24.6		5.74		TAS		10.4	0.80	m_e	mb	4.9

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TNS	76.17	P	20:27:56.713	0.3	24.6	5.74	TAS	35.1	0.75	a_e	mb	5.6
UBBA	75.22	P	20:27:51.108	0.2	24.6	5.74	TAS	11.8	0.70	m_e	mb	5.0
UBR	78.06	P	20:28:07.155		24.6	5.74	TAS	19.5	0.94	m_e	mb	5.2
WET	75.95	P	20:27:55.813	-0.1	24.6	5.74	TAS	37.4	0.90	a_e	mb	5.5

Event 90308004 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/08	02:32:15.98			22.1180	121.8550				33.0			16		83.75	88.67	m i ke	BGR
90308010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90308010
Ms	5.4		BGR	90308010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	88.18		L	03:28:37.062						T__		1328.7	18.90	a_e	Ms	5.4
BRG	83.75		P	02:44:41.263	-0.5	60.4		4.96		TAS		19.5	1.23	m_e	mb	5.2
BSEG	84.23		L	03:24:55.001						T__		1492.3	18.80	a_e	Ms	5.4
CLL	84.07		P	02:44:42.636	0.0	60.4		4.96		TAS		18.6	0.87	m_e	mb	5.3
CLL	84.07		L	03:27:19.287						T__		2041.9	18.60	a_e	Ms	5.5
CLZ	85.24		P	02:44:48.734		60.4		4.96		TAS		12.8	0.95	m_e	mb	5.1
FLT1	84.54		P	02:44:44.702	-0.1	60.4		4.96		TAS		18.7	0.78	m_e	mb	5.4
FUR	86.57		L	03:27:28.094						T__		1197.7	18.40	a_e	Ms	5.3
GEC2	84.83		P	02:44:46.767	0.3	60.4		4.96		TAS		16.4	0.85	m_e	mb	5.3
GEC2	84.83		L	03:28:02.798						T__		1087.9	18.20	a_e	Ms	5.3
GRA1	85.85		L	03:27:07.995						T__		1279.9	20.30	a_e	Ms	5.3
KAST	86.62		P	02:44:55.511		60.4		4.96		TAS		9.7	0.93	m_e	mb	4.9
MANZ	85.20		P	02:44:48.534	0.1	60.4		4.96		TAS		2.7	1.11	m_e	mb	4.4
MOX	85.16		P	02:44:48.070	0.2	60.4		4.96		TAS		15.2	1.05	m_e	mb	5.2
MOX	85.16		L	03:26:53.280						T__		1957.2	18.00	a_e	Ms	5.5
NEUB	84.80		P	02:44:47.456	0.0	60.4		4.96		TAS		26.6	0.94	m_e	mb	5.5
PLN	84.93		P	02:44:47.143	0.0	60.4		4.96		TAS		5.9	1.05	m_e	mb	4.8
RJOB	85.88		P	02:44:51.881		60.4		4.96		TAS		19.3	0.93	m_e	mb	5.2
ROTZ	85.25		P	02:44:49.087		60.4		4.96		TAS		3.1	0.95	m_e	mb	4.5
TANN	84.80		P	02:44:46.533	-0.2	60.4		4.96		TAS		7.3	0.93	m_e	mb	4.9
TNS	87.12		P	02:44:58.204		60.4		4.96		TAS				m_e		
TNS	87.12		L	03:26:09.161						T__		806.0	21.10	a_e	Ms	5.1
UBR	87.49		P	02:44:59.536		60.4		4.96		TAS				m_e		
WET	85.16		L	03:28:01.756						T__		1252.5	18.50	a_e	Ms	5.3
WLF	88.67		P	02:45:05.774		60.4		4.96		TAS				m_e		

Event 90308005 Philippine Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/08	15:06:14.10			10.4300	126.0400				40.0					94.91	100.47	m i ke	EMSC
OrigID 90308037																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.5		BGR	90308011
Ms	5.9		BGR	90308011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	96.79		Pdiff	15:19:40.112						T__				m_e	
BFO	99.86		Pdiff	15:19:53.955						T__				m_e	
BFO	99.86		L	16:09:46.119						T__		4002.5	19.50	a_e Ms	5.9
BRG	95.47		Pdiff	15:19:33.633						T__				m_e	
BSEG	96.17		L	16:08:17.798						T__		2752.8	20.80	a_e Ms	5.7
CLL	95.83		Pdiff	15:19:35.296						T__				m_e	
CLL	95.83		L	16:07:45.522						T__		5166.9	21.70	a_e Ms	6.0
CLZ	97.08		Pdiff	15:19:41.745						T__				m_e	
FUR	98.18		L	16:09:01.680						T__		3956.9	21.90	a_e Ms	5.9
GEC2	96.43		Pdiff	15:19:38.395						T__				m_e	
GEC2	96.43		L	16:07:48.332						T__		5408.0	22.00	a_e Ms	6.0
GOR1	96.06		Pdiff	15:19:37.121						T__				m_e	
GRA1	97.55		Pdiff	15:19:43.979						T__				m_e	
GRA1	97.55		L	16:05:57.212						T__		3385.3	21.20	a_e Ms	5.8
IBBN	98.29		Pdiff	15:19:46.480						T__				m_e	
KAST	98.46		Pdiff	15:19:47.753						T__				m_e	
MANZ	96.90		Pdiff	15:19:40.776						T__				m_e	
MOX	96.91		Pdiff	15:19:40.555						T__				m_e	
MOX	96.91		L	16:08:38.297						T__		5318.6	20.10	a_e Ms	6.0
NRDL	96.93		Pdiff	15:19:40.887						T__				m_e	
PLN	96.66		Pdiff	15:19:39.447						T__				m_e	
RJOB	97.43		Pdiff	15:19:42.825						T__				m_e	
ROTZ	96.94		Pdiff	15:19:41.053						T__				m_e	
RUE	94.91		P	15:19:32.111		64.2		4.30		TAS		559.2	2.58	m_e mb	6.5
TANN	96.52		Pdiff	15:19:38.838						T__				m_e	
TNS	98.91		Pdiff	15:19:50.023						T__				m_e	
TNS	98.91		L	16:09:06.389						T__		5280.2	20.60	a_e Ms	6.0
UBBA	97.75		Pdiff	15:19:44.265						T__				m_e	
UBR	99.10		Pdiff	15:19:50.356						T__				m_e	
WET	96.80		Pdiff	15:19:40.167						T__				m_e	
WET	96.80		L	16:07:52.958						T__		3165.4	20.10	a_e Ms	5.8
WLF	100.47		Pdiff	15:19:57.056						T__				m_e	

Event 90310003 South Indian Ocean

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	

2019/03/10 07:53:21.21 -3.1750 90.3030 10.0 83.60 85.35 m i ke BGR  
90310009

Magnitude Err Nsta Author OrigID  
mb 5.5 BGR 90310009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GEC2	83.60		P	08:05:49.963		100.4		4.83		TAS		85.8	1.98	m_e	mb 5.6
GRA1	85.35		P	08:05:59.056		100.4		4.83		TAS		71.6	1.68	m_e	mb 5.6
MOX	85.28		P	08:05:58.070		100.4		4.83		TAS		156.7	2.85	m_e	mb 5.7
ROTZ	84.74		P	08:05:56.270		100.4		4.83		TAS		11.7	2.00	m_e	mb 4.8
WET	84.19		P	08:05:52.876		100.4		4.83		TAS		120.9	2.16	m_e	mb 5.8

Event 90310004 Fiji Islands region

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
OrigID  
2019/03/10 08:12:24.60 -17.9300 -178.6000 561.0 30 143.41 149.48 m i ke EMSC  
90310036

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.10		PKPdf	08:30:57.921		17.5		2.79		TAS				m_e	
ASSE	145.10		PKPbc	08:30:58.891	0.3	17.5		2.79		TAS				m_e	
BFO	149.16		PKPdf	08:31:04.443		17.5		2.79		TAS				m_e	
BFO	149.16		PKPbc	08:31:09.789	-0.6	17.5		2.79		TAS				m_e	
BRG	145.64		PKPdf	08:30:58.867		17.5		2.79		TAS				m_e	
BRG	145.64		PKPbc	08:31:00.723	0.2	17.5		2.79		TAS				m_e	
BSEG	143.41		PKPbc	08:30:53.385	-0.1	17.5		2.79		TAS				m_e	
BUG	146.24		PKPdf	08:30:59.697		17.5		2.79		TAS				m_e	
CLL	145.44		PKPbc	08:31:00.045	0.1	17.5		2.79		TAS				m_e	
CLZ	145.43		PKPdf	08:30:58.769		17.5		2.79		TAS				m_e	
CLZ	145.43		PKPbc	08:31:00.247	0.1	17.5		2.79		TAS				m_e	
FLT1	144.81		PKPbc	08:30:57.880	0.4	17.5		2.79		TAS				m_e	
FUR	148.79		PKPbc	08:31:09.130		17.5		2.79		TAS				m_e	
GEC2	147.59		PKPdf	08:31:02.001		17.5		2.79		TAS				m_e	
GEC2	147.59		PKPbc	08:31:06.090	-0.1	17.5		2.79		TAS				m_e	
GOR1	144.16		PKPbc	08:30:55.989	0.1	17.5		2.79		TAS				m_e	
GRA1	147.34		PKPdf	08:31:01.942		17.5		2.79		TAS				m_e	
GRA1	147.34		PKPbc	08:31:05.577	0.0	17.5		2.79		TAS				m_e	
GTTG	145.78		PKPdf	08:30:59.167		17.5		2.79		TAS				m_e	
GTTG	145.78		PKPbc	08:31:01.144	0.0	17.5		2.79		TAS				m_e	
IBBN	145.33		PKPbc	08:30:59.661	-0.1	17.5		2.79		TAS				m_e	
KAST	146.34		PKPdf	08:31:00.245		17.5		2.79		TAS				m_e	
KAST	146.34		PKPbc	08:31:02.535	-0.1	17.5		2.79		TAS				m_e	
MANZ	146.88		PKPdf	08:31:01.092		17.5		2.79		TAS				m_e	

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MANZ	146.88	PKPbc	08:31:04.331	0.4	17.5	2.79	TAS	m_e
MOX	146.35	PKPdf	08:31:00.112		17.5	2.79	TAS	m_e
MOX	146.35	PKPbc	08:31:02.646	0.2	17.5	2.79	TAS	m_e
NEUB	145.80	PKPdf	08:30:59.174		17.5	2.79	TAS	m_e
NEUB	145.80	PKPbc	08:31:01.108	0.2	17.5	2.79	TAS	m_e
NRDL	144.84	PKPbc	08:30:58.264	-0.1	17.5	2.79	TAS	m_e
PLN	146.40	PKPdf	08:31:00.170		17.5	2.79	TAS	m_e
PLN	146.40	PKPbc	08:31:02.848	0.4	17.5	2.79	TAS	m_e
RETH	144.71	PKPbc	08:30:57.847	-0.4	17.5	2.79	TAS	m_e
RJOB	148.84	PKPdf	08:31:03.620		17.5	2.79	TAS	m_e
RJOB	148.84	PKPbc	08:31:08.892		17.5	2.79	TAS	m_e
ROTZ	147.07	PKPdf	08:31:01.053		17.5	2.79	TAS	m_e
ROTZ	147.07	PKPbc	08:31:04.899	0.1	17.5	2.79	TAS	m_e
RUE	144.18	PKPbc	08:30:56.024	-0.2	17.5	2.79	TAS	m_e
STU	148.59	PKPdf	08:31:03.952		17.5	2.79	TAS	m_e
STU	148.59	PKPbc	08:31:08.745	-0.7	17.5	2.79	TAS	m_e
TANN	146.40	PKPdf	08:31:00.323		17.5	2.79	TAS	m_e
TANN	146.40	PKPbc	08:31:03.031	0.4	17.5	2.79	TAS	m_e
TNS	147.29	PKPdf	08:31:01.808		17.5	2.79	TAS	m_e
TNS	147.29	PKPbc	08:31:05.375	0.4	17.5	2.79	TAS	m_e
UBBA	146.48	PKPdf	08:31:00.233		17.5	2.79	TAS	m_e
UBBA	146.48	PKPbc	08:31:02.683	0.4	17.5	2.79	TAS	m_e
UBR	149.48	PKPdf	08:31:05.004		17.5	2.79	TAS	m_e
UBR	149.48	PKPbc	08:31:10.582		17.5	2.79	TAS	m_e
WET	147.50	PKPdf	08:31:01.917		17.5	2.79	TAS	m_e
WET	147.50	PKPbc	08:31:05.870	-0.5	17.5	2.79	TAS	m_e
WLF	148.11	PKPdf	08:31:03.536		17.5	2.79	TAS	m_e
WLF	148.11	PKPbc	08:31:08.035	-0.0	17.5	2.79	TAS	a_e

Event 90310002 Sea of Okhotsk

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	09:52:30.68			46.4940	145.5510				33.0			23		72.96	77.48	m i ke	BGR
90310008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90310008
Ms	4.4		BGR	90310008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	74.41		P	10:04:03.245	-0.3	30.5		5.70		TAS		19.3	1.08	m_e mb	5.0
BRG	74.41		P	10:04:03.245	-0.3	30.5		5.70		TAS		13.7	0.96	m_e mb	5.0
BSEG	72.96		P	10:03:55.380	0.1	30.5		5.70		TAS		31.2	0.92	m_e mb	5.4
CLL	74.36		P	10:04:02.956	-0.1	30.5		5.70		TAS		46.3	0.85	m_e mb	5.5
CLZ	74.75		P	10:04:05.590	-0.3	30.5		5.70		TAS		39.6	1.00	m_e mb	5.4
FLT1	74.06		P	10:04:01.080	0.5	30.5		5.70		TAS		40.2	0.93	m_e mb	5.4

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GEC2	76.22	P	10:04:13.670		30.5	5.70	TAS	12.8	0.98	m_e	mb	5.0
GOR1	73.47	P	10:03:58.447	-0.2	30.5	5.70	TAS	48.7	1.19	m_e	mb	5.5
GRA1	76.34	P	10:04:14.969		30.5	5.70	TAS	58.3	0.92	m_e	mb	5.7
GRA1	76.34	L	10:43:58.823				T__	248.1	19.60	a_e	Ms	4.5
GTTG	75.14	P	10:04:08.079	0.1	30.5	5.70	TAS	39.5	0.94	m_e	mb	5.4
IBBN	75.14	P	10:04:07.429	0.2	30.5	5.70	TAS	29.1	0.83	m_e	mb	5.3
KAST	75.91	P	10:04:11.686	-0.3	30.5	5.70	TAS	18.7	0.95	m_e	mb	5.2
MANZ	75.79	P	10:04:11.542	0.0	30.5	5.70	TAS	4.4	0.97	m_e	mb	4.6
MOX	75.39	P	10:04:08.908	0.0	30.5	5.70	TAS	23.1	1.01	m_e	mb	5.2
MOX	75.39	L	10:46:26.066				T__	183.2	21.60	a_e	Ms	4.3
NEUB	74.86	P	10:04:06.131	-0.1	30.5	5.70	TAS	39.2	0.92	m_e	mb	5.4
NRDL	74.27	P	10:04:02.415	-0.4	30.5	5.70	TAS	15.4	0.93	m_e	mb	5.0
PLN	75.34	P	10:04:08.512	0.5	30.5	5.70	TAS	5.0	0.93	m_e	mb	4.5
RETH	74.29	P	10:04:02.812	-0.1	30.5	5.70	TAS	125.9	1.02	m_e	mb	5.9
RJOB	77.48	P	10:04:20.957		30.5	5.70	TAS	14.8	0.92	m_e	mb	5.1
ROTZ	75.94	P	10:04:12.263		30.5	5.70	TAS	6.3	1.06	m_e	mb	4.7
TANN	75.30	P	10:04:08.476	0.3	30.5	5.70	TAS	10.0	0.98	m_e	mb	4.8
TNS	76.76	P	10:04:16.556	-0.1	30.5	5.70	TAS	15.6	0.91	m_e	mb	5.1
WET	76.25	P	10:04:14.247		30.5	5.70	TAS	31.3	0.96	m_e	mb	5.4

Event 90310005 D'Entrecasteaux Islands, Papua New Guinea, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	12:48:00.30			-10.1100	152.0600				10.0					126.72	131.28	m i ke	EMSC
90310037																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.2		BGR	90310011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	131.28		L	14:07:09.750						T__		5044.7	20.90	a_e	Ms	6.2
BSEG	126.72		L	14:04:18.467						T__		3491.0	20.30	a_e	Ms	6.0
CLL	127.06		L	14:05:22.615						T__		7057.9	19.80	a_e	Ms	6.3
FUR	129.81		L	14:05:44.132						T__		5856.8	21.40	a_e	Ms	6.2
GEC2	128.10		PP	13:09:11.373						T__				m_e		
GEC2	128.10		L	14:04:21.795						T__		7312.2	21.40	a_e	Ms	6.3
GRA1	128.94		PP	13:09:17.065						T__				m_e		
GRA1	128.94		L	14:05:20.830						T__		4675.8	20.70	a_e	Ms	6.2
IBBN	128.95		PP	13:09:17.660						T__				m_e		
KAST	129.38		PP	13:09:23.208						T__				m_e		
MANZ	128.30		PP	13:09:14.092						T__				m_e		
MOX	128.16		PP	13:09:11.599						T__				m_e		
MOX	128.16		L	14:05:17.733						T__		7572.7	20.60	a_e	Ms	6.4
PLN	127.98		PP	13:09:11.634						T__				m_e		
RETH	127.93		PP	13:09:11.655						T__				m_e		
RJOB	129.22		PP	13:09:19.779						T__				m_e		



ROTZ	128.38	PP	13:09:14.763	T__													m_e
TANN	127.86	PP	13:09:11.019	T__													m_e
TNS	130.00	L	14:06:35.813	T__	8269.4	20.50											a_e Ms 6.4
WET	128.38	PP	13:09:14.916	T__													m_e
WET	128.38	L	14:05:29.743	T__	5018.0	20.20											a_e Ms 6.2

Event 90310006 Southwest Indian Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	
2019/03/10	13:18:16.10			-35.2500	53.8600				10.0					91.38	94.71	m i ke	EMSC
90310038																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	90310012
Ms	5.4		BGR	90310012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	92.59		P	13:31:28.257		146.3		5.37		TAS		36.1	1.42	m_e mb	5.6
BRG	92.68		P	13:31:28.267		146.3		5.37		TAS		4.9	0.90	m_e mb	4.9
CLL	93.36		P	13:31:31.691		146.3		5.37		TAS		9.2	1.07	m_e mb	5.1
CLZ	94.71		P	13:31:37.692		146.3		5.37		TAS		12.4	1.25	m_e mb	5.2
GRA1	92.63		P	13:31:28.263		146.3		5.37		TAS		19.6	0.82	m_e mb	5.6
GRA1	92.63		L	14:14:36.777						T__		1752.2	19.00	a_e Ms	5.5
MOX	93.28		P	13:31:31.555		146.3		5.37		TAS		6.6	1.09	m_e mb	5.0
MOX	93.28		L	14:15:51.605						T__		1269.3	21.40	a_e Ms	5.3
TANN	92.80		P	13:31:29.076		146.3		5.37		TAS		9.9	1.23	m_e mb	5.1
UBR	91.38		P	13:31:22.808		146.3		5.37		TAS		42.6	1.09	m_e mb	5.7

Event 90310007 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
OrigID																		
2019/03/10	15:21:16.40			-21.0500	-176.4300				210.0					15	146.77	151.37	m i ke	EMSC
90310039																		

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	149.14		PKPbc	15:40:39.536	-0.5	14.8		2.60		TAS				m_e	
BSEG	146.77		PKPbc	15:40:32.839	-0.1	14.8		2.60		TAS				m_e	
CLL	148.91		PKPbc	15:40:38.867	-0.1	14.8		2.60		TAS				m_e	
FLT1	148.22		PKPbc	15:40:36.852	0.1	14.8		2.60		TAS				m_e	
GEC2	151.10		PKPbc	15:40:44.200		14.8		2.60		TAS				m_e	
KAST	149.67		PKPbc	15:40:40.803		14.8		2.60		TAS				m_e	

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MANZ	150.34	PKPbc	15:40:42.592	14.8	2.60	TAS	m_e
MOX	149.79	PKPbc	15:40:41.098	14.8	2.60	TAS	m_e
NEUB	149.24	PKPbc	15:40:39.920	-0.1 14.8	2.60	TAS	m_e
PLN	149.85	PKPbc	15:40:41.358	14.8	2.60	TAS	m_e
ROTZ	150.53	PKPbc	15:40:42.943	14.8	2.60	TAS	m_e
TANN	149.87	PKPbc	15:40:41.366	14.8	2.60	TAS	m_e
TNS	150.63	PKPbc	15:40:43.314	14.8	2.60	TAS	m_e
UBBA	149.86	PKPbc	15:40:41.090	14.8	2.60	TAS	m_e
WLF	151.37	PKPbc	15:40:45.315	14.8	2.60	TAS	m_e

Event 90310008 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	16:23:58.14			58.3900	-30.8030				33.0			22		22.51	27.59	m i ke	BGR
90310014																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	90310014
Ms	4.7		BGR	90310014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	25.08		P	16:29:18.083	0.1	305.9		9.06		TAS		51.3	1.55	m_e	mb 5.0
BFO	25.08		L	16:38:23.443						T__		1185.1	19.10	a_e	Ms 4.4
BRG	26.53		P	16:29:31.576		305.9		9.06		TAS		83.9	2.37	m_e	mb 5.0
BSEG	23.05		P	16:28:59.470	0.7	305.9		9.06		TAS		245.4	2.34	m_e	mb 5.3
BSEG	23.05		L	16:37:44.113						T__		1921.1	18.70	a_e	Ms 4.6
BUG	22.71		P	16:28:55.533	0.8	305.9		9.06		TAS		202.9	1.89	m_e	mb 5.3
CLL	25.80		P	16:29:24.501		305.9		9.06		TAS		130.0	2.19	m_e	mb 5.2
CLL	25.80		L	16:39:11.693						T__		1851.1	21.10	a_e	Ms 4.6
CLZ	24.13		P	16:29:10.502	0.2	305.9		9.06		TAS		450.2	3.14	m_e	mb 5.5
FLT1	24.33		P	16:29:11.572	-0.5	305.9		9.06		TAS		43.9	1.70	m_e	mb 4.7
FUR	26.73		L	16:39:51.452						T__		1532.6	18.10	a_e	Ms 4.6
GEC2	27.59		P	16:29:41.681		305.9		9.06		TAS		45.0	1.92	m_e	mb 5.0
GEC2	27.59		L	16:40:13.647						T__		2448.3	21.60	a_e	Ms 4.8
GOR1	24.03		P	16:29:07.580	0.6	305.9		9.06		TAS		219.5	2.29	m_e	mb 5.3
GRA1	25.78		P	16:29:25.427	0.0	305.9		9.06		TAS		43.9	1.20	m_e	mb 5.0
GRA1	25.78		L	16:38:47.350						T__		1982.8	21.30	a_e	Ms 4.6
IBBN	22.51		P	16:28:55.270	-1.9	305.9		9.06		TAS		119.0	1.71	m_e	mb 5.1
KAST	23.44		P	16:29:03.861	0.2	305.9		9.06		TAS		393.5	3.10	m_e	mb 5.4
MOX	25.44		P	16:29:21.511	0.1	305.9		9.06		TAS		86.7	1.75	m_e	mb 5.2
MOX	25.44		L	16:39:29.187						T__		3015.7	18.30	a_e	Ms 4.8
NRDL	23.65		P	16:29:05.465	1.0	305.9		9.06		TAS		197.5	2.10	m_e	mb 5.3
PLN	25.81		P	16:29:25.522		305.9		9.06		TAS		50.0	2.05	m_e	mb 4.8
RETH	23.13		P	16:29:00.709	-0.2	305.9		9.06		TAS		755.2	1.97	m_e	mb 5.9
ROTZ	26.25		P	16:29:29.360		305.9		9.06		TAS		9.4	1.91	m_e	mb 4.1
TANN	26.01		P	16:29:27.027		305.9		9.06		TAS		75.4	1.85	m_e	mb 5.0

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TNS	24.01	P	16:29:10.186	-0.5	305.9	9.06	TAS	41.2	1.42	m_e	mb	4.8
TNS	24.01	L	16:38:10.450				T__	2267.3	18.80	a_e	Ms	4.7
UBBA	24.49	P	16:29:13.707	-0.3	305.9	9.06	TAS	32.1	1.41	m_e	mb	4.7
WET	26.97	P	16:29:35.952		305.9	9.06	TAS	49.8	1.66	m_e	mb	5.0
WET	26.97	L	16:39:55.103				T__	2461.6	20.10	a_e	Ms	4.8
WLF	23.13	P	16:29:01.365	0.1	305.9	9.06	TAS	186.1	1.90	m_e	mb	5.3

Event 90310009 Off east coast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	
2019/03/10	17:10:59.13			37.4320	142.7490				33.0			30		80.06	85.47	m i ke	BGR
90310015																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	90310015
MBB	6.2		BGR	90310015
Ms	5.8		BGR	90310015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	81.51	P		17:23:11.482	0.1	36.8		5.17		TAS		30.8	1.02	a_e	mb	5.4
BFO	85.47	P		17:23:31.582	-0.5	36.8		5.17		TAS		99.6	1.15	a_e	MBB	6.1
BFO	85.47	L		18:05:08.095						T__		4314.8	19.60	a_e	Ms	5.8
BRG	81.25	P		17:23:10.082	-0.1	36.8		5.17		TAS		29.9	1.03	a_e	mb	5.3
BSEG	80.18	P		17:23:04.732	0.0	36.8		5.17		TAS		67.6	1.11	a_e	mb	5.5
BSEG	80.18	L		18:00:03.814						T__		4064.4	21.30	a_e	Ms	5.7
BUG	83.29	P		17:23:20.582	-0.2	36.8		5.17		TAS		47.5	1.26	a_e	mb	5.6
CLL	81.28	P		17:23:09.932	-0.1	36.8		5.17		TAS		64.6	1.08	a_e	mb	5.6
CLL	81.28	L		18:02:20.015						T__		5071.9	18.00	a_e	Ms	5.9
CLZ	81.85	P		17:23:13.532	-0.1	36.8		5.17		TAS		79.8	1.06	a_e	mb	5.8
FLT1	81.14	P		17:23:09.032	0.2	36.8		5.17		TAS		79.0	1.13	a_e	mb	5.6
FUR	84.46	P		17:23:26.941		36.8		5.17		TAS		83.5	1.00	m_e	mb	5.9
FUR	84.46	L		18:04:19.207						T__		8588.8	19.00	a_e	Ms	6.2
GEC2	82.93	P		17:23:18.682	0.2	36.8		5.17		TAS		26.5	0.94	a_e	mb	5.5
GEC2	82.93	L		18:02:45.784						T__		4962.4	21.70	a_e	Ms	5.8
GOR1	80.58	P		17:23:06.848	0.1	36.8		5.17		TAS		99.0	1.27	m_e	mb	5.7
GRA1	83.25	P		17:23:21.132	-0.1	36.8		5.17		TAS		130.8	1.21	a_e	MBB	6.2
GRA1	83.25	L		18:03:30.482						T__		3011.4	19.80	a_e	Ms	5.7
GTTG	82.24	P		17:23:15.382	-0.4	36.8		5.17		TAS		43.7	0.88	a_e	mb	5.6
IBBN	82.41	P		17:23:16.319	-0.0	36.8		5.17		TAS		43.2	0.87	m_e	mb	5.6
KAST	83.08	P		17:23:19.401	0.0	36.8		5.17		TAS		56.8	1.54	m_e	mb	5.6
MANZ	82.67	P		17:23:17.402	0.6	36.8		5.17		TAS		13.3	1.42	m_e	mb	5.0
MOX	82.34	P		17:23:15.882	-0.1	36.8		5.17		TAS		55.7	1.46	a_e	mb	5.5
MOX	82.34	L		17:59:18.959						T__		2667.2	21.80	a_e	Ms	5.6
NRDL	81.42	P		17:23:11.132	0.2	36.8		5.17		TAS		42.5	1.29	a_e	mb	5.3
PLN	82.25	P		17:23:15.319	-0.2	36.8		5.17		TAS		19.6	1.54	m_e	mb	5.0
RETH	81.49	P		17:23:11.423	-0.0	36.8		5.17		TAS		240.9	1.17	m_e	mb	6.1

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RJOB	84.18	P	17:23:25.720		36.8	5.17	TAS	48.9	1.06	m_e	mb	5.7
ROTZ	82.81	P	17:23:18.585	0.3	36.8	5.17	TAS	16.3	1.24	m_e	mb	5.1
RUE	80.06	P	17:23:04.066	-0.6	36.8	5.17	TAS	87.7	1.19	m_e	mb	5.6
STU	84.78	P	17:23:28.412	0.4	36.8	5.17	TAS	258.5	1.19	m_e	mb	6.3
TANN	82.19	P	17:23:15.118	0.3	36.8	5.17	TAS	38.4	1.47	m_e	mb	5.3
TNS	83.87	P	17:23:23.653	0.4	36.8	5.17	TAS	59.4	1.48	m_e	mb	5.6
TNS	83.87	L	18:03:51.000				T__	5514.4	20.10	a_e	Ms	5.9
UBBA	82.81	P	17:23:18.282	0.0	36.8	5.17	TAS	38.8	1.42	m_e	mb	5.4
UBR	85.31	P	17:23:30.686		36.8	5.17	TAS	22.6	0.96	m_e	mb	5.4
WET	83.03	P	17:23:19.682	-0.4	36.8	5.17	TAS	45.8	1.15	a_e	mb	5.6
WLF	85.17	P	17:23:30.782	-0.2	36.8	5.17	TAS	124.4	1.54	a_e	mb	5.9

Event 90310010 Off east coast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	17:24:15.70			36.7800	142.4400				10.0					80.66	85.93	m i ke	EMSC
90310042																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90310016
Ms	5.6		BGR	90310016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	85.93		P	17:36:55.835		37.4		4.40		TAS		19.8	1.02	m_e	mb	5.2
BRG	81.69		P	17:36:34.155		37.4		4.40		TAS		11.8	1.14	m_e	mb	4.9
BSEG	80.66		P	17:36:28.982		37.4		4.40		TAS		31.0	1.28	m_e	mb	5.2
CLL	81.72		P	17:36:34.509		37.4		4.40		TAS		23.4	1.08	m_e	mb	5.2
CLZ	82.31		P	17:36:37.601		37.4		4.40		TAS		32.8	1.29	m_e	mb	5.3
FLT1	81.60		P	17:36:33.241		37.4		4.40		TAS		17.7	1.08	m_e	mb	5.1
GEC2	83.36		P	17:36:42.793		37.4		4.40		TAS		7.5	0.90	m_e	mb	4.9
GRA1	83.70		P	17:36:45.030		37.4		4.40		TAS		23.4	0.94	m_e	mb	5.4
GRA1	83.70		L	18:15:31.593						T__		2248.9	20.20	a_e	Ms	5.5
MOX	82.79		L	18:14:30.966						T__		2688.8	20.80	a_e	Ms	5.6
RETH	81.96		P	17:36:35.310		37.4		4.40		TAS		92.0	1.24	m_e	mb	5.8
ROTZ	83.25		P	17:36:42.676		37.4		4.40		TAS		4.9	1.47	m_e	mb	4.5

Event 90310011 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	17:58:53.49			58.7100	-32.2290				33.0					26.18	26.53	m i ke	BGR
90310017																	

Magnitude	Err	Nsta	Author	OrigID
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mb 5.0 BGR 90310017  
Ms 4.7 BGR 90310017

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	26.53		P	18:04:27.554		303.8		8.82		TAS		31.3	1.03	m_e	mb 5.0
GRA1	26.53		L	18:15:31.562						T__		2248.9	20.20	a_e	Ms 4.7
MOX	26.18		L	18:14:30.982						T__		2688.8	20.80	a_e	Ms 4.8

## Event 90310012 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	18:05:03.69			58.3930	-31.9300				33.0					23.10	28.39	m i ke	BGR
OrigID 90310018																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	90310018
MBB	6.1		BGR	90310018
Ms	5.6		BGR	90310018

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	24.73		P	18:10:22.787		304.4		8.65		TAS		1384.2	3.39	m_e	mb 6.1
BFO	25.67		P	18:10:30.696		304.4		8.65		TAS		136.1	1.27	m_e	mb 5.4
BFO	25.67		L	18:19:03.878						T__		11528.7	21.30	a_e	Ms 5.4
BRG	27.13		P	18:10:42.120		304.4		8.65		TAS		96.8	1.57	m_e	mb 5.3
BSEG	23.64		P	18:10:10.880		304.4		8.65		TAS		2124.9	2.90	m_e	mb 6.2
BSEG	23.64		L	18:18:35.065						T__		15278.1	21.30	a_e	Ms 5.4
BUG	23.30		P	18:10:08.276		304.4		8.65		TAS		1727.3	2.38	m_e	mb 6.2
CLL	26.39		P	18:10:36.593		304.4		8.65		TAS		269.9	1.88	m_e	mb 5.6
CLL	26.39		L	18:20:12.538						T__		20540.6	21.40	a_e	Ms 5.6
CLZ	24.72		P	18:10:22.726		304.4		8.65		TAS		509.3	2.22	m_e	mb 5.9
FLT1	24.92		P	18:10:23.046		304.4		8.65		TAS		707.4	2.49	m_e	mb 6.0
FUR	27.32		P	18:10:45.140		304.4		8.65		TAS		143.9	1.22	m_e	mb 5.6
FUR	27.32		L	18:20:53.818						T__		14339.8	18.80	a_e	Ms 5.6
GEC2	28.18		P	18:10:52.290		304.4		8.65		TAS		449.8	2.74	m_e	mb 5.8
GEC2	28.18		L	18:21:25.436						T__		22474.2	20.00	a_e	Ms 5.8
GOR1	24.62		P	18:10:21.614		304.4		8.65		TAS		1637.3	2.87	m_e	mb 6.3
GRA1	26.37		P	18:10:37.088		304.4		8.65		TAS		574.4	1.92	m_e	mb 5.9
GRA1	26.37		L	18:19:48.110						T__		19820.6	21.90	a_e	Ms 5.6
IBBN	23.10		P	18:10:05.688		304.4		8.65		TAS		1727.8	2.38	m_e	mb 6.2
KAST	24.04		P	18:10:15.810		304.4		8.65		TAS		846.3	2.52	m_e	mb 5.8
MANZ	26.67		P	18:10:38.142		304.4		8.65		TAS		29.0	1.41	m_e	mb 4.8
MOX	26.03		P	18:10:33.749		304.4		8.65		TAS		231.8	1.38	m_e	mb 5.6
MOX	26.03		L	18:20:40.754						T__		29958.4	18.20	a_e	Ms 5.9
NRDL	24.24		P	18:10:16.627		304.4		8.65		TAS		229.7	1.22	m_e	mb 5.6
PLN	26.41		P	18:10:35.970		304.4		8.65		TAS		77.6	1.51	m_e	mb 5.1
RETH	23.72		P	18:10:11.638		304.4		8.65		TAS		7392.2	2.57	m_e	mb 6.8

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RJOB	28.39	P	18:10:53.730	304.4	8.65	TAS	36.8	0.99	m_e	mb	5.2
ROTZ	26.85	P	18:10:40.010	304.4	8.65	TAS	18.7	1.40	m_e	mb	4.6
RUE	26.17	P	18:10:34.296	304.4	8.65	TAS	196.6	1.48	m_e	mb	5.5
STU	25.85	P	18:10:30.895	304.4	8.65	TAS	287.5	1.15	m_e	mb	5.8
TANN	26.61	P	18:10:37.701	304.4	8.65	TAS	207.1	1.80	m_e	mb	5.6
TNS	24.60	P	18:10:22.148	304.4	8.65	TAS	257.2	1.67	m_e	mb	5.7
TNS	24.60	L	18:19:22.152			T__	22752.8	18.50	a_e	Ms	5.7
UBBA	25.08	P	18:10:26.083	304.4	8.65	TAS	163.8	1.63	m_e	mb	5.5
UBR	27.01	P	18:10:41.808	304.4	8.65	TAS	119.8	1.55	m_e	mb	5.4
WET	27.57	P	18:10:46.778	304.4	8.65	TAS	116.5	1.66	m_e	mb	5.5
WLF	23.72	P	18:10:12.500	304.4	8.65	TAS	1865.9	2.61	m_e	mb	6.2

Event 90310013 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/10	19:35:21.20			-22.9900	-178.4900				408.0				11	148.39	151.98	m i ke	EMSC
90310045																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.8		BGR	90310019

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	150.07		PKPbc	19:54:28.144	0.1	19.5		2.41		TAS				m_e		
BRG	150.53		PKPbc	19:54:29.096		19.5		2.41		TAS				m_e		
BSEG	148.39		PKPbc	19:54:23.992		19.5		2.41		TAS				m_e		
CLL	150.36		PKPbc	19:54:28.609		19.5		2.41		TAS				m_e		
CLZ	150.40		PKPbc	19:54:28.986	-0.0	19.5		2.41		TAS				m_e		
FLT1	149.77		PKPbc	19:54:26.813	-0.2	19.5		2.41		TAS				m_e		
GTTG	150.75		PKPbc	19:54:29.761		19.5		2.41		TAS				m_e		
KAST	151.33		PKPbc	19:54:31.090		19.5		2.41		TAS				m_e		
MOX	151.29		PKPbc	19:54:30.647		19.5		2.41		TAS				m_e		
MOX	151.29	L		21:02:09.091						T__		327.8	18.30	a_e	Ms	5.2
PLN	151.32		PKPbc	19:54:30.977		19.5		2.41		TAS				m_e		
ROTZ	151.98	L		21:01:50.462						T__		69.4	20.10	a_e	Ms	4.5
RUE	149.09		PKPbc	19:54:25.668	-0.1	19.5		2.41		TAS				m_e		
TANN	151.32		PKPbc	19:54:30.890		19.5		2.41		TAS				m_e		

Event 90311001 Southeastern Alaska, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	00:07:29.13			60.1330	-141.4750				33.0					64.06	70.08	m i ke	BGR
90311007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90311007
Ms	4.5		BGR	90311007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	65.87		P	00:18:07.419		346.5		5.90		TAS		17.7	0.97	m_e	mb 5.3
BFO	69.14		L	00:50:07.227						T__		305.1	18.70	a_e	Ms 4.6
BRG	67.58		P	00:18:16.554		346.5		5.90		TAS		15.5	1.03	m_e	mb 5.2
BSEG	64.06		L	00:47:50.455						T__		345.4	18.90	a_e	Ms 4.6
CLL	67.02		P	00:18:13.132		346.5		5.90		TAS		20.5	1.13	m_e	mb 5.3
CLL	67.02		L	00:49:54.192						T__		281.7	18.90	a_e	Ms 4.5
CLZ	66.10		P	00:18:07.933		346.5		5.90		TAS		26.2	0.89	m_e	mb 5.5
FLT1	65.76		P	00:18:06.351		346.5		5.90		TAS		15.7	1.00	m_e	mb 5.2
FUR	69.81		L	00:48:20.190						T__		271.8	19.20	a_e	Ms 4.5
GEC2	69.52		P	00:18:29.146		346.5		5.90		TAS		41.2	1.71	m_e	mb 5.3
GRA1	68.32		P	00:18:25.075		346.5		5.90		TAS		14.7	0.82	m_e	mb 5.2
GRA1	68.32		L	00:50:35.435						T__		292.1	19.10	a_e	Ms 4.5
GTTG	66.32		P	00:18:09.430		346.5		5.90		TAS		33.5	0.99	m_e	mb 5.5
KAST	66.39		P	00:18:09.269		346.5		5.90		TAS		19.0	1.10	m_e	mb 5.2
MANZ	68.17		P	00:18:20.926		346.5		5.90		TAS		7.3	1.70	m_e	mb 4.6
MOX	67.45		P	00:18:16.016		346.5		5.90		TAS		17.1	0.89	m_e	mb 5.3
MOX	67.45		L	00:44:27.258						T__		233.2	21.40	a_e	Ms 4.4
NRDL	65.42		P	00:18:04.554		346.5		5.90		TAS		20.7	0.97	m_e	mb 5.3
PLN	67.69		P	00:18:17.438		346.5		5.90		TAS		4.4	0.87	m_e	mb 4.7
ROTZ	68.40		P	00:18:22.066		346.5		5.90		TAS		11.5	1.84	m_e	mb 4.8
TANN	67.81		P	00:18:18.318		346.5		5.90		TAS		10.9	1.03	m_e	mb 5.0
TNS	67.34		L	00:51:25.613						T__		248.2	18.00	a_e	Ms 4.5
UBR	70.08		P	00:18:32.609		346.5		5.90		TAS		40.7	1.66	m_e	mb 5.3
WET	69.11		P	00:18:26.802		346.5		5.90		TAS		23.5	1.07	m_e	mb 5.3
WET	69.11		L	00:51:05.957						T__		335.6	18.00	a_e	Ms 4.6

Event 90311002 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	04:21:09.40			-21.2500	-178.1100				482.0			18		146.74	152.81	m i ke	EMSC

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	148.43		PKPbc	04:40:01.166	0.0	18.0		2.40		TAS				a_e	
BRG	148.96		PKPbc	04:40:02.474	-0.2	18.0		2.40		TAS				m_e	
BSEG	146.74		PKPbc	04:39:56.716	0.0	18.0		2.40		TAS				a_e	
CLL	148.77		PKPbc	04:40:01.916	0.2	18.0		2.40		TAS				m_e	
CLZ	148.76		PKPbc	04:40:02.161	0.1	18.0		2.40		TAS				m_e	
FLT1	148.14		PKPbc	04:40:00.116	0.1	18.0		2.40		TAS				a_e	

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GEC2	150.89	PKPbc	04:40:06.966		18.0	2.40	TAS	a_e
KAST	149.67	PKPbc	04:40:04.145	0.1	18.0	2.40	TAS	m_e
MANZ	150.20	PKPbc	04:40:05.566		18.0	2.40	TAS	a_e
MOX	149.68	PKPbc	04:40:04.073		18.0	2.40	TAS	m_e
NRDL	148.17	PKPbc	04:40:00.466	0.3	18.0	2.40	TAS	a_e
PLN	149.72	PKPbc	04:40:04.276		18.0	2.40	TAS	m_e
RETH	148.04	PKPbc	04:40:00.061	0.1	18.0	2.40	TAS	m_e
ROTZ	150.39	PKPbc	04:40:05.866		18.0	2.40	TAS	a_e
TANN	149.72	PKPbc	04:40:04.366		18.0	2.40	TAS	a_e
TNS	150.63	PKPbc	04:40:06.497		18.0	2.40	TAS	m_e
UBR	152.81	PKPbc	04:40:11.016		18.0	2.40	TAS	m_e
WLF	151.44	PKPbc	04:40:08.766		18.0	2.40	TAS	a_e

Event 90311003 Andreanof Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	06:23:15.11			51.7790	-178.3040				33.0					74.41	80.11	m i ke	BGR
OrigID																	
90311009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90311009
Ms	4.6		BGR	90311009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	80.11		P	06:35:19.705		11.7		4.78		TAS		39.3	1.69	m_e	mb 5.1
BFO	80.11		L	07:16:52.382						T__		294.8	18.80	a_e	Ms 4.7
BSEG	74.41		L	07:06:22.754						T__		248.5	20.60	a_e	Ms 4.5
CLL	76.85		L	07:13:05.780						T__		350.1	19.90	a_e	Ms 4.7
CLZ	76.50		P	06:35:00.447		11.7		4.78		TAS		25.3	1.01	m_e	mb 5.3
FUR	80.10		L	07:08:24.958						T__		468.8	19.80	a_e	Ms 4.8
GEC2	79.23		P	06:35:14.827		11.7		4.78		TAS		12.6	1.36	m_e	mb 4.8
GEC2	79.23		L	07:14:55.547						T__		305.0	21.20	a_e	Ms 4.6
GRA1	78.58		P	06:35:11.777		11.7		4.78		TAS		21.3	0.95	m_e	mb 5.2
GRA1	78.58		L	07:14:25.580						T__		305.1	20.80	a_e	Ms 4.6
MOX	77.61		P	06:35:07.007		11.7		4.78		TAS		59.6	2.08	m_e	mb 5.4
MOX	77.61		L	07:12:23.654						T__		253.2	20.30	a_e	Ms 4.5
ROTZ	78.44		P	06:35:10.801		11.7		4.78		TAS		3.2	1.23	m_e	mb 4.3
TNS	78.21		L	07:17:15.045						T__		232.9	21.50	a_e	Ms 4.5
WET	79.00		L	07:06:04.846						T__		234.1	21.90	a_e	Ms 4.5

Event 90311004 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	



2019/03/11 11:00:36.04 58.9850 -31.9490 33.0 23.58 28.19 m i ke BGR  
90311010

Magnitude Err Nsta Author OrigID  
mb 4.8 BGR 90311010  
Ms 4.0 BGR 90311010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	25.74		L	11:14:04.954						T__		304.7	20.50	a_e	Ms 3.8
BSEG	23.58		P	11:05:42.640		305.7		8.61		TAS		25.4	1.01	m_e	mb 4.7
BSEG	23.58		L	11:15:10.316						T__		336.8	18.50	a_e	Ms 3.8
CLL	26.36		P	11:06:07.445		305.7		8.61		TAS		20.9	1.29	m_e	mb 4.6
CLL	26.36		L	11:15:17.020						T__		467.0	20.00	a_e	Ms 4.0
FUR	27.37		L	11:16:20.422						T__		214.4	19.70	a_e	Ms 3.7
GEC2	28.19		L	11:17:01.678						T__		591.4	18.70	a_e	Ms 4.2
GRA1	26.39		P	11:06:08.842		305.7		8.61		TAS		35.4	1.20	m_e	mb 4.9
GRA1	26.39		L	11:15:03.273						T__		542.6	20.70	a_e	Ms 4.1
MOX	26.03		P	11:06:04.949		305.7		8.61		TAS		32.2	1.32	m_e	mb 4.8
MOX	26.03		L	11:16:24.842						T__		532.7	18.00	a_e	Ms 4.1
NRDL	24.21		P	11:05:48.228		305.7		8.61		TAS		39.7	1.28	m_e	mb 4.8
PLN	26.40		P	11:06:08.170		305.7		8.61		TAS		11.2	1.40	m_e	mb 4.3
RETH	23.70		P	11:05:43.555		305.7		8.61		TAS		490.7	1.91	m_e	mb 5.7
TNS	24.64		L	11:14:38.802						T__		488.9	19.80	a_e	Ms 4.0
WET	27.58		L	11:16:32.655						T__		593.2	20.40	a_e	Ms 4.2

Event 90311005 Northern Sumatera, Indonesia

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
OrigID  
2019/03/11 13:26:23.56 1.2910 97.1130 33.0 19 84.68 88.90 m i ke BGR  
90311011

Magnitude Err Nsta Author OrigID  
mb 5.3 BGR 90311011  
Ms 4.5 BGR 90311011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	88.23		P	13:39:10.938		92.3		4.90		TAS		13.2	0.94	m_e	mb 5.2
BRG	84.68		P	13:38:53.735	0.1	92.3		4.90		TAS		13.4	0.98	m_e	mb 5.1
BSEG	87.07		P	13:39:05.515	0.2	92.3		4.90		TAS		36.0	0.92	m_e	mb 5.5
BUG	88.90		P	13:39:14.750	0.3	92.3		4.90		TAS		45.5	0.85	m_e	mb 5.7
CLZ	86.97		P	13:39:04.909	-0.2	92.3		4.90		TAS		19.5	0.85	m_e	mb 5.3
GEC2	84.69		P	13:38:53.991		92.3		4.90		TAS		23.9	0.95	m_e	mb 5.4
GRA1	86.36		P	13:39:02.766		92.3		4.90		TAS		28.7	0.87	m_e	mb 5.4
GRA1	86.36		L	14:23:09.462						T__		189.1	19.80	a_e	Ms 4.5
IBBN	88.59		P	13:39:13.168	0.1	92.3		4.90		TAS		65.0	0.83	m_e	mb 5.9
KAST	88.18		P	13:39:11.258	0.3	92.3		4.90		TAS		25.5	1.02	m_e	mb 5.5

MANZ	85.80	P	13:38:59.831		92.3	4.90	TAS	6.2	0.90	m_e	mb	4.7
MOX	86.15	P	13:39:00.958	-0.5	92.3	4.90	TAS	10.2	0.89	m_e	mb	5.0
MOX	86.15	L	14:23:03.214				T__	212.9	18.30	a_e	Ms	4.6
NRDL	87.15	P	13:39:06.280	0.0	92.3	4.90	TAS	44.3	1.15	m_e	mb	5.5
PLN	85.79	P	13:38:59.346	-0.4	92.3	4.90	TAS	3.2	0.85	m_e	mb	4.5
RETH	87.62	P	13:39:08.250	-0.2	92.3	4.90	TAS	139.0	1.15	m_e	mb	6.2
ROTZ	85.72	P	13:38:59.393		92.3	4.90	TAS	4.1	0.77	m_e	mb	4.6
RUE	84.91	P	13:38:54.894	-0.3	92.3	4.90	TAS	41.8	0.69	m_e	mb	5.8
TNS	88.16	P	13:39:11.380		92.3	4.90	TAS	26.9	1.04	m_e	mb	5.5
UBR	87.03	P	13:39:05.092		92.3	4.90	TAS	13.4	0.78	m_e	mb	5.1
WET	85.25	P	13:38:56.861		92.3	4.90	TAS	20.6	0.85	m_e	mb	5.4

Event 90311006 New Britain, Papua New Guinea, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	16:25:53.60			-6.0000	149.0400				60.0					121.72	126.23	m i ke	EMSC
OrigID 90311038																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	126.23		PKPdf	16:44:50.089		53.6		1.09		TAS					m_e
BRG	121.78		PKPdf	16:44:41.366		53.6		1.09		TAS					m_e
BSEG	121.72		PKPdf	16:44:41.099		53.6		1.09		TAS					m_e
CLL	122.02		PKPdf	16:44:41.879		53.6		1.09		TAS					m_e
CLZ	123.01		PKPdf	16:44:43.818		53.6		1.09		TAS					m_e
FLT1	122.29		PKPdf	16:44:41.993		53.6		1.09		TAS					m_e
GEC2	123.04		PKPdf	16:44:43.761		53.6		1.09		TAS					m_e
GRA1	123.89		PKPdf	16:44:45.471		53.6		1.09		TAS					m_e
IBBN	123.95		PKPdf	16:44:46.062		53.6		1.09		TAS					m_e
MANZ	123.25		PKPdf	16:44:44.388		53.6		1.09		TAS					m_e
MOX	123.12		PKPdf	16:44:44.616		53.6		1.09		TAS					m_e
NRDL	122.73		PKPdf	16:44:43.532		53.6		1.09		TAS					m_e
PLN	122.93		PKPdf	16:44:43.475		53.6		1.09		TAS					m_e
RETH	122.92		PKPdf	16:44:43.875		53.6		1.09		TAS					m_e
TANN	122.82		PKPdf	16:44:43.438		53.6		1.09		TAS					m_e
WET	123.33		PKPdf	16:44:44.844		53.6		1.09		TAS					m_e

Event 90311007 Northern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	16:34:27.67			1.2220	97.6950				33.0				26	85.11	89.32	m i ke	BGR
OrigID 90311013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	90311013
Ms	5.7		BGR	90311013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	87.21		P	16:47:10.471	0.1	91.9		4.86		TAS		69.6	1.04	m_e	mb	5.7
BFO	88.67		P	16:47:17.154		91.9		4.86		TAS		31.3	1.06	a_e	mb	5.5
BFO	88.67		L	17:41:15.782						T__		2120.0	21.20	a_e	Ms	5.5
BRG	85.11		P	16:47:00.270	-0.1	91.9		4.86		TAS		33.8	1.13	m_e	mb	5.5
BSEG	87.47		P	16:47:11.997	-0.3	91.9		4.86		TAS		87.0	1.09	m_e	mb	5.8
BSEG	87.47		L	17:38:50.954						T__		2950.9	21.90	a_e	Ms	5.7
BUG	89.32		P	16:47:20.864		91.9		4.86		TAS		80.9	1.13	m_e	mb	5.9
CLL	85.73		P	16:47:02.782	-0.6	91.9		4.86		TAS		28.1	1.14	m_e	mb	5.3
CLL	85.73		L	17:38:40.011						T__		4116.8	20.70	a_e	Ms	5.8
CLZ	87.39		P	16:47:11.715	0.4	91.9		4.86		TAS		91.5	1.12	m_e	mb	5.8
FLT1	86.87		P	16:47:08.307	0.2	91.9		4.86		TAS		30.0	1.04	m_e	mb	5.4
FUR	86.70		L	17:40:09.684						T__		2530.4	20.80	a_e	Ms	5.6
GEC2	85.12		P	16:47:00.670	0.2	91.9		4.86		TAS		86.1	1.31	m_e	mb	5.8
GEC2	85.12		L	17:39:28.958						T__		2982.5	21.60	a_e	Ms	5.6
GRA1	86.79		P	16:47:08.976	-0.1	91.9		4.86		TAS		47.9	1.05	m_e	mb	5.6
GRA1	86.79		L	17:39:46.059						T__		2448.5	20.90	a_e	Ms	5.6
GTTG	87.64		P	16:47:12.766	0.3	91.9		4.86		TAS		80.6	1.01	m_e	mb	6.0
IBBN	89.00		P	16:47:19.543		91.9		4.86		TAS		130.9	1.12	m_e	mb	6.1
KAST	88.60		P	16:47:17.473	-0.0	91.9		4.86		TAS		60.7	1.10	m_e	mb	5.7
MANZ	86.22		P	16:47:06.249	0.0	91.9		4.86		TAS		11.8	1.04	m_e	mb	5.0
MOX	86.57		P	16:47:07.577	0.4	91.9		4.86		TAS		56.2	1.40	m_e	mb	5.5
MOX	86.57		L	17:39:53.975						T__		4163.2	21.10	a_e	Ms	5.8
NEUB	86.49		P	16:47:07.178	0.1	91.9		4.86		TAS		73.5	1.10	m_e	mb	5.7
NRDL	87.56		P	16:47:12.700	-0.1	91.9		4.86		TAS		115.9	1.09	m_e	mb	6.1
PLN	86.22		P	16:47:05.715	0.4	91.9		4.86		TAS		7.6	1.11	m_e	mb	4.7
RETH	88.02		P	16:47:14.333	0.1	91.9		4.86		TAS		268.8	1.19	m_e	mb	6.5
ROTZ	86.15		P	16:47:05.931	-0.1	91.9		4.86		TAS		8.5	1.08	m_e	mb	4.8
RUE	85.32		P	16:47:01.403	-0.0	91.9		4.86		TAS		127.6	1.11	m_e	mb	6.1
TANN	86.02		P	16:47:04.811	0.4	91.9		4.86		TAS		24.1	1.21	m_e	mb	5.2
TNS	88.59		P	16:47:17.632	0.2	91.9		4.86		TAS		78.7	0.99	m_e	mb	5.9
TNS	88.59		L	17:40:30.753						T__		4835.0	21.20	a_e	Ms	5.9
UBBA	87.60		P	16:47:12.401	-0.2	91.9		4.86		TAS		103.4	1.80	m_e	mb	5.9
UBR	87.48		P	16:47:11.636	0.1	91.9		4.86		TAS		33.7	1.19	m_e	mb	5.3
WET	85.68		P	16:47:03.365	0.1	91.9		4.86		TAS		42.2	1.12	m_e	mb	5.5
WET	85.68		L	17:40:27.724						T__		2937.3	20.00	a_e	Ms	5.7

Event 90311008 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/11	20:56:28.30			-32.0100	-177.9900				10.0					158.61	161.18	m i ke	EMSC

90311040

Magnitude	Err	Nsta	Author	OrigID
Ms	4.7		BGR	90311014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	159.19		PKPab	21:17:03.003		24.7		4.07		TAS				m_e	
CLL	159.09		PKPab	21:17:02.227		24.7		4.07		TAS				m_e	
FLT1	158.61		PKPab	21:16:59.735		24.7		4.07		TAS				m_e	
GRA1	161.04		PKPab	21:17:11.590		24.7		4.07		TAS				m_e	
GRA1	161.04		L	22:23:33.866						T__		103.2	18.60	a_e Ms	4.7
MOX	160.06		L	22:19:58.392						T__		104.9	19.90	a_e Ms	4.7
PLN	160.06		PKPab	21:17:07.120		24.7		4.07		TAS				m_e	
ROTZ	160.69		PKPab	21:17:09.819		24.7		4.07		TAS				m_e	
TANN	160.04		PKPab	21:17:06.964		24.7		4.07		TAS				m_e	
TNS	161.18		PKPab	21:17:11.453		24.7		4.07		TAS				m_e	
WET	161.03		PKPab	21:17:11.324		24.7		4.07		TAS				m_e	

Event 90312003 Owen Fracture Zone region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/12	03:04:55.06			17.7950	57.6460				10.0			11		47.82	51.13	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90312009
Ms	3.8		BGR	90312009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	50.21		P	03:13:50.996	-0.3	113.7		7.68		TAS		9.5	0.96	m_e mb	4.7
BRG	47.82		P	03:13:32.620		113.7		7.68		TAS		7.3	0.91	m_e mb	4.8
CLL	48.55		P	03:13:38.773		113.7		7.68		TAS		25.1	0.96	m_e mb	5.2
CLZ	50.26		P	03:13:51.917	0.1	113.7		7.68		TAS		33.2	0.87	m_e mb	5.3
FLT1	49.99		P	03:13:48.875	0.4	113.7		7.68		TAS		17.2	0.82	m_e mb	5.0
GRA1	48.89		P	03:13:41.034		113.7		7.68		TAS		14.0	0.85	m_e mb	5.0
GRA1	48.89		L	03:38:49.126						T__		103.0	19.60	a_e Ms	3.8
GTTG	50.37		P	03:13:52.599	-0.2	113.7		7.68		TAS		24.2	0.88	m_e mb	5.1
KAST	51.13		P	03:13:58.373		113.7		7.68		TAS		17.1	1.18	m_e mb	4.9
MOX	49.05		P	03:13:42.513		113.7		7.68		TAS		18.1	1.40	m_e mb	4.9
MOX	49.05		L	03:38:29.294						T__		94.3	20.30	a_e Ms	3.8
NEUB	49.20		P	03:13:43.836		113.7		7.68		TAS		38.5	0.97	m_e mb	5.4
NRDL	50.68		P	03:13:54.782	0.1	113.7		7.68		TAS		24.8	0.89	m_e mb	5.2

Event 90312004 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/12	03:25:18.80			-17.9800	-177.9200				604.0			28		143.55	149.66	m i ke	EMSC
OrigID 90312036																	

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	145.26		PKPbc	03:43:49.821	0.3	16.4		2.78		TAS					a_e
BFO	149.30		PKPbc	03:44:00.465		16.4		2.78		TAS					m_e
BRG	145.84		PKPbc	03:43:51.625	0.2	16.4		2.78		TAS					m_e
BSEG	143.55		PKPbc	03:43:44.337	-0.1	16.4		2.78		TAS					m_e
BUG	146.36		PKPbc	03:43:52.619	-0.1	16.4		2.78		TAS					m_e
CLL	145.63		PKPbc	03:43:50.821	0.1	16.4		2.78		TAS					a_e
CLZ	145.58		PKPbc	03:43:50.930	0.3	16.4		2.78		TAS					m_e
FLT1	144.97		PKPbc	03:43:48.671	0.1	16.4		2.78		TAS					a_e
FUR	148.97		PKPbc	03:44:00.003		16.4		2.78		TAS					m_e
GEC2	147.80		PKPbc	03:43:56.589	-0.1	16.4		2.78		TAS					m_e
GRA1	147.52		PKPbc	03:43:56.304	-0.0	16.4		2.78		TAS					m_e
GTTG	145.93		PKPbc	03:43:51.874	-0.2	16.4		2.78		TAS					m_e
HLG	143.59		PKPbc	03:43:45.060	-0.6	16.4		2.78		TAS					m_e
IBBN	145.46		PKPbc	03:43:50.371	-0.3	16.4		2.78		TAS					a_e
KAST	146.47		PKPbc	03:43:53.221	0.1	16.4		2.78		TAS					a_e
MANZ	147.07		PKPbc	03:43:55.071	0.3	16.4		2.78		TAS					a_e
MOX	146.53		PKPbc	03:43:53.471	0.2	16.4		2.78		TAS					a_e
NEUB	145.98		PKPbc	03:43:51.892	0.0	16.4		2.78		TAS					m_e
NRDL	144.99		PKPbc	03:43:49.021	-0.2	16.4		2.78		TAS					m_e
PLN	146.58		PKPbc	03:43:53.659	0.3	16.4		2.78		TAS					m_e
RETH	144.85		PKPbc	03:43:48.506	0.1	16.4		2.78		TAS					m_e
ROTZ	147.26		PKPbc	03:43:55.571	0.3	16.4		2.78		TAS					a_e
RUE	144.37		PKPbc	03:43:47.189	0.1	16.4		2.78		TAS					m_e
STU	148.75		PKPbc	03:43:59.370	-0.5	16.4		2.78		TAS					m_e
TANN	146.59		PKPbc	03:43:53.721	0.2	16.4		2.78		TAS					a_e
TNS	147.43		PKPbc	03:43:56.010	0.2	16.4		2.78		TAS					m_e
UBR	149.66		PKPbc	03:44:01.428		16.4		2.78		TAS					m_e
WLF	148.22		PKPbc	03:43:58.421	-0.2	16.4		2.78		TAS					a_e

Event 90313002 Western Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/13	04:48:57.22			35.4900	134.9960				33.0			18		79.72	83.96	m i ke	BGR
OrigID 90313008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90313008

Ms 4.8 BGR 90313008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	83.96		P	05:01:21.931		43.2		5.29		TAS		15.2	0.92	m_e	mb 5.2
CLL	79.72		P	05:01:00.042	0.1	43.2		5.29		TAS		19.8	1.05	m_e	mb 5.0
CLZ	80.47		P	05:01:04.577	0.1	43.2		5.29		TAS		15.3	0.89	m_e	mb 4.9
FLT1	79.74		P	05:00:59.710	0.0	43.2		5.29		TAS		19.1	1.01	m_e	mb 5.0
FUR	82.76		P	05:01:16.299		43.2		5.29		TAS		19.3	0.67	m_e	mb 5.5
GEC2	81.15		P	05:01:07.575	-0.6	43.2		5.29		TAS				m_e	
GRA1	81.67		P	05:01:11.045		43.2		5.29		TAS		18.0	0.82	m_e	mb 5.2
GRA1	81.67		L	05:37:36.029						T__		374.4	19.20	a_e	Ms 4.8
GTTG	80.86		P	05:01:06.078	-0.3	43.2		5.29		TAS		10.9	0.76	m_e	mb 5.0
HLG	79.74		P	05:01:00.868		43.2		5.29		TAS		241.5	0.90	m_e	mb 6.1
KAST	81.76		P	05:01:10.970		43.2		5.29		TAS		9.4	1.00	m_e	mb 4.9
MANZ	81.06		P	05:01:07.203	0.4	43.2		5.29		TAS		2.6	0.98	m_e	mb 4.2
MOX	80.80		L	05:39:51.375						T__		405.0	19.90	a_e	Ms 4.8
NEUB	80.34		P	05:01:03.480	0.6	43.2		5.29		TAS		24.5	1.13	m_e	mb 5.0
PLN	80.68		P	05:01:05.271	-0.1	43.2		5.29		TAS		1.9	0.78	m_e	mb 4.2
RJOB	82.36		P	05:01:14.167		43.2		5.29		TAS		8.2	0.83	m_e	mb 4.9
ROTZ	81.17		P	05:01:08.148		43.2		5.29		TAS		5.6	1.41	m_e	mb 4.4
STU	83.25		P	05:01:18.499		43.2		5.29		TAS		50.7	0.80	m_e	mb 5.8
TNS	82.48		P	05:01:14.608		43.2		5.29		TAS		9.3	0.81	m_e	mb 5.0
WET	81.32		P	05:01:08.390		43.2		5.29		TAS		4.2	0.97	m_e	mb 4.4
WLF	83.87		P	05:01:22.459		43.2		5.29		TAS		36.9	1.28	m_e	mb 5.5

Event 90314001 Qinghai, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/14	05:32:43.70		35.0100	101.8400					10.0					62.55	66.93	m i ke	EMSC
90314033																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90314007
Ms	4.3		BGR	90314007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	66.93		P	05:43:35.816		65.3		5.41		TAS		3.8	0.71	m_e	mb 4.7
BFO	66.93		L	06:14:23.021						T__		180.5	21.80	a_e	Ms 4.2
BRG	62.55		P	05:43:08.121		65.3		5.41		TAS		7.1	0.81	m_e	mb 4.8
CLL	62.93		P	05:43:10.400		65.3		5.41		TAS		6.0	0.94	m_e	mb 4.7
CLZ	64.22		P	05:43:19.624		65.3		5.41		TAS		16.8	0.91	m_e	mb 5.3
FUR	65.24		L	06:13:04.454						T__		235.5	19.00	a_e	Ms 4.4
GEC2	63.49		P	05:43:14.534		65.3		5.41		TAS		4.3	0.89	m_e	mb 4.6
GEC2	63.49		L	06:11:59.390						T__		195.8	20.10	a_e	Ms 4.3
GRA1	64.62		P	05:43:22.433		65.3		5.41		TAS		15.4	0.72	m_e	mb 5.3
GRA1	64.62		L	06:12:55.359						T__		227.9	18.60	a_e	Ms 4.4

MANZ	63.98	P	05:43:17.942	65.3	5.41	TAS	0.7	0.63	m_e	mb	4.1
MOX	64.00	L	06:12:12.676			T__	114.0	21.00	a_e	Ms	4.0
RETH	64.42	P	05:43:20.727	65.3	5.41	TAS	29.6	1.01	m_e	mb	5.5
ROTZ	64.01	P	05:43:18.265	65.3	5.41	TAS	2.2	0.76	m_e	mb	4.5
TANN	63.60	P	05:43:15.073	65.3	5.41	TAS	4.9	1.08	m_e	mb	4.7
TNS	66.01	P	05:43:30.882	65.3	5.41	TAS	6.7	0.85	m_e	mb	4.9
TNS	66.01	L	06:13:44.522			T__	106.2	20.80	a_e	Ms	4.0
WET	63.86	L	06:12:21.349			T__	303.3	18.80	a_e	Ms	4.5

## Event 90315004 Central Bolivia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/15	05:04:54.50			-15.5740	-63.3200				33.0			27		89.04	94.12	m i k e	BGR
90315010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	90315010
Ms	5.2		BGR	90315010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	92.65		P	05:18:04.175	0.0	248.3		4.61		TAS		314.6	2.26	m_e	mb	6.3
BFO	89.78		P	05:17:50.448		248.3		4.61		TAS		17.1	1.02	m_e	mb	5.2
BRG	94.12		P	05:18:10.728	0.5	248.3		4.61		TAS		89.1	2.00	m_e	mb	5.8
BUG	90.44		P	05:17:54.790	-0.2	248.3		4.61		TAS		80.0	1.20	m_e	mb	5.8
CLL	93.71		P	05:18:09.050	0.3	248.3		4.61		TAS		18.0	0.88	m_e	mb	5.4
CLZ	92.37		P	05:18:02.892	-0.4	248.3		4.61		TAS		36.3	1.00	m_e	mb	5.7
FLT1	93.05		P	05:18:05.478	0.8	248.3		4.61		TAS		34.0	1.21	m_e	mb	5.7
FUR	91.53		P	05:17:59.025		248.3		4.61		TAS		95.0	1.39	m_e	mb	5.9
GEC2	93.29		P	05:18:06.866	0.2	248.3		4.61		TAS		14.7	0.88	m_e	mb	5.4
GRA1	92.07		P	05:18:01.279	-0.5	248.3		4.61		TAS		37.0	0.95	m_e	mb	5.7
GRA1	92.07		L	05:58:48.738						T__		889.0	20.40	a_e	Ms	5.2
GTTG	92.02		P	05:18:01.215	0.2	248.3		4.61		TAS		33.5	0.97	m_e	mb	5.6
IBBN	91.07		P	05:17:56.482	-0.1	248.3		4.61		TAS		72.3	1.18	m_e	mb	5.9
KAST	91.00		P	05:17:56.088	0.0	248.3		4.61		TAS		21.5	1.02	m_e	mb	5.4
MANZ	92.71		P	05:18:04.624	0.1	248.3		4.61		TAS		8.4	1.04	m_e	mb	5.1
MOX	92.65		P	05:18:04.198	0.2	248.3		4.61		TAS		87.6	1.92	m_e	mb	5.9
MOX	92.65		L	05:55:36.533						T__		1174.2	21.30	a_e	Ms	5.3
NEUB	92.94		P	05:18:05.705	-0.0	248.3		4.61		TAS		32.8	1.02	m_e	mb	5.7
NRDL	92.47		P	05:18:03.345	0.0	248.3		4.61		TAS		116.7	1.94	m_e	mb	5.9
PLN	92.92		P	05:18:05.375	0.2	248.3		4.61		TAS		6.4	1.00	m_e	mb	5.0
RETH	92.14		P	05:18:01.857	-0.5	248.3		4.61		TAS		209.1	1.23	m_e	mb	6.3
ROTZ	92.69		P	05:18:04.567	-0.2	248.3		4.61		TAS		3.7	0.95	m_e	mb	4.8
STU	90.49		P	05:17:53.844		248.3		4.61		TAS		110.9	0.90	m_e	mb	6.1
TANN	93.07		P	05:18:06.556	0.1	248.3		4.61		TAS		28.0	1.13	m_e	mb	5.6
TNS	90.62		P	05:17:54.893	-0.2	248.3		4.61		TAS		35.7	0.92	m_e	mb	5.7
UBBA	91.76		P	05:18:00.385	0.1	248.3		4.61		TAS		66.6	1.56	m_e	mb	5.7

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UBR	90.63	P	05:17:54.993		248.3		4.61	TAS		131.3	1.70	m_e	mb	6.0
WET	92.88	P	05:18:05.275	0.0	248.3		4.61	TAS		18.1	0.96	m_e	mb	5.5
WLF	89.04	P	05:17:47.617	-0.3	248.3		4.61	TAS		168.2	1.48	m_e	mb	6.1

Event 90316001 Eastern Mediterranean Sea

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/16	08:50:06.61			33.5440	26.7050				33.0			17		18.11	23.46	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	4.5		BGR	90316007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	20.19		P	08:54:39.380		138.9		10.89		TAS		15.3	1.00	m_e	mb	4.2
BSEG	23.46		P	08:55:12.986	0.2	138.9		10.89		TAS		16.7	0.81	m_e	mb	4.6
BUG	22.80		P	08:55:06.600	-0.2	138.9		10.89		TAS		18.7	0.64	m_e	mb	4.8
CLL	20.37		P	08:54:40.211	-1.8	138.9		10.89		TAS		25.9	0.66	m_e	mb	4.6
FLT1	21.84		P	08:54:55.702	-1.2	138.9		10.89		TAS		11.0	0.60	m_e	mb	4.5
GEC2	18.11		P	08:54:15.485		138.9		10.89		TAS		17.3	0.71	m_e	mb	4.3
GRA1	19.79		P	08:54:34.554		138.9		10.89		TAS		25.8	0.76	m_e	mb	4.5
GTTG	21.72		P	08:54:54.863	-1.7	138.9		10.89		TAS		31.3	0.85	m_e	mb	4.8
IBBN	23.20		P	08:55:12.092	0.1	138.9		10.89		TAS		25.5	0.75	m_e	mb	4.8
KAST	22.12		P	08:54:58.889	-0.8	138.9		10.89		TAS		14.6	0.96	m_e	mb	4.4
MANZ	19.65		P	08:54:31.375		138.9		10.89		TAS		3.2	1.03	m_e	mb	3.5
PLN	20.02		P	08:54:37.926		138.9		10.89		TAS		5.1	0.85	m_e	mb	3.8
RUE	21.09		P	08:54:50.043	-0.8	138.9		10.89		TAS		44.2	0.82	m_e	mb	4.8
STU	20.06		P	08:54:37.875		138.9		10.89		TAS		56.1	0.67	m_e	mb	4.9
TNS	21.41		P	08:54:52.854		138.9		10.89		TAS		28.2	0.68	m_e	mb	4.7
UBR	18.87		P	08:54:24.066		138.9		10.89		TAS		26.4	0.87	m_e	mb	4.5
WET	18.68		P	08:54:20.756		138.9		10.89		TAS		10.5	0.59	m_e	mb	4.2

Event 90317001 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/17	00:43:28.90			-20.1600	-173.3600				10.0			18		146.17	152.04	m i ke	EMSC

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
BRG	148.81		PKPab	01:03:19.908	0.0	8.7		2.71		TAS				m_e	
BSEG	146.17		PKPab	01:03:11.163	-1.8	8.7		2.71		TAS				m_e	



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CLL	148.52	PKPab	01:03:17.292	1.0	8.7	2.71	TAS	m_e
FLT1	147.69	PKPab	01:03:14.912	0.9	8.7	2.71	TAS	m_e
FUR	151.81	PKPab	01:03:27.008		8.7	2.71	TAS	m_e
GEC2	150.82	PKPab	01:03:25.006		8.7	2.71	TAS	m_e
GTTG	148.57	PKPab	01:03:18.936	0.9	8.7	2.71	TAS	m_e
MANZ	149.92	PKPab	01:03:22.913		8.7	2.71	TAS	m_e
MOX	149.33	PKPab	01:03:20.804	-2.5	8.7	2.71	TAS	m_e
NEUB	148.77	PKPab	01:03:19.609	0.5	8.7	2.71	TAS	m_e
NRDL	147.62	PKPab	01:03:16.245	0.7	8.7	2.71	TAS	m_e
PLN	149.42	PKPab	01:03:21.402		8.7	2.71	TAS	m_e
RJOB	152.04	PKPab	01:03:29.192		8.7	2.71	TAS	m_e
ROTZ	150.13	PKPab	01:03:23.361		8.7	2.71	TAS	m_e
RUE	147.27	PKPab	01:03:13.032	-0.8	8.7	2.71	TAS	m_e
STU	151.38	PKPab	01:03:25.887		8.7	2.71	TAS	m_e
TANN	149.46	PKPab	01:03:21.552		8.7	2.71	TAS	m_e
TNS	149.97	PKPab	01:03:21.103		8.7	2.71	TAS	m_e

Event 90317002 Southern Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/17	11:49:30.01			36.7230	21.6520				33.0			17		12.80	17.25	m i ke	BGR
90317008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	15.19		P	11:53:07.662	-7.0	145.9		13.66		TAS		6.1	0.68	m_e	
CLL	15.83		P	11:53:13.924	5.6	145.9		13.66		TAS		48.3	1.31	m_e	
CLZ	17.10		P	11:53:28.560	2.3	145.9		13.66		TAS		39.4	1.08	m_e	
FLT1	17.25		P	11:53:29.271	2.6	145.9		13.66		TAS		15.6	0.88	m_e	
GEC2	13.44		P	11:52:33.140		145.9		13.66		TAS		6.3	0.54	m_e	
GRA1	15.01		P	11:53:05.186		145.9		13.66		TAS		54.0	0.87	m_e	
GTTG	16.99		P	11:53:27.284	1.7	145.9		13.66		TAS		32.4	0.95	m_e	
MANZ	14.95		P	11:53:03.874		145.9		13.66		TAS		4.5	0.86	m_e	
NEUB	16.10		P	11:53:18.089	-6.7	145.9		13.66		TAS		99.8	0.98	m_e	
RJOB	12.80		P	11:52:25.432		145.9		13.66		TAS		14.8	0.66	m_e	
STU	15.10		P	11:52:55.902		145.9		13.66		TAS		35.4	0.65	m_e	
TANN	15.20		P	11:53:07.317		145.9		13.66		TAS		15.6	0.88	m_e	
TNS	16.51		P	11:53:23.346		145.9		13.66		TAS		43.4	0.76	m_e	
UBBA	16.38		P	11:53:19.632	8.0	145.9		13.66		TAS		12.3	0.88	m_e	
UBR	13.88		P	11:52:53.613		145.9		13.66		TAS		22.0	0.88	m_e	
WET	13.97		P	11:52:53.752		145.9		13.66		TAS		23.8	1.11	m_e	
WLF	17.13		P	11:53:30.389		145.9		13.66		TAS		35.9	0.95	m_e	

Event 90320001 France  
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
 OrigID  
 2019/03/20 09:56:42.37 0.53 1.40 45.3010 -0.4010 11.1 7.8 129 10.0 19 313 6.16 10.25 m i ke BGR  
 90320007

Magnitude Err Nsta Author OrigID  
 ML 4.8 BGR 90320007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	6.71		Sg	10:00:11.994	-1.1					T__				m_e	
BFO	6.71		Pn	09:58:19.437	-0.3					T__				m_e	ML 4.6
BUG	7.99		Sg	10:00:54.748	2.0					T__				m_e	ML 4.9
DAVA	7.39		Pn	09:58:28.900	-0.2					T__				m_e	
GEC2	10.25		Pn	09:59:08.705	0.4					T__				m_e	
GRA1	9.01		Pn	09:58:49.270	-2.0					T__				m_e	
KAST	8.33		Sg	10:01:05.535	2.0					T__				m_e	
KAST	8.33		Pn	09:58:40.767	-1.2					T__				m_e	ML 4.6
KBA	9.70		Pn	09:59:02.708	1.9					T__				m_e	
MEM	6.83		Sg	10:00:16.824	-0.0					T__				m_e	
MEM	6.83		Pn	09:58:21.779	0.4					T__				m_e	ML 5.3
PLONS	7.01		Sg	10:00:22.448	-0.0					T__				m_e	
RCHB	6.16		Sg	09:59:53.755	-2.2					T__				m_e	
RCHB	6.16		Pn	09:58:11.871	-0.3					T__				m_e	ML 4.9
RJOB	9.42		Pn	09:58:58.108	1.2					T__				m_e	
STU	7.42		Sg	10:00:35.269	0.2					T__				m_e	ML 5.1
TNS	7.73		Pn	09:58:32.215	-1.5					T__				m_e	
UBR	7.63		Sg	10:00:42.370	0.6					T__				m_e	
UBR	7.63		Pn	09:58:32.812	0.4					T__				m_e	ML 4.9
UCC	6.36		Sg	10:00:04.947	3.0					T__				m_e	
UCC	6.36		Pn	09:58:14.999	0.1					T__				m_e	ML 4.0
WILA	6.78		Sg	10:00:14.092	-1.1					T__				m_e	ML 5.1
WLF	6.23		Sg	09:59:56.570	-1.3					T__				m_e	
WLF	6.23		Pn	09:58:13.380	0.3					T__				m_e	ML 5.0
WTSB	8.20		Sn	10:00:03.480	-2.8					T__				m_e	ML 5.0
WTTA	8.57		Pn	09:58:46.927	1.7					T__				m_e	

Event 90320003 Tonga Islands region  
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
 OrigID  
 2019/03/20 19:03:01.90 -17.7500 -172.7000 10.0 16 145.26 149.49 m i ke EMSC  
 90320035

Magnitude Err Nsta Author OrigID  
 Ms 5.0 BGR 90320009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.59		pPKPab	19:22:52.470	-0.5					T__				m_e	
BFO	149.49		pPKPab	19:23:08.250						T__				m_e	
BRG	146.53		pPKPab	19:22:55.977	-0.5					T__				m_e	
BUG	146.39		pPKPab	19:22:55.457	0.7					T__				m_e	
CLL	146.21		pPKPab	19:22:54.353	1.8					T__				m_e	
CLZ	145.90		pPKPab	19:22:53.833	-0.3					T__				m_e	
FLT1	145.35		pPKPab	19:22:51.171	-0.7					T__				m_e	
FUR	149.49		pPKPab	19:23:08.510						T__				m_e	
GRA1	147.98		L	20:36:21.059						T__		222.6	18.90	a_e Ms	5.0
GTTG	146.21		pPKPab	19:22:55.262	-0.5					T__				m_e	
IBBN	145.52		pPKPab	19:22:52.729	-0.6					T__				m_e	
KAST	146.61		pPKPab	19:22:56.366	0.7					T__				m_e	
MANZ	147.61		pPKPab	19:23:01.691						T__				m_e	
MOX	147.00		L	20:29:25.643						T__		270.3	18.30	a_e Ms	5.1
NEUB	146.44		pPKPab	19:22:55.587	-0.9					T__				m_e	
NRDL	145.26		pPKPab	19:22:50.457	0.2					T__				m_e	
ROTZ	147.82		pPKPab	19:23:03.640						T__				m_e	
WLF	148.15		pPKPab	19:23:04.549						T__				m_e	

Event 90321003 Tanzania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/21	09:15:46.35			-6.5510	33.6600				33.0					57.87	63.38	m i ke	BGR
OrigID 90321009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90321009
Ms	5.1		BGR	90321009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	61.66		P	09:26:03.073		153.9		6.90		TAS		21.5	1.23	m_e mb	5.2
BRG	59.67		P	09:25:49.001		153.9		6.90		TAS		8.1	1.10	m_e mb	4.7
BSEG	63.38		P	09:26:14.293		153.9		6.90		TAS		37.5	1.33	m_e mb	5.3
BUG	62.05		P	09:26:05.331		153.9		6.90		TAS		30.6	1.33	m_e mb	5.4
CLL	60.31		P	09:25:53.485		153.9		6.90		TAS		11.9	1.25	m_e mb	4.8
CLZ	61.49		P	09:26:01.759		153.9		6.90		TAS		16.6	1.47	m_e mb	4.7
GEC2	57.87		P	09:25:37.044		153.9		6.90		TAS		17.0	1.08	m_e mb	5.0
GRA1	59.32		P	09:25:46.846		153.9		6.90		TAS		17.4	0.92	m_e mb	5.1
GRA1	59.32		L	09:54:54.199						T__		1443.7	19.10	a_e Ms	5.1
GTTG	61.34		P	09:26:01.225		153.9		6.90		TAS		14.8	0.78	m_e mb	4.9
KAST	61.49		P	09:26:02.075		153.9		6.90		TAS		16.4	1.20	m_e mb	4.7
MANZ	59.34		P	09:25:46.972		153.9		6.90		TAS		2.3	1.00	m_e mb	4.2
MOX	60.07		P	09:25:52.044		153.9		6.90		TAS		12.1	1.28	m_e mb	4.8
MOX	60.07		L	09:53:39.998						T__		1256.3	21.20	a_e Ms	5.0

NRDL	62.15	P	09:26:06.874	153.9	6.90	TAS	34.7	1.00	m_e	mb	5.5
PLN	59.78	P	09:25:50.156	153.9	6.90	TAS	2.8	1.08	m_e	mb	4.2
RETH	62.57	P	09:26:09.724	153.9	6.90	TAS	76.3	1.26	m_e	mb	5.7
ROTZ	59.11	P	09:25:45.276	153.9	6.90	TAS	10.6	2.01	m_e	mb	4.5
TANN	59.63	P	09:25:49.313	153.9	6.90	TAS	26.6	1.57	m_e	mb	5.0
TNS	60.62	P	09:25:55.480	153.9	6.90	TAS	27.6	1.27	m_e	mb	4.9
UBBA	60.68	P	09:25:56.403	153.9	6.90	TAS	30.0	1.54	m_e	mb	4.9
WET	58.36	P	09:25:40.043	153.9	6.90	TAS	7.9	1.11	m_e	mb	4.7

Event 90321001 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/21	19:24:07.00			-31.5300	-177.7000				10.0			22		156.88	162.60	m i ke	EMSC
OrigID 90321033																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.8		BGR	90321007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.52		PKPab	19:44:38.494	-0.1	23.6		4.44		TAS				m_e	
BFO	162.60		PKPab	19:44:56.507		23.6		4.44		TAS				m_e	
BRG	158.83		PKPab	19:44:40.202	0.7	23.6		4.44		TAS				m_e	
BSEG	156.88		PKPab	19:44:31.807	-0.4	23.6		4.44		TAS				m_e	
CLL	158.72		PKPab	19:44:39.244	-0.2	23.6		4.44		TAS				m_e	
CLZ	158.85		PKPab	19:44:40.477	-0.1	23.6		4.44		TAS				m_e	
FLT1	158.21		PKPab	19:44:36.876	0.0	23.6		4.44		TAS				m_e	
FUR	162.04		PKPab	19:44:54.630		23.6		4.44		TAS				m_e	
GEC2	160.67		PKPab	19:44:48.140		23.6		4.44		TAS				m_e	
GRA1	160.66		PKPab	19:44:48.837		23.6		4.44		TAS				m_e	
GRA1	160.66		L	21:02:29.782						T__		114.8	18.60	a_e	Ms 4.8
GTTG	159.22		PKPab	19:44:41.998	0.1	23.6		4.44		TAS				m_e	
IBBN	158.86		PKPab	19:44:40.007	-0.3	23.6		4.44		TAS				m_e	
MANZ	160.15		PKPab	19:44:46.211	-0.5	23.6		4.44		TAS				m_e	
MOX	159.69		PKPab	19:44:43.717	-0.7	23.6		4.44		TAS				m_e	
MOX	159.69		L	20:57:12.560						T__		140.7	19.20	a_e	Ms 4.8
NEUB	159.14		PKPab	19:44:41.365	0.2	23.6		4.44		TAS				m_e	
PLN	159.69		PKPab	19:44:43.927	0.3	23.6		4.44		TAS				m_e	
RETH	158.19		PKPab	19:44:37.227		23.6		4.44		TAS				m_e	
RJOB	161.94		PKPab	19:44:53.899		23.6		4.44		TAS				m_e	
ROTZ	160.32		PKPab	19:44:46.953		23.6		4.44		TAS				m_e	
STU	162.00		PKPab	19:44:54.421		23.6		4.44		TAS				m_e	
TANN	159.67		PKPab	19:44:43.944	-0.3	23.6		4.44		TAS				m_e	
TNS	160.77		PKPab	19:44:48.599	0.2	23.6		4.44		TAS				m_e	
WET	160.68		PKPab	19:44:49.029		23.6		4.44		TAS				m_e	

## Event 90322001 South Africa

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	00:30:30.47			-28.4300	26.7970				33.0					79.00	79.00	m i ke	BGR
OrigID 90322007																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90322007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.00		P	00:42:33.366		166.2		5.84		TAS		7.2	1.03	m_e mb	4.7

## Event 90322002 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	01:32:50.32			-17.4790	-178.3660				33.0				12	143.00	149.09	m i ke	BGR
OrigID 90322008																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BSEG	143.00		PKPbc	01:52:17.311	-0.3	16.9		2.93		TAS				m_e	
CLL	145.06		PKPbc	01:52:24.021	-0.5	16.9		2.93		TAS				m_e	
CLZ	145.02		PKPbc	01:52:24.328	2.3	16.9		2.93		TAS				m_e	
FLT1	144.41		PKPbc	01:52:21.734	-0.1	16.9		2.93		TAS				m_e	
GEC2	147.21		PKPbc	01:52:29.901		16.9		2.93		TAS				m_e	
GTTG	145.37		PKPbc	01:52:25.251		16.9		2.93		TAS				m_e	
PLN	146.01		PKPbc	01:52:26.595		16.9		2.93		TAS				m_e	
ROTZ	146.68		PKPbc	01:52:28.596		16.9		2.93		TAS				m_e	
TANN	146.01		PKPbc	01:52:26.522		16.9		2.93		TAS				m_e	
TNS	146.88		PKPbc	01:52:29.192		16.9		2.93		TAS				m_e	
UBR	149.09		PKPbc	01:52:34.733		16.9		2.93		TAS				m_e	

## Event 90322003 Northern Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	02:42:48.96			50.0600	-27.8800				33.0				29	21.84	26.81	m i ke	BGR
OrigID 90322009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90322009

Ms 4.7 BGR 90322009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	24.11		P	02:48:02.288	0.5	284.2		9.30		TAS		53.1	1.40	m_e	mb 4.9
BFO	23.58		P	02:47:57.470	1.4	284.2		9.30		TAS		38.2	1.30	m_e	mb 4.8
BRG	26.38		P	02:48:22.847	-0.3	284.2		9.30		TAS		25.8	1.45	m_e	mb 4.7
BSEG	23.64		P	02:47:57.576	1.7	284.2		9.30		TAS		274.4	1.91	m_e	mb 5.5
BUG	22.16		P	02:47:42.625	-1.4	284.2		9.30		TAS		158.1	1.41	m_e	mb 5.2
CLL	25.70		P	02:48:16.080	-0.7	284.2		9.30		TAS		33.7	1.36	m_e	mb 4.8
CLZ	23.98		P	02:48:01.886	1.1	284.2		9.30		TAS		68.0	1.38	m_e	mb 5.0
FLT1	24.42		P	02:48:04.046	-0.4	284.2		9.30		TAS		42.3	1.37	m_e	mb 4.8
FUR	25.50		P	02:48:14.825	0.6	284.2		9.30		TAS		65.7	1.18	m_e	mb 5.2
GEC2	26.81		P	02:48:27.487	0.4	284.2		9.30		TAS		31.7	1.49	m_e	mb 4.8
GRA1	25.01		P	02:48:09.752	-0.7	284.2		9.30		TAS		46.5	1.16	m_e	mb 5.1
GRA1	25.01		L	02:57:13.415						T__		2433.5	20.60	a_e	Ms 4.7
GTTG	23.79		P	02:47:59.950	0.8	284.2		9.30		TAS		98.7	1.67	m_e	mb 5.1
IBBN	22.31		P	02:47:44.900	-0.3	284.2		9.30		TAS		42.8	1.01	m_e	mb 4.8
KAST	22.91		P	02:47:50.252	-0.7	284.2		9.30		TAS		114.1	1.88	m_e	mb 5.1
MANZ	25.48		P	02:48:13.933	-1.0	284.2		9.30		TAS		12.1	1.39	m_e	mb 4.4
MOX	25.01		P	02:48:10.253	-0.3	284.2		9.30		TAS		29.8	1.26	m_e	mb 4.9
MOX	25.01		L	02:57:14.151						T__		2166.1	20.30	a_e	Ms 4.7
NEUB	24.97		P	02:48:10.728	0.6	284.2		9.30		TAS		62.2	1.21	m_e	mb 5.2
NRDL	23.71		P	02:47:57.907	0.0	284.2		9.30		TAS		94.2	1.36	m_e	mb 5.1
PLN	25.38		P	02:48:12.963	-1.0	284.2		9.30		TAS		11.1	1.51	m_e	mb 4.4
RETH	23.22		P	02:47:53.510	0.3	284.2		9.30		TAS		693.7	1.78	m_e	mb 5.9
RJOB	26.61		P	02:48:24.817	0.4	284.2		9.30		TAS		30.2	1.41	m_e	mb 4.8
ROTZ	25.60		P	02:48:14.435	-1.6	284.2		9.30		TAS		9.6	1.30	m_e	mb 4.3
STU	24.00		P	02:48:02.538	2.1	284.2		9.30		TAS		67.2	1.03	m_e	mb 5.1
TANN	25.59		P	02:48:15.588	-0.3	284.2		9.30		TAS		34.6	1.60	m_e	mb 4.7
TNS	23.14		P	02:47:53.044	-0.0	284.2		9.30		TAS		250.4	2.40	m_e	mb 5.3
UBBA	23.97		P	02:48:01.281	0.4	284.2		9.30		TAS		69.9	2.19	m_e	mb 4.8
UBR	24.92		P	02:48:08.216	-0.0	284.2		9.30		TAS		74.2	1.65	m_e	mb 5.2
WET	26.20		P	02:48:21.591	0.1	284.2		9.30		TAS		76.7	2.36	m_e	mb 4.9
WLF	21.84		P	02:47:38.851	-1.7	284.2		9.30		TAS		99.3	1.61	m_e	mb 5.0

Event 90322005 Michoacan, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	04:25:26.74			19.1180	-100.2370				33.0			9		85.75	90.52	m i ke	BGR
90322011																	

Magnitude Err Nsta Author OrigID  
mb 4.9 BGR 90322011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	87.23		P	04:38:09.248		298.4		4.72		TAS		11.2	1.14	m_e	mb 4.9

BSEG	86.20	P	04:38:04.535	0.1	298.4	4.72	TAS	9.3	0.87	m_e	mb	4.9
CLZ	87.20	P	04:38:09.135		298.4	4.72	TAS	8.0	0.89	m_e	mb	4.8
GEC2	90.52	P	04:38:24.901		298.4	4.72	TAS	3.1	0.94	m_e	mb	4.6
GTTG	87.11	P	04:38:08.942		298.4	4.72	TAS	8.2	0.99	m_e	mb	4.8
KAST	86.40	P	04:38:05.544	-0.1	298.4	4.72	TAS	5.8	0.96	m_e	mb	4.7
NRDL	86.75	P	04:38:07.278	-0.1	298.4	4.72	TAS				m_e	
RETH	86.24	P	04:38:04.555	0.1	298.4	4.72	TAS	36.5	1.11	m_e	mb	5.4
WLF	85.75	P	04:38:02.381	0.1	298.4	4.72	TAS	10.7	0.76	m_e	mb	5.0

Event 90322011 Bougainville - Solomon Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	14:52:58.50			-11.4330	162.4810				51.0				5	130.58	137.35	m i ke	NEIC
OrigID 90322050																	

Magnitude	Err	Nsta	Author	OrigID
Ms	5.0		BGR	90322017

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	133.45		PKPdf	15:12:10.164	0.1	44.1		1.79		TAS				m_e	
BFO	137.35		PKPdf	15:12:16.813	-0.1	44.1		1.79		TAS				m_e	
BRG	133.02		PKPdf	15:12:08.938	-0.2	44.1		1.79		TAS				m_e	
BSEG	132.18		PKPdf	15:12:08.345	0.3	44.1		1.79		TAS				m_e	
BUG	135.29		PKPdf	15:12:13.268	-0.3	44.1		1.79		TAS				m_e	
CLL	133.11		PKPdf	15:12:08.838	-0.5	44.1		1.79		TAS				a_e	
CLZ	133.79		PKPdf	15:12:10.688	-0.0	44.1		1.79		TAS				a_e	
CLZ	133.79		pPKPdf	15:12:25.451		36.5		1.80		TAS				m_e	
FLT1	133.07		PKPdf	15:12:09.425	0.0	44.1		1.79		TAS				m_e	
FUR	136.18		PKPdf	15:12:14.980	0.2	44.1		1.79		TAS				m_e	
GEC2	134.57		PKPdf	15:12:11.888	0.1	44.1		1.79		TAS				a_e	
GRA1	135.07		PKPdf	15:12:12.753	-0.1	44.1		1.79		TAS				m_e	
GRA1	135.07		L	16:08:54.404						T__		318.8	19.90	a_e	Ms 5.0
GTTG	134.18		PKPdf	15:12:11.338	-0.1	44.1		1.79		TAS				a_e	
HLG	132.83		PKPdf	15:12:09.939	0.5	44.1		1.79		TAS				m_e	
HLG	132.83		pPKPdf	15:12:22.787	0.2	36.5		1.80		TAS				m_e	
IBBN	134.41		PKPdf	15:12:11.835	-0.2	44.1		1.79		TAS				m_e	
KAST	135.05		PKPdf	15:12:12.938	-0.1	44.1		1.79		TAS				a_e	
KAST	135.05		pPKPdf	15:12:27.372		36.5		1.80		TAS				m_e	
MANZ	134.47		PKPdf	15:12:11.838	0.1	44.1		1.79		TAS				a_e	
MANZ	134.47		pPKPdf	15:12:26.285		36.5		1.80		TAS				m_e	
MOX	134.19		PKPdf	15:12:11.188	-0.1	44.1		1.79		TAS				a_e	
MOX	134.19		L	16:08:15.770						T__		304.1	19.70	a_e	Ms 5.0
NEUB	133.72		PKPdf	15:12:10.247	-0.2	44.1		1.79		TAS				m_e	
NRDL	133.39		PKPdf	15:12:09.861	-0.2	44.1		1.79		TAS				m_e	
PLN	134.08		PKPdf	15:12:10.938	-0.1	44.1		1.79		TAS				a_e	
RETH	133.48		PKPdf	15:12:09.888	-0.4	44.1		1.79		TAS				a_e	

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RGN	130.58	PKPdf	15:12:05.516	0.5	44.1	1.79	TAS	m_e
RJOB	135.78	PKPdf	15:12:14.128	0.1	44.1	1.79	TAS	m_e
ROTZ	134.59	PKPdf	15:12:11.862	-0.1	44.1	1.79	TAS	m_e
RUE	131.93	PKPdf	15:12:07.034	-0.2	44.1	1.79	TAS	m_e
STU	136.64	PKPdf	15:12:15.618	-0.0	44.1	1.79	TAS	m_e
TANN	134.00	PKPdf	15:12:10.888	0.0	44.1	1.79	TAS	a_e
TNS	135.82	PKPdf	15:12:14.353	0.0	44.1	1.79	TAS	m_e
UBBA	134.73	PKPdf	15:12:12.124	-0.2	44.1	1.79	TAS	m_e
UBR	137.07	PKPdf	15:12:16.788	0.5	44.1	1.79	TAS	a_e
UBR	137.07	pPKPdf	15:12:31.175		36.5	1.80	TAS	m_e
WET	134.74	PKPdf	15:12:12.338	0.2	44.1	1.79	TAS	m_e
WLF	137.15	PKPdf	15:12:16.991	0.2	44.1	1.79	TAS	m_e

Event 90322013 Rat Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/22	20:25:05.64			51.3960	179.3260				33.0			12		74.64	80.57	m i ke	BGR
OrigID 90322019																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90322019

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	77.36		P	20:36:53.911		11.4		4.93		TAS		2.4	0.66	m_e mb	4.5
BSEG	74.64		P	20:36:38.625	-0.1	11.4		4.93		TAS		7.8	1.00	m_e mb	4.7
CLZ	76.72		P	20:36:51.049	-0.4	11.4		4.93		TAS		9.7	0.67	m_e mb	5.1
FLT1	76.16		P	20:36:47.344	0.0	11.4		4.93		TAS		7.4	0.64	m_e mb	5.0
GEC2	79.38		P	20:37:05.378		11.4		4.93		TAS		3.4	0.69	m_e mb	4.5
GRA1	78.78		P	20:37:03.406		11.4		4.93		TAS		6.7	0.84	m_e mb	4.7
IBBN	76.43		P	20:36:48.797	-0.1	11.4		4.93		TAS		11.2	0.57	m_e mb	5.2
MOX	77.80		P	20:36:56.613		11.4		4.93		TAS		2.2	0.67	m_e mb	4.4
NRDL	76.09		P	20:36:47.175	0.5	11.4		4.93		TAS		6.3	0.71	m_e mb	4.8
PLN	77.91		P	20:36:57.359		11.4		4.93		TAS		0.7	0.65	m_e mb	3.9
RJOB	80.57		P	20:37:12.407		11.4		4.93		TAS		4.7	0.70	m_e mb	4.6
TNS	78.46		P	20:37:00.872		11.4		4.93		TAS		6.6	0.60	m_e mb	4.9
WLF	79.15		P	20:37:03.756		11.4		4.93		TAS		7.2	0.89	m_e mb	4.7

Event 90323001 Vanuatu Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	00:09:06.85			-20.9460	171.7300				145.9					147.40	147.40	m i ke	BGR
OrigID 90323007																	



Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	147.40		PKPbc	00:28:32.530		35.3		2.84		TAS					m_e
GRA1	147.40		pPKPbc	00:29:10.828						T__					m_e

Event 90323004 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	07:47:42.10			-31.8180	-177.7900				10.0			9		158.96	162.87	m i ke	NEIC
OrigID 90323043																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	162.87		PKPab	08:08:31.781		24.0		4.45		TAS					m_e
BRG	159.07		PKPab	08:08:15.646		24.0		4.45		TAS					m_e
CLL	158.96		PKPab	08:08:14.936		24.0		4.45		TAS					m_e
FUR	162.28		PKPab	08:08:30.163		24.0		4.45		TAS					m_e
GEC2	160.91		PKPab	08:08:24.207		24.0		4.45		TAS					m_e
MOX	159.94		PKPab	08:08:19.060		24.0		4.45		TAS					m_e
PLN	159.94		PKPab	08:08:19.628		24.0		4.45		TAS					m_e
RJOB	162.17		PKPab	08:08:29.936		24.0		4.45		TAS					m_e
ROTZ	160.57		PKPab	08:08:21.966		24.0		4.45		TAS					m_e

Event 90323006 Andaman Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	11:29:26.00			12.8880	92.9280				31.6	2.5		29		73.17	78.22	m i ke	BGR
OrigID 90323012																	

Magnitude Err Nsta Author OrigID  
mb 5.5 BGR 90323012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	75.20		P	11:41:04.404	0.1	87.8		5.78		TAS		42.5	1.28	m_e mb	5.3
ASSE	75.20		pP	11:41:13.806	5.2					T__					m_e
BFO	76.92		P	11:41:14.233	-0.1	87.8		5.78		TAS		18.5	1.18	a_e mb	5.1
BFO	76.92		pP	11:41:23.586	5.2					T__					m_e
BRG	73.17		P	11:40:52.933	0.1	87.8		5.78		TAS		49.2	1.21	a_e mb	5.5
BSEG	75.35		P	11:41:05.583	0.2	87.8		5.78		TAS		80.5	1.17	a_e mb	5.6
BUG	77.35		P	11:41:16.933	-0.4	87.8		5.78		TAS		86.2	1.34	a_e mb	5.7
BUG	77.35		pP	11:41:26.170	5.2					T__					m_e

CLL	73.76	P	11:40:55.983	0.0	87.8	5.78	TAS	49.6	1.38	m_e	mb	5.4
CLL	73.76	pP	11:41:04.862	5.2			T__			m_e		
CLZ	75.39	P	11:41:05.833	-0.0	87.8	5.78	TAS	85.4	1.38	a_e	mb	5.6
FLT1	74.84	P	11:41:01.674	-0.2	87.8	5.78	TAS	14.7	1.05	m_e	mb	4.9
FUR	74.97	P	11:41:03.183	-0.2	87.8	5.78	TAS	32.3	0.93	a_e	mb	5.3
GEC2	73.33	P	11:40:53.905	-0.3	87.8	5.78	TAS	62.1	1.21	m_e	mb	5.6
GRA1	74.94	P	11:41:03.783	0.2	87.8	5.78	TAS	37.0	1.04	a_e	mb	5.3
GTTG	75.66	P	11:41:07.283	-0.1	87.8	5.78	TAS	71.3	1.25	a_e	mb	5.7
GTTG	75.66	pP	11:41:16.434	5.2			T__			m_e		
IBBN	76.98	P	11:41:14.883	-0.9	87.8	5.78	TAS	95.9	1.29	a_e	mb	5.8
KAST	76.65	P	11:41:13.033	-0.2	87.8	5.78	TAS	42.6	1.41	a_e	mb	5.4
MANZ	74.35	P	11:41:00.433	0.6	87.8	5.78	TAS	23.0	1.39	a_e	mb	5.0
MANZ	74.35	pP	11:41:08.745	5.2			T__			m_e		
MOX	74.65	P	11:41:01.583	0.0	87.8	5.78	TAS	100.4	1.68	a_e	mb	5.6
NEUB	74.54	P	11:41:00.633	-0.0	87.8	5.78	TAS	78.8	1.33	a_e	mb	5.6
NRDL	75.53	P	11:41:06.933	-0.3	87.8	5.78	TAS	115.6	1.44	a_e	mb	5.8
PLN	74.31	P	11:40:59.533	0.1	87.8	5.78	TAS	20.5	1.50	a_e	mb	4.9
PLN	74.31	pP	11:41:08.482	5.2			T__			m_e		
RETH	75.97	P	11:41:09.162	5.2	87.8	5.78	TAS	215.9	1.40	m_e	mb	6.1
RJOB	73.96	P	11:40:57.233	-0.3	87.8	5.78	TAS	23.7	1.12	a_e	mb	5.1
ROTZ	74.30	P	11:41:00.083	0.4	87.8	5.78	TAS	19.9	1.28	a_e	mb	5.0
RUE	73.28	P	11:40:53.233	0.0	87.8	5.78	TAS	84.3	0.98	a_e	mb	5.8
STU	76.31	P	11:41:10.807	-0.4	87.8	5.78	TAS	48.7	1.14	m_e	mb	5.5
TANN	74.12	P	11:40:58.483	-0.2	87.8	5.78	TAS	39.0	1.31	a_e	mb	5.3
TNS	76.70	P	11:41:13.181	0.6	87.8	5.78	TAS	34.1	1.25	m_e	mb	5.3
UBBA	75.67	P	11:41:07.479	0.1	87.8	5.78	TAS	63.2	1.84	m_e	mb	5.4
UBR	75.78	P	11:41:07.683		87.8	5.78	TAS	80.2	1.51	a_e	mb	5.6
WET	73.87	P	11:40:57.233	0.0	87.8	5.78	TAS	74.0	1.35	a_e	mb	5.5
WLF	78.22	P	11:41:22.583	0.6	87.8	5.78	TAS	79.3	1.60	a_e	mb	5.6

Event 90323005 Andaman Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	11:33:56.60		12.5400	93.4400				29.5	1.0		24		73.76	77.93	m i ke	BGR	
90323011																	

Magnitude Err Nsta Author OrigID  
 mb 4.9 BGR 90323011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	77.51		P	11:45:49.214	-0.4	88.0		5.72		TAS		11.6	1.24	m_e	mb	4.9
BRG	73.76		P	11:45:27.903	-0.3	88.0		5.72		TAS		9.2	0.87	m_e	mb	4.8
BRG	73.76		pP	11:45:36.563	-0.2	87.6		5.66		TAS				m_e		
BSEG	75.93		P	11:45:40.827	0.3	88.0		5.72		TAS		18.9	0.93	m_e	mb	5.2
BUG	77.93		P	11:45:52.038	-0.0	88.0		5.72		TAS		12.1	0.98	m_e	mb	5.0
CLL	74.35		P	11:45:31.154	-0.4	88.0		5.72		TAS		7.0	0.96	m_e	mb	4.7

CLZ	75.98	P	11:45:40.748	-0.1	88.0	5.72	TAS	12.9	1.00	m_e	mb	5.0
CLZ	75.98	pP	11:45:49.027	-0.2	87.6	5.66	TAS			m_e		
FLT1	75.43	P	11:45:36.887	-0.8	88.0	5.72	TAS	7.8	0.95	m_e	mb	4.7
GEC2	73.93	P	11:45:29.251	0.2	88.0	5.72	TAS	13.9	0.94	m_e	mb	5.0
GEC2	73.93	pP	11:45:37.851		87.6	5.66	TAS			m_e		
GRA1	75.53	P	11:45:38.845	0.6	88.0	5.72	TAS	26.8	1.25	m_e	mb	5.2
GTTG	76.24	P	11:45:42.333	-0.1	88.0	5.72	TAS	16.1	1.00	m_e	mb	5.1
GTTG	76.24	pP	11:45:50.636	-0.1	87.6	5.66	TAS			m_e		
IBBN	77.56	P	11:45:49.973	0.1	88.0	5.72	TAS	20.1	1.15	m_e	mb	5.1
IBBN	77.56	pP	11:45:58.363	-0.3	87.6	5.66	TAS			m_e		
KAST	77.23	P	11:45:48.009	-0.1	88.0	5.72	TAS	10.2	1.13	m_e	mb	4.8
MANZ	74.94	P	11:45:35.515	0.6	88.0	5.72	TAS	3.1	1.01	m_e	mb	4.3
MOX	75.24	P	11:45:36.545	-0.1	88.0	5.72	TAS	6.3	0.85	m_e	mb	4.7
NEUB	75.13	P	11:45:35.559	-0.4	88.0	5.72	TAS	13.7	1.14	m_e	mb	4.9
NRDL	76.11	P	11:45:42.016	0.4	88.0	5.72	TAS	25.5	1.33	m_e	mb	5.2
NRDL	76.11	pP	11:45:50.331	0.1	87.6	5.66	TAS			m_e		
PLN	74.90	P	11:45:34.563	-0.1	88.0	5.72	TAS	2.8	1.00	m_e	mb	4.2
PLN	74.90	pP	11:45:43.206		87.6	5.66	TAS			m_e		
RETH	76.55	P	11:45:44.048	-0.1	88.0	5.72	TAS	26.9	1.16	m_e	mb	5.3
RETH	76.55	pP	11:45:52.447	0.3	87.6	5.66	TAS			m_e		
RJOB	74.55	P	11:45:32.369	-0.2	88.0	5.72	TAS	10.7	0.98	m_e	mb	4.8
ROTZ	74.89	P	11:45:35.197	0.6	88.0	5.72	TAS	2.9	1.03	m_e	mb	4.2
ROTZ	74.89	pP	11:45:43.755		87.6	5.66	TAS			m_e		
TANN	74.71	P	11:45:33.849	0.2	88.0	5.72	TAS	5.4	0.99	m_e	mb	4.5
TNS	77.29	P	11:45:48.643	0.3	88.0	5.72	TAS	10.7	1.10	m_e	mb	4.9
TNS	77.29	pP	11:45:56.815		87.6	5.66	TAS			m_e		
UBR	76.37	P	11:45:42.703	-0.3	88.0	5.72	TAS	16.2	1.01	m_e	mb	5.1
UBR	76.37	pP	11:45:51.386		87.6	5.66	TAS			m_e		
WET	74.46	P	11:45:32.264	0.1	88.0	5.72	TAS	12.3	1.05	m_e	mb	4.9
WET	74.46	pP	11:45:40.768		87.6	5.66	TAS			m_e		

Event 90323007 Central Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	12:35:26.91			7.8030	-37.3240				33.0					58.09	58.78	m i ke	BGR
90323013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90323013
Ms	4.8		BGR	90323013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	58.09		P	12:45:17.734		237.4		6.59		TAS		14.0	0.98	m_e	mb	5.0
GRA1	58.09		L	13:05:52.076						T__		703.2	20.70	a_e	Ms	4.8
MOX	58.78		L	13:05:52.905						T__		948.6	19.70	a_e	Ms	4.9

Event 90323009 Colombia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/23	19:21:25.14			5.2100	-74.8500				129.5	2.3		32		80.23	85.23	m i ke	BGR
OrigID 90323015																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.1		BGR	90323015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	83.17		P	19:33:37.583	0.3	270.1		5.13		TAS		165.3	1.13	a_e	mb	6.2
BFO	81.60		P	19:33:28.733	-0.5	270.1		5.13		TAS		67.3	1.09	a_e	mb	5.7
BFO	81.60		pP	19:34:01.298						T__				m_e		
BRG	85.23		P	19:33:47.783	-0.1	270.1		5.13		TAS		186.2	1.01	a_e	mb	6.3
BSEG	82.97		P	19:33:36.083	-0.2	270.1		5.13		TAS		168.2	0.99	a_e	mb	6.2
BSEG	82.97		pP	19:34:08.816						T__				m_e		
BUG	81.04		P	19:33:26.233	-0.1	270.1		5.13		TAS		178.8	1.02	a_e	mb	6.0
CLL	84.63		P	19:33:44.633	-0.2	270.1		5.13		TAS		205.2	0.99	a_e	mb	6.3
CLZ	82.98		P	19:33:36.533	0.2	270.1		5.13		TAS		136.0	0.98	a_e	mb	6.1
FLT1	83.52		P	19:33:38.583	-0.5	270.1		5.13		TAS		143.0	0.96	a_e	mb	6.2
FUR	83.57		P	19:33:38.703	-0.9	270.1		5.13		TAS		289.0	1.73	m_e	mb	6.2
GEC2	85.16		P	19:33:47.283	-0.2	270.1		5.13		TAS		175.4	1.01	a_e	mb	6.2
GRA1	83.52		P	19:33:39.283	0.2	270.1		5.13		TAS		123.8	1.08	a_e	mb	6.1
GTTG	82.72		P	19:33:35.133	0.1	270.1		5.13		TAS		160.4	1.00	a_e	mb	6.2
HLG	81.55		P	19:33:28.983	0.0	270.1		5.13		TAS		432.0	1.11	a_e	mb	6.5
IBBN	81.38		P	19:33:28.033	-0.1	270.1		5.13		TAS		272.0	1.18	a_e	mb	6.2
KAST	81.74		P	19:33:29.783	-0.2	270.1		5.13		TAS		105.7	1.02	a_e	mb	5.9
KAST	81.74		pP	19:34:02.405						T__				m_e		
MANZ	84.09		P	19:33:42.233	0.2	270.1		5.13		TAS		32.4	1.02	a_e	mb	5.5
MANZ	84.09		pP	19:34:14.913						T__				m_e		
MOX	83.76		P	19:33:40.333	-0.0	270.1		5.13		TAS		111.5	1.30	a_e	mb	5.9
NEUB	83.86		P	19:33:40.833	0.0	270.1		5.13		TAS		209.9	1.18	a_e	mb	6.2
NRDL	82.83		P	19:33:35.683	0.1	270.1		5.13		TAS		114.2	0.98	a_e	mb	6.1
PLN	84.11		P	19:33:42.133	0.0	270.1		5.13		TAS		65.4	1.09	a_e	mb	5.8
RETH	82.37		P	19:33:33.533	0.3	270.1		5.13		TAS		851.6	1.12	a_e	mb	6.8
RGN	84.73		P	19:33:45.433	0.1	270.1		5.13		TAS		376.1	1.02	a_e	mb	6.6
RJOB	84.60		P	19:33:44.633	0.1	270.1		5.13		TAS		120.6	0.95	a_e	mb	6.1
ROTZ	84.16		P	19:33:42.683	0.3	270.1		5.13		TAS		15.2	1.06	a_e	mb	5.2
RUE	85.07		P	19:33:46.733	-0.3	270.1		5.13		TAS		279.6	1.09	a_e	mb	6.4
STU	82.18		P	19:33:32.033	-0.2	270.1		5.13		TAS		313.5	0.93	a_e	mb	6.4
TANN	84.31		P	19:33:43.333	0.2	270.1		5.13		TAS		199.4	1.03	a_e	mb	6.3
TNS	81.73		P	19:33:30.083	0.1	270.1		5.13		TAS		206.1	1.08	a_e	mb	6.2
UBBA	82.74		P	19:33:35.233	0.1	270.1		5.13		TAS		138.6	1.70	a_e	mb	5.9
UBBA	82.74		pP	19:34:08.540						T__				m_e		
UBR	82.78		P	19:33:35.783	0.6	270.1		5.13		TAS		244.3	1.48	a_e	mb	6.2
WET	84.61		P	19:33:44.983	0.3	270.1		5.13		TAS		241.9	1.01	a_e	mb	6.4

WLF 80.23 P 19:33:22.333 0.1 270.1 5.13 TAS 339.0 1.01 m\_e mb 6.2

Event 90324001 South Indian Ocean

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/03/24 03:37:18.27 -2.0200 65.8000 33.0 27 65.83 72.71 m i ke BGR
90324007

Magnitude Err Nsta Author OrigID
mb 5.3 BGR 90324007

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Lists station data for event 90324001.

Event 90324002 Northern Molucca Sea

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID

2019/03/24 04:37:34.00 1.6440 126.4520 40.0 24 102.31 106.43 m i ke NEIC 90324041

Magnitude Err Nsta Author OrigID Ms 5.8 BGR 90324008

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Contains station data for event 90324008.

Event 90324003 Southeast of Loyalty Islands

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author 2019/03/24 06:02:45.02 -21.5840 170.9000 33.0 11 145.52 149.71 m i ke BGR 90324009

Magnitude Err Nsta Author OrigID

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. Contains station data for event 90324009.

CLL	145.69	PKPbc	06:22:20.434	0.1	37.1	2.83	TAS	m_e
FLT1	145.52	PKPbc	06:22:19.668	0.1	37.1	2.83	TAS	m_e
GEC2	147.28	PKPbc	06:22:25.639		37.1	2.83	TAS	m_e
GTTG	146.61	PKPbc	06:22:23.358		37.1	2.83	TAS	m_e
NEUB	146.25	PKPbc	06:22:22.257		37.1	2.83	TAS	m_e
PLN	146.66	PKPbc	06:22:23.438		37.1	2.83	TAS	m_e
UBR	149.71	PKPbc	06:22:31.620		37.1	2.83	TAS	m_e
WLF	149.48	PKPbc	06:22:31.486		37.1	2.83	TAS	m_e

Event 90324004 Near coast of Nicaragua

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/24	09:29:57.85			11.3030	-86.6810				111.7	4.2		25		83.31	88.31	m i k e	BGR
OrigID 90324010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90324010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	85.65	P		09:42:23.780	0.2	283.3		4.87		TAS		14.1	1.31	m_e mb	4.9
BFO	84.96	P		09:42:20.479	0.1	283.3		4.87		TAS		11.2	1.27	m_e mb	4.9
BRG	87.93	P		09:42:34.382		283.3		4.87		TAS		22.8	1.59	m_e mb	5.3
BSEG	85.04	P		09:42:20.834	0.1	283.3		4.87		TAS		376.5	3.51	m_e mb	6.0
BSEG	85.04	pP		09:42:48.908	0.6	284.0		5.11		TAS				m_e	
BUG	83.71	P		09:42:13.878	-0.1	283.3		4.87		TAS		42.5	1.67	m_e mb	5.4
BUG	83.71	pP		09:42:42.652	0.2	284.0		5.11		TAS				m_e	
CLL	87.25	P		09:42:30.892		283.3		4.87		TAS		21.1	1.30	m_e mb	5.1
CLL	87.25	pP		09:43:00.453		284.0		5.11		TAS				m_e	
CLZ	85.53	P		09:42:23.380	0.1	283.3		4.87		TAS		9.8	0.94	m_e mb	4.9
CLZ	85.53	pP		09:42:51.992	-0.2	284.0		5.11		TAS				m_e	
FLT1	85.94	P		09:42:24.805	-0.2	283.3		4.87		TAS		4.1	0.44	m_e mb	4.9
FLT1	85.94	pP		09:42:53.476	-0.2	284.0		5.11		TAS				m_e	
GEC2	88.31	P		09:42:37.083		283.3		4.87		TAS		6.3	1.12	m_e mb	4.8
GRA1	86.53	P		09:42:27.781	-0.6	283.3		4.87		TAS		17.7	1.47	m_e mb	5.0
GRA1	86.53	pP		09:42:56.787		284.0		5.11		TAS				m_e	
GTTG	85.34	P		09:42:22.669	0.5	283.3		4.87		TAS		20.4	1.13	m_e mb	5.3
GTTG	85.34	pP		09:42:51.503	0.2	284.0		5.11		TAS				m_e	
IBBN	83.85	P		09:42:14.813	-0.3	283.3		4.87		TAS		11.0	1.03	m_e mb	5.0
IBBN	83.85	pP		09:42:43.416	-0.5	284.0		5.11		TAS				m_e	
KAST	84.46	P		09:42:17.578	-0.1	283.3		4.87		TAS		9.4	1.12	m_e mb	4.9
KAST	84.46	pP		09:42:45.963	0.2	284.0		5.11		TAS				m_e	
MOX	86.56	P		09:42:27.781	1.0	283.3		4.87		TAS		10.8	1.34	m_e mb	4.8
MOX	86.56	pP		09:42:57.003		284.0		5.11		TAS				m_e	
NEUB	86.52	P		09:42:28.205	-0.4	283.3		4.87		TAS		40.3	1.85	m_e mb	5.2
NRDL	85.23	P		09:42:21.779	0.5	283.3		4.87		TAS		29.4	1.62	m_e mb	5.3
PLN	86.93	P		09:42:29.581	-0.2	283.3		4.87		TAS		4.1	0.95	m_e mb	4.5

PLN	86.93	pP	09:42:58.923		284.0	5.11	TAS												m_e	
RETH	84.73	P	09:42:19.079	0.1	283.3	4.87	TAS				61.6	1.12	m_e mb							5.7
RETH	84.73	pP	09:42:47.835	-0.3	284.0	5.11	TAS													m_e
RGN	86.62	pP	09:42:57.319		284.0	5.11	TAS													m_e
RUE	87.41	P	09:42:33.282		283.3	4.87	TAS				23.5	0.16	m_e mb							6.0
STU	85.43	P	09:42:23.180	0.3	283.3	4.87	TAS				12.6	0.73	m_e mb							5.2
TANN	87.14	P	09:42:30.781	0.4	283.3	4.87	TAS				18.5	1.18	m_e mb							5.1
TANN	87.14	pP	09:43:00.320		284.0	5.11	TAS													m_e
TNS	84.67	P	09:42:18.779	-0.1	283.3	4.87	TAS				20.0	1.35	m_e mb							5.2
TNS	84.67	pP	09:42:47.780	0.1	284.0	5.11	TAS													m_e
WET	87.71	P	09:42:33.582		283.3	4.87	TAS				9.5	1.01	m_e mb							5.1
WET	87.71	pP	09:43:03.437		284.0	5.11	TAS													m_e
WLF	83.31	P	09:42:12.577	0.3	283.3	4.87	TAS				15.7	1.10	m_e mb							5.2
WLF	83.31	pP	09:42:40.567	-0.1	284.0	5.11	TAS													m_e

Event 90324005 Near coast of Oaxaca, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/24	12:27:34.74			15.6000	-94.5290				33.0				3	85.00	88.09	m i ke	BGR
OrigID 90324011																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.5		BGR	90324011
Ms	4.8		BGR	90324011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	88.09		P	12:40:21.597		283.6		5.36		TAS		12.6	1.28	m_e mb	5.1
GRA1	88.09		L	13:18:10.512						T__		310.0	21.00	a_e Ms	4.7
IBBN	85.12		P	12:40:11.027		283.6		5.36		TAS				m_e	
MOX	87.97		L	13:18:28.326						T__		412.0	19.20	a_e Ms	4.9
RETH	85.90		P	12:40:13.226		283.6		5.36		TAS		77.2	1.05	m_e mb	5.8
WLF	85.00		P	12:40:07.911		283.6		5.36		TAS		61.0	1.62	m_e mb	5.6

Event 90324006 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/24	14:33:05.02			49.5260	154.3180				33.0				28	72.54	78.35	m i ke	BGR
OrigID 90324012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	90324012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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ASSE	74.11	P	14:44:36.228	-0.5	23.7	5.71	TAS	26.3	1.26	m_e	mb	5.1
BFO	78.20	P	14:44:59.099	-0.1	23.7	5.71	TAS	11.9	1.09	a_e	mb	4.9
BRG	74.40	P	14:44:37.499	0.4	23.7	5.71	TAS	11.6	1.10	a_e	mb	4.8
BSEG	72.54	P	14:44:27.137	0.2	23.7	5.71	TAS	13.4	0.97	m_e	mb	5.0
BUG	75.56	P	14:44:44.149	0.4	23.7	5.71	TAS	21.2	0.98	a_e	mb	5.2
CLL	74.26	P	14:44:36.499	-0.2	23.7	5.71	TAS	23.4	0.97	a_e	mb	5.2
CLZ	74.45	P	14:44:38.399	0.0	23.7	5.71	TAS	27.4	1.03	m_e	mb	5.2
FLT1	73.79	P	14:44:33.649	-0.1	23.7	5.71	TAS	19.9	1.01	a_e	mb	5.1
FUR	77.59	P	14:44:56.149	-0.3	23.7	5.71	TAS	29.4	1.06	a_e	mb	5.3
GEC2	76.31	P	14:44:48.375	0.1	23.7	5.71	TAS	10.3	0.97	m_e	mb	4.9
GRA1	76.21	P	14:44:48.499	0.5	23.7	5.71	TAS	27.9	0.98	a_e	mb	5.3
GTTG	74.82	P	14:44:40.479	0.1	23.7	5.71	TAS	11.7	1.01	m_e	mb	4.9
HLG	72.87	P	14:44:28.968	0.1	23.7	5.71	TAS	114.1	0.85	m_e	mb	6.0
IBBN	74.64	P	14:44:38.999	-0.2	23.7	5.71	TAS	21.1	0.96	a_e	mb	5.1
KAST	75.52	P	14:44:44.199	-0.1	23.7	5.71	TAS	17.0	1.01	a_e	mb	5.1
MOX	75.23	P	14:44:42.549	0.1	23.7	5.71	TAS	13.3	1.01	a_e	mb	4.9
NEUB	74.69	P	14:44:39.149	0.4	23.7	5.71	TAS	17.7	0.99	a_e	mb	5.0
NRDL	73.92	P	14:44:34.788	0.1	23.7	5.71	TAS	13.7	1.07	m_e	mb	4.9
PLN	75.24	P	14:44:42.649	-0.3	23.7	5.71	TAS	4.9	1.02	a_e	mb	4.5
RETH	73.87	P	14:44:34.527	-0.1	23.7	5.71	TAS	97.7	1.30	m_e	mb	5.7
RUE	73.00	P	14:44:29.888	-0.6	23.7	5.71	TAS	21.6	0.91	m_e	mb	5.3
STU	77.58	P	14:44:55.749	0.2	23.7	5.71	TAS	21.0	0.61	a_e	mb	5.4
TANN	75.22	P	14:44:42.520	0.1	23.7	5.71	TAS	3.5	0.84	m_e	mb	4.4
TNS	76.42	P	14:44:49.299	-0.1	23.7	5.71	TAS	14.5	0.82	a_e	mb	5.1
UBBA	75.48	P	14:44:43.563	0.2	23.7	5.71	TAS	6.0	0.91	m_e	mb	4.6
UBR	78.35	P	14:45:00.249		23.7	5.71	TAS	18.2	1.32	a_e	mb	5.0
WET	76.26	P	14:44:48.899	-0.2	23.7	5.71	TAS	25.1	1.04	a_e	mb	5.3
WLF	77.48	P	14:44:55.141	-0.1	23.7	5.71	TAS	15.0	1.31	m_e	mb	5.0

Event 90325002 Pakistan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/25	11:25:29.15			31.0340	70.5910				33.0			5		47.37	47.61	m i ke	BGR
90325008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90325008
Ms	4.2		BGR	90325008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	47.61		P	11:34:01.375		99.8		7.40		TAS		11.2	0.97	m_e	mb	5.0
GRA1	47.61		L	11:43:54.063						T__		284.7	20.00	a_e	Ms	4.2
MOX	47.37		L	11:44:57.982						T__		262.6	20.80	a_e	Ms	4.2

Event 90326002 Northern Alaska, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/26	21:27:32.71			67.4290	-158.0880				33.0			23		58.65	64.87	m i ke	BGR
90326008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	90326008
Ms	4.2		BGR	90326008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	64.11		P	21:38:01.251		355.4		6.68		TAS		28.8	1.49	m_e	mb	5.3
BRG	61.87		P	21:37:46.293	-0.0	355.4		6.68		TAS		17.3	1.42	m_e	mb	5.1
BSEG	58.65		P	21:37:25.032	0.1	355.4		6.68		TAS		17.2	0.92	m_e	mb	5.1
BUG	60.94		P	21:37:40.104	-0.2	355.4		6.68		TAS		22.4	1.13	m_e	mb	4.9
CLL	61.40		P	21:37:43.286	-0.3	355.4		6.68		TAS		48.7	1.85	m_e	mb	5.0
CLZ	60.74		P	21:37:38.926	-0.0	355.4		6.68		TAS		28.7	1.31	m_e	mb	4.9
GEC2	63.89		P	21:38:00.049		355.4		6.68		TAS		23.1	1.34	m_e	mb	5.2
GRA1	62.93		P	21:37:54.035	-0.6	355.4		6.68		TAS		29.4	1.39	m_e	mb	5.2
GRA1	62.93		L	22:06:15.498						T__		188.5	21.50	a_e	Ms	4.2
GTTG	61.01		P	21:37:40.546	-0.1	355.4		6.68		TAS		19.9	0.76	m_e	mb	5.0
IBBN	60.11		P	21:37:34.409	-0.0	355.4		6.68		TAS		64.2	1.50	m_e	mb	5.4
KAST	61.26		P	21:37:42.380	-0.2	355.4		6.68		TAS		8.5	0.80	m_e	mb	4.6
MOX	62.00		P	21:37:47.044	0.5	355.4		6.68		TAS		10.2	0.86	m_e	mb	5.1
MOX	62.00		L	22:07:11.941						T__		150.6	21.90	a_e	Ms	4.1
NEUB	61.46		P	21:37:43.667	0.2	355.4		6.68		TAS		14.2	1.06	m_e	mb	4.7
NRDL	60.07		P	21:37:34.560	0.0	355.4		6.68		TAS		16.7	1.29	m_e	mb	4.9
PLN	62.18		P	21:37:48.322	0.4	355.4		6.68		TAS		12.6	1.63	m_e	mb	4.9
RETH	59.79		P	21:37:32.462	-0.2	355.4		6.68		TAS		40.8	1.02	m_e	mb	5.4
STU	63.73		P	21:37:58.775		355.4		6.68		TAS		22.0	0.73	m_e	mb	5.5
TANN	62.27		P	21:37:49.325	0.1	355.4		6.68		TAS		14.8	1.15	m_e	mb	5.1
TNS	62.24		P	21:37:48.794	-0.1	355.4		6.68		TAS		10.6	0.74	m_e	mb	5.2
UBBA	61.74		P	21:37:45.391	0.6	355.4		6.68		TAS		8.4	0.83	m_e	mb	5.0
UBR	64.87		P	21:38:05.960		355.4		6.68		TAS		46.6	1.72	m_e	mb	5.4
WET	63.55		P	21:37:58.094		355.4		6.68		TAS		32.9	1.76	m_e	mb	5.3
WLF	62.63		P	21:37:51.780	-0.1	355.4		6.68		TAS		30.1	1.10	m_e	mb	5.3

Event 90326003 Tonga Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/26	21:54:10.46			-21.1330	-172.8410				34.0	2.1		14		147.16	153.41	m i ke	BGR
90326009																	

Magnitude	Err	Nsta	Author	OrigID
Ms	5.0		BGR	90326009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.94		PKPbc	22:13:54.396	0.2	7.9		2.44		TAS				m_e	
ASSE	148.94		pPKPbc	22:14:04.834	0.1	9.2		2.30		TAS				m_e	
BFO	152.85		PKPdf	22:13:55.923		11.4		1.52		TAS				m_e	
BFO	152.85		PKPbc	22:14:03.545	-0.4	7.9		2.44		TAS				m_e	
BFO	152.85		pPKPbc	22:14:13.785		9.2		2.30		TAS				m_e	
BRG	149.84		PKPbc	22:13:56.704	-0.2	7.9		2.44		TAS				m_e	
BRG	149.84		PKPab	22:14:02.467		10.0		4.52		TAS				m_e	
BRG	149.84		pPKPbc	22:14:06.418		9.2		2.30		TAS				m_e	
BSEG	147.16		PKPbc	22:13:49.595	-0.2	7.9		2.44		TAS				m_e	
BSEG	147.16		pPKPab	22:14:00.403	0.2	9.1		4.33		TAS				m_e	
BUG	149.75		PKPbc	22:13:56.305	0.0	7.9		2.44		TAS				m_e	
BUG	149.75		pPKPbc	22:14:06.924	-0.4	9.2		2.30		TAS				m_e	
CLL	149.54		PKPdf	22:13:51.227		11.4		1.52		TAS				m_e	
CLL	149.54		PKPbc	22:13:55.676	0.1	7.9		2.44		TAS				m_e	
CLL	149.54		PKPab	22:14:01.131		10.0		4.52		TAS				m_e	
CLL	149.54		pPKPbc	22:14:05.856	-0.1	9.2		2.30		TAS				m_e	
CLL	149.54		pPKPab	22:14:10.807		9.1		4.33		TAS				m_e	
CLZ	149.25		PKPdf	22:13:50.555	0.3	11.4		1.52		TAS				m_e	
CLZ	149.25		PKPbc	22:13:55.301	-0.2	7.9		2.44		TAS				m_e	
CLZ	149.25		PKPab	22:14:00.332		10.0		4.52		TAS				m_e	
CLZ	149.25		pPKPbc	22:14:05.780	0.1	9.2		2.30		TAS				m_e	
CLZ	149.25		pPKPab	22:14:09.811	0.2	9.1		4.33		TAS				m_e	
FLT1	148.70		PKPdf	22:13:49.454	0.2	11.4		1.52		TAS				m_e	
FLT1	148.70		PKPbc	22:13:53.561	0.3	7.9		2.44		TAS				m_e	
FLT1	148.70		pPKPbc	22:14:04.039	-0.3	9.2		2.30		TAS				m_e	
FLT1	148.70		pPKPab	22:14:07.595	-0.2	9.1		4.33		TAS				m_e	
FUR	152.83		PKPbc	22:14:03.554		7.9		2.44		TAS				m_e	
GEC2	151.86		PKPbc	22:14:01.362	-0.3	7.9		2.44		TAS				m_e	
GEC2	151.86		pPKPbc	22:14:10.969		9.2		2.30		TAS				m_e	
GRA1	151.32		PKPbc	22:14:00.613	-0.1	7.9		2.44		TAS				m_e	
GRA1	151.32		pPKPab	22:14:18.493		9.1		4.33		TAS				m_e	
GRA1	151.32		L	23:22:20.865						T__		251.9	21.00	a_e Ms	5.0
GTTG	149.57		PKPbc	22:13:55.992	-0.0	7.9		2.44		TAS				m_e	
GTTG	149.57		PKPab	22:14:01.680		10.0		4.52		TAS				m_e	
GTTG	149.57		pPKPab	22:14:11.517	-0.1	9.1		4.33		TAS				m_e	
IBBN	148.88		PKPdf	22:13:50.456	0.2	11.4		1.52		TAS				m_e	
IBBN	148.88		PKPbc	22:13:54.154	0.1	7.9		2.44		TAS				m_e	
IBBN	148.88		PKPab	22:13:58.915	-0.1	10.0		4.52		TAS				m_e	
IBBN	148.88		pPKPbc	22:14:04.239	0.3	9.2		2.30		TAS				m_e	
KAST	149.97		PKPbc	22:13:56.932	0.2	7.9		2.44		TAS				m_e	
MOX	150.34		PKPdf	22:13:51.957		11.4		1.52		TAS				m_e	
MOX	150.34		PKPbc	22:13:57.484	0.2	7.9		2.44		TAS				m_e	
MOX	150.34		pPKPbc	22:14:07.938		9.2		2.30		TAS				m_e	
MOX	150.34		L	23:27:47.960						T__		199.0	18.90	a_e Ms	4.9
NEUB	149.78		PKPdf	22:13:51.474		11.4		1.52		TAS				m_e	
NEUB	149.78		PKPbc	22:13:56.416	-0.1	7.9		2.44		TAS				m_e	
NEUB	149.78		pPKPbc	22:14:06.863		9.2		2.30		TAS				m_e	

NEUB	149.78	pPKPab	22:14:11.821		9.1	4.33	TAS	m_e
NRDL	148.61	PKPbc	22:13:53.287	-0.1	7.9	2.44	TAS	m_e
NRDL	148.61	PKPab	22:13:57.245	0.1	10.0	4.52	TAS	m_e
NRDL	148.61	pPKPab	22:14:07.691	0.3	9.1	4.33	TAS	m_e
PLN	150.44	PKPdf	22:13:52.549		11.4	1.52	TAS	m_e
PLN	150.44	PKPbc	22:13:58.067	0.1	7.9	2.44	TAS	m_e
PLN	150.44	pPKPbc	22:14:08.583		9.2	2.30	TAS	m_e
RETH	148.41	PKPbc	22:13:52.852	-0.1	7.9	2.44	TAS	m_e
RETH	148.41	PKPab	22:13:56.616	0.2	10.0	4.52	TAS	m_e
RUE	148.30	PKPbc	22:13:52.612	-0.1	7.9	2.44	TAS	m_e
STU	152.38	PKPbc	22:14:02.923	-0.2	7.9	2.44	TAS	m_e
STU	152.38	pPKPab	22:14:23.358		9.1	4.33	TAS	m_e
TANN	150.48	PKPdf	22:13:52.638		11.4	1.52	TAS	m_e
TANN	150.48	PKPbc	22:13:58.228	0.4	7.9	2.44	TAS	m_e
TNS	150.95	PKPdf	22:13:53.641		11.4	1.52	TAS	m_e
TNS	150.95	PKPbc	22:13:59.395	0.6	7.9	2.44	TAS	m_e
UBBA	150.29	PKPbc	22:13:57.397	0.2	7.9	2.44	TAS	m_e
UBBA	150.29	pPKPbc	22:14:07.954		9.2	2.30	TAS	m_e
UBBA	150.29	pPKPab	22:14:14.178		9.1	4.33	TAS	m_e
UBR	153.41	PKPbc	22:14:04.754		7.9	2.44	TAS	m_e
UBR	153.41	pPKPbc	22:14:15.059		9.2	2.30	TAS	m_e
WET	151.68	PKPbc	22:14:00.727	0.2	7.9	2.44	TAS	m_e
WET	151.68	pPKPab	22:14:20.462		9.1	4.33	TAS	m_e
WLF	151.52	PKPdf	22:13:54.881		11.4	1.52	TAS	m_e
WLF	151.52	PKPbc	22:14:01.310	-0.2	7.9	2.44	TAS	m_e

Event 90327004 Shikoku, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/27	00:11:23.17			32.1370	133.0770				33.0			31		80.51	85.92	m i ke	BGR
	90327010																

Magnitude	Err	Nsta	Author	OrigID
mb	5.5		BGR	90327010
Ms	5.4		BGR	90327010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	82.15		P	00:23:39.113	-0.1	46.4		5.14		TAS		33.1	1.64	a_e mb	5.2
BFO	85.90		P	00:23:58.013		46.4		5.14		TAS		86.0	1.35	a_e mb	5.7
BRG	81.50		P	00:23:35.513	-0.4	46.4		5.14		TAS		49.5	1.54	a_e mb	5.3
BSEG	81.06		P	00:23:33.063	-0.2	46.4		5.14		TAS		34.4	1.44	a_e mb	5.2
BUG	84.13		P	00:23:48.913	-0.3	46.4		5.14		TAS		50.6	1.40	a_e mb	5.6
CLL	81.65		P	00:23:36.113	-0.6	46.4		5.14		TAS		88.2	1.54	a_e mb	5.7
CLZ	82.49		P	00:23:41.113	0.2	46.4		5.14		TAS		36.7	1.33	a_e mb	5.3
DAVA	85.90		P	00:23:58.050		46.4		5.14		TAS		74.5	1.20	m_e mb	5.7
FLT1	81.76		P	00:23:36.463	-0.1	46.4		5.14		TAS		37.2	1.29	a_e mb	5.4

FUR	84.61	P	00:23:52.063	-0.3	46.4	5.14	TAS	127.2	1.17	m_e	mb	6.0
GEC2	82.96	P	00:23:43.113	-0.0	46.4	5.14	TAS	47.5	1.64	a_e	mb	5.5
GRA1	83.58	P	00:23:47.063	-0.2	46.4	5.14	TAS	180.3	1.40	a_e	mb	6.1
GRA1	83.58	L	01:04:37.818				T__	2794.2	19.20	a_e	Ms	5.7
GTTG	82.87	P	00:23:43.063	0.4	46.4	5.14	TAS	21.0	1.31	a_e	mb	5.2
IBBN	83.30	P	00:23:44.863	0.6	46.4	5.14	TAS	58.4	1.67	a_e	mb	5.5
KAST	83.80	P	00:23:47.663	0.2	46.4	5.14	TAS	28.9	1.36	a_e	mb	5.3
KBA	84.33	P	00:23:50.040	-0.1	46.4	5.14	TAS	28.4	1.15	m_e	mb	5.4
MOA	83.35	P	00:23:45.354	-0.3	46.4	5.14	TAS	53.4	1.27	m_e	mb	5.6
MOX	82.74	P	00:23:42.363	-0.1	46.4	5.14	TAS	57.4	1.67	a_e	mb	5.5
MOX	82.74	L	01:03:18.407				T__	1146.5	20.90	a_e	Ms	5.2
NEUB	82.30	P	00:23:39.763	0.1	46.4	5.14	TAS	102.6	1.58	a_e	mb	5.7
NRDL	82.15	P	00:23:38.917	0.1	46.4	5.14	TAS	50.7	1.78	m_e	mb	5.3
PLN	82.60	P	00:23:41.563	0.3	46.4	5.14	TAS	14.3	1.58	a_e	mb	5.0
RETH	82.30	P	00:23:39.863	0.4	46.4	5.14	TAS	350.8	2.03	a_e	mb	6.1
RUE	80.51	P	00:23:30.513	-0.3	46.4	5.14	TAS	80.5	1.37	a_e	mb	5.6
STU	85.18	P	00:23:54.513	0.1	46.4	5.14	TAS	130.9	1.09	a_e	mb	6.1
TANN	82.51	P	00:23:41.013	0.2	46.4	5.14	TAS	40.5	1.58	a_e	mb	5.4
TNS	84.49	P	00:23:51.263	-0.1	46.4	5.14	TAS	31.4	1.21	a_e	mb	5.4
UBBA	83.37	P	00:23:45.563	0.1	46.4	5.14	TAS	73.1	1.59	a_e	mb	5.7
UBR	85.51	P	00:23:56.213		46.4	5.14	TAS	70.6	1.50	a_e	mb	5.6
WET	83.17	P	00:23:44.663	0.2	46.4	5.14	TAS	41.2	1.51	a_e	mb	5.4
WLF	85.92	P	00:23:58.513		46.4	5.14	TAS	50.0	1.25	a_e	mb	5.5
WTTA	85.05	P	00:23:53.648	-0.3	46.4	5.14	TAS	53.2	1.34	m_e	mb	5.6

Event 90327005 Shikoku, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/27	06:38:05.37			32.5510	132.7510				33.0			23		81.00	85.42	m i ke	BGR
90327011																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	90327011
Ms	5.7		BGR	90327011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	85.40		P	06:50:37.964		46.4		5.18		TAS		57.9	1.39	m_e	mb	5.6
BRG	81.00		P	06:50:15.828	0.1	46.4		5.18		TAS		32.0	1.59	m_e	mb	5.1
BUG	83.64		P	06:50:29.389	-0.1	46.4		5.18		TAS		10.9	0.59	m_e	mb	5.3
CLL	81.15		P	06:50:16.127	0.2	46.4		5.18		TAS		79.7	1.72	m_e	mb	5.5
CLZ	81.99		P	06:50:21.043	0.1	46.4		5.18		TAS		20.0	1.18	m_e	mb	5.1
FLT1	81.26		P	06:50:16.562	0.1	46.4		5.18		TAS		39.8	1.69	m_e	mb	5.2
FUR	84.12		P	06:50:32.322		46.4		5.18		TAS		44.0	0.91	m_e	mb	5.7
GEC2	82.47		P	06:50:22.990		46.4		5.18		TAS		34.7	1.58	m_e	mb	5.2
GRA1	83.09		P	06:50:26.705	-0.5	46.4		5.18		TAS		115.5	1.41	m_e	mb	5.9
GRA1	83.09		L	07:31:17.362						T__		3653.6	19.20	a_e	Ms	5.8

GTTG	82.38	P	06:50:22.907	0.5	46.4	5.18	TAS	11.4	0.75	m_e	mb	5.1
IBBN	82.80	P	06:50:24.770	-0.3	46.4	5.18	TAS	17.7	1.09	m_e	mb	5.2
KAST	83.31	P	06:50:27.723	-0.0	46.4	5.18	TAS	660.6	4.30	m_e	mb	6.2
MOX	82.25	P	06:50:21.990	0.2	46.4	5.18	TAS	44.5	1.72	m_e	mb	5.3
MOX	82.25	L	07:30:41.305				T__	2083.8	18.50	a_e	Ms	5.5
NEUB	81.80	P	06:50:19.726	-0.1	46.4	5.18	TAS	72.0	1.54	m_e	mb	5.6
PLN	82.10	P	06:50:21.586	-0.3	46.4	5.18	TAS	15.4	1.73	m_e	mb	4.8
RETH	81.81	P	06:50:19.640	0.3	46.4	5.18	TAS	429.8	2.43	m_e	mb	6.2
STU	84.68	P	06:50:34.977		46.4	5.18	TAS	68.0	0.98	m_e	mb	5.8
TANN	82.01	P	06:50:20.856	0.2	46.4	5.18	TAS	31.8	1.66	m_e	mb	5.2
TNS	83.99	P	06:50:31.100	-0.5	46.4	5.18	TAS	28.0	1.36	m_e	mb	5.3
UBBA	82.87	P	06:50:25.826	0.2	46.4	5.18	TAS	50.2	1.65	m_e	mb	5.5
UBR	85.02	P	06:50:35.957		46.4	5.18	TAS	72.7	1.65	m_e	mb	5.6
WET	82.67	P	06:50:24.561		46.4	5.18	TAS	42.1	1.74	m_e	mb	5.4
WLF	85.42	P	06:50:38.675	0.5	46.4	5.18	TAS	33.7	1.33	m_e	mb	5.4

Event 90327006 Southern Xinjiang, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/27	21:36:37.86			37.8850	90.6680				33.0			27		53.59	59.07	m i ke	BGR
OrigID 90327012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90327012
Ms	4.1		BGR	90327012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	55.51		P	21:46:07.607	0.2	69.7		7.17		TAS		28.1	1.86	m_e	mb	5.0
BFO	58.28		P	21:46:27.630	0.1	69.7		7.17		TAS		16.3	0.95	a_e	mb	5.0
BRG	53.97		P	21:45:56.980	-0.0	69.7		7.17		TAS		8.8	0.79	a_e	mb	4.8
BSEG	55.14		P	21:46:05.630	0.6	69.7		7.17		TAS		22.4	1.13	a_e	mb	5.1
BUG	57.73		P	21:46:23.730	-0.1	69.7		7.17		TAS		13.3	0.82	a_e	mb	5.0
CLL	54.40		P	21:45:59.730	-0.3	69.7		7.17		TAS		12.8	0.83	m_e	mb	5.0
CLZ	55.78		P	21:46:10.130	-0.2	69.7		7.17		TAS		22.6	0.97	a_e	mb	5.2
FLT1	55.12		P	21:46:04.480	0.1	69.7		7.17		TAS		13.5	0.88	a_e	mb	5.0
FUR	56.51		P	21:46:16.030		69.7		7.17		TAS		44.3	0.71	a_e	mb	5.6
GEC2	54.76		P	21:46:03.180	-0.5	69.7		7.17		TAS		9.0	0.84	a_e	mb	4.8
GRA1	56.01		P	21:46:12.230	0.3	69.7		7.17		TAS		27.8	0.69	a_e	mb	5.4
GRA1	56.01		L	22:14:24.891						T__		135.0	20.70	a_e	Ms	4.0
GTTG	56.12		P	21:46:12.680	-0.5	69.7		7.17		TAS		31.2	0.87	a_e	mb	5.4
IBBN	57.14		P	21:46:19.430	-0.4	69.7		7.17		TAS		15.6	0.74	a_e	mb	5.1
KAST	57.15		P	21:46:19.680	-0.2	69.7		7.17		TAS		3.1	0.81	a_e	mb	4.4
MOX	55.44		P	21:46:07.730	-0.0	69.7		7.17		TAS		17.5	1.33	m_e	mb	4.9
MOX	55.44		L	22:15:10.891						T__		170.9	18.50	a_e	Ms	4.2
NEUB	55.17		P	21:46:05.430	0.0	69.7		7.17		TAS		30.0	0.71	a_e	mb	5.4
NRDL	55.72		P	21:46:09.980	-0.0	69.7		7.17		TAS		37.7	1.05	a_e	mb	5.3

PLN	55.17	P	21:46:05.730	-0.1	69.7	7.17	TAS	1.6	0.84	a_e	mb	4.1
RETH	56.07	P	21:46:12.130	-0.5	69.7	7.17	TAS	43.8	1.09	a_e	mb	5.4
RUE	53.59	P	21:45:53.780	-0.7	69.7	7.17	TAS	20.0	0.69	a_e	mb	5.3
STU	57.58	P	21:46:22.830	0.7	69.7	7.17	TAS	50.5	0.86	a_e	mb	5.6
TANN	55.01	P	21:46:04.630	-0.1	69.7	7.17	TAS	8.8	0.91	a_e	mb	4.8
TNS	57.49	P	21:46:22.230	0.4	69.7	7.17	TAS	10.0	0.73	a_e	mb	4.9
UBBA	56.35	P	21:46:14.180	-0.1	69.7	7.17	TAS	5.5	0.61	a_e	mb	4.8
UBR	57.42	P	21:46:21.930		69.7	7.17	TAS	26.0	0.67	a_e	mb	5.4
WET	55.18	P	21:46:06.080	-0.2	69.7	7.17	TAS	7.5	0.73	a_e	mb	4.8
WLF	59.07	P	21:46:33.680	0.2	69.7	7.17	TAS	13.4	0.96	a_e	mb	5.0

Event 90328001 Andaman Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/28	03:08:15.63			10.8100	94.0600				22.5	1.7		28		75.46	80.51	m i ke	BGR
90328007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90328007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	77.50		P	03:20:10.428	-0.3	88.7		5.59		TAS		30.0	1.26	m_e	mb	5.3
BFO	79.19		P	03:20:19.760	-0.3	88.7		5.59		TAS		16.3	1.30	m_e	mb	4.9
BFO	79.19		pP	03:20:26.305		88.6		5.54		TAS				m_e		
BRG	75.46		P	03:19:59.258	-0.1	88.7		5.59		TAS		26.4	1.00	m_e	mb	5.2
BRG	75.46		pP	03:20:06.129	0.2	88.6		5.54		TAS				m_e		
BSEG	77.67		P	03:20:11.859	0.2	88.7		5.59		TAS		53.8	1.01	m_e	mb	5.6
BUG	79.64		P	03:20:22.621	-0.1	88.7		5.59		TAS		37.8	1.01	m_e	mb	5.3
CLL	76.06		P	03:20:02.288	-0.4	88.7		5.59		TAS		16.1	1.03	m_e	mb	5.1
CLL	76.06		pP	03:20:09.253	0.0	88.6		5.54		TAS				m_e		
CLZ	77.69		P	03:20:11.876	0.0	88.7		5.59		TAS		35.9	0.91	m_e	mb	5.5
CLZ	77.69		pP	03:20:18.535		88.6		5.54		TAS				m_e		
FLT1	77.15		P	03:20:08.027	-0.8	88.7		5.59		TAS		12.3	0.83	m_e	mb	5.1
FUR	77.23		P	03:20:09.140	-0.0	88.7		5.59		TAS		16.4	0.81	m_e	mb	5.2
GEC2	75.61		P	03:20:00.367	0.2	88.7		5.59		TAS		24.3	0.88	m_e	mb	5.3
GEC2	75.61		pP	03:20:06.959	0.3	88.6		5.54		TAS				m_e		
GRA1	77.22		P	03:20:10.021	0.9	88.7		5.59		TAS		14.4	0.89	m_e	mb	5.1
GTTG	77.96		P	03:20:13.311	0.0	88.7		5.59		TAS		36.5	0.91	m_e	mb	5.5
GTTG	77.96		pP	03:20:20.010		88.6		5.54		TAS				m_e		
IBBN	79.28		P	03:20:20.823	0.1	88.7		5.59		TAS		60.0	0.98	m_e	mb	5.6
IBBN	79.28		pP	03:20:27.188		88.6		5.54		TAS				m_e		
KAST	78.94		P	03:20:18.761	-0.1	88.7		5.59		TAS		22.4	1.15	m_e	mb	5.1
MANZ	76.64		P	03:20:06.407	0.5	88.7		5.59		TAS		4.4	1.05	m_e	mb	4.5
MANZ	76.64		pP	03:20:12.457	0.2	88.6		5.54		TAS				m_e		
MOX	76.94		P	03:20:07.572	-0.1	88.7		5.59		TAS		12.0	0.84	m_e	mb	5.0
MOX	76.94		pP	03:20:13.870	-0.0	88.6		5.54		TAS				m_e		

NEUB	76.83	P	03:20:06.791	-0.2	88.7	5.59	TAS	25.0	0.95	m_e	mb	5.3
NEUB	76.83	pP	03:20:13.367	0.3	88.6	5.54	TAS			m_e		
NRDL	77.83	P	03:20:12.965	0.3	88.7	5.59	TAS	43.4	1.16	m_e	mb	5.5
PLN	76.60	P	03:20:05.542	-0.2	88.7	5.59	TAS	4.1	0.90	m_e	mb	4.5
PLN	76.60	pP	03:20:11.856	-0.3	88.6	5.54	TAS			m_e		
RETH	78.28	P	03:20:15.258	0.2	88.7	5.59	TAS	80.0	1.09	m_e	mb	5.8
RETH	78.28	pP	03:20:21.492		88.6	5.54	TAS			m_e		
RJOB	76.22	P	03:20:03.230	-0.2	88.7	5.59	TAS	13.5	0.78	m_e	mb	5.1
ROTZ	76.58	P	03:20:06.182	0.6	88.7	5.59	TAS	5.3	1.12	m_e	mb	4.6
ROTZ	76.58	pP	03:20:12.309	-0.2	88.6	5.54	TAS			m_e		
RUE	75.59	P	03:20:00.016	-0.1	88.7	5.59	TAS	63.5	0.91	m_e	mb	5.7
RUE	75.59	pP	03:20:06.326	-0.3	88.6	5.54	TAS			m_e		
TANN	76.41	P	03:20:04.654	0.0	88.7	5.59	TAS	12.6	1.08	m_e	mb	5.0
TNS	78.98	P	03:20:19.113	0.1	88.7	5.59	TAS	10.1	0.76	m_e	mb	4.9
UBR	78.04	P	03:20:13.253	-0.4	88.7	5.59	TAS	20.3	1.01	m_e	mb	5.2
WET	76.15	P	03:20:03.212	0.1	88.7	5.59	TAS	22.2	1.18	m_e	mb	5.2
WLF	80.51	P	03:20:27.637	0.1	88.7	5.59	TAS	83.6	1.93	m_e	mb	5.4

Event 90328002 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/28	08:02:59.90			-18.9710	-177.4850			71.0		4.3		31		144.59	150.70	m i ke	BGR
90328008																	

Magnitude Err Nsta Author

OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	146.30		PKPbc	08:22:31.018	0.0	15.0		2.74		TAS				a_e	
BFO	150.34		PKPbc	08:22:41.668	-0.5	15.0		2.74		TAS				a_e	
BFO	150.34		pPKPbc	08:23:02.161	1.0					T__				m_e	
BRG	146.90		PKPbc	08:22:32.668	0.3	15.0		2.74		TAS				a_e	
BSEG	144.59		PKPbc	08:22:25.468	-0.8	15.0		2.74		TAS				a_e	
BSEG	144.59		pPKPbc	08:22:45.994	1.0					T__				m_e	
BUG	147.38		PKPbc	08:22:33.968	0.1	15.0		2.74		TAS				a_e	
CLL	146.68		PKPbc	08:22:31.918	0.1	15.0		2.74		TAS				m_e	
CLZ	146.62		PKPbc	08:22:32.118	-0.1	15.0		2.74		TAS				a_e	
CLZ	146.62		pPKPbc	08:22:52.429	1.0					T__				m_e	
FLT1	146.01		PKPbc	08:22:31.118	0.1	15.0		2.74		TAS				a_e	
FLT1	146.01		pPKPbc	08:22:50.203	1.0					T__				m_e	
FUR	150.02		PKPbc	08:22:40.868	-0.7	15.0		2.74		TAS				a_e	
GEC2	148.86		PKPbc	08:22:37.868	0.4	15.0		2.74		TAS				a_e	
GEC2	148.86		pPKPbc	08:22:58.139	1.0					T__				m_e	
GRA1	148.56		PKPbc	08:22:37.815	-0.4	15.0		2.74		TAS				m_e	
GTTG	146.97		PKPbc	08:22:33.068	0.1	15.0		2.74		TAS				a_e	
GTTG	146.97		pPKPbc	08:22:53.047	1.0					T__				m_e	
HLG	144.61		PKPbc	08:22:25.868	-0.4	15.0		2.74		TAS				a_e	



IBBN	146.48	PKPbc	08:22:31.668	0.3	15.0	2.74	TAS	a_e
KAST	147.50	PKPbc	08:22:34.418	0.2	15.0	2.74	TAS	a_e
KAST	147.50	pPKPbc	08:22:54.234	1.0			T__	m_e
MANZ	148.12	PKPbc	08:22:36.168	0.3	15.0	2.74	TAS	a_e
MANZ	148.12	pPKPbc	08:22:56.632	1.0			T__	m_e
MOX	147.58	PKPbc	08:22:34.568	0.1	15.0	2.74	TAS	a_e
NEUB	147.02	PKPbc	08:22:32.968	-0.2	15.0	2.74	TAS	a_e
NRDL	146.02	PKPbc	08:22:30.218	1.0	15.0	2.74	TAS	a_e
NRDL	146.02	pPKPbc	08:22:50.050	1.0			T__	m_e
PLN	147.63	PKPbc	08:22:34.668	0.2	15.0	2.74	TAS	a_e
PLN	147.63	pPKPbc	08:22:55.012	1.0			T__	m_e
RETH	145.88	PKPbc	08:22:29.918	0.0	15.0	2.74	TAS	a_e
RJOB	150.11	PKPbc	08:22:40.718	-0.3	15.0	2.74	TAS	a_e
ROTZ	148.31	PKPbc	08:22:36.668	0.1	15.0	2.74	TAS	a_e
RUE	145.42	PKPbc	08:22:28.118	0.0	15.0	2.74	TAS	a_e
RUE	145.42	pPKPbc	08:22:48.651	1.0			T__	m_e
STU	149.79	PKPbc	08:22:40.418	-0.2	15.0	2.74	TAS	a_e
TANN	147.64	PKPbc	08:22:34.818	0.3	15.0	2.74	TAS	a_e
TANN	147.64	pPKPbc	08:22:54.996	1.0			T__	m_e
TNS	148.46	PKPbc	08:22:37.018	0.7	15.0	2.74	TAS	a_e
UBBA	147.67	PKPbc	08:22:35.018	0.3	15.0	2.74	TAS	a_e
UBR	150.70	PKPbc	08:22:42.418		15.0	2.74	TAS	a_e
UBR	150.70	pPKPbc	08:23:02.359	1.0			T__	m_e
WET	148.76	PKPbc	08:22:37.277	-0.1	15.0	2.74	TAS	m_e
WLF	149.24	PKPbc	08:22:39.668	-0.0	15.0	2.74	TAS	a_e
WLF	149.24	pPKPbc	08:22:59.869	1.0			T__	m_e

Event 90328004 East of Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/28	22:06:46.31			49.2700	158.9500				33.0				9	72.59	79.73	m i ke	BGR
OrigID 90328010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90328010
MBB	6.6		BGR	90328010
Ms	6.2		BGR	90328010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	75.44		P	22:18:27.414	0.1	21.1		5.82		TAS		316.4	1.93	a_e	MBB 6.7
ASSE	75.44		PP	22:21:18.078	-1.0	20.3		8.81		TAS				m_e	
BFO	79.52		S	22:28:47.498		19.5		10.95		TAS				m_e	
BFO	79.52		P	22:18:50.814	-0.3	21.1		5.82		TAS		39.3	0.93	a_e	MBB 6.4
BRG	75.84		S	22:28:08.250		19.5		10.95		TAS				m_e	
BRG	75.84		P	22:18:29.414	-0.2	21.1		5.82		TAS		132.0	1.42	a_e	MBB 6.6
BSEG	73.82		P	22:18:17.964	0.1	21.1		5.82		TAS		53.7	0.92	a_e	MBB 6.7

BUG	76.80	S	22:28:19.370		19.5	10.95	TAS			m_e		
BUG	76.80	P	22:18:34.869	-0.3	21.1	5.82	TAS	75.6	0.89	m_e	MBB	6.7
CLL	75.67	S	22:28:06.615	-0.7	19.5	10.95	TAS			m_e		
CLL	75.67	P	22:18:28.264	-0.4	21.1	5.82	TAS	54.4	0.88	m_e	MBB	6.6
CLZ	75.77	S	22:28:06.942	-1.3	19.5	10.95	TAS			m_e		
CLZ	75.77	P	22:18:29.714	0.5	21.1	5.82	TAS	357.6	1.88	a_e	MBB	6.7
CLZ	75.77	PP	22:21:21.336	-0.4	20.3	8.81	TAS			m_e		
FLT1	75.12	P	22:18:24.914	-0.6	21.1	5.82	TAS	44.0	0.89	a_e	MBB	6.6
FLT1	75.12	PP	22:21:15.519	0.0	20.3	8.81	TAS			m_e		
FUR	79.01	P	22:18:48.064	-0.0	21.1	5.82	TAS	164.8	1.30	a_e	MBB	6.6
GEC2	77.78	S	22:28:29.837		19.5	10.95	TAS			m_e		
GEC2	77.78	P	22:18:41.014	0.1	21.1	5.82	TAS	45.7	0.72	a_e	MBB	6.6
GRA1	77.59	S	22:28:30.164		19.5	10.95	TAS			m_e		
GRA1	77.59	P	22:18:40.214	0.4	21.1	5.82	TAS	94.9	0.80	a_e	MBB	6.8
GRA1	77.59	L	22:54:56.954				T__	12078.4	21.00	a_e	Ms	6.2
GTTG	76.14	P	22:18:31.714	0.3	21.1	5.82	TAS	77.9	1.13	a_e	MBB	6.7
GTTG	76.14	PP	22:21:25.291	-0.1	20.3	8.81	TAS			m_e		
HLG	74.08	P	22:18:19.564	0.3	21.1	5.82	TAS	96.4	0.91	a_e	MBB	6.8
IBBN	75.88	P	22:18:29.814	-0.0	21.1	5.82	TAS	67.0	0.78	a_e	MBB	6.8
IBBN	75.88	PP	22:21:22.499	0.6	20.3	8.81	TAS			m_e		
KAST	76.79	P	22:18:35.024	-0.1	21.1	5.82	TAS	57.4	0.98	m_e	MBB	6.7
KAST	76.79	PP	22:21:30.177		20.3	8.81	TAS			m_e		
MANZ	77.11	P	22:18:37.064	0.0	21.1	5.82	TAS	27.7	1.63	a_e	MBB	6.0
MANZ	77.11	PP	22:21:33.900		20.3	8.81	TAS			m_e		
MOX	76.61	P	22:18:34.164	0.0	21.1	5.82	TAS	79.0	1.32	a_e	MBB	6.7
MOX	76.61	PP	22:21:27.851		20.3	8.81	TAS			m_e		
MOX	76.61	L	22:54:17.492				T__	12657.2	21.70	a_e	Ms	6.2
NEUB	76.06	P	22:18:30.764	-0.2	21.1	5.82	TAS	291.3	1.74	a_e	MBB	6.7
NRDL	75.21	P	22:18:26.014	-0.0	21.1	5.82	TAS	225.9	1.94	a_e	MBB	6.6
PLN	76.63	P	22:18:34.364	0.1	21.1	5.82	TAS	35.1	1.35	a_e	MBB	6.3
PLN	76.63	PP	22:21:28.652		20.3	8.81	TAS			m_e		
RETH	75.14	P	22:18:25.664	0.1	21.1	5.82	TAS	561.8	1.41	a_e	MBB	7.2
RETH	75.14	PP	22:21:14.821	0.5	20.3	8.81	TAS			m_e		
RGN	72.59	P	22:18:10.664	-0.1	21.1	5.82	TAS	192.7	1.00	a_e	MBB	6.9
RGN	72.59	PP	22:20:53.880	0.4	20.3	8.81	TAS			m_e		
RJOB	79.03	P	22:18:48.527	0.3	21.1	5.82	TAS	47.6	0.79	m_e	MBB	6.6
ROTZ	77.29	P	22:18:38.414	0.3	21.1	5.82	TAS	31.1	1.54	a_e	MBB	6.1
ROTZ	77.29	PP	22:21:35.762		20.3	8.81	TAS			m_e		
RUE	74.40	P	22:18:21.164	-0.1	21.1	5.82	TAS	160.6	1.10	a_e	MBB	6.7
STU	78.92	S	22:28:41.611		19.5	10.95	TAS			m_e		
STU	78.92	P	22:18:47.316	-0.2	21.1	5.82	TAS	110.4	0.81	m_e	MBB	6.9
TANN	76.62	P	22:18:34.414	0.2	21.1	5.82	TAS	152.1	1.79	a_e	MBB	6.7
TANN	76.62	PP	22:21:28.669		20.3	8.81	TAS			m_e		
TNS	77.71	P	22:18:40.377	-0.1	21.1	5.82	TAS	56.0	0.76	m_e	MBB	6.7
UBBA	76.81	P	22:18:35.264	-0.1	21.1	5.82	TAS	270.7	1.91	a_e	MBB	6.6
UBR	79.73	P	22:18:51.640	-0.7	21.1	5.82	TAS	222.6	1.77	m_e	MBB	6.5
UBR	79.73	PP	22:21:56.335		20.3	8.81	TAS			m_e		
WET	77.70	S	22:28:31.472		19.5	10.95	TAS			m_e		
WET	77.70	P	22:18:40.914	0.4	21.1	5.82	TAS	72.9	0.81	a_e	MBB	6.7

WLF 78.71 P 22:18:46.764 0.5 21.1 5.82 TAS 1223.4 2.99 a\_e MBB 6.6

Event 90329001 Kyushu, Japan

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/03/29 20:55:47.05 31.8100 131.4000 33.0 29 80.01 85.44 m i ke BGR
90329007

Magnitude Err Nsta Author OrigID
mb 5.1 BGR 90329007
Ms 5.3 BGR 90329007

Table with columns: Sta, Dist, EvAz, Phase, Time, TRes, Azim, AzRes, Slow, SRes, Def, SNR, Amp, Per, Qual, Magnitude. It lists various station data points for the event.

Event 90330001 Northwestern Balkan Peninsula

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/30	02:08:17.64	0.64	1.25	43.2880	16.8290	15.6	11.1	84	10.0			31	318	3.61	9.18	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
ML	4.2		BGR	90330007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ABH	9.18		Pn	02:10:28.048	-0.9					T__				m_e	
ARSA	4.07		Sn	02:10:01.712	-1.7					T__				m_e	
ARSA	4.07		Pn	02:09:19.260	0.5					T__				m_e ML	3.7
BALST	7.60		Pn	02:10:06.976	-0.3					T__				m_e ML	4.3
BERGE	7.60		Pn	02:10:06.490	-0.8					T__				m_e ML	4.1
BFO	7.79		Pn	02:10:09.128	-0.7					T__				m_e ML	4.3
DAVA	6.32		Pn	02:09:51.423	1.7					T__				m_e ML	4.4
ECH	8.36		Sn	02:11:41.496	-4.1					T__				m_e	
ECH	8.36		Pn	02:10:16.470	-1.2					T__				m_e	
EMING	7.25		Pn	02:10:02.034	-0.4					T__				m_e ML	4.4
FUR	6.23		Pn	02:09:48.345	-0.1					T__				m_e ML	4.6
GEC2	5.97		Sn	02:10:46.922	-1.7					T__				m_e	
GEC2	5.97		Pn	02:09:45.269	0.5					T__				m_e ML	3.9
GRA1	7.48		Pn	02:10:05.726	0.1					T__				m_e	
GRFO	7.48		Pn	02:10:05.560	-0.0					T__				m_e	
KBA	4.52		Sn	02:10:14.108	-0.1					T__				m_e	
KBA	4.52		Pn	02:09:25.579	0.7					T__				m_e ML	4.0
MANZ	7.44		Sn	02:11:23.178	-0.6					T__				m_e	
MANZ	7.44		Pn	02:10:04.546	-0.5					T__				m_e ML	4.1
METMA	7.47		Pn	02:10:04.059	-1.4					T__				m_e ML	4.0
MOA	4.90		Sn	02:10:23.182	-0.1					T__				m_e	
MOA	4.90		Pn	02:09:31.413	1.2					T__				m_e ML	3.9
MOX	8.18		Pn	02:10:14.837	-0.3					T__				m_e ML	4.1
NORI	6.94		Pn	02:09:57.254	-0.9					T__				m_e ML	4.4
OBER	6.18		Pn	02:09:49.801	2.1					T__				m_e	
OBKA	3.61		Sn	02:09:52.396	-0.0					T__				m_e	
OBKA	3.61		Pn	02:09:12.854	0.5					T__				m_e ML	4.5
PART	5.82		Sn	02:10:47.809	2.6					T__				m_e ML	4.1
PLONS	6.47		Pn	02:09:52.636	0.9					T__				m_e ML	4.0
RJOB	5.27		Sn	02:10:34.521	2.4					T__				m_e	
RJOB	5.27		Pn	02:09:36.353	1.1					T__				m_e ML	4.0
ROTZ	7.22		Pn	02:10:01.387	-0.6					T__				m_e ML	4.1
SLE	7.37		Pn	02:10:03.330	-0.7					T__				m_e ML	5.0
TNS	9.01		Pn	02:10:26.179	-0.3					T__				m_e	
UBR	6.45		Pn	02:09:51.586	0.1					T__				m_e ML	4.6
WALHA	7.01		Pn	02:09:58.793	-0.4					T__				m_e ML	4.6
WET	6.47		Pn	02:09:51.586	-0.1					T__				m_e ML	4.0

WILA	6.94	Pn	02:09:58.550	0.4	T__	m_e ML	4.6
WTTA	5.41	Sn	02:10:37.807	2.5	T__	m_e	
WTTA	5.41	Pn	02:09:37.732	0.6	T__	m_e ML	4.4

Event 90330002 Southern Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/30	10:46:06.41			37.0010	22.3100				33.0			26		12.82	19.86	m i ke	BGR
90330008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	17.21		P	10:50:13.470	3.1	143.6		13.26		TAS				m_e	
BFO	15.27		P	10:49:38.512		143.6		13.26		TAS				m_e	
BRG	15.11		P	10:49:44.340	-4.5	143.6		13.26		TAS				m_e	
BSEG	18.86		P	10:50:25.059	-1.6	143.6		13.26		TAS				m_e	
CLL	15.76		P	10:49:50.815	6.4	143.6		13.26		TAS				m_e	
CLZ	17.08		P	10:50:07.030	-4.2	143.6		13.26		TAS				m_e	
FLT1	17.20		P	10:50:07.134	1.7	143.6		13.26		TAS				m_e	
GEC2	13.40		P	10:49:12.291		143.6		13.26		TAS				m_e	
GRA1	15.01		P	10:49:41.581	-5.0	143.6		13.26		TAS				m_e	
GTTG	16.98		P	10:50:06.820	3.7	143.6		13.26		TAS				m_e	
HLG	19.86		P	10:50:36.735	-3.6	143.6		13.26		TAS				m_e	
KAST	17.31		P	10:50:05.318	-0.3	143.6		13.26		TAS				m_e	
MANZ	14.92		P	10:49:35.894	-4.4	143.6		13.26		TAS				m_e	
MOX	15.65		P	10:49:47.010	-1.9	143.6		13.26		TAS				m_e	
NEUB	16.06		P	10:49:56.155	6.8	143.6		13.26		TAS				m_e	
NRDL	17.71		P	10:50:11.428	-0.1	143.6		13.26		TAS				m_e	
PLN	15.33		P	10:49:49.681	0.6	143.6		13.26		TAS				m_e	
RETH	18.17		P	10:50:19.124	-3.0	143.6		13.26		TAS				m_e	
RJOB	12.82		P	10:49:04.965		143.6		13.26		TAS				m_e	
ROTZ	14.70		P	10:49:35.491	-5.2	143.6		13.26		TAS				m_e	
TANN	15.16		P	10:49:36.120	5.1	143.6		13.26		TAS				m_e	
TNS	16.56		P	10:49:58.843	2.5	143.6		13.26		TAS				m_e	
UBBA	16.38		P	10:50:03.661	-0.3	143.6		13.26		TAS				m_e	
UBR	13.96		P	10:49:23.415		143.6		13.26		TAS				m_e	
WET	13.94		P	10:49:20.402	-0.2	143.6		13.26		TAS				m_e	
WLF	17.23		P	10:50:11.005	-1.6	143.6		13.26		TAS				m_e	

Event 90331001 Near coast of Ecuador

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	

2019/03/31 07:04:12.26

-0.6230 -80.7490

33.0

28

88.46 93.45 m i ke BGR

90331007

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90331007
MBB	6.4		BGR	90331007
Ms	5.8		BGR	90331007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	91.36		P	07:17:14.899	-0.0	271.1		4.62		TAS		235.9	2.77	m_e	MBB	6.4
ASSE	91.36		S	07:27:59.790	7.2					T__				m_e		
BFO	89.85		P	07:17:06.477		271.1		4.62		TAS		192.3	2.73	m_e	MBB	6.2
BRG	93.45		P	07:17:22.630	0.6	271.1		4.62		TAS		71.9	1.69	m_e	MBB	6.4
BRG	93.45		S	07:28:10.504						T__				m_e		
BSEG	91.13		S	07:27:56.901	2.0					T__				m_e		
BUG	89.24		P	07:17:04.656	-1.4	271.1		4.62		TAS		271.5	2.51	m_e	MBB	6.4
BUG	89.24		S	07:27:44.759	0.1					T__				m_e		
CLL	92.84		P	07:17:21.193	-0.2	271.1		4.62		TAS		15.1	0.93	m_e	MBB	6.4
CLL	92.84		S	07:28:06.932	0.3					T__				m_e		
CLZ	91.18		P	07:17:14.261	-0.3	271.1		4.62		TAS		28.1	1.29	m_e	MBB	6.3
CLZ	91.18		S	07:27:56.901	11.1					T__				m_e		
FLT1	91.71		P	07:17:15.403	0.1	271.1		4.62		TAS		33.9	1.34	m_e	MBB	6.4
FLT1	91.71		S	07:28:01.186	2.4					T__				m_e		
FUR	91.81		P	07:17:16.788		271.1		4.62		TAS		444.7	2.50	m_e	MBB	6.4
FUR	91.81		S	07:28:09.757	-18.9					T__				m_e		
GEC2	93.40		P	07:17:23.842	-0.0	271.1		4.62		TAS		75.2	1.89	m_e	MBB	6.3
GEC2	93.40		S	07:28:11.899						T__				m_e		
GRA1	91.75		P	07:17:16.888	-0.9	271.1		4.62		TAS		137.3	2.34	m_e	mb	5.9
GRA1	91.75		S	07:28:00.504	-15.9					T__				m_e		
GRA1	91.75		L	07:54:39.401						T__		3068.1	21.40	a_e	Ms	5.7
GTTG	90.93		P	07:17:12.403	0.8	271.1		4.62		TAS		46.0	1.44	m_e	MBB	6.4
HLG	89.70		S	07:27:47.616	1.1					T__				m_e		
IBBN	89.57		P	07:17:06.692	0.0	271.1		4.62		TAS		306.7	2.49	m_e	MBB	6.3
IBBN	89.57		S	07:27:47.616	-0.7					T__				m_e		
KAST	89.96		P	07:17:07.544	0.4	271.1		4.62		TAS		321.2	3.06	m_e	MBB	6.1
KAST	89.96		S	07:27:50.505	1.1					T__				m_e		
MANZ	92.32		P	07:17:18.459	-0.3	271.1		4.62		TAS		17.2	1.59	m_e	MBB	5.9
MANZ	92.32		S	07:27:45.473	2.7					T__				m_e		
MOX	91.98		P	07:17:17.687	-0.4	271.1		4.62		TAS		64.0	1.73	m_e	MBB	6.4
MOX	91.98		S	07:28:06.932	-10.6					T__				m_e		
MOX	91.98		L	07:58:02.698						T__		4151.5	18.90	a_e	Ms	5.9
NEUB	92.07		P	07:17:18.459	0.3	271.1		4.62		TAS		121.2	1.94	m_e	MBB	6.5
NEUB	92.07		S	07:28:02.615	4.3					T__				m_e		
NRDL	91.01		P	07:17:11.641	0.5	271.1		4.62		TAS		179.3	2.69	m_e	MBB	6.4
NRDL	91.01		S	07:27:59.790	3.0					T__				m_e		
PLN	92.33		P	07:17:19.232	0.7	271.1		4.62		TAS		21.3	1.54	m_e	MBB	5.9
PLN	92.33		S	07:27:42.616	2.8					T__				m_e		
RETH	90.56		P	07:17:10.735	-0.6	271.1		4.62		TAS		903.8	2.59	m_e	MBB	7.0
RGN	92.87		S	07:28:02.615						T__				m_e		

RJOB	92.85	P	07:17:21.254		271.1		4.62	TAS		14.9	0.96	m_e	MBB	6.4
RJOB	92.85	S	07:28:01.900	3.1				T__					m_e	
ROTZ	92.39	P	07:17:19.870	-0.0	271.1		4.62	TAS		16.4	1.53	m_e	MBB	5.8
ROTZ	92.39	S	07:27:51.187	-2.0				T__					m_e	
RUE	93.26	S	07:28:06.900					T__					m_e	
STU	90.43	P	07:17:09.180	0.5	271.1		4.62	TAS		236.6	1.74	m_e	MBB	6.6
STU	90.43	S	07:27:52.615	4.8				T__					m_e	
TANN	92.53	P	07:17:20.373	0.3	271.1		4.62	TAS		36.7	1.04	m_e	MBB	6.5
TANN	92.53	S	07:28:06.900	-2.2				T__					m_e	
TNS	89.96	P	07:17:07.712	0.7	271.1		4.62	TAS		82.7	1.72	m_e	MBB	6.3
TNS	89.96	S	07:27:41.902	1.7				T__					m_e	
UBBA	90.95	P	07:17:12.309	-0.2	271.1		4.62	TAS		122.6	2.59	m_e	MBB	6.3
UBBA	90.95	S	07:27:56.219	1.1				T__					m_e	
UBR	91.03	P	07:17:13.445		271.1		4.62	TAS		67.9	1.19	m_e	MBB	6.4
UBR	91.03	S	07:27:55.504	2.6				T__					m_e	
WET	92.85	P	07:17:20.952	0.3	271.1		4.62	TAS		33.1	1.01	m_e	MBB	6.4
WET	92.85	S	07:28:06.900	5.0				T__					m_e	
WLF	88.46	P	07:17:01.261	-0.9	271.1		4.62	TAS		113.7	1.24	m_e	MBB	6.5

Event 90331002 Turkey

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/03/31	11:30:13.20			37.3500	29.8700				10.0			31		16.28	21.55	m i ke	BGR
OrigID 90331008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90331008
Ms	3.9		BGR	90331008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	20.01		P	11:34:46.870	0.1	127.6		11.05		TAS				m_e		
BFO	19.17		P	11:34:37.320	2.0	127.6		11.05		TAS		173.7	1.22	m_e	mb	5.2
BRG	17.65		P	11:34:21.950	1.6	127.6		11.05		TAS		131.2	1.32	m_e	mb	4.9
BSEG	21.38		P	11:35:00.364	-0.3	127.6		11.05		TAS		82.3	0.90	m_e	mb	5.1
BUG	21.31		P	11:34:59.630	-1.6	127.6		11.05		TAS				m_e		
CLL	18.38		P	11:34:28.355	-0.2	127.6		11.05		TAS		61.3	1.36	m_e	mb	4.5
CLZ	19.98		P	11:34:46.431	-0.0	127.6		11.05		TAS				m_e		
FLT1	19.88		P	11:34:44.848	-0.2	127.6		11.05		TAS		58.5	1.01	m_e	mb	4.8
FUR	17.37		P	11:34:16.255	-0.4	127.6		11.05		TAS		191.8	1.34	m_e	mb	5.1
GEC2	16.44		P	11:34:05.426	-2.0	127.6		11.05		TAS		174.0	1.22	m_e	mb	5.1
GRA1	18.24		P	11:34:26.847	-0.5	127.6		11.05		TAS		48.7	1.13	m_e	mb	4.5
GRA1	18.24		L	11:42:36.069						T__		759.9	20.80	a_e	Ms	4.0
GTTG	19.99		P	11:34:46.827	0.1	127.6		11.05		TAS				m_e		
IBBN	21.55		P	11:35:03.000	-0.9	127.6		11.05		TAS		31.4	0.81	m_e	mb	4.8
KAST	20.58		P	11:34:52.783	-0.4	127.6		11.05		TAS				m_e		
MANZ	17.96		P	11:34:22.968	-1.3	127.6		11.05		TAS		18.6	1.47	m_e	mb	4.0

MOX	18.62	P	11:34:31.600	0.1	127.6	11.05	TAS	84.4	1.40	m_e	mb	4.8
MOX	18.62	L	11:41:06.914				T__	626.3	19.40	a_e	Ms	3.9
NEUB	18.89	P	11:34:33.777	-0.7	127.6	11.05	TAS			m_e		
NRDL	20.52	P	11:34:52.273	0.0	127.6	11.05	TAS	61.1	1.00	m_e	mb	4.9
PLN	18.25	P	11:34:27.227	-0.2	127.6	11.05	TAS	21.7	1.29	m_e	mb	4.1
RETH	21.02	P	11:34:57.842	-0.1	127.6	11.05	TAS		1.19	m_e		
RGN	20.60	P	11:34:51.386	1.9	127.6	11.05	TAS			m_e		
RJOB	16.28	P	11:34:05.347	0.5	127.6	11.05	TAS	59.6	1.32	m_e	mb	4.5
ROTZ	17.77	P	11:34:20.411	-1.8	127.6	11.05	TAS	43.9	2.03	m_e	mb	4.2
RUE	18.87	P	11:34:34.371	1.8	127.6	11.05	TAS	70.3	0.97	m_e	mb	4.9
STU	18.87	P	11:34:34.466	1.5	127.6	11.05	TAS			m_e		
TANN	18.05	P	11:34:24.650	-0.6	127.6	11.05	TAS	70.5	1.38	m_e	mb	4.6
TNS	20.03	P	11:34:46.375	-0.3	127.6	11.05	TAS			m_e		
UBBA	19.54	P	11:34:41.341	-0.4	127.6	11.05	TAS			m_e		
UBR	17.81	P	11:34:21.812	1.4	127.6	11.05	TAS	125.6	1.20	m_e	mb	4.9
WET	17.05	P	11:34:14.335	0.2	127.6	11.05	TAS	133.4	1.21	m_e	mb	4.9
WLF	21.05	P	11:34:57.581	0.9	127.6	11.05	TAS			m_e		