

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

(produced by SZO/BGR - HANNOVER)

December 2019 UPDATED 22.July 2021

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

Event 91201001 Northwestern Balkan Peninsula

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/01	03:03:49.50	0.65	0.82	43.2270	18.0810	10.0	7.8	33	5.0			19	299	4.13	9.62	m i ke	NEIC
OrigID 91201040																	

Magnitude	Err	Nsta	Author	OrigID
ML	4.1		BGR	91201007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	4.41		Pn	03:04:56.725	-0.5					T__				m_e	ML 3.6
BFO	8.51		Pn	03:05:53.239	-1.1					T__				m_e	
BUD	4.30		Pn	03:04:52.301	-1.6					T__				m_e	ML 4.3
FUR	6.86		Pn	03:05:30.868	-0.7					T__				m_e	ML 4.6
GEC2	6.39		Sn	03:06:33.996	-1.5					T__				m_e	
GEC2	6.39		Pn	03:05:25.304	0.7					T__				m_e	ML 4.0
GRA1	8.01		Pn	03:05:46.855	-0.2					T__				m_e	
KBA	5.10		Sn	03:06:04.513	-1.1					T__				m_e	
KBA	5.10		Pn	03:05:07.657	0.3					T__				m_e	ML 3.9
MANZ	7.91		Sn	03:07:11.938	0.2					T__				m_e	
MANZ	7.91		Pn	03:05:46.265	0.7					T__				m_e	ML 4.2
MOA	5.34		Sn	03:06:09.996	-0.7					T__				m_e	
MOA	5.34		Pn	03:05:10.677	0.4					T__				m_e	ML 3.9
MOX	8.64		Pn	03:05:55.878	0.4					T__				m_e	
OBKA	4.13		Sn	03:05:41.979	-0.4					T__				m_e	
OBKA	4.13		Pn	03:04:54.029	0.1					T__				m_e	ML 4.1
PSZ	4.86		Sn	03:05:55.397	0.6					T__				m_e	
PSZ	4.86		Pn	03:05:01.800	0.7					T__				m_e	ML 3.8
RJOB	5.84		Sn	03:06:23.588	0.5					T__				m_e	
RJOB	5.84		Pn	03:05:18.144	0.7					T__				m_e	ML 4.0
SOP	4.58		Pn	03:04:58.535	-0.6					T__				m_e	ML 4.1

TANN	8.16	Pn	03:05:49.963	1.2	T__	m_e		
TNS	9.62	Pn	03:06:08.784	-0.6	T__	m_e		
UBR	7.16	Pn	03:05:35.343	-0.4	T__	m_e ML	4.5	
WET	6.93	Sg	03:07:34.794	0.5	T__	m_e		
WET	6.93	Pn	03:05:33.024	0.9	T__	m_e ML	4.1	
WTTA	6.08	Sn	03:06:30.844	1.7	T__	m_e ML	4.3	

Event 91201007 Carlsberg Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/01	05:48:43.13			-4.2630	67.7920				33.0			24		71.60	75.67	m i ke	BGR
OrigID 91201013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	91201013
Ms	4.3		BGR	91201013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	74.00	P		06:00:16.998	-0.0	119.3		5.95		TAS		27.8	1.54	m_e mb	5.1
BFO	73.55	P		06:00:14.095		119.3		5.95		TAS		10.8	1.48	m_e mb	4.7
BRG	71.60	P		06:00:02.819	0.2	119.3		5.95		TAS		12.7	1.45	m_e mb	4.8
BSEG	75.08	P		06:00:22.838	0.0	119.3		5.95		TAS		14.9	1.38	m_e mb	4.8
BUG	75.55	P		06:00:26.144	0.2	119.3		5.95		TAS		8.1	0.89	m_e mb	4.9
CLL	72.33	P		06:00:07.118	0.1	119.3		5.95		TAS		39.5	1.62	m_e mb	5.3
CLZ	74.02	P		06:00:17.060	0.1	119.3		5.95		TAS		27.4	1.39	m_e mb	5.1
FLT1	73.80	P		06:00:15.312	0.3	119.3		5.95		TAS		17.3	1.37	m_e mb	4.9
FUR	71.73	P		06:00:03.261		119.3		5.95		TAS		30.9	1.00	m_e mb	5.4
GRA1	72.50	P		06:00:07.721		119.3		5.95		TAS		40.8	1.21	m_e mb	5.4
GRA1	72.50	L		06:31:31.648						T__		146.1	20.20	a_e Ms	4.2
GTTG	74.10	P		06:00:17.889	0.4	119.3		5.95		TAS		32.4	1.40	m_e mb	5.2
IBBN	75.67	P		06:00:26.901	-0.0	119.3		5.95		TAS		23.9	1.58	m_e mb	5.1
KAST	74.80	P		06:00:22.088	0.3	119.3		5.95		TAS		26.8	1.54	m_e mb	5.0
MANZ	72.15	P		06:00:06.101	-0.1	119.3		5.95		TAS		2.6	1.21	m_e mb	4.2
MOX	72.75	P		06:00:09.760	0.1	119.3		5.95		TAS		6.1	0.99	m_e mb	4.7
MOX	72.75	L		06:32:46.992						T__		182.4	18.80	a_e Ms	4.4
NEUB	72.94	P		06:00:10.883	0.2	119.3		5.95		TAS		29.1	1.35	m_e mb	5.2
RETH	75.00	P		06:00:22.612	-0.4	119.3		5.95		TAS		28.0	1.56	m_e mb	5.0
ROTZ	71.98	P		06:00:04.525	-0.2	119.3		5.95		TAS		2.4	1.31	m_e mb	4.2
RUE	72.54	P		06:00:08.185	0.1	119.3		5.95		TAS		12.3	0.84	m_e mb	5.1
STU	73.24	P		06:00:11.980		119.3		5.95		TAS		47.0	1.09	m_e mb	5.5
TANN	72.17	P		06:00:06.331	-0.3	119.3		5.95		TAS		68.2	2.22	m_e mb	5.4
TNS	74.33	P		06:00:19.257	-0.4	119.3		5.95		TAS		14.4	1.10	m_e mb	4.9
UBBA	73.73	P		06:00:15.645	0.3	119.3		5.95		TAS		20.8	1.53	m_e mb	4.9
UBR	72.19	P		06:00:06.258		119.3		5.95		TAS		66.3	1.21	m_e mb	5.6

Event 91201002 Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/01	06:04:21.96	2.94	0.54	41.6400	19.6570	48.9	31.1	140	10.0			9	338	6.10	9.09	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
ML	4.2		BGR	91201008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	6.34		Pn	06:05:53.756	-0.5					T__				m_e	ML 4.0
DAVA	8.98		Sn	06:08:10.057						T__				m_e	
DAVA	8.98		Pn	06:06:30.519	0.0					T__				m_e	ML 4.5
KBA	7.07		Pn	06:06:03.311	-1.0					T__				m_e	ML 4.2
MOA	7.30		Pn	06:06:08.281	0.9					T__				m_e	ML 4.1
OBKA	6.10		Pn	06:05:51.170	0.2					T__				m_e	ML 4.3
PART	8.45		Sn	06:07:57.260						T__				m_e	
RJOB	7.81		Pn	06:06:14.462	0.0					T__				m_e	
UBR	9.09		Pn	06:06:31.601	-0.5					T__				m_e	
WTTA	8.03		Sn	06:07:47.849						T__				m_e	
WTTA	8.03		Pn	06:06:17.954	0.5					T__				m_e	ML 4.5
ZUGS	8.47		Sn	06:07:58.714						T__				m_e	
ZUGS	8.47		Pn	06:06:23.851	0.4					T__				m_e	ML 4.0

Event 91202002 Andreanof Islands, Aleutian Islands, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/02	05:01:53.00			51.0300	-179.1200				33.0			30		74.28	81.35	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	91202008
Ms	5.9		BGR	91202008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	76.88		S	05:23:22.543	-0.7	6.1		10.66		TAS				m_e	
ASSE	76.88		P	05:13:42.053	0.1	6.6		5.51		TAS		490.4	2.31	m_e	mb 6.2
BFO	80.81		S	05:24:05.070	-1.3	6.1		10.66		TAS				a_e	
BFO	80.81		P	05:14:03.659	-0.1	6.6		5.51		TAS		77.5	1.26	m_e	mb 5.6
BRG	77.87		S	05:23:31.720	-1.6	6.1		10.66		TAS				a_e	
BRG	77.87		P	05:13:47.429	-0.1	6.6		5.51		TAS		51.9	0.97	m_e	mb 5.6
BSEG	75.11		S	05:23:04.633	0.6	6.1		10.66		TAS				m_e	
BSEG	75.11		P	05:13:32.542	-0.3	6.6		5.51		TAS		56.1	0.91	m_e	mb 5.6
BUG	77.76		S	05:23:33.270	-0.1	6.1		10.66		TAS				a_e	

BUG	77.76	P	05:13:46.705	0.0	6.6	5.51	TAS	89.8	1.25	m_e	mb	5.8
CLL	77.52	S	05:23:29.070	-0.7	6.1	10.66	TAS			a_e		
CLL	77.52	P	05:13:45.568	-0.4	6.6	5.51	TAS	42.7	0.89	m_e	mb	5.6
CLZ	77.19	S	05:23:26.620	-0.0	6.1	10.66	TAS			m_e		
CLZ	77.19	P	05:13:44.431	-0.3	6.6	5.51	TAS	97.7	1.01	m_e	mb	5.9
FLT1	76.64	S	05:23:20.520	-0.0	6.1	10.66	TAS			a_e		
FLT1	76.64	P	05:13:40.606	-0.3	6.6	5.51	TAS	73.5	1.11	m_e	mb	5.7
FUR	80.79	S	05:24:05.920	0.4	6.1	10.66	TAS			a_e		
FUR	80.79	P	05:14:03.556	-0.0	6.6	5.51	TAS	108.2	1.07	m_e	mb	5.8
GEC2	79.90	S	05:23:54.620	-0.7	6.1	10.66	TAS			a_e		
GEC2	79.90	P	05:13:59.317	-0.3	6.6	5.51	TAS	46.2	0.89	m_e	mb	5.4
GOR1	75.98	P	05:13:37.504	0.2	6.6	5.51	TAS	199.7	1.49	m_e	mb	6.0
GRA1	79.27	S	05:23:50.220	1.2	6.1	10.66	TAS			a_e		
GRA1	79.27	P	05:13:55.906	0.3	6.6	5.51	TAS	125.0	0.95	m_e	mb	5.9
GRA1	79.27	L	05:53:01.675				T__	5795.0	21.20	a_e	Ms	5.9
GTTG	77.51	S	05:23:30.770	0.6	6.1	10.66	TAS			a_e		
GTTG	77.51	P	05:13:45.878	0.1	6.6	5.51	TAS	89.6	0.96	m_e	mb	5.9
HLG	74.99	S	05:23:03.020	-0.1	6.1	10.66	TAS			a_e		
IBBN	76.88	S	05:23:22.720	-0.9	6.1	10.66	TAS			a_e		
IBBN	76.88	P	05:13:42.570	0.4	6.6	5.51	TAS	119.2	1.08	m_e	mb	5.9
KAST	77.94	S	05:23:35.620	0.5	6.1	10.66	TAS			a_e		
KAST	77.94	P	05:13:48.152	0.0	6.6	5.51	TAS	66.3	1.28	m_e	mb	5.6
MANZ	78.91	S	05:23:44.523	-0.4	6.1	10.66	TAS			m_e		
MANZ	78.91	P	05:13:53.528	0.1	6.6	5.51	TAS	10.0	0.99	m_e	mb	4.8
MOX	78.29	S	05:23:37.820	-0.6	6.1	10.66	TAS			a_e		
MOX	78.29	P	05:13:50.116	0.1	6.6	5.51	TAS	51.4	1.01	m_e	mb	5.6
MOX	78.29	L	05:52:32.081				T__	5386.3	20.80	a_e	Ms	5.9
NEUB	77.73	S	05:23:31.770	-0.5	6.1	10.66	TAS			a_e		
NEUB	77.73	P	05:13:47.119	-0.3	6.6	5.51	TAS	117.8	0.97	m_e	mb	6.0
PLN	78.41	S	05:23:39.747	0.2	6.1	10.66	TAS			m_e		
PLN	78.41	P	05:13:50.840	0.1	6.6	5.51	TAS	17.3	1.05	m_e	mb	5.1
RETH	76.36	P	05:13:39.572	0.4	6.6	5.51	TAS	103.5	1.39	m_e	mb	5.8
RGN	74.28	S	05:22:55.470	0.9	6.1	10.66	TAS			a_e		
RJOB	81.08	S	05:24:08.820	0.5	6.1	10.66	TAS			a_e		
RJOB	81.08	P	05:14:05.416		6.6	5.51	TAS	40.9	0.87	m_e	mb	5.5
ROTZ	79.12	S	05:23:47.110	-0.1	6.1	10.66	TAS			m_e		
ROTZ	79.12	P	05:13:54.768	0.3	6.6	5.51	TAS	14.9	1.07	m_e	mb	4.9
RUE	76.30	S	05:23:16.270	0.0	6.1	10.66	TAS			a_e		
RUE	76.30	P	05:13:38.745	-0.4	6.6	5.51	TAS	73.0	0.78	m_e	mb	5.9
STU	80.32	S	05:24:00.970	0.1	6.1	10.66	TAS			a_e		
STU	80.32	P	05:14:00.868	-0.3	6.6	5.51	TAS	123.4	0.96	m_e	mb	5.8
TANN	78.45	S	05:23:41.042	1.1	6.1	10.66	TAS			m_e		
TANN	78.45	P	05:13:51.047	0.0	6.6	5.51	TAS	51.6	1.14	m_e	mb	5.6
TNS	78.92	S	05:23:45.420	-0.3	6.1	10.66	TAS			a_e		
TNS	78.92	P	05:13:53.528	0.4	6.6	5.51	TAS	64.8	0.97	m_e	mb	5.6
UBBA	78.23	S	05:23:37.970	-0.1	6.1	10.66	TAS			a_e		
UBBA	78.23	P	05:13:49.600	0.1	6.6	5.51	TAS	215.6	2.07	m_e	mb	5.9
UBR	81.35	S	05:24:12.020	0.1	6.1	10.66	TAS			a_e		
UBR	81.35	P	05:14:06.877		6.6	5.51	TAS	62.2	1.32	m_e	mb	5.5

WET	79.68	S	05:23:54.320	1.2	6.1	10.66	TAS							a_e	
WET	79.68	P	05:13:57.973	-0.4	6.6	5.51	TAS	50.5	1.06	m_e	mb				5.4
WLF	79.58	S	05:23:54.220	0.9	6.1	10.66	TAS							a_e	
WLF	79.58	P	05:13:57.353	0.4	6.6	5.51	TAS	95.9	1.04	m_e	mb				5.7

Event 91202007 Nicobar Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/02	17:53:25.35			7.7500	94.3600				166.1			29		77.99	82.99	m i ke	BGR
91202013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91202013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	80.06		P	18:05:16.265	0.2	87.7		5.52		TAS		22.6	0.99	a_e	mb 5.1
BFO	81.63		P	18:05:24.515	-0.1	87.7		5.52		TAS		11.8	0.76	a_e	mb 5.1
BRG	77.99		P	18:05:05.465	0.3	87.7		5.52		TAS		12.4	0.73	a_e	mb 5.1
BSEG	80.28		P	18:05:17.915	-0.2	87.7		5.52		TAS		22.0	0.94	a_e	mb 5.1
BUG	82.19		P	18:05:27.815		87.7		5.52		TAS		23.9	0.65	a_e	mb 5.5
CLL	78.59		P	18:05:08.315	-0.2	87.7		5.52		TAS		22.3	1.31	a_e	mb 5.0
CLZ	80.24		P	18:05:17.565	-0.2	87.7		5.52		TAS		26.9	0.59	a_e	mb 5.4
FUR	79.67		P	18:05:14.215	0.0	87.7		5.52		TAS		22.5	0.76	a_e	mb 5.2
GEC2	78.06		P	18:05:06.015	-0.1	87.7		5.52		TAS		28.8	0.93	m_e	mb 5.4
GOR1	79.68		P	18:05:14.515	0.5	87.7		5.52		TAS		31.9	0.98	a_e	mb 5.2
GRA1	79.70		P	18:05:15.165		87.7		5.52		TAS		24.5	0.93	a_e	mb 5.1
GRA1	79.70		pP	18:05:56.020	0.1					T__				m_e	
GTTG	80.50		P	18:05:18.965	-0.2	87.7		5.52		TAS		15.1	0.82	a_e	mb 5.0
IBBN	81.85		P	18:05:26.115		87.7		5.52		TAS		44.8	0.70	a_e	mb 5.7
KAST	81.48		P	18:05:24.115	-0.3	87.7		5.52		TAS		11.9	0.90	a_e	mb 4.9
MANZ	79.13		P	18:05:12.115	-0.2	87.7		5.52		TAS		9.1	1.36	a_e	mb 4.6
MOX	79.46		P	18:05:13.315		87.7		5.52		TAS		9.2	0.68	a_e	mb 4.9
NEUB	79.36		P	18:05:12.615		87.7		5.52		TAS		22.9	0.76	a_e	mb 5.3
PLN	79.11		P	18:05:11.365		87.7		5.52		TAS		2.9	0.84	a_e	mb 4.3
POSS	79.93		P	18:05:15.737	0.1	87.7		5.52		TAS				m_e	
RETH	80.86		P	18:05:20.765	0.0	87.7		5.52		TAS		21.9	1.08	a_e	mb 5.1
ROTZ	79.06		P	18:05:11.665		87.7		5.52		TAS		4.4	0.89	a_e	mb 4.5
RUE	78.16		P	18:05:06.165	-0.2	87.7		5.52		TAS		98.5	0.61	a_e	mb 6.1
STU	81.04		P	18:05:21.515	0.1	87.7		5.52		TAS				a_e	
TANN	78.91		P	18:05:10.415	-0.1	87.7		5.52		TAS		15.0	1.34	a_e	mb 4.8
TNS	81.49		P	18:05:24.265	0.0	87.7		5.52		TAS		11.9	0.84	a_e	mb 5.0
UBBA	80.48		P	18:05:18.597	-0.0	87.7		5.52		TAS		4.8	0.81	m_e	mb 4.5
UBR	80.46		P	18:05:18.315	0.1	87.7		5.52		TAS		15.1	0.59	a_e	mb 5.1
WET	78.61		P	18:05:08.915	-0.0	87.7		5.52		TAS		14.5	0.65	a_e	mb 5.2
WLF	82.99		P	18:05:32.465		87.7		5.52		TAS		14.7	1.13	a_e	mb 5.1

Event 91202009 Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/02	23:22:58.19	0.92	0.87	41.1470	19.9010	14.5	12.2	15	10.0			13	315	6.77	10.91	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
ML	4.1		BGR	91202015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BE1	9.17		Pn	23:25:08.737	-0.4					T__				m_e	
BFO	10.91		Pn	23:25:30.533	-2.2					T__				m_e	
CKRC	8.63		Pn	23:25:02.127	0.2					T__				m_e	
GEC2	8.86		Sn	23:26:41.358	0.7					T__				m_e	
GEC2	8.86		Pn	23:25:04.136	-0.8					T__				m_e	
KHC	9.14		Pn	23:25:09.037	0.2					T__				m_e	
KRUC	8.29		Pn	23:24:58.321	1.0					T__				m_e	
KW1	8.70		Pn	23:25:03.365	0.6					T__				m_e	
OBER	9.30		Sn	23:26:51.523	0.3					T__				m_e	
PART	8.94		Sn	23:26:41.812	-0.8					T__				m_e	
PART	8.94		Pn	23:25:06.765	0.7					T__				m_e	ML 4.3
PRU	9.60		Pn	23:25:16.325	1.3					T__				m_e	
PSZ	6.77		Sn	23:25:49.859	-1.2					T__				m_e	
PSZ	6.77		Pn	23:24:36.937	0.2					T__				m_e	ML 4.2
UBR	9.57		Pn	23:25:13.913	-0.7					T__				m_e	
ZUGS	8.95		Sn	23:26:43.515	0.6					T__				m_e	
ZUGS	8.95		Pn	23:25:06.389	0.2					T__				m_e	ML 3.8

Event 91203001 Near east coast of eastern Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/03	01:18:04.04			36.7280	140.2440				33.0			22		79.69	85.11	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91203007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	81.18		P	01:30:14.846	-0.5	38.9		5.20		TAS		9.8	0.91	m_e mb	4.8
BFO	85.11		P	01:30:34.920		38.9		5.20		TAS		9.5	1.00	m_e mb	5.0
BRG	80.83		P	01:30:13.125	0.2	38.9		5.20		TAS		6.6	0.89	m_e mb	4.7
BSEG	79.90		P	01:30:08.439	-0.1	38.9		5.20		TAS		7.6	1.04	m_e mb	4.6
CLL	80.89		P	01:30:12.902	-0.1	38.9		5.20		TAS		19.0	0.98	m_e mb	5.1

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CLZ	81.52	P	01:30:16.912	-0.0	38.9	5.20	TAS	12.0	0.97	m_e	mb	5.0
FLT1	80.81	P	01:30:12.457	0.1	38.9	5.20	TAS	12.8	0.93	m_e	mb	4.9
FUR	84.03	P	01:30:29.683		38.9	5.20	TAS	15.2	0.86	m_e	mb	5.2
GEC2	82.47	P	01:30:21.441		38.9	5.20	TAS	6.0	0.94	m_e	mb	4.7
GRA1	82.86	P	01:30:24.040		38.9	5.20	TAS	14.6	0.87	m_e	mb	5.2
GTTG	81.91	P	01:30:18.768	0.0	38.9	5.20	TAS	13.8	1.01	m_e	mb	5.0
IBBN	82.14	P	01:30:19.735	0.3	38.9	5.20	TAS	20.4	1.05	m_e	mb	5.2
MANZ	82.27	P	01:30:20.625	-0.0	38.9	5.20	TAS	1.3	0.77	m_e	mb	4.1
MOX	81.96	P	01:30:18.917	0.4	38.9	5.20	TAS	10.8	1.29	m_e	mb	4.8
NEUB	81.47	P	01:30:16.382	0.4	38.9	5.20	TAS	15.3	0.93	m_e	mb	5.0
RETH	81.20	P	01:30:14.870	-0.5	38.9	5.20	TAS	8.8	1.00	m_e	mb	4.7
ROTZ	82.40	P	01:30:21.590		38.9	5.20	TAS	5.1	1.50	m_e	mb	4.4
RUE	79.69	P	01:30:06.996	-0.0	38.9	5.20	TAS	14.2	0.63	m_e	mb	5.0
STU	84.41	P	01:30:31.500		38.9	5.20	TAS	23.5	0.49	m_e	mb	5.7
TNS	83.55	P	01:30:27.050	-0.4	38.9	5.20	TAS	4.8	0.89	m_e	mb	4.7
WET	82.60	P	01:30:22.617		38.9	5.20	TAS	10.7	1.26	m_e	mb	4.9
WLF	84.87	P	01:30:34.257		38.9	5.20	TAS	20.5	1.47	m_e	mb	5.1

Event 91203002 Near coast of northern Chile

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/03	08:46:36.40			-18.3770	-70.5900				32.0			12		95.55	100.67	m i ke	NEIC
91203041																	

Magnitude Err Nsta Author OrigID
Ms 5.6 BGR 91203008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	99.08		Pdiff	09:00:12.090	-0.7	251.9		4.18		TAS				a_e	
ASSE	99.08		pPdiff	09:00:25.526	0.2	250.7		4.46		TAS				m_e	
ASSE	99.08		sPdiff	09:00:30.490	0.1	251.2		4.52		TAS				m_e	
BFO	96.41		Pdiff	08:59:58.840	-2.8	251.9		4.18		TAS				a_e	
BRG	100.67		Pdiff	09:00:18.990	-0.5	251.9		4.18		TAS				a_e	
BRG	100.67		pPdiff	09:00:32.374		250.7		4.46		TAS				m_e	
BSEG	99.44		Pdiff	09:00:13.040	-1.3	251.9		4.18		TAS				a_e	
BUG	96.86		Pdiff	09:00:01.290	-2.2	251.9		4.18		TAS				a_e	
BUG	96.86		sPdiff	09:00:20.987	0.1	251.2		4.52		TAS				m_e	
CLL	100.22		Pdiff	09:00:16.840	-0.7	251.9		4.18		TAS				a_e	
CLL	100.22		sPdiff	09:00:36.127	0.2	251.2		4.52		TAS				m_e	
CLZ	98.81		Pdiff	09:00:10.640	-1.1	251.9		4.18		TAS				a_e	
CLZ	98.81		pPdiff	09:00:23.851	-0.1	250.7		4.46		TAS				m_e	
CLZ	98.81		sPdiff	09:00:29.647	-0.2	251.2		4.52		TAS				m_e	
FLT1	99.47		Pdiff	09:00:13.140	-1.3	251.9		4.18		TAS				a_e	
FUR	98.21		Pdiff	09:00:07.590	-1.6	251.9		4.18		TAS				a_e	
GEC2	99.95		Pdiff	09:00:15.240	-1.3	251.9		4.18		TAS				a_e	
GEC2	99.95		pPdiff	09:00:28.282		250.7		4.46		TAS				m_e	

GEC2	99.95	sPdiff	09:00:33.842	251.2	4.52	TAS												m_e
GRA1	98.65	Pdiff	09:00:09.740	-1.3 251.9	4.18	TAS												a_e
GRA1	98.65	L	09:41:28.101			T__	1730.1	22.00										a_e Ms 5.5
GTTG	98.48	Pdiff	09:00:09.040	-1.3 251.9	4.18	TAS												a_e
IBBN	97.44	Pdiff	09:00:04.090	-1.9 251.9	4.18	TAS												a_e
IBBN	97.44	pPdiff	09:00:17.637	-0.1 250.7	4.46	TAS												m_e
IBBN	97.44	sPdiff	09:00:22.785	0.4 251.2	4.52	TAS												m_e
KAST	97.45	Pdiff	09:00:03.940	-2.1 251.9	4.18	TAS												a_e
KAST	97.45	pPdiff	09:00:17.754	-0.4 250.7	4.46	TAS												m_e
KAST	97.45	sPdiff	09:00:23.328	0.3 251.2	4.52	TAS												m_e
MANZ	99.29	Pdiff	09:00:12.790	-0.9 251.9	4.18	TAS												m_e
MANZ	99.29	pPdiff	09:00:25.651	250.7	4.46	TAS												m_e
MOX	99.19	Pdiff	09:00:11.395	6.0 251.9	4.18	TAS												m_e
MOX	99.19	L	09:41:31.681			T__	2974.6	21.60										a_e Ms 5.8
NEUB	99.45	Pdiff	09:00:13.390	-1.0 251.9	4.18	TAS												a_e
PLN	99.47	Pdiff	09:00:13.440	-1.0 251.9	4.18	TAS												a_e
PLN	99.47	sPdiff	09:00:31.996	251.2	4.52	TAS												m_e
RETH	98.51	Pdiff	09:00:09.490	-1.0 251.9	4.18	TAS												a_e
ROTZ	99.28	Pdiff	09:00:12.690	-1.0 251.9	4.18	TAS												a_e
ROTZ	99.28	sPdiff	09:00:31.569	251.2	4.52	TAS												m_e
STU	97.10	Pdiff	09:00:02.190	-2.4 251.9	4.18	TAS												a_e
STU	97.10	pPdiff	09:00:16.043	250.7	4.46	TAS												m_e
TANN	99.63	Pdiff	09:00:14.540	-0.6 251.9	4.18	TAS												a_e
TANN	99.63	pPdiff	09:00:27.353	250.7	4.46	TAS												m_e
TNS	97.13	Pdiff	09:00:02.740	-1.9 251.9	4.18	TAS												a_e
TNS	97.13	sPdiff	09:00:21.810	251.2	4.52	TAS												m_e
UBBA	98.27	Pdiff	09:00:08.040	-1.4 251.9	4.18	TAS												a_e
UBBA	98.27	pPdiff	09:00:21.656	250.7	4.46	TAS												m_e
UBBA	98.27	sPdiff	09:00:26.729	251.2	4.52	TAS												m_e
UBR	97.31	Pdiff	09:00:03.690	-1.8 251.9	4.18	TAS												a_e
WET	99.52	Pdiff	09:00:13.490	-1.2 251.9	4.18	TAS												a_e
WET	99.52	pPdiff	09:00:27.084	250.7	4.46	TAS												m_e
WET	99.52	sPdiff	09:00:32.720	251.2	4.52	TAS												m_e
WLF	95.55	Pdiff	08:59:55.690	-2.4 251.9	4.18	TAS												a_e
WLF	95.55	pPdiff	09:00:09.541	250.7	4.46	TAS												m_e

Event 91203003 Southern Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/03	09:46:38.51			36.8540	21.9670				11.0				6	12.37	15.66	m i ke	BGR
91203009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.2		BGR	91203009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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GEC2	13.42	P	09:49:56.646	144.8	11.44	TAS											m_e
GRA1	15.01	P	09:50:16.967	144.8	11.44	TAS											m_e
MOA	12.37	P	09:49:47.579	144.8	11.44	TAS											m_e
MOX	15.66	P	09:50:25.386	144.8	11.44	TAS					25.2	1.36	m_e mb			4.2	
ROTZ	14.71	P	09:50:12.919	144.8	11.44	TAS											m_e
WET	13.95	P	09:50:03.771	144.8	11.44	TAS											m_e

Event 91203007 New Ireland, Papua New Guinea, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/03	22:23:12.80			-3.3400	150.7670				10.0					121.70	122.50	m i ke	NEIC
	91203046																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	122.50		L	23:37:51.020						T__		704.3	20.70	a_e Ms	5.3
MOX	121.70		L	23:38:19.117						T__		625.6	20.20	a_e Ms	5.2

Event 91203008 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/03	23:25:14.05			43.2370	146.4380				33.0				38	76.17	82.72	m i ke	BGR
	91203014																

Magnitude Err Nsta Author OrigID

mb	5.3		BGR	91203014
Ms	5.4		BGR	91203014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	80.00		P	23:37:18.244	0.5	31.5		5.46		TAS		38.4	1.67	m_e mb	5.1
ASSE	77.61		P	23:37:05.159	-0.3	31.5		5.46		TAS		17.1	1.00	m_e mb	5.1
BALST	82.72		P	23:37:32.254		31.5		5.46		TAS		48.7	0.88	m_e mb	5.7
BFO	81.65		P	23:37:28.188	-0.8	31.5		5.46		TAS		16.4	0.80	m_e mb	5.2
BRG	77.57		P	23:37:04.568	0.2	31.5		5.46		TAS		10.9	0.85	m_e mb	5.0
BSEG	76.17		P	23:36:57.273	0.0	31.5		5.46		TAS		24.7	0.92	m_e mb	5.3
BUG	79.27		P	23:37:13.998	0.5	31.5		5.46		TAS		39.2	0.96	m_e mb	5.4
CLL	77.53		P	23:37:04.199	-0.1	31.5		5.46		TAS		29.7	0.84	m_e mb	5.5
CLZ	77.95		P	23:37:07.325	-0.1	31.5		5.46		TAS		18.5	0.70	m_e mb	5.3
DAVA	82.03		P	23:37:30.558	-0.7	31.5		5.46		TAS		28.7	0.93	m_e mb	5.4
FLT1	77.25		P	23:37:02.677	-0.6	31.5		5.46		TAS		35.8	0.98	m_e mb	5.5

FUR	80.79	P	23:37:23.136	0.8	31.5	5.46	TAS	38.9	0.93	m_e	mb	5.4
GEC2	79.35	P	23:37:15.006	0.4	31.5	5.46	TAS	15.1	1.16	m_e	mb	4.9
GOR1	76.67	P	23:37:00.260	-0.6	31.5	5.46	TAS	101.7	1.78	m_e	mb	5.7
GRA1	79.50	P	23:37:16.021	-0.0	31.5	5.46	TAS	50.9	0.82	m_e	mb	5.5
GRA1	79.50	L	00:17:18.524				T__	2029.8	18.20	a_e	Ms	5.5
GTTG	78.33	P	23:37:09.077	-0.4	31.5	5.46	TAS	67.4	1.10	m_e	mb	5.7
IBBN	78.36	P	23:37:09.021	-0.3	31.5	5.46	TAS	63.1	0.94	m_e	mb	5.7
KAST	79.12	P	23:37:12.879	0.2	31.5	5.46	TAS	32.6	1.05	m_e	mb	5.3
KBA	80.97	P	23:37:24.148	1.4	31.5	5.46	TAS	48.0	1.02	m_e	mb	5.5
MANZ	78.95	P	23:37:12.645	0.7	31.5	5.46	TAS	4.2	0.80	m_e	mb	4.5
MOA	79.98	P	23:37:17.855	-0.1	31.5	5.46	TAS	16.1	1.04	m_e	mb	4.9
MOX	78.56	P	23:37:10.808	0.8	31.5	5.46	TAS	34.9	1.18	m_e	mb	5.3
MOX	78.56	L	00:16:40.423				T__	1191.4	19.90	a_e	Ms	5.2
NEUB	78.04	P	23:37:07.277	-0.2	31.5	5.46	TAS	28.4	0.81	m_e	mb	5.4
PLN	78.51	P	23:37:09.862	0.0	31.5	5.46	TAS	5.6	0.99	m_e	mb	4.5
PLONS	82.40	P	23:37:30.629		31.5	5.46	TAS	18.9	0.94	m_e	mb	5.2
RETH	77.50	P	23:37:05.030	-0.5	31.5	5.46	TAS	57.0	1.51	m_e	mb	5.5
ROTZ	79.10	P	23:37:14.106	-0.2	31.5	5.46	TAS	5.4	0.97	m_e	mb	4.5
RUE	76.29	P	23:36:58.078	0.2	31.5	5.46	TAS	41.5	0.95	m_e	mb	5.5
SLE	82.08	P	23:37:28.526	-1.0	31.5	5.46	TAS	40.8	0.72	m_e	mb	5.7
STU	80.98	P	23:37:24.492	-1.0	31.5	5.46	TAS	54.1	0.80	m_e	mb	5.6
SULZ	82.42	P	23:37:30.817		31.5	5.46	TAS	206.5	1.13	m_e	mb	6.2
TANN	78.47	P	23:37:09.580	0.3	31.5	5.46	TAS	24.6	1.46	m_e	mb	5.1
TNS	79.96	P	23:37:17.990	0.6	31.5	5.46	TAS	69.7	1.52	m_e	mb	5.4
UBBA	78.95	P	23:37:13.342	-0.6	31.5	5.46	TAS	9.2	0.61	m_e	mb	5.0
UBR	81.61	P	23:37:26.169	-1.2	31.5	5.46	TAS	7.4	0.80	m_e	mb	4.9
WET	79.39	P	23:37:15.539	-0.3	31.5	5.46	TAS	25.3	0.86	m_e	mb	5.3
WLF	81.17	P	23:37:26.037	0.9	31.5	5.46	TAS	18.9	0.97	m_e	mb	5.1
WTTA	81.43	P	23:37:26.388	1.1	31.5	5.46	TAS	24.1	0.80	m_e	mb	5.3

Event 91204002 Near east coast of eastern Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/04	01:38:54.72		38.0000	142.2500				33.0				18		80.45	85.03	m i ke	BGR
91204008																	

Magnitude Err Nsta Author
 mb 4.8 BGR

OrigID
 91204008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	84.79		P	01:51:28.298		36.5		5.19		TAS		16.0	1.08	m_e	mb	5.2
BRG	80.56		P	01:51:06.486	0.2	36.5		5.19		TAS		4.4	0.83	m_e	mb	4.5
CLL	80.59		P	01:51:06.367	0.1	36.5		5.19		TAS		10.7	0.86	m_e	mb	4.9
CLZ	81.16		P	01:51:10.554	0.6	36.5		5.19		TAS		14.8	1.23	m_e	mb	4.9
DAVA	85.03		P	01:51:29.180		36.5		5.19		TAS		11.1	0.92	m_e	mb	5.1
FLT1	80.45		P	01:51:05.772	0.8	36.5		5.19		TAS		10.1	0.86	m_e	mb	4.8

FUR	83.77	P	01:51:23.830	36.5	5.19	TAS	21.6	0.77	m_e	mb	5.5
GEC2	82.24	P	01:51:14.822	36.5	5.19	TAS	2.8	0.58	m_e	mb	4.6
GRA1	82.56	P	01:51:17.782	36.5	5.19	TAS	16.9	0.95	m_e	mb	5.2
KBA	83.77	P	01:51:23.945	36.5	5.19	TAS	3.5	0.84	m_e	mb	4.6
MANZ	81.98	P	01:51:14.224	-0.8	36.5	5.19	1.0	0.82	m_e	mb	4.0
MOA	82.78	P	01:51:18.801	36.5	5.19	TAS	12.2	1.37	m_e	mb	5.0
MOX	81.65	P	01:51:12.646	0.2	36.5	5.19	10.1	1.50	m_e	mb	4.7
NEUB	81.15	P	01:51:09.518	-0.1	36.5	5.19	10.0	0.73	m_e	mb	4.9
RETH	80.81	P	01:51:07.944	0.2	36.5	5.19	9.1	1.00	m_e	mb	4.8
ROTZ	82.12	P	01:51:15.023	36.5	5.19	TAS	1.0	0.77	m_e	mb	4.0
STU	84.09	P	01:51:25.260	36.5	5.19	TAS	36.2	0.98	m_e	mb	5.6
WET	82.34	P	01:51:15.996	36.5	5.19	TAS	4.2	0.95	m_e	mb	4.5

Event 91204004 Northern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/04	04:53:52.27			0.9400	98.6600				33.0			20		85.93	90.92	m i ke	BGR
OrigID 91204010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	91204010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	88.02	P		05:06:38.803	-0.1	91.5		4.77		TAS		16.6	1.08	m_e	mb	5.3
BFO	89.53	P		05:06:45.266		91.5		4.77		TAS		4.4	0.81	m_e	mb	4.7
BRG	85.93	P		05:06:28.924	0.2	91.5		4.77		TAS		5.6	0.88	m_e	mb	4.7
BUG	90.14	P		05:06:49.090	0.1	91.5		4.77		TAS		14.4	1.12	m_e	mb	5.1
CLL	86.55	P		05:06:31.646	0.5	91.5		4.77		TAS		13.3	1.29	m_e	mb	4.9
CLZ	88.21	P		05:06:39.755	0.1	91.5		4.77		TAS		18.1	1.17	m_e	mb	5.3
FLT1	87.68	P		05:06:36.847	-0.0	91.5		4.77		TAS		8.2	0.92	m_e	mb	5.0
GEC2	85.97	P		05:06:28.938		91.5		4.77		TAS		5.8	0.92	m_e	mb	4.7
GRA1	87.63	P		05:06:37.233		91.5		4.77		TAS		9.0	0.77	m_e	mb	5.2
GTTG	88.46	P		05:06:41.478	-0.1	91.5		4.77		TAS		12.9	0.98	m_e	mb	5.2
KAST	89.43	P		05:06:45.476		91.5		4.77		TAS		65.3	2.72	m_e	mb	5.4
MANZ	87.06	P		05:06:34.835		91.5		4.77		TAS		2.2	0.99	m_e	mb	4.2
MOX	87.40	P		05:06:35.802	-0.2	91.5		4.77		TAS		15.1	1.43	m_e	mb	4.9
NEUB	87.32	P		05:06:35.364	0.3	91.5		4.77		TAS		16.1	0.87	m_e	mb	5.2
PLN	87.05	P		05:06:34.380	-0.8	91.5		4.77		TAS		3.4	1.17	m_e	mb	4.4
ROTZ	86.99	P		05:06:34.659		91.5		4.77		TAS		1.7	1.03	m_e	mb	4.1
RUE	86.13	P		05:06:30.235		91.5		4.77		TAS		47.3	1.05	m_e	mb	5.5
TANN	86.85	P		05:06:33.236	-0.1	91.5		4.77		TAS		3.8	1.00	m_e	mb	4.5
TNS	89.42	P		05:06:45.677		91.5		4.77		TAS		17.1	1.01	m_e	mb	5.2
UBR	88.33	P		05:06:40.313		91.5		4.77		TAS		206.2	3.33	m_e	mb	5.9
WET	86.53	P		05:06:31.790		91.5		4.77		TAS		5.0	0.81	m_e	mb	4.7
WLF	90.92	P		05:06:53.071		91.5		4.77		TAS		6.2	0.91	m_e	mb	4.9

Event 91204005 Afghanistan-Tajikistan border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/04	08:46:24.63			37.3800	70.1900				146.0	2.6		23		41.57	46.68	m i ke	BGR
OrigID 91204011																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91204011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	41.57		P	08:53:58.539	0.1	85.0		8.01		TAS		21.1	0.84	m_e mb	4.9
BSEG	43.62		P	08:54:15.080	-0.2	85.0		8.01		TAS		24.2	0.77	m_e mb	5.0
BUG	45.70		P	08:54:31.262		85.0		8.01		TAS		27.2	1.13	m_e mb	5.2
CLL	42.14		P	08:54:02.680	-0.3	85.0		8.01		TAS		12.3	0.78	m_e mb	4.7
CLL	42.14		pP	08:54:35.036	0.2	82.4		8.11		TAS				m_e	
CLZ	43.73		P	08:54:15.783	0.3	85.0		8.01		TAS		25.5	0.91	m_e mb	5.0
CLZ	43.73		pP	08:54:48.132		82.4		8.11		TAS				m_e	
FLT1	43.16		P	08:54:10.752	0.7	85.0		8.01		TAS		53.2	0.75	m_e mb	5.3
FLT1	43.16		pP	08:54:43.209		82.4		8.11		TAS				m_e	
GEC2	41.90		P	08:54:00.530	-0.1	85.0		8.01		TAS		8.1	1.11	m_e mb	4.4
GOR1	43.08		P	08:54:10.795	0.6	85.0		8.01		TAS		41.5	1.03	m_e mb	5.1
GRA1	43.42		P	08:54:13.685	-0.0	85.0		8.01		TAS		38.2	1.45	m_e mb	4.9
GRA1	43.42		pP	08:54:46.143		82.4		8.11		TAS				m_e	
GTTG	44.01		P	08:54:18.253	-0.2	85.0		8.01		TAS		40.9	1.01	m_e mb	5.1
IBBN	45.29		P	08:54:28.292		85.0		8.01		TAS		33.3	0.73	m_e mb	5.4
MANZ	42.81		P	08:54:08.799	-0.5	85.0		8.01		TAS		3.3	0.98	m_e mb	4.0
MOX	43.06		P	08:54:09.909	-0.4	85.0		8.01		TAS		11.2	0.97	m_e mb	4.6
MOX	43.06		pP	08:54:42.874		82.4		8.11		TAS				m_e	
NEUB	42.92		P	08:54:09.305	0.4	85.0		8.01		TAS		39.1	0.99	m_e mb	5.1
PLN	42.73		P	08:54:07.560	0.5	85.0		8.01		TAS		5.1	1.13	m_e mb	4.2
RETH	44.27		P	08:54:19.837	-0.3	85.0		8.01		TAS		22.8	1.43	m_e mb	4.7
RGN	41.84		P	08:54:01.756		85.0		8.01		TAS		259.0	1.12	m_e mb	5.9
ROTZ	42.77		P	08:54:08.337	0.0	85.0		8.01		TAS		4.3	1.15	m_e mb	4.1
ROTZ	42.77		pP	08:54:40.886	0.1	82.4		8.11		TAS				m_e	
RUE	41.60		P	08:53:58.406	-0.2	85.0		8.01		TAS		44.2	0.79	m_e mb	5.2
STU	44.86		P	08:54:24.691		85.0		8.01		TAS		36.5	0.40	m_e mb	5.7
TANN	42.55		P	08:54:05.913	0.4	85.0		8.01		TAS		8.0	0.92	m_e mb	4.4
TANN	42.55		pP	08:54:38.770	0.3	82.4		8.11		TAS				m_e	
TNS	45.13		P	08:54:26.668		85.0		8.01		TAS		10.8	0.99	m_e mb	4.7
UBBA	44.07		P	08:54:18.282	0.1	85.0		8.01		TAS		54.4	1.78	m_e mb	5.0
UBBA	44.07		pP	08:54:50.378		82.4		8.11		TAS				m_e	
WLF	46.68		P	08:54:39.255		85.0		8.01		TAS		20.6	0.99	m_e mb	5.2
WLF	46.68		pP	08:55:12.359		82.4		8.11		TAS				m_e	

Event 91204009 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/04	20:10:03.10			-19.0200	169.5900				260.0	3.1		28		141.64	147.05	m i ke	EMSC
OrigID 91204041																	

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	143.06		PKPbc	20:29:02.164	0.1	34.7		3.12		TAS					a_e
BFO	147.05		PKPbc	20:29:14.514		34.7		3.12		TAS					m_e
BFO	147.05		pPKPbc	20:30:21.788		35.6		3.45		TAS					m_e
BRG	142.82		PKPbc	20:29:01.264	-0.3	34.7		3.12		TAS					a_e
BSEG	141.67		PKPbc	20:28:57.114	0.1	34.7		3.12		TAS					a_e
BUG	144.77		PKPbc	20:29:07.514	0.5	34.7		3.12		TAS					a_e
BUG	144.77		pPKPbc	20:30:13.651		35.6		3.45		TAS					m_e
CLL	142.86		PKPbc	20:29:02.521	1.0	34.7		3.12		TAS					m_e
CLZ	143.40		PKPbc	20:29:04.514	-0.3	34.7		3.12		TAS					a_e
FLT1	142.69		PKPbc	20:29:02.714	-0.5	34.7		3.12		TAS					a_e
FUR	146.02		PKPbc	20:29:12.014	-0.6	34.7		3.12		TAS					a_e
FUR	146.02		pPKPbc	20:30:18.579		35.6		3.45		TAS					m_e
GEC2	144.45		PKPbc	20:29:06.964	0.5	34.7		3.12		TAS					a_e
GRA1	144.83		PKPbc	20:29:08.614	0.0	34.7		3.12		TAS					a_e
GRA1	144.83		pPKPbc	20:30:15.002		35.6		3.45		TAS					m_e
GTTG	143.79		PKPbc	20:29:04.864	-0.1	34.7		3.12		TAS					a_e
IBBN	143.87		PKPbc	20:29:04.714	-0.1	34.7		3.12		TAS					a_e
KAST	144.60		PKPbc	20:29:07.364	0.0	34.7		3.12		TAS					a_e
KAST	144.60		pPKPbc	20:30:13.843		35.6		3.45		TAS					m_e
KAST	144.60		PP	20:32:22.027						T__					m_e
MANZ	144.25		PKPbc	20:29:06.464	0.1	34.7		3.12		TAS					a_e
MOX	143.92		PKPbc	20:29:05.114	0.2	34.7		3.12		TAS					m_e
NEUB	143.42		PKPbc	20:29:03.364	-0.0	34.7		3.12		TAS					a_e
PLN	143.83		PKPbc	20:29:04.964	0.2	34.7		3.12		TAS					a_e
RETH	142.99		PKPbc	20:29:01.814	-0.3	34.7		3.12		TAS					a_e
ROTZ	144.38		PKPbc	20:29:07.014	-0.3	34.7		3.12		TAS					a_e
ROTZ	144.38		pPKPbc	20:30:13.005		35.6		3.45		TAS					m_e
RUE	141.64		PKPbc	20:28:58.264	1.4	34.7		3.12		TAS					a_e
STU	146.36		PKPbc	20:29:12.864	-0.5	34.7		3.12		TAS					m_e
STU	146.36		pPKPbc	20:30:20.040		35.6		3.45		TAS					m_e
TANN	143.77		PKPbc	20:29:04.814	0.1	34.7		3.12		TAS					a_e
TNS	145.42		PKPbc	20:29:10.364	0.4	34.7		3.12		TAS					m_e
TNS	145.42		pPKPbc	20:30:16.799		35.6		3.45		TAS					m_e
TNS	145.42		PP	20:32:29.087						T__					m_e
UBBA	144.38		PKPbc	20:29:06.764	-0.4	34.7		3.12		TAS					a_e
UBBA	144.38		pPKPbc	20:30:12.670		35.6		3.45		TAS					m_e
UBR	146.88		PKPbc	20:29:14.064		34.7		3.12		TAS					a_e
UBR	146.88		pPKPbc	20:30:21.277		35.6		3.45		TAS					m_e
WET	144.58		PKPbc	20:29:07.614	0.0	34.7		3.12		TAS					a_e

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WLF	146.67	PKPbc	20:29:14.164	34.7	3.12	TAS	a_e
WLF	146.67	pPKPbc	20:30:21.354	35.6	3.45	TAS	m_e

Event 91205002 Northeastern China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/05	00:02:39.15			39.0900	116.6800				33.0			13		67.84	72.29	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91205008
Ms	4.3		BGR	91205008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	72.29		P	00:14:01.865		53.3		6.14		TAS		24.6	1.74	m_e mb	5.0
BRG	67.84		P	00:13:34.777	0.1	53.3		6.14		TAS		9.7	1.36	m_e mb	4.8
BSEG	67.86		P	00:13:35.113	-0.4	53.3		6.14		TAS		6.4	1.15	m_e mb	4.8
CLL	68.08		P	00:13:36.010	-0.3	53.3		6.14		TAS		9.0	1.19	m_e mb	4.9
CLZ	69.09		P	00:13:43.060		53.3		6.14		TAS		12.9	1.15	m_e mb	5.0
FLT1	68.37		P	00:13:37.695	0.5	53.3		6.14		TAS		28.1	1.49	m_e mb	5.3
FUR	70.85		P	00:13:53.387		53.3		6.14		TAS		13.4	1.04	m_e mb	5.0
GOR1	67.94		P	00:13:35.605	-0.4	53.3		6.14		TAS		12.1	1.02	m_e mb	5.1
GRA1	69.95		P	00:13:48.288		53.3		6.14		TAS		12.2	0.94	m_e mb	5.0
GRA1	69.95		L	00:47:12.122						T__		141.5	19.20	a_e Ms	4.2
GTTG	69.47		P	00:13:45.774		53.3		6.14		TAS		8.7	0.98	m_e mb	5.0
MANZ	69.32		P	00:13:44.018		53.3		6.14		TAS		13.4	2.54	m_e mb	4.7
MOX	69.18		L	00:47:19.610						T__		257.8	20.60	a_e Ms	4.5
NEUB	68.77		P	00:13:40.370	-0.1	53.3		6.14		TAS		11.5	0.82	m_e mb	5.2
RETH	69.04		P	00:13:42.069		53.3		6.14		TAS		21.2	1.59	m_e mb	5.1
ROTZ	69.39		P	00:13:44.751		53.3		6.14		TAS		2.5	1.38	m_e mb	4.2

Event 91205003 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/05	01:29:18.00			45.5270	151.5970				43.8	3.5		21		75.57	82.24	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91205009
Ms	4.7		BGR	91205009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	79.88		P	01:41:22.278		27.1		5.49		TAS		23.7	1.78	m_e mb	4.8

ASSE	77.08	P	01:41:05.421	0.4	27.1	5.49	TAS	10.4	1.01	m_e	mb	4.9
BALST	82.24	P	01:41:31.566		27.1	5.49	TAS	37.7	1.28	m_e	mb	5.4
BFO	81.16	P	01:41:29.669		27.1	5.49	TAS	226.3	3.17	m_e	mb	5.7
BSEG	75.57	P	01:40:57.051	-0.6	27.1	5.49	TAS	20.2	1.42	m_e	mb	5.0
CLL	77.13	P	01:41:04.767	0.8	27.1	5.49	TAS	21.1	1.07	m_e	mb	5.2
CLL	77.13	pP	01:41:17.063				T__			m_e		
CLZ	77.42	P	01:41:07.715	-1.4	27.1	5.49	TAS	15.4	0.94	m_e	mb	5.1
CLZ	77.42	pP	01:41:19.973				T__			m_e		
FLT1	76.74	P	01:41:03.007	0.4	27.1	5.49	TAS	15.2	0.97	m_e	mb	5.1
FLT1	76.74	pP	01:41:15.491				T__			m_e		
FUR	80.44	P	01:41:23.868		27.1	5.49	TAS	31.1	1.39	m_e	mb	5.0
GEC2	79.08	P	01:41:15.079		27.1	5.49	TAS	5.6	1.06	m_e	mb	4.5
GRA1	79.10	P	01:41:16.113		27.1	5.49	TAS	21.9	1.12	m_e	mb	5.1
GRA1	79.10	L	02:20:50.688				T__	412.8	19.00	a_e	Ms	4.8
IBBN	77.71	P	01:41:09.591	0.7	27.1	5.49	TAS	38.7	1.31	m_e	mb	5.4
KAST	78.53	P	01:41:13.841	-2.2	27.1	5.49	TAS	16.3	1.31	m_e	mb	4.9
KAST	78.53	pP	01:41:26.283				T__			m_e		
KBA	80.75	P	01:41:25.650		27.1	5.49	TAS	26.8	1.16	m_e	mb	5.2
MOX	78.13	L	02:20:39.023				T__	269.4	19.60	a_e	Ms	4.6
NEUB	77.60	P	01:41:08.229	-0.8	27.1	5.49	TAS	20.8	0.98	m_e	mb	5.2
RETH	76.90	P	01:41:04.712	-0.1	27.1	5.49	TAS	36.6	1.47	m_e	mb	5.3
ROTZ	78.73	P	01:41:14.400	-0.9	27.1	5.49	TAS	3.4	1.24	m_e	mb	4.2
SULZ	81.95	P	01:41:31.314		27.1	5.49	TAS	144.9	1.27	m_e	mb	6.0
TNS	79.41	P	01:41:18.955		27.1	5.49	TAS	10.4	1.20	m_e	mb	4.7
WET	79.08	P	01:41:15.629		27.1	5.49	TAS	14.0	1.18	m_e	mb	4.9
WET	79.08	pP	01:41:29.252				T__			m_e		
WTTA	81.13	P	01:41:29.417		27.1	5.49	TAS	19.4	1.19	m_e	mb	5.0

Event 91205004 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/05	02:03:22.10			46.1000	149.5300				33.0			29		74.47	80.08	m i ke	BGR
91205010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	91205010
Ms	5.4		BGR	91205010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	75.97		P	02:15:06.410	0.5	28.3		5.59		TAS		47.3	1.20	m_e	mb	5.5
BFO	80.04		P	02:15:28.163	-0.5	28.3		5.59		TAS		57.0	1.02	a_e	mb	5.5
BRG	76.07		P	02:15:06.213	-0.2	28.3		5.59		TAS		56.9	1.31	a_e	mb	5.5
BSEG	74.47		P	02:14:57.363	-0.1	28.3		5.59		TAS		16.9	1.09	a_e	mb	5.0
BUG	77.54		P	02:15:14.413	-0.2	28.3		5.59		TAS		90.9	1.14	a_e	mb	5.8
CLL	75.99		P	02:15:05.513	-0.5	28.3		5.59		TAS		85.4	1.02	m_e	mb	5.8
CLZ	76.31		P	02:15:08.213	0.4	28.3		5.59		TAS		107.1	1.22	a_e	mb	5.8

Station	Mag	Type	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
FLT1	75.62	P	02:15:03.363	-0.6	28.3															
FUR	79.29	P	02:15:24.463	0.0	28.3															
GEC2	77.91	P	02:15:16.663	-0.1	28.3															
GOR1	75.02	P	02:15:00.913	0.3	28.3															
GRA1	77.95	P	02:15:17.363	0.3	28.3															
GRA1	77.95	L	02:52:53.372																	
GTTG	76.69	P	02:15:10.113	0.2	28.3															
IBBN	76.63	P	02:15:09.363	-0.1	28.3															
KAST	77.44	P	02:15:14.163	0.1	28.3															
MANZ	77.42	P	02:15:13.963	-0.1	28.3															
MOX	76.99	P	02:15:11.613	-0.0	28.3															
MOX	76.99	L	02:52:23.770																	
NEUB	76.46	P	02:15:08.413	-0.3	28.3															
PLN	76.97	P	02:15:11.513	0.0	28.3															
RETH	75.80	P	02:15:04.963	0.1	28.3															
ROTZ	77.58	P	02:15:15.163	0.2	28.3															
RUE	74.73	P	02:14:58.763	-0.2	28.3															
STU	79.39	P	02:15:24.713	-0.3	28.3															
TANN	76.94	P	02:15:11.817	0.5	28.3															
TNS	78.31	P	02:15:18.913	-0.1	28.3															
UBBA	77.32	P	02:15:13.513	0.0	28.3															
UBR	80.08	P	02:15:28.882	-0.0	28.3															
WET	77.91	P	02:15:17.163	0.4	28.3															
WLF	79.45	P	02:15:25.620	0.3	28.3															

Event 91205006 Southern Xinjiang, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/05	02:46:35.36			41.1920	80.8770				33.0				26	45.68	51.11	m i ke	BGR
91205012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91205012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	46.00		P	02:54:54.142		72.2		7.75		TAS		16.7	1.11	m_e	mb 5.0
BFO	50.23		P	02:55:25.932		72.2		7.75		TAS		51.0	1.60	m_e	mb 5.2
BRG	45.98		P	02:54:53.331	-0.9	72.2		7.75		TAS		30.6	1.51	m_e	mb 5.1
BSEG	47.34		P	02:55:04.410	0.8	72.2		7.75		TAS		26.2	1.40	m_e	mb 5.2
BUG	49.84		P	02:55:23.262		72.2		7.75		TAS		15.9	1.11	m_e	mb 4.8
CLL	46.44		P	02:54:56.441	0.6	72.2		7.75		TAS		16.0	0.81	m_e	mb 5.1
CLZ	47.87		P	02:55:08.048	0.1	72.2		7.75		TAS		13.1	1.08	m_e	mb 5.0
FLT1	47.22		P	02:55:02.400	-0.0	72.2		7.75		TAS		12.4	0.97	m_e	mb 5.0
FUR	48.44		P	02:55:13.305	0.1	72.2		7.75		TAS		54.9	1.28	m_e	mb 5.5
GEC2	46.69		P	02:54:59.162	0.1	72.2		7.75		TAS		27.3	1.40	m_e	mb 5.2
GOR1	47.01		P	02:55:01.838	-0.1	72.2		7.75		TAS		43.5	1.24	m_e	mb 5.5

GRA1	47.99	P	02:55:10.054	-0.1	72.2	7.75	TAS	30.0	1.06	m_e	mb	5.3
GTTG	48.20	P	02:55:10.813	0.2	72.2	7.75	TAS	29.8	0.98	m_e	mb	5.4
KBA	47.46	P	02:55:05.725	-0.0	72.2	7.75	TAS	18.2	1.32	m_e	mb	5.0
MANZ	47.35	P	02:55:04.053	-0.2	72.2	7.75	TAS	3.8	1.43	m_e	mb	4.3
MOX	47.46	P	02:55:05.307	-0.0	72.2	7.75	TAS	16.5	1.28	m_e	mb	5.0
NEUB	47.21	P	02:55:03.206	0.3	72.2	7.75	TAS	18.0	0.77	m_e	mb	5.3
PLN	47.18	P	02:55:03.190	-0.5	72.2	7.75	TAS	6.6	1.24	m_e	mb	4.6
ROTZ	47.36	P	02:55:04.900	0.6	72.2	7.75	TAS	9.1	1.58	m_e	mb	4.7
RUE	45.68	P	02:54:51.251	-0.5	72.2	7.75	TAS	33.9	1.14	m_e	mb	5.3
STU	49.54	P	02:55:21.881		72.2	7.75	TAS	29.9	0.33	m_e	mb	5.7
TANN	47.01	P	02:55:01.714	-0.7	72.2	7.75	TAS	19.4	1.23	m_e	mb	5.1
TNS	49.52	P	02:55:21.512		72.2	7.75	TAS	6.5	0.85	m_e	mb	4.6
UBBA	48.39	P	02:55:12.477	-0.9	72.2	7.75	TAS	6.1	0.96	m_e	mb	4.7
UBR	49.34	P	02:55:19.664		72.2	7.75	TAS	19.4	0.93	m_e	mb	5.1
WET	47.12	P	02:55:02.803	1.1	72.2	7.75	TAS	24.6	1.31	m_e	mb	5.2
WLF	51.11	P	02:55:33.648		72.2	7.75	TAS	23.6	1.17	m_e	mb	5.0
WTTA	48.50	P	02:55:13.288		72.2	7.75	TAS	37.0	1.09	m_e	mb	5.3

Event 91206004 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/06	13:04:48.10			-15.3900	-175.3100				10.0					145.38	145.38	m i ke	EMSC
91206036																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	145.38		PKP	13:24:25.211		11.1		2.96		TAS					m_e

Event 91206005 Samoa Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/06	15:42:44.80			-14.9300	-175.0600				10.0					144.96	144.96	m i ke	EMSC
91206037																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	144.96		PKP	16:02:24.491		10.6		2.91		TAS					m_e

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Event 91207005 Crete, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/07	14:46:57.70			35.0000	23.7000				10.0					17.30	17.30	m i ke	EMSC
91207037																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.2	BGR		91207011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	17.30		P	14:51:00.852		143.4		11.14		TAS		24.7	1.40	m_e mb	4.2

Event 91207008 Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/07	23:14:24.60	1.04	0.70	41.2210	19.8450	30.0	13.3	43	5.0				12 340	6.53	10.30	m i ke	BGR
91207014																	

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
ARSA	6.78		Pn	23:16:01.900	-0.6					T__				m_e	
DAVA	9.37		Sn	23:18:14.135	0.0					T__				m_e	
DAVA	9.37		Pn	23:16:38.150	0.8					T__				m_e	
GEC2	8.77		Pn	23:16:29.143	-0.2					T__				m_e	
KBA	7.49		Sn	23:17:29.003	-1.2					T__				m_e	
KBA	7.49		Pn	23:16:12.056	-0.0					T__				m_e	
MANZ	10.30		Pn	23:16:50.626	0.8					T__				m_e	
MOA	7.73		Sn	23:17:37.378	1.5					T__				m_e	
MOA	7.73		Pn	23:16:15.564	0.3					T__				m_e	
OBKA	6.53		Pn	23:15:59.131	0.1					T__				m_e	
PART	8.86		Sn	23:18:01.816	-0.3					T__				m_e	
ROTZ	10.08		Pn	23:16:46.177	-0.8					T__				m_e	
WET	9.32		Pn	23:16:35.884	-0.8					T__				m_e	
WTTA	8.44		Pn	23:16:24.508	-0.3					T__				m_e	
ZUGS	8.87		Pn	23:16:31.300	0.7					T__				m_e	

Event 91208004 Crete, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/08	22:41:14.10			34.9900	23.7500				10.0					17.33	17.33	m i ke	EMSC
91208036																	

Magnitude Err Nsta Author OrigID
mb 4.0 BGR 91208010

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 17.33 P 22:45:19.346 143.3 11.23 TAS 11.8 0.92 m_e mb 4.0

Event 91209003 Central Italy

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/09 03:37:02.29 1.08 0.84 43.6390 11.5670 20.0 17.8 78 10.0 18 315 3.80 7.08 m i ke BGR
91209009

Magnitude Err Nsta Author OrigID
ML 4.8 BGR 91209009

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
BE1 4.28 Pn 03:38:06.489 0.6 T__ m_e ML 5.2
BFO 5.21 Pn 03:38:18.052 -0.3 T__ m_e ML 4.9
FUR 4.53 Pn 03:38:09.202 -0.1 T__ m_e ML 5.1
GEC2 5.41 Pn 03:38:21.659 0.5 T__ m_e ML 4.6
GRA1 6.06 Pn 03:38:28.748 -1.1 T__ m_e
KW1 4.54 Pn 03:38:10.350 0.9 T__ m_e ML 5.0
MANZ 6.36 Pn 03:38:32.711 -1.2 T__ m_e
MOX 7.01 Sn 03:39:56.720 1.0 T__ m_e
MOX 7.01 Pn 03:38:41.445 -1.2 T__ m_e
NORI 5.12 Pn 03:38:16.217 -1.1 T__ m_e ML 4.8
OBER 3.87 Pn 03:38:01.590 1.2 T__ m_e
PART 3.87 Pn 03:38:01.277 0.9 T__ m_e ML 4.7
ROTZ 6.15 Pn 03:38:30.417 -0.6 T__ m_e ML 4.7
STU 5.39 Pn 03:38:20.056 -0.8 T__ m_e ML 5.1
TNS 6.92 Pn 03:38:41.439 -0.1 T__ m_e
UBR 4.17 Sn 03:38:48.439 -0.9 T__ m_e
UBR 4.17 Pn 03:38:04.878 0.5 T__ m_e ML 5.0
WET 5.58 Pn 03:38:23.169 -0.2 T__ m_e
WLF 7.08 Pn 03:38:44.620 0.9 T__ m_e
ZUGS 3.80 Pn 03:38:00.437 1.0 T__ m_e ML 4.2

Event 91209010 Reykjanes Ridge

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/09 22:36:30.50 52.7800 -34.9900 10.0 28.71 28.71 m i ke EMSC
91209042

Magnitude Err Nsta Author OrigID
 mb 4.8 BGR 91209016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	28.71		P	22:42:27.428		294.1		7.87		TAS		17.4	1.04	m_e	mb 4.8

Event 91210001 Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/10	08:40:41.10			-20.8400	168.7200				2.0			26		143.08	148.36	m_i	ke EMSC
OrigID																	
91210033																	

Magnitude Err Nsta Author OrigID
 Ms 5.2 BGR 91210007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	144.42		PKPbc	09:00:15.732	0.7	39.9		2.84		TAS				m_e	
ASSE	144.42		pPKPbc	09:00:31.217						T__				m_e	
BFO	148.36		PKPbc	09:00:26.970		39.9		2.84		TAS				m_e	
BFO	148.36		pPKPbc	09:00:42.137						T__				m_e	
BRG	144.07		PKPbc	09:00:15.551	-0.7	39.9		2.84		TAS				m_e	
BRG	144.07		pPKPbc	09:00:28.985						T__				m_e	
BSEG	143.08		PKPbc	09:00:11.663	-0.2	39.9		2.84		TAS				m_e	
BUG	146.19		PKPbc	09:00:22.170	-1.3	39.9		2.84		TAS				m_e	
BUG	146.19		pPKPbc	09:00:36.100						T__				m_e	
CLL	144.15		PKPbc	09:00:15.672	-0.7	39.9		2.84		TAS				m_e	
CLL	144.15		pPKPbc	09:00:28.893						T__				m_e	
CLZ	144.76		PKPbc	09:00:18.088	0.6	39.9		2.84		TAS				m_e	
CLZ	144.76		pPKPbc	09:00:31.204						T__				m_e	
FLT1	144.05		PKPbc	09:00:14.743	-0.0	39.9		2.84		TAS				m_e	
FLT1	144.05		pPKPbc	09:00:28.920						T__				m_e	
FUR	147.25		PKPbc	09:00:25.069	-0.8	39.9		2.84		TAS				m_e	
FUR	147.25		pPKPbc	09:00:39.915						T__				m_e	
GEC2	145.65		PKPbc	09:00:20.479	0.0	39.9		2.84		TAS				m_e	
GEC2	145.65		pPKPbc	09:00:33.804						T__				m_e	
GOR1	143.50		PKPbc	09:00:13.436	-0.2	39.9		2.84		TAS				m_e	
GRA1	146.11		PKPbc	09:00:22.110	0.2	39.9		2.84		TAS				m_e	
GRA1	146.11		pPKPbc	09:00:36.403						T__				m_e	
GRA1	146.11		L	10:02:40.772						T__		415.1	21.20	a_e Ms	5.2
GTTG	145.15		PKPbc	09:00:19.418	0.3	39.9		2.84		TAS				m_e	
GTTG	145.15		pPKPbc	09:00:33.297						T__				m_e	
MANZ	145.52		PKPbc	09:00:19.996	-0.2	39.9		2.84		TAS				m_e	
MANZ	145.52		pPKPbc	09:00:33.743						T__				m_e	
MOX	145.22		PKPbc	09:00:19.478	-0.1	39.9		2.84		TAS				m_e	
MOX	145.22		pPKPbc	09:00:32.891						T__				m_e	
MOX	145.22		L	10:05:38.100						T__		468.9	21.70	a_e Ms	5.2

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NEUB	144.73	PKPbc	09:00:17.400	0.8	39.9	2.84	TAS	m_e
PLN	145.12	PKPbc	09:00:19.272	0.2	39.9	2.84	TAS	m_e
PLN	145.12	pPKPbc	09:00:32.604				T__	m_e
RETH	144.39	PKPbc	09:00:16.313	0.7	39.9	2.84	TAS	m_e
ROTZ	145.64	PKPbc	09:00:20.479	0.7	39.9	2.84	TAS	m_e
ROTZ	145.64	pPKPbc	09:00:33.854				T__	m_e
STU	147.67	PKPbc	09:00:24.465	0.6	39.9	2.84	TAS	m_e
STU	147.67	pPKPbc	09:00:40.355				T__	m_e
TANN	145.04	PKPbc	09:00:19.211	0.9	39.9	2.84	TAS	m_e
TANN	145.04	pPKPbc	09:00:32.408				T__	m_e
TNS	146.79	PKPbc	09:00:23.526	-0.7	39.9	2.84	TAS	m_e
TNS	146.79	pPKPbc	09:00:37.745				T__	m_e
UBBA	145.72	PKPbc	09:00:20.203	0.3	39.9	2.84	TAS	m_e
UBBA	145.72	pPKPbc	09:00:34.863				T__	m_e
UBR	148.13	PKPbc	09:00:26.607		39.9	2.84	TAS	m_e
UBR	148.13	pPKPbc	09:00:41.418				T__	m_e
WET	145.81	PKPbc	09:00:20.600	0.7	39.9	2.84	TAS	m_e
WET	145.81	pPKPbc	09:00:35.133				T__	m_e
WLF	148.07	PKPbc	09:00:27.424		39.9	2.84	TAS	m_e

Event 91210002 Off coast of Chiapas, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/10	11:13:05.90			14.8500	-94.2500				40.0					88.50	88.50	m i ke	EMSC
OrigID 91210034																	

Magnitude Err Nsta Author OrigID
mb 4.9 BGR 91210008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	88.50		P	11:25:55.754		291.2		4.69		TAS		11.7	1.44	m_e mb	4.9

Event 91210004 Southeast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/10	17:05:03.78			30.9400	142.4500				33.0				27	84.27	91.04	m i ke	BGR
OrigID 91210010																	

Magnitude Err Nsta Author OrigID
mb 6.0 BGR 91210010
Ms 5.8 BGR 91210010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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ASSE	87.14	S	17:28:25.284		35.5	9.53	TAS				m_e		
ASSE	87.14	P	17:17:47.113	0.2	40.1	4.77	TAS	449.2	2.15	a_e	mb	6.2	
BFO	91.04	P	17:18:05.163		40.1	4.77	TAS	88.9	1.21	a_e	mb	6.0	
BRG	86.74	P	17:17:45.213	0.2	40.1	4.77	TAS	402.6	2.12	a_e	mb	6.2	
BSEG	85.89	P	17:17:41.113	-0.3	40.1	4.77	TAS	83.0	1.16	a_e	mb	5.8	
BUG	89.00	P	17:17:55.613		40.1	4.77	TAS	63.7	1.13	a_e	mb	5.8	
CLL	86.81	P	17:17:45.213	0.2	40.1	4.77	TAS	131.5	1.31	a_e	mb	5.9	
CLZ	87.48	S	17:28:24.592		35.5	9.53	TAS				m_e		
CLZ	87.48	P	17:17:48.913		40.1	4.77	TAS	169.6	1.35	a_e	mb	6.0	
FLT1	86.76	P	17:17:44.663	0.3	40.1	4.77	TAS	205.4	1.36	a_e	mb	6.1	
FUR	89.93	P	17:18:00.413		40.1	4.77	TAS	157.8	1.48	a_e	mb	6.0	
GEC2	88.35	S	17:28:37.891		35.5	9.53	TAS				m_e		
GEC2	88.35	P	17:17:52.563		40.1	4.77	TAS	125.3	1.90	a_e	mb	5.9	
GOR1	86.23	P	17:17:42.863	0.2	40.1	4.77	TAS	280.3	1.39	a_e	mb	6.2	
GRA1	88.78	S	17:28:40.247		35.5	9.53	TAS				m_e		
GRA1	88.78	P	17:17:55.213		40.1	4.77	TAS	122.5	1.31	a_e	mb	6.0	
GRA1	88.78	L	18:00:15.150				T__	3626.2	20.10	a_e	Ms	5.8	
GTTG	87.87	P	17:17:50.713		40.1	4.77	TAS	76.6	1.15	a_e	mb	5.9	
HLG	86.59	P	17:17:44.463	0.3	40.1	4.77	TAS	301.6	1.06	a_e	mb	6.3	
MANZ	88.18	S	17:28:36.644		35.5	9.53	TAS				m_e		
MANZ	88.18	P	17:17:52.263		40.1	4.77	TAS	36.5	1.93	a_e	mb	5.4	
MOX	87.89	S	17:28:29.995		35.5	9.53	TAS				m_e		
MOX	87.89	P	17:17:50.763		40.1	4.77	TAS	225.0	2.15	a_e	mb	6.1	
MOX	87.89	L	18:01:27.023				T__	4400.9	18.20	a_e	Ms	5.9	
NEUB	87.41	S	17:28:29.025		35.5	9.53	TAS				m_e		
NEUB	87.41	P	17:17:48.213	-0.4	40.1	4.77	TAS	138.0	1.26	a_e	mb	5.9	
PLN	87.78	P	17:17:50.313		40.1	4.77	TAS	131.6	2.38	a_e	mb	5.8	
RETH	87.18	P	17:17:47.313	0.1	40.1	4.77	TAS	459.3	2.00	a_e	mb	6.3	
RGN	84.27	P	17:17:32.963	-0.4	40.1	4.77	TAS	300.9	1.28	a_e	mb	6.4	
ROTZ	88.31	S	17:28:37.614		35.5	9.53	TAS				m_e		
ROTZ	88.31	P	17:17:52.963		40.1	4.77	TAS	148.1	2.58	a_e	mb	5.9	
RUE	85.62	P	17:17:39.763	0.1	40.1	4.77	TAS	268.5	1.29	a_e	mb	6.3	
STU	90.34	P	17:18:02.063		40.1	4.77	TAS	232.2	1.27	a_e	mb	6.3	
TANN	87.71	S	17:28:29.302		35.5	9.53	TAS				m_e		
TANN	87.71	P	17:17:50.013		40.1	4.77	TAS	258.8	2.24	m_e	mb	6.2	
TNS	89.50	P	17:17:58.463		40.1	4.77	TAS	52.8	1.37	a_e	mb	5.6	
UBBA	88.42	S	17:28:37.337		35.5	9.53	TAS				m_e		
UBBA	88.42	P	17:17:53.163		40.1	4.77	TAS	78.0	1.55	a_e	mb	5.8	
UBR	90.80	P	17:18:04.163		40.1	4.77	TAS	23.2	1.06	a_e	mb	5.4	
WET	88.49	S	17:28:39.001		35.5	9.53	TAS				m_e		
WET	88.49	P	17:17:53.713		40.1	4.77	TAS	130.0	2.00	a_e	mb	5.9	
WLF	90.85	P	17:18:04.963		40.1	4.77	TAS	164.6	1.49	a_e	mb	6.1	

Event 91210005 Turkey

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

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2019/12/10 20:14:02.70 39.4400 27.9400 10.0 15.68 15.68 m i ke EMSC
91210037

Magnitude Err Nsta Author OrigID
mb 4.0 BGR 91210011

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 15.68 P 20:17:50.117 124.5 11.65 TAS 16.0 1.14 m_e mb 4.0

Event 91210007 Crete, Greece

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/10 21:58:30.00 35.3900 26.5000 33.0 18.14 18.14 m i ke NOA
91210076

Magnitude Err Nsta Author OrigID
mb 5.1 BGR 91210013

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 18.14 P 22:02:34.618 136.3 12.59 TAS 266.0 1.59 m_e mb 5.1

Event 91211001 Vanuatu Islands

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/11 01:34:24.90 -18.5100 168.1100 10.0 143.78 143.78 m i ke EMSC
91211033

Magnitude Err Nsta Author OrigID

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 143.78 PKP 01:53:56.074 39.1 3.14 TAS m_e

Event 91211002 Near east coast of eastern Honshu, Japan

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/11 09:39:12.82 38.1610 141.6500 46.8 12.6 27 79.00 84.41 m i ke BGR
91211008

Magnitude Err Nsta Author OrigID
mb 5.3 BGR 91211008

Ms	4.9	BGR	91211008													
Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	80.46		P	09:51:17.634	0.3	37.4		5.40		TAS		16.7	0.99	m_e	mb	4.9
BFO	84.41		P	09:51:38.123		37.4		5.40		TAS		56.0	1.01	a_e	mb	5.8
BRG	80.18		P	09:51:16.123	0.0	37.4		5.40		TAS		31.7	1.16	a_e	mb	5.1
BRG	80.18		pP	09:51:30.149						T__				m_e		
BSEG	79.14		P	09:51:10.623	0.3	37.4		5.40		TAS		28.9	1.00	a_e	mb	5.3
BSEG	79.14		pP	09:51:24.392						T__				m_e		
BUG	82.25		P	09:51:27.233	0.1	37.4		5.40		TAS		24.6	0.83	m_e	mb	5.4
BUG	82.25		pP	09:51:40.656						T__				m_e		
CLL	80.22		P	09:51:15.973	-0.0	37.4		5.40		TAS		47.1	1.00	a_e	mb	5.4
CLL	80.22		pP	09:51:29.751						T__				m_e		
CLZ	80.80		P	09:51:19.723	0.1	37.4		5.40		TAS		43.0	0.95	a_e	mb	5.5
CLZ	80.80		pP	09:51:34.118						T__				m_e		
FLT1	80.09		P	09:51:15.073	-0.5	37.4		5.40		TAS		40.2	0.91	a_e	mb	5.3
FLT1	80.09		pP	09:51:28.727						T__				m_e		
FUR	83.39		P	09:51:33.173	0.2	37.4		5.40		TAS		64.4	0.95	a_e	mb	5.8
FUR	83.39		pP	09:51:46.520						T__				m_e		
GEC2	81.86		P	09:51:24.973	0.5	37.4		5.40		TAS		16.2	0.92	a_e	mb	5.1
GEC2	81.86		pP	09:51:39.128						T__				m_e		
GOR1	79.54		P	09:51:13.123	-0.7	37.4		5.40		TAS		56.5	1.26	a_e	mb	5.3
GRA1	82.19		P	09:51:27.273	0.1	37.4		5.40		TAS		56.7	1.07	a_e	mb	5.6
GRA1	82.19		pP	09:51:40.077						T__				m_e		
GRA1	82.19		L	10:32:57.576						T__		546.7	18.30	a_e	Ms	5.0
GTTG	81.19		P	09:51:21.573	0.0	37.4		5.40		TAS		28.4	0.75	a_e	mb	5.4
MANZ	81.61		P	09:51:23.823	-0.1	37.4		5.40		TAS		4.0	0.80	a_e	mb	4.6
MANZ	81.61		pP	09:51:37.973						T__				m_e		
MOX	81.28		P	09:51:22.023	0.5	37.4		5.40		TAS		19.7	0.91	a_e	mb	5.1
MOX	81.28		pP	09:51:35.941						T__				m_e		
MOX	81.28		L	10:30:58.124						T__		413.1	18.30	a_e	Ms	4.8
NEUB	80.78		P	09:51:19.173	0.1	37.4		5.40		TAS		40.4	0.88	a_e	mb	5.5
NEUB	80.78		pP	09:51:33.016						T__				m_e		
PLN	81.19		P	09:51:21.723	0.1	37.4		5.40		TAS		11.0	1.40	a_e	mb	4.7
PLN	81.19		pP	09:51:35.483						T__				m_e		
RETH	80.45		P	09:51:17.623	-0.2	37.4		5.40		TAS		26.2	0.96	a_e	mb	5.1
RETH	80.45		pP	09:51:30.962						T__				m_e		
ROTZ	81.74		P	09:51:24.923	-0.1	37.4		5.40		TAS		21.4	1.65	m_e	mb	5.0
RUE	79.00		P	09:51:09.923	-0.1	37.4		5.40		TAS		101.9	1.38	a_e	mb	5.7
STU	83.72		P	09:51:34.673	-0.6	37.4		5.40		TAS		86.3	0.90	a_e	mb	6.0
STU	83.72		pP	09:51:48.414						T__				m_e		
TANN	81.13		P	09:51:21.373	0.2	37.4		5.40		TAS		15.6	1.05	a_e	mb	5.0
TNS	82.82		P	09:51:30.146	-0.2	37.4		5.40		TAS		11.2	0.90	m_e	mb	5.1
TNS	82.82		pP	09:51:43.880						T__				m_e		
UBBA	81.76		P	09:51:24.423	0.4	37.4		5.40		TAS		15.2	1.18	a_e	mb	5.0
UBBA	81.76		pP	09:51:38.543						T__				m_e		
UBR	84.24		P	09:51:37.041		37.4		5.40		TAS		11.2	0.91	m_e	mb	5.1
UBR	84.24		pP	09:51:50.399						T__				m_e		
WET	81.96		P	09:51:25.973	0.2	37.4		5.40		TAS		23.2	1.08	a_e	mb	5.2

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WET 81.96 pP 09:51:39.644 T__ m_e
WLF 84.12 P 09:51:37.073 -0.3 37.4 5.40 TAS 40.0 1.18 a_e mb 5.5

Event 91211003 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/11	10:12:13.37			49.4840	153.6860				14.3					76.08	76.08	m i ke	BGR

Magnitude Err Nsta Author OrigID
mb 5.5 BGR 91211009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	76.08		P	10:23:56.113		23.7		4.94		TAS		32.0	0.91	m_e mb	5.5
GRA1	76.08		pP	10:24:00.196						T__				m_e	

Event 91212001 Crete, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/12	03:05:44.80			35.1700	26.1900				3.0					18.19	18.74	m i ke	EMSC

Magnitude Err Nsta Author OrigID
mb 4.3 BGR 91212007
Ms 3.7 BGR 91212007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	18.19		P	03:09:53.250		137.3		12.31		TAS		31.0	1.10	m_e mb	4.3
GRA1	18.19		L	03:18:06.332						T__		446.2	21.80	a_e Ms	3.7
MOX	18.74		L	03:20:17.429						T__		394.8	21.60	a_e Ms	3.7

Event 91215001 Mindanao, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/15	06:11:53.60			6.7200	125.1300				30.0				11	97.42	101.53	m i ke	EMSC

Magnitude Err Nsta Author OrigID
Ms 7.0 BGR 91215007

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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BUG	101.53		Pdiff	06:25:47.463						T__				m_e	
CLL	98.30		Pdiff	06:25:32.712	-0.6					T__				m_e	
FLT1	98.92		Pdiff	06:25:35.245	0.2					T__				m_e	
GEC2	98.77		Pdiff	06:25:35.132	-0.1					T__				m_e	
GRA1	99.96		L	07:16:14.679						T__		50499.2	20.20	a_e Ms	7.0
GTTG	99.96		Pdiff	06:25:40.948						T__				m_e	
KAST	100.98		Pdiff	06:25:45.369						T__				m_e	
MOX	99.36		Pdiff	06:25:38.156						T__				m_e	
MOX	99.36		L	07:15:58.028						T__		57222.1	21.90	a_e Ms	7.0
RUE	97.42		Pdiff	06:25:29.082	-0.3					T__				m_e	
TANN	98.95		Pdiff	06:25:35.830	1.9					T__				m_e	
UBBA	100.23		Pdiff	06:25:43.973						T__				m_e	
WET	99.17		Pdiff	06:25:37.226						T__				m_e	

Event 91216001 Southern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/16	14:49:15.20			-2.9500	101.0300				30.0			15		90.42	93.92	m i ke	EMSC
	91216033																

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	91216007
Ms	4.9		BGR	91216007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	90.42		P	15:02:14.118	-0.3	92.0		4.55		TAS		45.7	1.05	m_e mb	5.6
BSEG	92.78		P	15:02:24.970	0.1	92.0		4.55		TAS		26.5	1.03	m_e mb	5.6
CLL	91.04		P	15:02:16.511	0.1	92.0		4.55		TAS		36.8	1.06	m_e mb	5.6
GEC2	90.44		P	15:02:14.191		92.0		4.55		TAS		64.0	1.26	m_e mb	5.7
GRA1	92.10		L	15:47:40.569						T__		377.6	21.80	m_e Ms	4.8
KAST	93.92		P	15:02:30.080	0.1	92.0		4.55		TAS		19.0	1.06	m_e mb	5.3
MANZ	91.54		P	15:02:19.438		92.0		4.55		TAS		15.2	1.10	m_e mb	5.2
MOX	91.89		P	15:02:20.690		92.0		4.55		TAS		37.3	1.17	m_e mb	5.6
MOX	91.89		L	15:50:58.434						T__		583.0	21.60	a_e Ms	5.0
NEUB	91.81		P	15:02:20.237	0.1	92.0		4.55		TAS		91.3	1.10	m_e mb	6.0
RETH	93.34		P	15:02:27.168	0.1	92.0		4.55		TAS		22.7	1.09	m_e mb	5.5
ROTZ	91.47		P	15:02:18.937		92.0		4.55		TAS		7.6	1.09	m_e mb	4.9
RUE	90.64		P	15:02:15.162	-0.2	92.0		4.55		TAS		200.8	1.16	m_e mb	6.3
TANN	91.34		P	15:02:18.258		92.0		4.55		TAS		23.5	1.12	m_e mb	5.4
TNS	93.90		P	15:02:30.156		92.0		4.55		TAS		46.8	1.02	m_e mb	5.8
UBR	92.78		P	15:02:24.429		92.0		4.55		TAS		21.9	1.02	m_e mb	5.5
WET	91.00		P	15:02:16.729		92.0		4.55		TAS		45.9	1.02	m_e mb	5.8

Event 91217002 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/17	02:03:04.65			-23.8590	-178.7360				33.0				10	149.20	152.58	m i ke	BGR
OrigID 91217008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	150.87		PKPbc	02:22:54.100	-0.1	20.4		2.28		TAS					m_e
BRG	151.30		PKPbc	02:22:55.161		20.4		2.28		TAS					m_e
BSEG	149.20		PKPbc	02:22:50.295	-0.1	20.4		2.28		TAS					m_e
CLL	151.14		PKPbc	02:22:54.537	0.1	20.4		2.28		TAS					m_e
CLZ	151.20		PKPbc	02:22:55.161	0.1	20.4		2.28		TAS					m_e
KAST	152.15		PKPbc	02:22:57.095	-0.0	20.4		2.28		TAS					m_e
MANZ	152.58		PKPbc	02:22:57.906		20.4		2.28		TAS					m_e
MOX	152.08		PKPbc	02:22:56.658		20.4		2.28		TAS					m_e
RETH	150.51		PKPbc	02:22:53.352	0.0	20.4		2.28		TAS					m_e
TANN	152.09		PKPbc	02:22:56.908		20.4		2.28		TAS					m_e

Event 91217008 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/17	20:23:01.88			-22.1990	171.6440				33.0				18	145.29	150.57	m i ke	BGR
OrigID 91217014																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	146.71		PKPbc	20:42:40.764	-0.0	36.4		2.73		TAS					m_e
BRG	146.50		PKPbc	20:42:39.900	0.2	36.4		2.73		TAS					m_e
BSEG	145.29		PKPbc	20:42:36.374	-0.3	36.4		2.73		TAS					m_e
CLL	146.53		PKPbc	20:42:39.972	-0.0	36.4		2.73		TAS					m_e
CLZ	147.05		PKPbc	20:42:42.059	0.0	36.4		2.73		TAS					m_e
FLT1	146.35		PKPbc	20:42:39.325	0.4	36.4		2.73		TAS					m_e
GEC2	148.15		PKPbc	20:42:44.506		36.4		2.73		TAS					m_e
GOR1	145.77		PKPbc	20:42:37.957	-0.2	36.4		2.73		TAS					m_e
GTTG	147.44		PKPbc	20:42:42.995	0.0	36.4		2.73		TAS					m_e
KAST	148.24		PKPbc	20:42:44.866	0.3	36.4		2.73		TAS					m_e
MANZ	147.93		PKPbc	20:42:44.002		36.4		2.73		TAS					m_e
MOX	147.59		PKPbc	20:42:42.851	0.0	36.4		2.73		TAS					m_e
NEUB	147.09		PKPbc	20:42:41.556	0.2	36.4		2.73		TAS					m_e
ROTZ	148.06		PKPbc	20:42:44.434		36.4		2.73		TAS					m_e
RUE	145.31		PKPbc	20:42:36.374	0.6	36.4		2.73		TAS					m_e
STU	150.03		PKPbc	20:42:49.544		36.4		2.73		TAS					m_e

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TANN 147.45 PKPbc 20:42:42.851 36.4 2.73 TAS m_e
UBR 150.57 PKPbc 20:42:50.335 36.4 2.73 TAS m_e

Event 91217009 Ryukyu Islands, Japan

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/17 23:35:27.31 27.9970 127.1700 33.0 21 81.10 85.85 m i ke BGR
91217015

Magnitude Err Nsta Author OrigID
mb 5.6 BGR 91217015
Ms 5.0 BGR 91217015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	82.85		P	23:47:47.262	-0.0	53.0		5.10		TAS		32.5	0.95	m_e mb	5.5
BRG	81.93		P	23:47:42.710	-0.1	53.0		5.10		TAS		15.3	0.89	m_e mb	5.1
BSEG	81.93		P	23:47:42.426	-0.1	53.0		5.10		TAS		46.2	0.90	m_e mb	5.6
CLL	82.17		P	23:47:43.564	-0.0	53.0		5.10		TAS		57.9	0.82	m_e mb	5.8
CLZ	83.17		P	23:47:49.254	0.3	53.0		5.10		TAS		109.4	0.96	m_e mb	6.1
FLT1	82.45		P	23:47:44.797	-0.5	53.0		5.10		TAS		72.2	0.88	m_e mb	5.8
FUR	84.93		P	23:47:58.358		53.0		5.10		TAS		92.0	1.01	m_e mb	6.0
GEC2	83.23		P	23:47:49.159		53.0		5.10		TAS		24.9	1.02	m_e mb	5.4
GOR1	82.02		P	23:47:43.374	0.3	53.0		5.10		TAS		114.4	1.10	m_e mb	5.9
GRA1	84.04		P	23:47:53.711		53.0		5.10		TAS		76.5	1.05	m_e mb	5.9
GRA1	84.04		L	00:29:52.698						T__		637.0	18.70	a_e Ms	5.0
GTTG	83.55		P	23:47:51.151	0.3	53.0		5.10		TAS		75.4	0.91	m_e mb	5.9
MANZ	83.41		P	23:47:50.202	-0.1	53.0		5.10		TAS		8.7	1.00	m_e mb	4.9
MOX	83.27		P	23:47:49.254	0.0	53.0		5.10		TAS		20.9	0.96	m_e mb	5.3
MOX	83.27		L	00:29:38.994						T__		486.1	18.10	a_e Ms	4.9
NEUB	82.86		P	23:47:47.357	-0.2	53.0		5.10		TAS		94.3	0.90	m_e mb	6.0
PLN	83.08		P	23:47:48.400	0.1	53.0		5.10		TAS		11.9	0.98	m_e mb	5.1
RETH	83.12		P	23:47:48.400	-0.2	53.0		5.10		TAS		66.5	1.13	m_e mb	5.8
ROTZ	83.48		P	23:47:50.676	0.4	53.0		5.10		TAS		13.8	0.96	m_e mb	5.2
RUE	81.10		P	23:47:38.537	0.2	53.0		5.10		TAS		50.3	0.90	m_e mb	5.5
TANN	82.97		P	23:47:47.831	0.3	53.0		5.10		TAS		27.5	1.06	m_e mb	5.4
UBR	85.85		P	23:48:02.247		53.0		5.10		TAS		35.2	1.02	m_e mb	5.4
WET	83.50		P	23:47:50.582		53.0		5.10		TAS		22.9	1.21	m_e mb	5.3

Event 91218001 Sichuan, China

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/12/18 00:14:13.59 30.3450 105.5060 33.0 9 68.04 73.09 m i ke BGR
91218007

2019/12/18 12:19:39.87
91218011

-23.5910 -176.9260

33.0

15

149.21 153.43 m i ke BGR

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	150.92		PKPbc	12:39:29.654	-0.0	16.7		2.27		TAS				m_e	
BRG	151.49		PKPbc	12:39:31.030	0.1	16.7		2.27		TAS				m_e	
BSEG	149.21		PKPbc	12:39:25.528	-0.3	16.7		2.27		TAS				m_e	
CLL	151.28		PKPbc	12:39:30.592	0.3	16.7		2.27		TAS				m_e	
CLZ	151.24		PKPbc	12:39:30.717	0.3	16.7		2.27		TAS				m_e	
FLT1	150.63		PKPbc	12:39:28.904	-0.1	16.7		2.27		TAS				m_e	
GEC2	153.43		PKPbc	12:39:35.093		16.7		2.27		TAS				m_e	
GOR1	149.98		PKPbc	12:39:27.654	0.1	16.7		2.27		TAS				m_e	
MANZ	152.72		PKPbc	12:39:33.905		16.7		2.27		TAS				m_e	
MOX	152.19		PKPbc	12:39:32.217	0.2	16.7		2.27		TAS				m_e	
NEUB	151.63		PKPbc	12:39:31.530	-0.3	16.7		2.27		TAS				m_e	
PLN	152.23		PKPbc	12:39:32.717	0.2	16.7		2.27		TAS				m_e	
RETH	150.50		PKPbc	12:39:28.717	-0.1	16.7		2.27		TAS				m_e	
ROTZ	152.91		PKPbc	12:39:34.030		16.7		2.27		TAS				m_e	
TANN	152.24		PKPbc	12:39:32.842	-0.1	16.7		2.27		TAS				m_e	

Event 91218006 Southeastern Alaska, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/18	21:52:16.70			60.3740	-141.8340				33.0			10		63.89	68.14	m i ke	BGR
OrigID																	
91218012																	

Magnitude Err Nsta Author OrigID

mb	5.2		BGR	91218012
Ms	4.5		BGR	91218012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BSEG	63.89		P	22:02:44.968	-0.4	346.0		6.30		TAS		22.8	1.65	m_e mb	5.1
BUG	65.80		P	22:02:55.872	0.0	346.0		6.30		TAS		31.7	1.40	m_e mb	5.4
CLZ	65.93		P	22:02:57.866	-0.1	346.0		6.30		TAS		32.0	1.35	m_e mb	5.4
FLT1	65.58		P	22:02:55.169	1.1	346.0		6.30		TAS		26.8	1.49	m_e mb	5.3
GRA1	68.14		L	22:35:02.203						T__		291.3	18.70	a_e Ms	4.5
KAST	66.22		P	22:03:00.680		346.0		6.30		TAS		55.3	2.04	m_e mb	5.4
MOX	67.28		P	22:03:06.073		346.0		6.30		TAS		16.0	1.15	m_e mb	5.1
MOX	67.28		L	22:33:47.999						T__		242.0	19.50	a_e Ms	4.4
NEUB	66.77		P	22:03:03.025		346.0		6.30		TAS		21.0	1.02	m_e mb	5.3
PLN	67.52		P	22:03:07.597		346.0		6.30		TAS		3.7	1.14	m_e mb	4.5
RETH	64.90		P	22:02:51.300	-0.9	346.0		6.30		TAS		11.9	1.13	m_e mb	5.0
TANN	67.63		P	22:03:08.418		346.0		6.30		TAS		31.9	1.98	m_e mb	5.2

Event 91219001 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/19	04:49:38.40			-26.3300	178.4800				619.0			11		151.06	156.09	m i ke	EMSC
OrigID 91219033																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BSEG	151.06		PKPbc	05:08:32.795	-0.5	27.6		4.37		TAS					m_e
FLT1	152.31		PKPbc	05:08:37.349	0.1	27.6		4.37		TAS					m_e
GEC2	154.59		PKPbc	05:08:47.658		27.6		4.37		TAS					m_e
GOR1	151.69		PKPbc	05:08:35.200	-0.3	27.6		4.37		TAS					m_e
MANZ	154.15		PKPbc	05:08:46.053		27.6		4.37		TAS					m_e
PLN	153.69		PKPbc	05:08:44.086		27.6		4.37		TAS					m_e
ROTZ	154.31		PKPbc	05:08:47.038		27.6		4.37		TAS					m_e
STU	156.09		PKPbc	05:08:54.358		27.6		4.37		TAS					m_e
TANN	153.66		PKPbc	05:08:44.056		27.6		4.37		TAS					m_e
UBBA	154.00		PKPbc	05:08:45.002		27.6		4.37		TAS					m_e
WET	154.62		PKPbc	05:08:48.326		27.6		4.37		TAS					m_e

Event 91219002 Near east coast of eastern Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/19	06:21:32.80			40.9680	142.9700				33.0			24		77.10	82.45	m i ke	BGR
OrigID 91219008																	

Magnitude Err Nsta Author OrigID

mb	5.4		BGR	91219008
Ms	4.5		BGR	91219008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	78.46		P	06:33:28.775	0.2	34.9		5.40		TAS		30.8	1.13	m_e mb	5.3
BFO	82.45		P	06:33:49.979		34.9		5.40		TAS		81.5	1.31	m_e mb	5.7
BRG	78.28		P	06:33:27.614	-0.1	34.9		5.40		TAS		22.8	0.85	m_e mb	5.3
BSEG	77.10		P	06:33:21.611	0.3	34.9		5.40		TAS		36.5	0.94	m_e mb	5.5
BUG	80.20		P	06:33:37.974	-0.1	34.9		5.40		TAS		46.9	0.96	m_e mb	5.4
CLL	78.28		P	06:33:27.420	-0.2	34.9		5.40		TAS		49.5	0.81	m_e mb	5.7
CLZ	78.80		P	06:33:31.002	-0.1	34.9		5.40		TAS		40.7	0.76	m_e mb	5.5
FLT1	78.09		P	06:33:26.355	0.4	34.9		5.40		TAS		58.7	0.73	m_e mb	5.8
FUR	81.49		P	06:33:45.429		34.9		5.40		TAS		102.7	0.85	m_e mb	5.9
GEC2	80.00		P	06:33:37.005	-0.4	34.9		5.40		TAS		41.9	1.11	m_e mb	5.3
GRA1	80.26		P	06:33:38.942	-0.1	34.9		5.40		TAS		83.9	0.91	m_e mb	5.7

GRA1	80.26	L	07:11:19.289						T__	227.7	20.40	a_e	Ms	4.5
GTTG	79.19	P	06:33:32.939	-0.4	34.9	5.40			TAS	30.2	0.79	m_e	mb	5.4
KAST	80.01	P	06:33:37.005	-0.2	34.9	5.40			TAS	27.2	1.00	m_e	mb	5.1
MANZ	79.69	P	06:33:35.456	0.4	34.9	5.40			TAS	16.1	1.44	m_e	mb	4.8
MOX	79.33	P	06:33:33.423	-0.2	34.9	5.40			TAS	21.4	0.77	m_e	mb	5.2
MOX	79.33	L	07:11:00.260						T__	207.7	21.10	a_e	Ms	4.5
NEUB	78.83	P	06:33:30.615	-0.1	34.9	5.40			TAS	59.8	0.85	m_e	mb	5.7
PLN	79.26	P	06:33:33.036	-0.1	34.9	5.40			TAS	6.0	0.75	m_e	mb	4.7
RETH	78.41	P	06:33:28.679	-0.4	34.9	5.40			TAS	33.1	0.85	m_e	mb	5.5
ROTZ	79.83	P	06:33:36.521	0.3	34.9	5.40			TAS	14.1	1.29	m_e	mb	4.7
TANN	79.21	P	06:33:32.648	0.0	34.9	5.40			TAS	10.7	0.81	m_e	mb	4.9
TNS	80.82	P	06:33:41.459	0.3	34.9	5.40			TAS	24.1	0.92	m_e	mb	5.2
UBBA	79.78	P	06:33:35.747	-0.1	34.9	5.40			TAS	14.4	0.88	m_e	mb	4.9
WET	80.08	P	06:33:37.877	0.0	34.9	5.40			TAS	46.8	0.89	m_e	mb	5.4

Event 91219010 Off south coast of northwest Africa

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/19	15:26:01.46			1.7870	8.6220				33.0			18		45.73	50.42	m i ke	BGR
91219016																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	91219016
Ms	4.7		BGR	91219016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	46.36		P	15:34:25.800		183.5		7.74		TAS		27.4	0.66	m_e	mb 5.4
BRG	49.12		P	15:34:47.467	-0.2	183.5		7.74		TAS		31.2	1.33	m_e	mb 5.2
CLL	49.48		P	15:34:50.003	0.2	183.5		7.74		TAS		12.2	0.77	m_e	mb 5.0
FLT1	50.42		P	15:34:56.873	-0.6	183.5		7.74		TAS		15.4	0.78	m_e	mb 5.0
GEC2	47.08		P	15:34:31.983		183.5		7.74		TAS		26.9	0.64	m_e	mb 5.5
GRA1	47.78		P	15:34:37.215	-1.1	183.5		7.74		TAS		53.9	0.75	m_e	mb 5.8
GRA1	47.78		L	15:55:39.405						T__	697.7	20.30	a_e	Ms 4.6	
GTTG	49.60		P	15:34:51.377	0.2	183.5		7.74		TAS		18.3	0.79	m_e	mb 5.1
KAST	49.24		P	15:34:48.418	-0.0	183.5		7.74		TAS		13.2	0.78	m_e	mb 5.0
MANZ	48.11		P	15:34:39.804	0.5	183.5		7.74		TAS		7.0	0.78	m_e	mb 4.9
MOX	48.75		P	15:34:44.455	0.1	183.5		7.74		TAS		14.2	0.72	m_e	mb 5.1
MOX	48.75		L	15:56:19.203						T__	949.6	20.10	a_e	Ms 4.8	
NEUB	49.30		P	15:34:48.735	-0.1	183.5		7.74		TAS		22.9	0.79	m_e	mb 5.3
PLN	48.61		P	15:34:43.345	0.5	183.5		7.74		TAS		2.7	0.78	m_e	mb 4.3
STU	46.81		P	15:34:29.711		183.5		7.74		TAS		92.9	0.89	m_e	mb 5.9
TNS	48.26		P	15:34:40.544	0.5	183.5		7.74		TAS		63.3	0.68	m_e	mb 5.9
UBBA	48.87		P	15:34:45.459	-0.1	183.5		7.74		TAS		18.9	0.75	m_e	mb 5.2
UBR	45.73		P	15:34:20.146		183.5		7.74		TAS		27.9	0.67	m_e	mb 5.4
WET	47.32		P	15:34:33.991		183.5		7.74		TAS		63.1	0.67	m_e	mb 5.9
WLF	47.75		P	15:34:36.686	-0.1	183.5		7.74		TAS		37.3	0.78	m_e	mb 5.6

Event 91219011 Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/19	16:03:13.30			41.4400	19.5500				10.0					8.48	10.52	m i ke	EMSC

OrigID
91219043

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	10.52		Pn	16:05:44.777						T__					m_e
GEC2	8.48		Pn	16:05:16.450						T__					m_e
WET	9.02		Pn	16:05:23.055						T__					m_e
ZUGS	8.56		Pn	16:05:18.316						T__					m_e

Event 91220001 North Atlantic Ocean

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/20	06:11:59.03			58.7180	-28.5570				10.0					24.62	24.62	m i ke	BGR

OrigID
91220007

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91220007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	24.62		P	06:17:18.749		304.0		9.09		TAS		45.7	1.96	m_e mb	4.9

Event 91220002 North Atlantic Ocean

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/20	09:29:38.28			58.6430	-28.8100				10.0					24.74	24.74	m i ke	BGR

OrigID
91220008

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	91220008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	24.74		P	09:34:59.151		303.8		9.04		TAS		11.2	0.76	m_e mb	4.7

Event 91220003 Pakistan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/20	11:39:18.88			34.3310	71.9240				209.5	5.7		30		44.58	49.66	m i ke	BGR
91220009																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.3		BGR	91220009
MBB	6.7		BGR	91220009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	46.58		P	11:47:41.249	-0.6	85.5		7.86		TAS		139.0	1.06	m_e	MBB 6.7
ASSE	46.58		pP	11:48:27.344	16.4					T__				m_e	
ASSE	46.58		sP	11:48:50.465	16.4					T__				m_e	
BFO	48.42		P	11:47:56.306	-0.3	85.5		7.86		TAS		136.6	1.04	a_e	MBB 6.5
BFO	48.42		sP	11:49:06.273	16.4					T__				m_e	
BRG	44.58		P	11:47:26.206	-0.2	85.5		7.86		TAS		470.1	1.07	a_e	MBB 6.7
BRG	44.58		sP	11:48:34.894	16.4					T__				m_e	
BSEG	46.73		P	11:47:42.956	0.7	85.5		7.86		TAS		301.0	0.99	a_e	MBB 6.8
BSEG	46.73		pP	11:48:28.759	16.4					T__				m_e	
BSEG	46.73		sP	11:48:51.173	16.4					T__				m_e	
BUG	48.73		P	11:47:58.656	-0.3	85.5		7.86		TAS		421.3	0.99	a_e	MBB 6.8
BUG	48.73		sP	11:49:07.925	16.4					T__				m_e	
CLL	45.16		P	11:47:30.306	-0.6	85.5		7.86		TAS		216.9	1.00	a_e	MBB 6.5
CLL	45.16		pP	11:48:15.075	16.4					T__				m_e	
CLL	45.16		sP	11:48:38.433	16.4					T__				m_e	
CLZ	46.78		P	11:47:43.506	0.0	85.5		7.86		TAS		747.3	1.32	a_e	MBB 6.9
CLZ	46.78		pP	11:48:29.231	16.4					T__				m_e	
CLZ	46.78		sP	11:48:52.353	16.4					T__				m_e	
FLT1	46.22		P	11:47:38.306	-0.7	85.5		7.86		TAS		820.7	0.96	a_e	MBB 7.0
FLT1	46.22		pP	11:48:24.041	16.4					T__				m_e	
FUR	46.48		P	11:47:41.814	0.5	85.5		7.86		TAS		719.3	1.34	m_e	MBB 6.9
FUR	46.48		pP	11:48:27.580	16.4					T__				m_e	
FUR	46.48		sP	11:48:49.994	16.4					T__				m_e	
GEC2	44.82		P	11:47:28.456	0.1	85.5		7.86		TAS		147.2	1.09	a_e	MBB 6.4
GEC2	44.82		pP	11:48:13.423	16.4					T__				m_e	
GEC2	44.82		sP	11:48:36.545	16.4					T__				m_e	
GOR1	46.16		P	11:47:38.606	0.3	85.5		7.86		TAS		685.0	1.12	a_e	MBB 7.0
GOR1	46.16		pP	11:48:23.097	16.4					T__				m_e	
GOR1	46.16		sP	11:48:47.162	16.4					T__				m_e	
GRA1	46.38		P	11:47:41.323	0.6	85.5		7.86		TAS		319.7	1.01	m_e	mb 6.3
GRA1	46.38		pP	11:48:26.400	16.4					T__				m_e	
GRA1	46.38		sP	11:48:49.994	16.4					T__				m_e	
GTTG	47.05		P	11:47:45.756	0.1	85.5		7.86		TAS		728.7	1.02	a_e	MBB 7.0
GTTG	47.05		pP	11:48:30.411	16.4					T__				m_e	
IBBN	48.36		P	11:47:55.606	-0.1	85.5		7.86		TAS		450.4	0.88	a_e	MBB 7.1
IBBN	48.36		pP	11:48:40.556	16.4					T__				m_e	

IBBN	48.36	sP	11:49:05.093	16.4				T__			m_e	
KAST	48.04	P	11:47:53.391	-0.2	85.5	7.86		TAS	107.3	1.10	m_e	MBB 6.5
KAST	48.04	sP	11:49:02.262	16.4				T__			m_e	
MANZ	45.79	P	11:47:36.456	0.4	85.5	7.86		TAS	61.4	1.04	a_e	MBB 6.1
MANZ	45.79	pP	11:48:21.681	16.4				T__			m_e	
MANZ	45.79	sP	11:48:45.039	16.4				T__			m_e	
MOX	46.06	P	11:47:38.156	0.0	85.5	7.86		TAS	342.3	1.20	a_e	MBB 6.7
MOX	46.06	pP	11:48:22.625	16.4				T__			m_e	
MOX	46.06	sP	11:48:47.398	16.4				T__			m_e	
NEUB	45.93	P	11:47:36.706	-0.3	85.5	7.86		TAS	569.2	1.00	a_e	MBB 6.8
NEUB	45.93	sP	11:48:46.455	16.4				T__			m_e	
PLN	45.72	P	11:47:35.406	-0.1	85.5	7.86		TAS	66.6	1.02	a_e	MBB 6.1
PLN	45.72	pP	11:48:19.558	16.4				T__			m_e	
PLN	45.72	sP	11:48:44.331	16.4				T__			m_e	
RETH	47.35	P	11:47:47.806	0.1	85.5	7.86		TAS	244.9	1.11	a_e	MBB 7.0
RETH	47.35	pP	11:48:33.242	16.4				T__			m_e	
RETH	47.35	sP	11:48:56.836	16.4				T__			m_e	
RGN	44.97	P	11:47:28.906	0.8	85.5	7.86		TAS	2012.3	1.06	m_e	MBB 7.2
RGN	44.97	pP	11:48:13.895	16.4				T__			m_e	
RGN	44.97	sP	11:48:38.197	16.4				T__			m_e	
ROTZ	45.74	P	11:47:35.790	0.2	85.5	7.86		TAS	104.2	1.21	m_e	MBB 6.2
ROTZ	45.74	pP	11:48:21.681	16.4				T__			m_e	
ROTZ	45.74	sP	11:48:44.803	16.4				T__			m_e	
RUE	44.66	P	11:47:26.006	-0.7	85.5	7.86		TAS	415.8	0.95	a_e	MBB 6.8
RUE	44.66	pP	11:48:11.300	16.4				T__			m_e	
RUE	44.66	sP	11:48:35.130	16.4				T__			m_e	
STU	47.79	P	11:47:51.856	0.1	85.5	7.86		TAS			a_e	
STU	47.79	pP	11:48:36.073	16.4				T__			m_e	
STU	47.79	sP	11:49:02.026	16.4				T__			m_e	
TANN	45.54	P	11:47:34.056	0.0	85.5	7.86		TAS	213.6	1.08	a_e	MBB 6.6
TANN	45.54	pP	11:48:19.322	16.4				T__			m_e	
TANN	45.54	sP	11:48:42.680	16.4				T__			m_e	
TNS	48.12	P	11:47:54.256	-0.1	85.5	7.86		TAS	199.4	1.01	a_e	MBB 6.7
TNS	48.12	sP	11:49:04.386	16.4				T__			m_e	
UBBA	47.07	P	11:47:45.956	-0.1	85.5	7.86		TAS	113.7	0.84	a_e	MBB 6.7
UBBA	47.07	pP	11:48:31.355	16.4				T__			m_e	
UBBA	47.07	sP	11:48:55.420	16.4				T__			m_e	
UBR	47.32	P	11:47:47.732	-0.1	85.5	7.86		TAS	452.1	1.07	m_e	MBB 7.0
UBR	47.32	pP	11:48:33.242	16.4				T__			m_e	
UBR	47.32	sP	11:48:56.836	16.4				T__			m_e	
WET	45.34	P	11:47:32.556	0.1	85.5	7.86		TAS	194.3	1.59	a_e	MBB 6.4
WET	45.34	pP	11:48:17.906	16.4				T__			m_e	
WET	45.34	sP	11:48:41.500	16.4				T__			m_e	
WLF	49.66	P	11:48:06.767	0.3	85.5	7.86		TAS	587.3	0.98	m_e	MBB 6.7
WLF	49.66	sP	11:49:16.182	16.4				T__			m_e	

Event 91220004 Cook Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/20	17:20:37.90			-21.2940	-159.3690				33.0					150.69	150.69	m i ke	BGR
OrigID 91220010																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	150.69		PKPbc	17:40:26.520		346.7		1.80		TAS				m_e	

Event 91220005 Southeast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/20	19:40:56.09			32.6070	143.3650				42.1	0.9		18		84.53	89.95	m i ke	BGR
OrigID 91220011																	

Magnitude Err Nsta Author OrigID
mb 5.3 BGR 91220011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	86.02		P	19:53:31.474	0.1	38.7		4.82		TAS		26.1	1.09	m_e mb	5.3
BFO	89.95		P	19:53:49.976		38.7		4.82		TAS		6.1	0.96	m_e mb	4.8
BRG	85.68		P	19:53:29.567	-0.2	38.7		4.82		TAS		22.3	1.00	m_e mb	5.3
BRG	85.68		pP	19:53:41.883	-0.4					T__				m_e	
BSEG	84.73		P	19:53:24.798	-0.4	38.7		4.82		TAS		19.0	1.06	m_e mb	5.2
BUG	87.84		P	19:53:40.312	0.1	38.7		4.82		TAS		52.8	1.20	m_e mb	5.7
CLL	85.73		P	19:53:29.694	-0.4	38.7		4.82		TAS		55.3	0.98	m_e mb	5.7
CLL	85.73		pP	19:53:42.069	-0.4					T__				m_e	
CLZ	86.36		P	19:53:32.789	0.5	38.7		4.82		TAS		36.0	0.95	m_e mb	5.5
CLZ	86.36		pP	19:53:45.315	-0.4					T__				m_e	
FLT1	85.64		P	19:53:29.213	-0.1	38.7		4.82		TAS		42.7	1.03	m_e mb	5.6
FLT1	85.64		pP	19:53:41.357	-0.4					T__				m_e	
GEC2	87.32		P	19:53:37.959		38.7		4.82		TAS		3.2	0.87	m_e mb	4.5
GRA1	87.71		P	19:53:39.676	0.2	38.7		4.82		TAS		51.6	1.26	m_e mb	5.7
GTTG	86.75		P	19:53:34.612	0.5	38.7		4.82		TAS		29.2	0.95	m_e mb	5.4
GTTG	86.75		pP	19:53:47.137	-0.4					T__				m_e	
KAST	87.61		P	19:53:38.913	-0.2	38.7		4.82		TAS		25.3	1.08	m_e mb	5.3
KAST	87.61		pP	19:53:51.053	-0.4					T__				m_e	
MANZ	87.12		P	19:53:36.688	-0.3	38.7		4.82		TAS		4.1	1.07	m_e mb	4.5
MANZ	87.12		pP	19:53:48.740	-0.4					T__				m_e	
MOX	86.81		P	19:53:35.021	-0.0	38.7		4.82		TAS		25.6	1.11	m_e mb	5.3
NEUB	86.32		P	19:53:32.682	-0.2	38.7		4.82		TAS		51.5	0.99	m_e mb	5.6
NEUB	86.32		pP	19:53:44.748	-0.4					T__				m_e	
ROTZ	87.24		P	19:53:37.476	0.2	38.7		4.82		TAS		7.7	1.16	m_e mb	4.7
RUE	84.53		P	19:53:24.317	0.1	38.7		4.82		TAS		34.3	0.80	m_e mb	5.6

STU	89.25	P	19:53:47.051		38.7	4.82	TAS	56.9	1.12	m_e	mb	5.7
TNS	88.38	P	19:53:42.584	-0.0	38.7	4.82	TAS	28.4	1.24	m_e	mb	5.5
UBBA	87.31	P	19:53:37.571	0.1	38.7	4.82	TAS	32.8	1.31	m_e	mb	5.3
WET	87.44	P	19:53:38.471	-0.4	38.7	4.82	TAS	16.9	1.40	m_e	mb	5.0

Event 91221001 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/21	04:17:43.98			-17.5190	-173.9950				202.4	1.9		21		145.02	149.73	m i ke	BGR
91221007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.27		PKPbc	04:37:17.230	0.1	9.3		2.84		TAS				m_e	
BFO	149.21		PKPbc	04:37:28.334	-0.2	9.3		2.84		TAS				m_e	
BRG	146.12		PKPbc	04:37:19.746	-0.2	9.3		2.84		TAS				m_e	
BUG	146.14		PKPbc	04:37:19.814	-0.4	9.3		2.84		TAS				m_e	
CLL	145.83		PKPbc	04:37:18.724	-0.4	9.3		2.84		TAS				m_e	
CLZ	145.58		PKPbc	04:37:18.597	0.3	9.3		2.84		TAS				m_e	
FLT1	145.02		PKPbc	04:37:15.861	-0.9	9.3		2.84		TAS				m_e	
FUR	149.13		PKPbc	04:37:28.538		9.3		2.84		TAS				m_e	
GEC2	148.13		PKPbc	04:37:25.608	-0.4	9.3		2.84		TAS				m_e	
GRA1	147.63		PKPbc	04:37:24.381	-0.1	9.3		2.84		TAS				m_e	
GTTG	145.91		PKPbc	04:37:19.202	0.5	9.3		2.84		TAS				m_e	
GTTG	145.91		pPKPbc	04:38:11.341	-0.4					T__				m_e	
KAST	146.34		PKPbc	04:37:20.701	0.1	9.3		2.84		TAS				m_e	
KAST	146.34		pPKPbc	04:38:12.002	-0.4					T__				m_e	
MANZ	147.24		PKPbc	04:37:23.090	-0.2	9.3		2.84		TAS				m_e	
MOX	146.65		PKPbc	04:37:21.314	0.4	9.3		2.84		TAS				m_e	
MOX	146.65		pPKPbc	04:38:13.190	-0.4					T__				m_e	
NEUB	146.09		PKPbc	04:37:19.263	0.2	9.3		2.84		TAS				m_e	
ROTZ	147.44		PKPbc	04:37:23.879	0.2	9.3		2.84		TAS				m_e	
STU	148.72		PKPbc	04:37:27.448	0.1	9.3		2.84		TAS				m_e	
STU	148.72		pPKPbc	04:38:19.034	-0.4					T__				m_e	
TANN	146.78		PKPbc	04:37:22.132	0.4	9.3		2.84		TAS				m_e	
TNS	147.32		PKPbc	04:37:23.768	0.6	9.3		2.84		TAS				m_e	
UBBA	146.62		PKPbc	04:37:21.304	0.2	9.3		2.84		TAS				m_e	
UBR	149.73		PKPbc	04:37:29.902		9.3		2.84		TAS				m_e	
WET	147.97		PKPbc	04:37:25.063	0.1	9.3		2.84		TAS				m_e	
WLF	147.93		PKPbc	04:37:25.827		9.3		2.84		TAS				m_e	
WLF	147.93		pPKPbc	04:38:17.694	-0.4					T__				m_e	

Event 91221002 Alaska Peninsula, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/21	22:52:37.27			56.4560	-159.2020				29.0	2.9		16		69.64	75.85	m i ke	BGR
91221008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91221008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	71.46		P	23:03:52.035	-0.9	354.5		5.88		TAS		11.3	0.82	m_e	mb 5.0
BFO	75.07		P	23:04:12.742		354.5		5.88		TAS		5.8	0.92	m_e	mb 4.6
BFO	75.07		pP	23:04:21.852	0.6					T__				m_e	
BRG	72.89		P	23:04:01.032	0.3	354.5		5.88		TAS		6.9	0.86	m_e	mb 4.8
BSEG	69.64		P	23:03:41.372	-0.5	354.5		5.88		TAS		9.1	0.85	m_e	mb 4.9
BUG	71.89		P	23:03:54.285	0.6	354.5		5.88		TAS		25.6	0.80	m_e	mb 5.4
CLL	72.41		P	23:03:57.490	-0.3	354.5		5.88		TAS		7.4	0.81	m_e	mb 4.9
CLL	72.41		pP	23:04:06.053	0.6					T__				m_e	
CLZ	71.73		P	23:03:53.524	-0.3	354.5		5.88		TAS		14.7	0.84	m_e	mb 5.1
FLT1	71.29		P	23:03:51.170	0.3	354.5		5.88		TAS		11.4	0.83	m_e	mb 5.0
FUR	75.45		P	23:04:15.536		354.5		5.88		TAS		9.3	0.75	m_e	mb 4.9
GEC2	74.90		P	23:04:12.855		354.5		5.88		TAS		6.8	0.80	m_e	mb 4.7
GRA1	73.92		P	23:04:07.390		354.5		5.88		TAS		8.9	0.77	m_e	mb 4.9
GTTG	71.99		P	23:03:55.519	-0.3	354.5		5.88		TAS		14.4	0.88	m_e	mb 5.1
KAST	72.22		P	23:03:56.898	-0.3	354.5		5.88		TAS		10.4	0.88	m_e	mb 5.0
MANZ	73.68		P	23:04:05.496	-0.9	354.5		5.88		TAS		1.0	0.84	m_e	mb 3.9
MOX	73.00		P	23:04:01.543	0.6	354.5		5.88		TAS		10.8	0.79	m_e	mb 5.0
MOX	73.00		pP	23:04:09.529	0.6					T__				m_e	
NEUB	72.46		P	23:03:58.380	-0.2	354.5		5.88		TAS		19.9	0.81	m_e	mb 5.3
NEUB	72.46		pP	23:04:06.367	0.6					T__				m_e	
ROTZ	73.91		P	23:04:06.898		354.5		5.88		TAS		2.0	0.80	m_e	mb 4.2
RUE	71.28		P	23:03:50.903	-0.9	354.5		5.88		TAS		18.2	0.86	m_e	mb 5.2
STU	74.70		P	23:04:11.754		354.5		5.88		TAS		31.8	1.04	m_e	mb 5.3
STU	74.70		pP	23:04:19.356	0.6					T__				m_e	
TANN	73.27		P	23:04:03.027		354.5		5.88		TAS		4.7	0.89	m_e	mb 4.6
TNS	73.20		P	23:04:02.532	-1.0	354.5		5.88		TAS		10.7	0.83	m_e	mb 5.0
TNS	73.20		pP	23:04:10.941	0.6					T__				m_e	
UBBA	72.72		P	23:04:00.031	0.3	354.5		5.88		TAS		3.3	0.77	m_e	mb 4.5
UBR	75.85		P	23:04:17.518		354.5		5.88		TAS		4.2	0.76	m_e	mb 4.6
WET	74.56		P	23:04:10.384		354.5		5.88		TAS		4.4	0.93	m_e	mb 4.5
WLF	73.55		P	23:04:05.454		354.5		5.88		TAS		11.3	0.90	m_e	mb 4.9

Event 91222001 Carlsberg Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/22	02:22:21.91			3.2890	66.8280				10.0					65.82	65.82	m i ke	BGR

91222007

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91222007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	65.82		P	02:33:08.012		117.9		7.56		TAS		13.7	1.01	m_e mb	5.1

Event 91222002 Turkey

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/22	11:27:29.40			32.4170	48.7040				10.0			15		30.89	35.61	m i ke	EMSC

OrigID
91222038

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	91222008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	31.46		P	11:33:49.290	0.2	107.9		9.31		TAS		3.1	0.71	m_e mb	4.3
BSEG	34.69		P	11:34:18.430	0.8	107.9		9.31		TAS		3.4	0.81	m_e mb	4.3
BUG	35.61		P	11:34:26.971	0.2	107.9		9.31		TAS		11.1	0.84	m_e mb	4.7
CLL	32.17		P	11:33:56.038	0.0	107.9		9.31		TAS		7.8	0.90	m_e mb	4.6
CLZ	33.90		P	11:34:11.030	-0.3	107.9		9.31		TAS		14.3	0.84	m_e mb	4.9
FLT1	33.57		P	11:34:07.990	-0.8	107.9		9.31		TAS		5.0	0.76	m_e mb	4.5
FUR	32.22		P	11:33:56.751		107.9		9.31		TAS		51.1	0.75	m_e mb	5.5
GEC2	30.89		P	11:33:44.710		107.9		9.31		TAS		2.7	0.78	m_e mb	4.2
GRA1	32.69		P	11:34:01.122	0.1	107.9		9.31		TAS		19.7	0.83	m_e mb	5.1
KAST	34.86		P	11:34:20.840	0.2	107.9		9.31		TAS		11.6	0.83	m_e mb	4.8
MANZ	32.24		P	11:33:56.751	-0.1	107.9		9.31		TAS		83.0	2.21	m_e mb	5.3
ROTZ	32.11		P	11:33:56.038	0.3	107.9		9.31		TAS		3.5	0.88	m_e mb	4.3
TNS	34.56		P	11:34:18.010	0.1	107.9		9.31		TAS		7.3	0.85	m_e mb	4.6
UBR	32.86		P	11:34:02.282		107.9		9.31		TAS		23.0	0.86	m_e mb	5.1
WET	31.50		P	11:33:50.062		107.9		9.31		TAS		7.9	0.84	m_e mb	4.7

Event 91222003 Tonga Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/22	16:49:29.39			-21.0940	-172.3790				33.0			24		147.15	153.40	m i ke	BGR

OrigID
91222009

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
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ASSE	148.93	PKPbc	17:09:13.764	-0.1	7.0	2.44	TAS	m_e
BFO	152.82	PKPbc	17:09:23.129	-0.7	7.0	2.44	TAS	m_e
BRG	149.87	PKPbc	17:09:16.371	0.1	7.0	2.44	TAS	m_e
BSEG	147.15	PKPbc	17:09:08.929	-0.3	7.0	2.44	TAS	m_e
BUG	149.71	PKPbc	17:09:15.666	-0.4	7.0	2.44	TAS	m_e
CLL	149.55	PKPbc	17:09:14.962	-0.5	7.0	2.44	TAS	m_e
CLZ	149.24	PKPbc	17:09:14.632	0.4	7.0	2.44	TAS	m_e
FLT1	148.69	PKPbc	17:09:13.130	-0.2	7.0	2.44	TAS	m_e
FUR	152.83	PKPbc	17:09:23.345	-0.1	7.0	2.44	TAS	m_e
GEC2	151.89	PKPbc	17:09:21.161	-0.1	7.0	2.44	TAS	m_e
GRA1	151.32	PKPbc	17:09:19.541	0.9	7.0	2.44	TAS	m_e
GTTG	149.55	PKPbc	17:09:15.353	0.8	7.0	2.44	TAS	m_e
KAST	149.94	PKPbc	17:09:16.230	-0.3	7.0	2.44	TAS	m_e
MANZ	150.95	PKPbc	17:09:18.907	0.1	7.0	2.44	TAS	m_e
MOX	150.34	PKPbc	17:09:17.428	0.1	7.0	2.44	TAS	m_e
NEUB	149.78	PKPbc	17:09:16.300	0.3	7.0	2.44	TAS	m_e
ROTZ	151.16	PKPbc	17:09:19.189	-0.2	7.0	2.44	TAS	m_e
RUE	148.31	PKPbc	17:09:12.003	-0.4	7.0	2.44	TAS	m_e
TANN	150.49	PKPbc	17:09:17.991	0.3	7.0	2.44	TAS	m_e
TNS	150.93	PKPbc	17:09:19.189	0.3	7.0	2.44	TAS	m_e
UBBA	150.28	PKPbc	17:09:17.428	0.2	7.0	2.44	TAS	m_e
UBR	153.40	PKPbc	17:09:24.683	-0.1	7.0	2.44	TAS	m_e
WET	151.70	PKPbc	17:09:20.457	-0.2	7.0	2.44	TAS	m_e
WLF	151.47	PKPbc	17:09:20.597	0.1	7.0	2.44	TAS	m_e

Event 91226009 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	08:22:56.40			-22.5800	-178.2800				33.0				25	148.02	154.07	m i ke	BGR
91226015																	

Magnitude Err Nsta Author

OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	149.70		PKPbc	19:23:03.645	-0.2	12.9		2.91		TAS					m_e
BFO	153.77		PKPbc	19:23:15.147		12.9		2.91		TAS					m_e
BFO	153.77		PKPab	19:23:20.498	-0.3	12.9		2.91		TAS					m_e
BRG	150.19		PKPbc	19:23:05.742	0.6	12.9		2.91		TAS					m_e
BSEG	148.02		PKPbc	19:22:58.514	-0.2	12.9		2.91		TAS					m_e
CLL	150.01		PKPbc	19:23:04.944	0.2	12.9		2.91		TAS					m_e
CLZ	150.03		PKPbc	19:23:04.667	0.6	12.9		2.91		TAS					m_e
FLT1	149.41		PKPbc	19:23:02.959	0.2	12.9		2.91		TAS					m_e
FUR	153.35		PKPbc	19:23:14.609		12.9		2.91		TAS					m_e
FUR	153.35		PKPab	19:23:19.915	-0.3	12.9		2.91		TAS					m_e
GEC2	152.11		PKPbc	19:23:11.459		12.9		2.91		TAS					m_e
GRA1	151.92		PKPbc	19:23:10.165		12.9		2.91		TAS					m_e

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GRA1	151.92	PKPab	19:23:13.919	-0.3	12.9	2.91	TAS	m_e
GTTG	150.39	PKPbc	19:23:05.844	0.6	12.9	2.91	TAS	m_e
IBBN	149.96	PKPbc	19:23:04.511	-0.2	12.9	2.91	TAS	m_e
KAST	150.96	PKPbc	19:23:07.151	0.6	12.9	2.91	TAS	m_e
MANZ	151.45	PKPbc	19:23:09.132		12.9	2.91	TAS	m_e
MOX	150.94	PKPbc	19:23:07.343	-0.2	12.9	2.91	TAS	m_e
NEUB	150.39	PKPbc	19:23:05.981	0.6	12.9	2.91	TAS	m_e
ROTZ	151.63	PKPbc	19:23:09.711		12.9	2.91	TAS	m_e
RUE	148.75	PKPbc	19:23:01.255	-0.3	12.9	2.91	TAS	m_e
STU	153.20	PKPbc	19:23:13.862		12.9	2.91	TAS	m_e
STU	153.20	PKPab	19:23:18.392	-0.3	12.9	2.91	TAS	m_e
TANN	150.97	PKPbc	19:23:07.687	-0.4	12.9	2.91	TAS	m_e
TNS	151.91	PKPbc	19:23:09.942		12.9	2.91	TAS	m_e
TNS	151.91	PKPab	19:23:13.739	-0.3	12.9	2.91	TAS	m_e
UBBA	151.08	PKPbc	19:23:07.728	-0.4	12.9	2.91	TAS	m_e
UBR	154.07	PKPbc	19:23:16.292		12.9	2.91	TAS	m_e
WET	152.05	PKPbc	19:23:11.144		12.9	2.91	TAS	m_e
WET	152.05	PKPab	19:23:15.028	-0.3	12.9	2.91	TAS	m_e
WLF	152.74	PKPbc	19:23:12.589		12.9	2.91	TAS	m_e

Event 91223001 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	08:22:56.40			-22.5800	-178.2800				33.0			24		148.02	154.07	m i ke	BGR
91223007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	149.70		PKPbc	08:42:42.472	-0.1	18.4		2.35		TAS					m_e
ASSE	149.70		PKPab	08:42:47.446		18.4		2.35		TAS					m_e
BFO	153.77		PKPbc	08:42:52.099		18.4		2.35		TAS					m_e
BFO	153.77		PKPab	08:43:04.123		18.4		2.35		TAS					m_e
BRG	150.19		PKPbc	08:42:43.941	0.4	18.4		2.35		TAS					m_e
BSEG	148.02		PKPbc	08:42:38.370	-0.5	18.4		2.35		TAS					m_e
BUG	150.87		PKPbc	08:42:45.716		18.4		2.35		TAS					m_e
BUG	150.87		PKPab	08:42:52.680		18.4		2.35		TAS					m_e
CLL	150.01		PKPbc	08:42:43.676	-0.0	18.4		2.35		TAS					m_e
CLZ	150.03		PKPbc	08:42:43.251	0.5	18.4		2.35		TAS					m_e
CLZ	150.03		PKPab	08:42:49.486		18.4		2.35		TAS					m_e
FLT1	149.41		PKPbc	08:42:41.752	-0.3	18.4		2.35		TAS					m_e
FLT1	149.41		PKPab	08:42:46.076		18.4		2.35		TAS					m_e
FUR	153.35		PKPbc	08:42:50.839		18.4		2.35		TAS					m_e
FUR	153.35		PKPab	08:43:03.176		18.4		2.35		TAS					m_e
GEC2	152.11		PKPbc	08:42:48.650		18.4		2.35		TAS					m_e
GRA1	151.92		PKPbc	08:42:48.252	-0.5	18.4		2.35		TAS					m_e

GRA1	151.92	PKPab	08:42:57.272		18.4	2.35	TAS	m_e
GTTG	150.39	PKPbc	08:42:44.233	0.0	18.4	2.35	TAS	m_e
GTTG	150.39	PKPab	08:42:50.136		18.4	2.35	TAS	m_e
KAST	150.96	PKPbc	08:42:45.856		18.4	2.35	TAS	m_e
MANZ	151.45	PKPbc	08:42:47.191	0.1	18.4	2.35	TAS	m_e
MOX	150.94	PKPbc	08:42:45.732	0.1	18.4	2.35	TAS	m_e
NEUB	150.39	PKPbc	08:42:44.381		18.4	2.35	TAS	m_e
ROTZ	151.63	PKPbc	08:42:47.456	0.3	18.4	2.35	TAS	m_e
RUE	148.75	PKPbc	08:42:40.161	-0.4	18.4	2.35	TAS	m_e
STU	153.20	PKPbc	08:42:51.237		18.4	2.35	TAS	m_e
TANN	150.97	PKPbc	08:42:46.263	0.3	18.4	2.35	TAS	m_e
TNS	151.91	PKPbc	08:42:48.451	-0.2	18.4	2.35	TAS	m_e
TNS	151.91	PKPab	08:42:57.141		18.4	2.35	TAS	m_e
UBR	154.07	PKPbc	08:42:52.364		18.4	2.35	TAS	m_e
WET	152.05	PKPbc	08:42:48.120	-0.6	18.4	2.35	TAS	m_e
WET	152.05	PKPab	08:42:58.088		18.4	2.35	TAS	m_e
WLF	152.74	PKPbc	08:42:50.681	-0.1	18.4	2.35	TAS	m_e

Event 91223002 Guatemala

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	15:48:06.55			14.1530	-91.3050				33.0			21		84.10	89.06	m i ke	BGR
91223008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	91223008
Ms	5.5		BGR	91223008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	86.15		P	16:00:43.949	0.4	288.6		4.83		TAS		88.6	1.21	m_e	mb 5.8
BFO	85.84		P	16:00:42.476		288.6		4.83		TAS		28.4	1.04	m_e	mb 5.3
BRG	88.49		P	16:00:55.477	0.0	288.6		4.83		TAS		13.8	0.91	m_e	mb 5.3
BSEG	85.39		P	16:00:40.301	-0.4	288.6		4.83		TAS		41.0	0.90	m_e	mb 5.7
BUG	84.32		P	16:00:35.704	-0.3	288.6		4.83		TAS		26.1	0.93	m_e	mb 5.5
CLL	87.78		P	16:00:52.013	0.0	288.6		4.83		TAS		6.7	0.93	m_e	mb 5.0
CLZ	86.06		P	16:00:43.592	0.0	288.6		4.83		TAS		31.0	0.83	m_e	mb 5.5
FLT1	86.41		P	16:00:45.284	0.3	288.6		4.83		TAS		24.7	0.84	m_e	mb 5.4
GEC2	89.06		P	16:00:58.248	-0.6	288.6		4.83		TAS		19.1	0.96	m_e	mb 5.3
GRA1	87.24		P	16:00:49.432	-0.2	288.6		4.83		TAS		50.2	1.07	m_e	mb 5.6
GRA1	87.24		L	16:41:44.543						T__		1857.5	19.70	a_e	Ms 5.5
GTTG	85.91		P	16:00:43.197	0.2	288.6		4.83		TAS		71.0	0.94	m_e	mb 5.8
IBBN	84.38		P	16:00:35.641		288.6		4.83		TAS		24.5	0.87	m_e	mb 5.5
KAST	85.08		P	16:00:39.230	-0.2	288.6		4.83		TAS		39.8	1.16	m_e	mb 5.5
MANZ	87.69		P	16:00:51.588	-0.3	288.6		4.83		TAS		3.2	0.95	m_e	mb 4.6
MOX	87.18		P	16:00:49.180	0.1	288.6		4.83		TAS		13.9	0.86	m_e	mb 5.1
MOX	87.18		L	16:42:11.605						T__		1488.9	18.80	a_e	Ms 5.4

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ROTZ	87.82	P	16:00:52.454	0.6	288.6	4.83	TAS	2.0	0.99	m_e mb	4.4
STU	86.26	P	16:00:44.898	0.2	288.6	4.83	TAS	70.6	0.85	m_e mb	5.8
TANN	87.76	P	16:00:51.995	0.0	288.6	4.83	TAS	17.9	1.01	m_e mb	5.3
TNS	85.37	P	16:00:40.741	-0.0	288.6	4.83	TAS	62.3	0.96	m_e mb	5.8
UBBA	86.15	P	16:00:44.394	-0.2	288.6	4.83	TAS	12.3	0.90	m_e mb	5.0
UBR	87.17	P	16:00:48.907		288.6	4.83	TAS	36.3	0.96	m_e mb	5.5
WET	88.44	P	16:00:55.414	-0.0	288.6	4.83	TAS	11.9	0.89	m_e mb	5.2
WLF	84.10	P	16:00:34.192	-0.1	288.6	4.83	TAS	24.1	0.94	m_e mb	5.4

Event 91223003 Near east coast of Kamchatka Peninsula, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	16:19:19.86			56.8680	161.1180				33.0			10		68.39	73.06	m i ke	BGR
OrigID 91223009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91223009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	72.75	P		16:30:42.732	-0.0	16.9		6.10		TAS		3.6	0.88	m_e mb	4.5
BRG	69.26	P		16:30:21.740	0.2	16.9		6.10		TAS		22.2	1.21	m_e mb	5.3
CLL	69.03	P		16:30:20.188	-0.0	16.9		6.10		TAS		51.7	1.30	m_e mb	5.6
CLZ	69.01	P		16:30:20.141	-0.0	16.9		6.10		TAS		16.0	1.09	m_e mb	5.2
FLT1	68.39	P		16:30:16.376	-0.1	16.9		6.10		TAS		83.5	1.79	m_e mb	5.7
GEC2	71.23	P		16:30:33.563		16.9		6.10		TAS		23.5	1.15	m_e mb	5.2
GRA1	70.92	P		16:30:32.085		16.9		6.10		TAS		19.5	1.06	m_e mb	5.2
KAST	69.97	P		16:30:25.892		16.9		6.10		TAS		10.1	1.16	m_e mb	4.8
MANZ	70.46	P		16:30:28.911	0.1	16.9		6.10		TAS		5.9	1.29	m_e mb	4.6
MOX	69.93	P		16:30:25.572	0.3	16.9		6.10		TAS		17.2	1.30	m_e mb	5.0
ROTZ	70.65	P		16:30:30.608	-0.2	16.9		6.10		TAS		9.4	1.35	m_e mb	4.7
TANN	69.99	P		16:30:26.448	0.2	16.9		6.10		TAS		16.5	1.18	m_e mb	5.0
UBBA	70.06	P		16:30:26.383		16.9		6.10		TAS		48.8	1.59	m_e mb	5.4
UBR	73.06	P		16:30:44.831	-0.0	16.9		6.10		TAS		43.8	1.35	m_e mb	5.4
WET	71.12	P		16:30:33.180		16.9		6.10		TAS		33.9	1.23	m_e mb	5.3

Event 91223004 Vancouver Island, Canada, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	19:49:51.89			49.6970	-124.9680				10.0					74.10	74.10	m i ke	BGR
OrigID 91223010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91223010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	74.10		P	20:01:26.518		341.9		5.27		TAS		26.0	1.26	m_e mb	5.1

Event 91223005 West of Vancouver Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/23	20:56:23.58			50.1530	-132.2710				10.0					75.74	75.74	m i ke	BGR
OrigID 91223011																	

Magnitude	Err	Nsta	Author	OrigID
mb 5.3			BGR	91223011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	75.74		P	21:08:07.626		340.1		5.27		TAS		39.7	1.48	m_e mb	5.3

Event 91224001 Northern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/24	05:52:44.99			5.4880	94.9750				33.0					81.80	81.80	m i ke	BGR
OrigID 91224007																	

Magnitude	Err	Nsta	Author	OrigID
mb 4.9			BGR	91224007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	81.80		P	06:05:00.931		104.3		4.69		TAS		9.9	1.03	m_e mb	4.9

Event 91224002 Off southeast coast of Hokkaido, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/24	14:36:40.12			42.7280	148.1550				33.0				10	77.16	82.66	m i ke	BGR
OrigID 91224008																	

Magnitude	Err	Nsta	Author	OrigID
mb 4.9			BGR	91224008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	78.61		P	14:48:36.899	0.1	30.6		5.38		TAS		12.1	0.95	m_e mb	4.9
BFO	82.66		P	14:48:58.487		30.6		5.38		TAS		7.6	0.89	m_e mb	4.9

BRG	78.61	P	14:48:37.143		30.6	5.38	TAS	9.7	1.01	m_e	mb	4.8
BSEG	77.16	P	14:48:28.732	0.1	30.6	5.38	TAS	13.9	0.96	m_e	mb	5.1
BUG	80.25	P	14:48:46.006		30.6	5.38	TAS	14.0	0.88	m_e	mb	4.9
CLL	78.56	P	14:48:36.778		30.6	5.38	TAS	27.2	0.81	m_e	mb	5.3
CLZ	78.95	P	14:48:39.177		30.6	5.38	TAS	16.7	0.85	m_e	mb	5.1
FLT1	78.26	P	14:48:34.927	0.2	30.6	5.38	TAS	22.8	0.88	m_e	mb	5.3
GEC2	80.41	P	14:48:46.683		30.6	5.38	TAS	4.8	0.88	m_e	mb	4.4
GRA1	80.53	P	14:48:47.646		30.6	5.38	TAS	16.3	0.76	m_e	mb	5.1
GTTG	79.34	P	14:48:41.200		30.6	5.38	TAS	33.5	1.25	m_e	mb	5.2
IBBN	79.34	P	14:48:40.711	0.1	30.6	5.38	TAS	21.1	0.84	m_e	mb	5.2
KAST	80.11	P	14:48:45.271		30.6	5.38	TAS	10.8	0.89	m_e	mb	4.8
MANZ	79.99	P	14:48:44.659		30.6	5.38	TAS	1.9	1.02	m_e	mb	4.0
MOX	79.58	P	14:48:41.875		30.6	5.38	TAS	6.3	0.85	m_e	mb	4.6
NEUB	79.06	P	14:48:39.408		30.6	5.38	TAS	23.1	0.91	m_e	mb	5.2
ROTZ	80.14	P	14:48:45.652		30.6	5.38	TAS	2.3	1.01	m_e	mb	4.0
RUE	77.31	P	14:48:29.916	-0.2	30.6	5.38	TAS	27.6	1.05	m_e	mb	5.3
STU	82.00	P	14:48:55.548		30.6	5.38	TAS	40.1	0.97	m_e	mb	5.5
TANN	79.50	P	14:48:41.720		30.6	5.38	TAS	4.4	1.01	m_e	mb	4.3
TNS	80.96	P	14:48:50.340	0.1	30.6	5.38	TAS	7.9	0.98	m_e	mb	4.7
UBBA	79.95	P	14:48:43.914		30.6	5.38	TAS	5.0	0.78	m_e	mb	4.5
WET	80.44	P	14:48:46.975	2.0	30.6	5.38	TAS	11.4	0.92	m_e	mb	4.8

Event 91224003 Santiago del Estero, Argentina

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/24	16:43:32.20			-26.9880	-63.3520				559.0			14		98.05	103.62	m i ke	EMSC
	91224039																

Magnitude	Err	Nsta	Author	OrigID
mb	6.2		BGR	91224009
MBB	6.4		BGR	91224009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	101.77		P	16:56:25.324		241.6		4.44		TAS		57.2	1.17	m_e	MBB 6.5
BFO	98.57		P	16:56:11.297		241.6		4.44		TAS		76.3	0.86	m_e	MBB 6.8
BRG	103.00		P	16:56:30.922		241.6		4.44		TAS		20.8	1.13	m_e	MBB 6.2
BSEG	102.45		P	16:56:28.297	0.1	241.6		4.44		TAS		17.5	0.93	m_e	MBB 6.0
BUG	99.60		P	16:56:15.786	-0.1	241.6		4.44		TAS		161.9	0.99	m_e	MBB 6.8
CLL	102.66		P	16:56:29.177		241.6		4.44		TAS		58.0	1.27	m_e	MBB 6.3
CLZ	101.47		P	16:56:24.211		241.6		4.44		TAS		48.0	1.14	m_e	MBB 6.3
FLT1	102.17		P	16:56:27.178		241.6		4.44		TAS		35.3	0.84	m_e	MBB 6.3
FUR	100.19		P	16:56:18.327		241.6		4.44		TAS		125.9	1.33	m_e	MBB 6.6
GEC2	101.93		P	16:56:26.134		241.6		4.44		TAS		112.4	1.98	m_e	MBB 6.1
GRA1	100.90		P	16:56:21.645		241.6		4.44		TAS		109.5	1.03	m_e	MBB 6.5
GTTG	101.10		P	16:56:22.583		241.6		4.44		TAS		58.5	1.00	m_e	MBB 6.3
IBBN	100.30		P	16:56:18.906	-0.1	241.6		4.44		TAS		193.4	0.93	m_e	MBB 6.9

KAST	100.09	P	16:56:17.818	241.6	4.44	TAS	68.2	0.96	m_e	MBB	6.5
MANZ	101.55	P	16:56:24.493	241.6	4.44	TAS	8.1	1.02	m_e	MBB	5.8
MOX	101.58	P	16:56:24.784	241.6	4.44	TAS	31.4	0.97	m_e	MBB	6.0
NEUB	101.93	P	16:56:26.240	241.6	4.44	TAS	76.8	1.16	m_e	MBB	6.5
PLN	101.81	P	16:56:25.677	241.6	4.44	TAS	10.0	1.05	m_e	MBB	5.9
RETH	101.37	P	16:56:23.525	0.1 241.6	4.44	TAS	72.1	1.01	m_e	MBB	6.5
ROTZ	101.50	P	16:56:24.612	241.6	4.44	TAS	7.8	1.00	m_e	MBB	5.6
RUE	103.62	P	16:56:33.610	-0.2 241.6	4.44	TAS	75.1	0.81	m_e	MBB	6.7
STU	99.29	P	16:56:14.402	241.6	4.44	TAS	342.2	1.00	m_e	MBB	7.2
TANN	101.95	P	16:56:26.894	241.6	4.44	TAS	41.6	1.24	m_e	MBB	6.5
TNS	99.61	P	16:56:15.938	241.6	4.44	TAS	142.9	1.15	m_e	MBB	6.7
UBBA	100.77	P	16:56:20.784	241.6	4.44	TAS	48.0	1.39	m_e	MBB	6.1
UBR	99.27	P	16:56:14.617	241.6	4.44	TAS	193.8	1.08	m_e	MBB	6.9
WET	101.59	P	16:56:24.492	241.6	4.44	TAS	49.9	1.50	m_e	MBB	6.0
WLF	98.05	P	16:56:08.939	241.6	4.44	TAS	327.5	0.95	m_e	MBB	7.2

Event 91224004 Colombia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/24	19:04:07.24		3.9050	-71.2740				21.7		0.8		8		78.90	83.97	m i ke	BGR
91224010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	91224010
Ms	5.5		BGR	91224010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	81.99		P	19:16:24.323	0.1	266.8		5.23		TAS		21.6	1.17	m_e	mb 5.2
BFO	80.18		P	19:16:14.591		266.8		5.23		TAS		15.5	1.05	m_e	mb 4.9
BRG	83.97		P	19:16:34.614	0.1	266.8		5.23		TAS		17.9	1.31	m_e	mb 5.1
BSEG	81.90		P	19:16:23.594	-0.3	266.8		5.23		TAS				m_e	
BSEG	81.90		pP	19:16:29.938	0.1					T__				m_e	
BUG	79.82		P	19:16:13.014	0.1	266.8		5.23		TAS		20.9	0.92	m_e	mb 5.1
CLL	83.39		P	19:16:31.719	0.1	266.8		5.23		TAS		11.4	1.10	m_e	mb 5.0
CLZ	81.78		P	19:16:23.387	0.1	266.8		5.23		TAS		14.6	0.97	m_e	mb 5.1
FLT1	82.34		P	19:16:25.860		266.8		5.23		TAS		12.6	1.04	m_e	mb 5.0
FLT1	82.34		pP	19:16:31.906	0.1					T__				m_e	
GEC2	83.77		P	19:16:33.583		266.8		5.23		TAS		12.2	1.02	m_e	mb 5.1
GRA1	82.18		P	19:16:25.369	0.1	266.8		5.23		TAS				m_e	
GRA1	82.18		L	19:51:05.973						T__		2514.2	20.40	a_e	Ms 5.6
GTTG	81.50		P	19:16:21.892	0.1	266.8		5.23		TAS		4.3	0.84	m_e	mb 4.6
IBBN	80.21		P	19:16:14.674	0.1	266.8		5.23		TAS		42.6	1.28	m_e	mb 5.2
KAST	80.51		P	19:16:16.696	0.1	266.8		5.23		TAS		11.8	1.02	m_e	mb 4.9
MANZ	82.77		P	19:16:28.589		266.8		5.23		TAS		1.7	0.90	m_e	mb 4.3
MANZ	82.77		pP	19:16:34.937	0.1					T__				m_e	
MOX	82.48		P	19:16:26.754	0.1	266.8		5.23		TAS		7.5	1.13	m_e	mb 4.7

MOX	82.48	L	19:54:20.095						T__	2067.7	20.20	a_e	Ms	5.5
ROTZ	82.82	P	19:16:28.845	0.1	266.8	5.23			TAS	15.7	1.71	m_e	mb	5.0
RUE	83.91	P	19:16:33.990	0.1	266.8	5.23			TAS	11.8	0.80	m_e	mb	5.2
RUE	83.91	pP	19:16:40.430	0.1					T__			m_e		
STU	80.79	P	19:16:17.987	0.1	266.8	5.23			TAS	66.8	1.00	m_e	mb	5.6
TANN	83.01	P	19:16:29.703	0.1	266.8	5.23			TAS	11.9	1.08	m_e	mb	5.0
TNS	80.43	P	19:16:16.320	0.1	266.8	5.23			TAS	22.8	1.12	m_e	mb	5.0
UBBA	81.47	P	19:16:21.736	0.1	266.8	5.23			TAS			m_e		
UBR	81.32	P	19:16:21.163		266.8	5.23			TAS	45.9	1.22	m_e	mb	5.4
WET	83.24	P	19:16:31.086		266.8	5.23			TAS	35.7	1.17	m_e	mb	5.5
WLF	78.90	P	19:16:08.414		266.8	5.23			TAS	49.6	0.99	m_e	mb	5.5

Event 91225001 Queen Charlotte Islands, Canada, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	03:36:11.89			52.0960	-133.1130				33.0			13		70.02	75.74	m i ke	BGR
91225007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	91225007
MBB	6.4		BGR	91225007
Ms	6.3		BGR	91225007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	71.77		P	03:47:29.268	-0.9	338.1		5.86		TAS		34.7	1.14	m_e	MBB 6.4
BFO	74.68		P	03:47:46.164		338.1		5.86		TAS				m_e	
BRG	73.69		P	03:47:40.297	-0.2	338.1		5.86		TAS				m_e	
BSEG	70.02		P	03:47:19.039	-0.1	338.1		5.86		TAS		19.7	1.16	m_e	MBB 6.2
BUG	71.56		P	03:47:28.257	-0.2	338.1		5.86		TAS		71.2	1.34	m_e	MBB 6.3
CLL	73.07		P	03:47:36.250	0.1	338.1		5.86		TAS				m_e	
CLZ	71.96		P	03:47:30.315	-0.2	338.1		5.86		TAS		32.2	1.09	m_e	MBB 6.5
FLT1	71.71		P	03:47:28.732	-0.1	338.1		5.86		TAS		14.0	0.94	m_e	MBB 6.3
GEC2	75.54		P	03:47:51.595		338.1		5.86		TAS				m_e	
GRA1	74.16		P	03:47:43.515		338.1		5.86		TAS				m_e	
GRA1	74.16		L	04:21:21.102						T__	15821.2	19.50		a_e	Ms 6.3
GTTG	72.14		P	03:47:31.357	-0.2	338.1		5.86		TAS				m_e	
IBBN	70.89		P	03:47:24.153	0.2	338.1		5.86		TAS		105.6	1.31	m_e	MBB 6.6
KAST	72.07		P	03:47:31.093	0.1	338.1		5.86		TAS				m_e	
MANZ	74.10		P	03:47:42.704		338.1		5.86		TAS				m_e	
MOX	73.37		P	03:47:38.424		338.1		5.86		TAS				m_e	
MOX	73.37		L	04:21:53.889						T__	15957.5	18.40		a_e	Ms 6.3
RGN	70.11		P	03:47:19.684	-0.1	338.1		5.86		TAS		74.0	1.17	m_e	MBB 6.5
ROTZ	74.33		P	03:47:44.498		338.1		5.86		TAS				m_e	
STU	74.50		P	03:47:45.327		338.1		5.86		TAS				m_e	
TANN	73.78		P	03:47:41.127		338.1		5.86		TAS				m_e	
TNS	72.97		P	03:47:36.300		338.1		5.86		TAS				m_e	

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UBBA	72.82	P	03:47:35.246	-0.2	338.1	5.86	TAS	m_e
UBR	75.74	P	03:47:52.466		338.1	5.86	TAS	m_e
WET	75.06	P	03:47:48.132		338.1	5.86	TAS	m_e

Event 91225002 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	03:45:44.04			-23.3070	175.0760				33.0			14		147.33	152.90	m i ke	BGR
OrigID 91225008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.83		PKPbc	04:05:28.702	0.1	31.5		2.49		TAS					m_e
BFO	152.90		PKPbc	04:05:38.515		31.5		2.49		TAS					m_e
BRG	148.82		PKPbc	04:05:28.634	0.1	31.5		2.49		TAS					m_e
BSEG	147.33		PKPbc	04:05:24.572	-0.7	31.5		2.49		TAS					m_e
BUG	150.37		PKPbc	04:05:32.793		31.5		2.49		TAS					m_e
CLL	148.79		PKPbc	04:05:28.558		31.5		2.49		TAS					m_e
CLZ	149.17		PKPbc	04:05:29.732	0.1	31.5		2.49		TAS					m_e
FLT1	148.49		PKPbc	04:05:27.880	0.8	31.5		2.49		TAS					m_e
GEC2	150.56		PKPbc	04:05:32.888		31.5		2.49		TAS					m_e
GTTG	149.55		PKPbc	04:05:30.693	-0.1	31.5		2.49		TAS					m_e
IBBN	149.46		PKPbc	04:05:30.435	0.1	31.5		2.49		TAS					m_e
KAST	150.29		PKPbc	04:05:32.517		31.5		2.49		TAS					m_e
MANZ	150.22		PKPbc	04:05:32.408		31.5		2.49		TAS					m_e
MOX	149.82		PKPbc	04:05:31.227		31.5		2.49		TAS					m_e
ROTZ	150.37		PKPbc	04:05:32.450		31.5		2.49		TAS					m_e
STU	152.24		PKPbc	04:05:36.926		31.5		2.49		TAS					m_e
TANN	149.73		PKPbc	04:05:31.036	-0.3	31.5		2.49		TAS					m_e
TNS	151.17		PKPbc	04:05:34.826		31.5		2.49		TAS					m_e
UBBA	150.19		PKPbc	04:05:31.911		31.5		2.49		TAS					m_e
UBR	152.87		PKPbc	04:05:38.515		31.5		2.49		TAS					m_e
WET	150.64		PKPbc	04:05:33.369		31.5		2.49		TAS					m_e
WLF	152.29		PKPbc	04:05:37.764		31.5		2.49		TAS					m_e

Event 91225003 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	04:55:07.38			-18.1210	-177.1980				33.0			16		143.78	149.92	m i ke	BGR
OrigID 91225009																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	149.53		PKPbc	05:14:53.251	0.1	15.1		2.82		TAS				m_e	
BRG	146.14		PKPbc	05:14:43.652	-0.3	15.1		2.82		TAS				m_e	
BSEG	143.78		PKPbc	05:14:36.980	-0.3	15.1		2.82		TAS				m_e	
CLL	145.91		PKPbc	05:14:43.092	-0.1	15.1		2.82		TAS				m_e	
CLZ	145.82		PKPbc	05:14:42.850	0.5	15.1		2.82		TAS				m_e	
FLT1	145.22		PKPbc	05:14:40.946	-0.3	15.1		2.82		TAS				m_e	
GEC2	148.10		PKPbc	05:14:49.144	0.0	15.1		2.82		TAS				m_e	
GRA1	147.78		PKPbc	05:14:48.224	0.8	15.1		2.82		TAS				m_e	
GTTG	146.17		PKPbc	05:14:43.979	-0.0	15.1		2.82		TAS				m_e	
MANZ	147.34		PKPbc	05:14:47.144	0.5	15.1		2.82		TAS				m_e	
ROTZ	147.53		PKPbc	05:14:47.786	0.2	15.1		2.82		TAS				m_e	
TANN	146.87		PKPbc	05:14:45.892	-0.0	15.1		2.82		TAS				m_e	
TNS	147.66		PKPbc	05:14:48.317	0.3	15.1		2.82		TAS				m_e	
UBR	149.92		PKPbc	05:14:54.114	-0.7	15.1		2.82		TAS				m_e	
WET	148.00		PKPbc	05:14:48.738	-0.4	15.1		2.82		TAS				m_e	
WLF	148.42		PKPbc	05:14:50.417	-0.3	15.1		2.82		TAS				m_e	

Event 91225004 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	06:55:06.17			-21.1140	177.7200				33.0			6		147.13	151.67	m i ke	BGR
91225010																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	151.54		PKPbc	07:14:55.775		25.4		2.62		TAS				m_e	
BRG	147.68		PKPbc	07:14:45.930		25.4		2.62		TAS				m_e	
CLL	147.58		PKPbc	07:14:46.768		25.4		2.62		TAS				m_e	
CLZ	147.79		PKPbc	07:14:47.082		25.4		2.62		TAS				m_e	
FLT1	147.13		PKPbc	07:14:44.796		25.4		2.62		TAS				m_e	
GEC2	149.52		PKPbc	07:14:50.297		25.4		2.62		TAS				m_e	
GTTG	148.16		PKPbc	07:14:48.333		25.4		2.62		TAS				m_e	
IBBN	147.91		PKPbc	07:14:47.903		25.4		2.62		TAS				m_e	
KAST	148.82		PKPbc	07:14:50.376		25.4		2.62		TAS				m_e	
MANZ	149.02		PKPbc	07:14:49.978		25.4		2.62		TAS				m_e	
MOX	148.56		PKPbc	07:14:48.384		25.4		2.62		TAS				m_e	
ROTZ	149.18		PKPbc	07:14:50.159		25.4		2.62		TAS				m_e	
STU	150.91		PKPbc	07:14:54.470		25.4		2.62		TAS				m_e	
TANN	148.53		PKPbc	07:14:48.849		25.4		2.62		TAS				m_e	
UBR	151.67		PKPbc	07:14:55.468		25.4		2.62		TAS				m_e	
WET	149.53		PKPbc	07:14:50.470		25.4		2.62		TAS				m_e	
WLF	150.73		PKPbc	07:14:55.067		25.4		2.62		TAS				m_e	

Event 91225005 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	08:13:20.10			-22.9180	176.5040				33.0			15		147.32	153.00	m i ke	BGR
OrigID 91225011																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.87		PKPbc	08:33:04.552	0.0	28.7		2.48		TAS					m_e
BFO	152.95		PKPbc	08:33:14.817		28.7		2.48		TAS					m_e
BRG	148.97		PKPbc	08:33:04.794	0.4	28.7		2.48		TAS					m_e
BSEG	147.32		PKPbc	08:33:00.593	-0.5	28.7		2.48		TAS					m_e
CLL	148.91		PKPbc	08:33:04.643	-0.3	28.7		2.48		TAS					m_e
CLZ	149.21		PKPbc	08:33:05.604	-0.1	28.7		2.48		TAS					m_e
FLT1	148.53		PKPbc	08:33:03.498	0.4	28.7		2.48		TAS					m_e
GEC2	150.75		PKPbc	08:33:09.198		28.7		2.48		TAS					m_e
GTTG	149.58		PKPbc	08:33:06.399	-0.5	28.7		2.48		TAS					m_e
IBBN	149.41		PKPbc	08:33:06.235	0.4	28.7		2.48		TAS					m_e
KAST	150.29		PKPbc	08:33:08.107	-0.5	28.7		2.48		TAS					m_e
MANZ	150.34		PKPbc	08:33:08.642	-0.0	28.7		2.48		TAS					m_e
MOX	149.92		PKPbc	08:33:07.022	0.0	28.7		2.48		TAS					m_e
NEUB	149.39		PKPbc	08:33:05.823	-0.5	28.7		2.48		TAS					m_e
ROTZ	150.49		PKPbc	08:33:09.148	-0.2	28.7		2.48		TAS					m_e
STU	152.30		PKPbc	08:33:13.197		28.7		2.48		TAS					m_e
TANN	149.85		PKPbc	08:33:07.140	-0.5	28.7		2.48		TAS					m_e
TNS	151.18		PKPbc	08:33:10.715		28.7		2.48		TAS					m_e
UBR	153.00		PKPbc	08:33:14.716		28.7		2.48		TAS					m_e
WET	150.80		PKPbc	08:33:09.553		28.7		2.48		TAS					m_e
WLF	152.24		PKPbc	08:33:13.773		28.7		2.48		TAS					m_e

Event 91225006 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	09:30:24.82			-24.3470	175.0800				33.0					151.73	151.73	m i ke	BGR
OrigID 91225012																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.73		PKPbc	09:50:16.050		40.0		1.80		TAS					m_e

Event 91225007 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	10:11:42.41			-22.4170	174.9280				33.0				15	146.44	152.01	m i ke	BGR
OrigID 91225013																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	152.01		PKPbc	10:31:33.705		31.1		2.58		TAS					m_e
BRG	147.96		PKPbc	10:31:23.812	0.6	31.1		2.58		TAS					m_e
BSEG	146.44		PKPbc	10:31:19.738	-0.5	31.1		2.58		TAS					m_e
CLL	147.92		PKPbc	10:31:23.759	0.0	31.1		2.58		TAS					m_e
CLZ	148.29		PKPbc	10:31:25.000		31.1		2.58		TAS					m_e
FLT1	147.60		PKPbc	10:31:22.859	0.5	31.1		2.58		TAS					m_e
GEC2	149.70		PKPbc	10:31:28.520		31.1		2.58		TAS					m_e
GRA1	149.90		PKPbc	10:31:29.049		31.1		2.58		TAS					m_e
GTTG	148.67		PKPbc	10:31:26.298	-0.1	31.1		2.58		TAS					m_e
IBBN	148.57		PKPbc	10:31:25.566		31.1		2.58		TAS					m_e
KAST	149.41		PKPbc	10:31:27.843		31.1		2.58		TAS					m_e
MANZ	149.34		PKPbc	10:31:27.780	-0.2	31.1		2.58		TAS					m_e
MOX	148.95		PKPbc	10:31:26.241		31.1		2.58		TAS					m_e
NEUB	148.43		PKPbc	10:31:25.324		31.1		2.58		TAS					m_e
ROTZ	149.49		PKPbc	10:31:28.150	-0.7	31.1		2.58		TAS					m_e
STU	151.36		PKPbc	10:31:32.489		31.1		2.58		TAS					m_e
TANN	148.86		PKPbc	10:31:26.245	0.1	31.1		2.58		TAS					m_e
TNS	150.29		PKPbc	10:31:30.031		31.1		2.58		TAS					m_e
UBR	152.00		PKPbc	10:31:34.023		31.1		2.58		TAS					m_e
WET	149.77		PKPbc	10:31:28.679		31.1		2.58		TAS					m_e
WLF	151.40		PKPbc	10:31:33.653	-0.3	31.1		2.58		TAS					m_e

Event 91225008 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	10:50:36.76			-25.0020	176.1990				33.0				11	149.24	154.83	m i ke	BGR
OrigID 91225014																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	150.76		PKPbc	11:10:25.880	-0.2	30.8		2.31		TAS					m_e
BFO	154.83		PKPbc	11:10:34.978		30.8		2.31		TAS					m_e
BRG	150.78		PKPbc	11:10:25.858	-0.7	30.8		2.31		TAS					m_e
BSEG	149.24		PKPbc	11:10:22.501	-0.3	30.8		2.31		TAS					m_e

BUG	152.27	PKPbc	11:10:29.760	-0.2	30.8	2.31	TAS	m_e
CLL	150.74	PKPbc	11:10:25.374	-0.2	30.8	2.31	TAS	m_e
CLZ	151.10	PKPbc	11:10:26.671	-0.2	30.8	2.31	TAS	m_e
FLT1	150.42	PKPbc	11:10:25.122	-0.9	30.8	2.31	TAS	m_e
GEC2	152.53	PKPbc	11:10:30.106		30.8	2.31	TAS	m_e
GTTG	151.48	PKPbc	11:10:27.457	-0.2	30.8	2.31	TAS	m_e
IBBN	151.35	PKPbc	11:10:27.633	-0.2	30.8	2.31	TAS	m_e
KAST	152.21	PKPbc	11:10:29.293		30.8	2.31	TAS	m_e
MANZ	152.17	PKPbc	11:10:29.425	-0.9	30.8	2.31	TAS	m_e
MOX	151.77	PKPbc	11:10:28.183		30.8	2.31	TAS	m_e
ROTZ	152.32	PKPbc	11:10:29.844		30.8	2.31	TAS	m_e
STU	154.17	PKPbc	11:10:34.040		30.8	2.31	TAS	m_e
TANN	151.68	PKPbc	11:10:28.052		30.8	2.31	TAS	m_e
UBR	154.82	PKPbc	11:10:35.561		30.8	2.31	TAS	m_e
WET	152.59	PKPbc	11:10:30.316		30.8	2.31	TAS	m_e
WLF	154.19	PKPbc	11:10:34.618	-0.9	30.8	2.31	TAS	m_e

Event 91225009 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	12:23:15.71			-23.6290	176.7820				33.0					151.63	151.63	m i ke	BGR
91225015																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.63		PKP	12:43:06.673		36.4		1.81		TAS					m_e

Event 91225010 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	14:15:16.94			-22.5520	171.5090				33.0					148.78	148.78	m i ke	BGR
91225016																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	148.78		PKP	14:35:00.642		44.6		2.10		TAS					m_e

Event 91225011 Southeast of Loyalty Islands

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Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	14:58:40.24			-22.8200	174.1080				33.0					149.99	149.99	m i ke	BGR
91225017																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	149.99		PKP	15:18:27.130		40.5		1.97		TAS				m_e	

Event 91225012 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	18:05:26.100			-24.7250	174.4080				33.0					151.84	151.84	m i ke	BGR
91225018																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.84		PKP	18:25:18.500		41.5		1.79		TAS				m_e	

Event 91225013 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	18:34:00.22			-24.7740	177.5570				33.0					152.94	152.94	m i ke	BGR
91225019																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	152.94		PKP	18:53:54.272		35.8		1.69		TAS				m_e	

Event 91225015 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/25	21:33:00.35			-24.7950	177.1380				33.0					152.83	152.83	m i ke	BGR
91225021																	

Magnitude Err Nsta Author OrigID

./bul1912.txt

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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	152.83		PKPbc	21:52:54.155		36.6		1.70		TAS					m_e

Event 91226001 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	02:06:39.72			-23.8820	171.5200				33.0					149.97	149.97	m i ke	BGR
91226007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	149.97		PKPbc	02:26:26.611		45.7		1.97		TAS					m_e

Event 91226002 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	02:21:22.59			-23.8610	178.6560				33.0					152.40	152.40	m i ke	BGR
91226008																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	152.40		PKPbc	02:41:15.373		33.1		1.74		TAS					m_e

Event 91226003 South of Aleutian Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	05:54:37.67			49.7860	167.7710				33.0					78.88	78.88	m i ke	BGR
91226009																	

Magnitude Err Nsta Author OrigID
mb 4.5 BGR 91226009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	78.88		P	06:06:36.019		15.2		5.51		TAS		4.4	0.82	m_e mb	4.5

Event 91226004 Near east coast of eastern Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	09:26:39.89			39.1010	142.1290				33.0			15		78.47	83.78	m i ke	BGR
OrigID 91226010																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	91226010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	83.78		P	09:39:04.441		36.4		5.30		TAS		11.0	0.87	m_e	mb	5.1
BRG	79.56		P	09:38:42.358	0.0	36.4		5.30		TAS		6.0	1.01	m_e	mb	4.5
BSEG	78.47		P	09:38:36.014	0.0	36.4		5.30		TAS		6.6	0.86	m_e	mb	4.8
CLL	79.59		P	09:38:42.047	-0.1	36.4		5.30		TAS		10.3	0.83	m_e	mb	4.8
CLZ	80.15		P	09:38:44.778	-0.5	36.4		5.30		TAS		10.0	0.88	m_e	mb	4.8
FLT1	79.44		P	09:38:40.928	0.5	36.4		5.30		TAS		10.6	0.82	m_e	mb	4.9
FUR	82.77		P	09:38:59.235		36.4		5.30		TAS		17.0	0.78	m_e	mb	5.3
GEC2	81.25		P	09:38:51.135		36.4		5.30		TAS		5.2	1.07	m_e	mb	4.5
GRA1	81.56		P	09:38:53.013	-0.0	36.4		5.30		TAS		11.3	0.84	m_e	mb	5.0
GTTG	80.54		P	09:38:47.347	-0.1	36.4		5.30		TAS		9.8	0.84	m_e	mb	4.9
IBBN	80.70		P	09:38:48.019	-0.5	36.4		5.30		TAS		15.3	0.88	m_e	mb	5.0
KAST	81.38		P	09:38:52.097	0.0	36.4		5.30		TAS		5.5	0.94	m_e	mb	4.6
MANZ	80.98		P	09:38:49.652	-0.3	36.4		5.30		TAS		1.3	0.89	m_e	mb	4.0
MOX	80.65		P	09:38:47.721	0.3	36.4		5.30		TAS		4.6	1.01	m_e	mb	4.5
ROTZ	81.12		P	09:38:50.620	0.1	36.4		5.30		TAS		0.8	0.77	m_e	mb	3.8
STU	83.09		P	09:39:00.861		36.4		5.30		TAS		19.6	0.79	m_e	mb	5.4
TANN	80.50		P	09:38:47.221	0.1	36.4		5.30		TAS		2.0	0.79	m_e	mb	4.2
TNS	82.17		P	09:38:55.832	0.0	36.4		5.30		TAS		4.0	0.75	m_e	mb	4.6
UBBA	81.11		P	09:38:49.988	0.0	36.4		5.30		TAS		1.8	0.70	m_e	mb	4.2
UBR	83.63		P	09:39:03.597		36.4		5.30		TAS		4.5	0.88	m_e	mb	4.7
WET	81.35		P	09:38:51.655		36.4		5.30		TAS		8.5	1.13	m_e	mb	4.7

Event 91226005 Gansu, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	10:37:34.20			35.9530	104.8400				33.0					65.72	65.72	m i ke	BGR
OrigID 91226011																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	91226011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	65.72		P	10:48:14.586		65.2		5.47		TAS		6.4	0.86	m_e	mb	4.9

Event 91226006 Mindoro, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	12:20:01.41			13.0980	121.5570				33.0					92.79	92.79	m i ke	BGR
OrigID 91226012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	91226012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	92.79		P	12:33:10.173		66.8		3.98		TAS		13.2	0.86	m_e mb	5.4

Event 91226007 Kamchatka Peninsula, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	17:13:58.32			59.6610	161.0470				33.0				10	64.34	70.41	m i ke	BGR
OrigID 91226013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	91226013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	66.03		P	17:24:39.883		15.9		6.29		TAS		12.5	1.00	m_e mb	5.1
BFO	70.09		P	17:25:05.460		15.9		6.29		TAS				m_e	
BRG	66.64		P	17:24:43.644		15.9		6.29		TAS		3.2	0.90	m_e mb	4.5
BSEG	64.34		P	17:24:29.223	0.2	15.9		6.29		TAS		4.3	0.85	m_e mb	4.7
BUG	67.24		P	17:24:47.709		15.9		6.29		TAS		8.7	0.78	m_e mb	5.0
CLL	66.40		P	17:24:42.168	0.1	15.9		6.29		TAS		17.3	0.87	m_e mb	5.3
FLT1	65.73		P	17:24:37.808	-0.1	15.9		6.29		TAS		3.6	0.99	m_e mb	4.6
GEC2	68.63		P	17:24:56.324		15.9		6.29		TAS		10.0	0.84	m_e mb	5.1
GRA1	68.28		P	17:24:54.244		15.9		6.29		TAS		13.4	0.89	m_e mb	5.2
GTTG	66.71		P	17:24:44.239		15.9		6.29		TAS		14.9	1.44	m_e mb	5.0
IBBN	66.32		P	17:24:41.671		15.9		6.29		TAS		10.2	1.01	m_e mb	5.0
KAST	67.29		P	17:24:47.798		15.9		6.29		TAS		6.4	1.01	m_e mb	4.8
MANZ	67.83		P	17:24:51.493		15.9		6.29		TAS		1.5	0.87	m_e mb	4.2
MOX	67.29		P	17:24:47.982		15.9		6.29		TAS		6.6	0.84	m_e mb	4.9
NEUB	66.73		P	17:24:44.293		15.9		6.29		TAS		7.3	0.75	m_e mb	5.0
ROTZ	68.03		P	17:24:52.768		15.9		6.29		TAS		2.0	0.87	m_e mb	4.3
TANN	67.36		P	17:24:48.273		15.9		6.29		TAS		6.3	0.94	m_e mb	4.8
TNS	68.24		P	17:24:54.160		15.9		6.29		TAS		7.9	0.79	m_e mb	5.0
UBBA	67.40		P	17:24:48.420		15.9		6.29		TAS		3.4	0.75	m_e mb	4.7
UBR	70.41		P	17:25:07.393		15.9		6.29		TAS		5.5	0.83	m_e mb	4.7
WET	68.50		P	17:24:55.586		15.9		6.29		TAS		8.1	0.82	m_e mb	5.0

Event 91226008 Eastern Siberia, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/26	17:21:49.39			60.1470	164.6260				33.0					68.42	68.42	m i ke	BGR
OrigID 91226014																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.5		BGR	91226014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	68.42		P	17:32:46.169		15.8		5.48		TAS		2.7	0.79	m_e mb	4.5

Event 91227001 Iran-Iraq border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/27	01:53:11.00			28.8700	51.4200				10.0				16	35.64	39.02	m i ke	emsc
OrigID 91227037																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	91227007
Ms	3.9		BGR	91227007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	38.02		P	02:00:28.978	-0.0	109.2		8.85		TAS		12.2	0.98	m_e mb	4.6
BRG	35.65		P	02:00:08.444	0.1	109.2		8.85		TAS		12.5	0.75	m_e mb	4.8
BSEG	38.91		P	02:00:36.765	0.2	109.2		8.85		TAS		16.0	1.11	m_e mb	4.6
CLL	36.36		P	02:00:14.715	-0.3	109.2		8.85		TAS		21.6	1.08	m_e mb	4.9
CLZ	38.09		P	02:00:29.943	-0.0	109.2		8.85		TAS		37.0	0.69	m_e mb	5.2
FLT1	37.77		P	02:00:26.842	-0.3	109.2		8.85		TAS		19.1	1.08	m_e mb	4.8
FUR	36.32		P	02:00:14.249		109.2		8.85		TAS		51.5	0.77	m_e mb	5.4
GOR1	37.99		P	02:00:29.323	0.6	109.2		8.85		TAS		74.3	1.16	m_e mb	5.3
GRA1	36.84		P	02:00:18.780		109.2		8.85		TAS		27.8	0.80	m_e mb	5.0
GRA1	36.84		L	02:17:13.695						T__		269.9	21.80	a_e Ms	4.0
KAST	39.02		P	02:00:37.936	0.0	109.2		8.85		TAS		23.2	1.16	m_e mb	4.7
MANZ	36.40		P	02:00:15.059	0.3	109.2		8.85		TAS		2.0	0.91	m_e mb	3.9
MOX	36.93		L	02:17:50.459						T__		197.5	20.20	a_e Ms	3.9
NEUB	37.03		P	02:00:20.434	-0.1	109.2		8.85		TAS		33.8	1.18	m_e mb	5.0
RETH	38.99		P	02:00:38.005	0.2	109.2		8.85		TAS		24.9	0.94	m_e mb	4.8
ROTZ	36.26		P	02:00:14.026		109.2		8.85		TAS		2.7	0.79	m_e mb	4.1
UBR	36.94		P	02:00:19.263		109.2		8.85		TAS				m_e	
WET	35.64		P	02:00:07.962		109.2		8.85		TAS		6.5	0.84	m_e mb	4.5

Event 91227002 Turkey
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/12/27 07:02:13.98 37.5910 40.2320 4.0 17 22.86 27.22 m i ke BGR
 91227008

Magnitude Err Nsta Author OrigID
 mb 5.1 BGR 91227008
 Ms 3.9 BGR 91227008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BUG	27.01		P	07:07:57.096	1.7	109.2		9.52		TAS		88.2	0.95	m_e	mb	5.5
CLL	23.62		P	07:07:24.140	0.1	109.2		9.52		TAS		27.0	0.98	m_e	mb	4.7
CLZ	25.34		P	07:07:41.452	-1.1	109.2		9.52		TAS		32.6	0.71	m_e	mb	5.2
FUR	23.57		P	07:07:24.766		109.2		9.52		TAS		180.6	0.89	m_e	mb	5.6
GRA1	24.07		P	07:07:29.876		109.2		9.52		TAS		146.3	0.87	m_e	mb	5.5
GRA1	24.07		L	07:19:48.544						T__		314.1	19.20	a_e	Ms	3.8
GTTG	25.46		P	07:07:43.017	0.2	109.2		9.52		TAS		59.8	1.17	m_e	mb	5.2
IBBN	27.01		P	07:07:57.618	-0.2	109.2		9.52		TAS		57.3	0.98	m_e	mb	5.3
KAST	26.26		P	07:07:50.734	-0.8	109.2		9.52		TAS		86.3	0.89	m_e	mb	5.4
MANZ	23.63		P	07:07:26.017		109.2		9.52		TAS		21.4	1.02	m_e	mb	4.6
MOX	24.16		P	07:07:32.275	0.4	109.2		9.52		TAS		40.3	1.04	m_e	mb	4.9
MOX	24.16		L	07:19:32.063						T__		506.6	19.00	a_e	Ms	4.0
PLN	23.78		P	07:07:27.060	-2.0	109.2		9.52		TAS		13.4	1.01	m_e	mb	4.4
RETH	26.26		P	07:07:50.943	-0.0	109.2		9.52		TAS		55.2	1.28	m_e	mb	5.0
ROTZ	23.49		P	07:07:24.813		109.2		9.52		TAS		34.3	0.93	m_e	mb	4.9
STU	25.07		P	07:07:38.115		109.2		9.52		TAS		303.0	1.50	m_e	mb	5.8
TANN	23.58		P	07:07:24.140	-0.0	109.2		9.52		TAS		36.6	0.89	m_e	mb	4.9
WET	22.86		P	07:07:15.901		109.2		9.52		TAS		60.2	1.18	m_e	mb	5.0
WLF	27.22		P	07:07:58.139		109.2		9.52		TAS		46.4	1.01	m_e	mb	5.2

Event 91230002 Eastern Arabian Peninsula
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/12/30 13:49:45.00 27.3100 56.6900 33.0 12 39.41 44.41 m i ke emsc
 91230038

Magnitude Err Nsta Author OrigID
 mb 5.0 BGR 91230008
 Ms 4.6 BGR 91230008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	42.25		P	13:57:37.909	0.0	108.7		8.14		TAS		45.4	1.31	m_e	mb	5.0
BUG	44.09		P	13:57:52.907	-0.3	108.7		8.14		TAS		41.8	1.03	m_e	mb	5.1
CLZ	42.34		P	13:57:40.366	1.2	108.7		8.14		TAS		53.2	1.17	m_e	mb	5.2

FLT1	41.98	P	13:57:35.582	0.1	108.7		8.14	TAS	57.7	1.05	m_e	mb	5.2
GEC2	39.41	P	13:57:13.989		108.7		8.14	TAS	23.1	1.00	m_e	mb	4.8
GRA1	41.21	P	13:57:29.117		108.7		8.14	TAS	49.0	0.85	m_e	mb	5.3
GRA1	41.21	L	14:17:45.932					T__	832.7	18.70	a_e	Ms	4.6
KAST	43.34	P	13:57:47.089	-0.6	108.7		8.14	TAS	68.9	1.61	m_e	mb	5.1
MANZ	40.74	P	13:57:26.919		108.7		8.14	TAS	16.4	2.02	m_e	mb	4.4
MOX	41.24	L	14:18:19.788					T__	751.3	19.60	a_e	Ms	4.6
ROTZ	40.62	P	13:57:24.204		108.7		8.14	TAS	5.5	0.96	m_e	mb	4.3
TNS	43.08	P	13:57:44.632		108.7		8.14	TAS	120.5	1.77	m_e	mb	5.3
UBR	41.44	P	13:57:30.248		108.7		8.14	TAS	73.2	0.86	m_e	mb	5.4
WLF	44.41	P	13:57:54.717		108.7		8.14	TAS	28.6	1.07	m_e	mb	4.9

Event 91230003 Northern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/30	16:58:47.30			5.2540	95.3070				33.0			12		80.50	83.02	m i ke	BGR
OrigID 91230009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	91230009
Ms	5.7		BGR	91230009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BRG	80.50		P	17:10:56.157		91.1		5.23		TAS		9.1	0.76	m_e	mb	4.8
BSEG	82.83		P	17:11:08.524	0.1	91.1		5.23		TAS		10.2	0.71	m_e	mb	5.2
CLZ	82.77		P	17:11:08.188	0.1	91.1		5.23		TAS		13.1	0.61	m_e	mb	5.3
GEC2	80.54		P	17:10:56.582		91.1		5.23		TAS		24.9	0.83	m_e	mb	5.3
GRA1	82.19		L	17:50:11.158						T__		2747.8	20.10	a_e	Ms	5.6
GTTG	83.02		P	17:11:09.419	0.1	91.1		5.23		TAS		8.4	0.71	m_e	mb	5.1
MANZ	81.63		P	17:11:02.648		91.1		5.23		TAS		4.5	1.11	m_e	mb	4.5
MOX	81.96		P	17:11:03.823		91.1		5.23		TAS		6.5	0.68	m_e	mb	4.9
MOX	81.96		L	17:49:47.597						T__		4398.8	20.50	a_e	Ms	5.8
PLN	81.61		P	17:11:01.865		91.1		5.23		TAS		3.0	0.88	m_e	mb	4.4
ROTZ	81.56		P	17:11:02.145		91.1		5.23		TAS		2.8	0.66	m_e	mb	4.5
RUE	80.69		P	17:10:56.941	-0.1	91.1		5.23		TAS		45.9	0.73	m_e	mb	5.6
UBR	82.91		P	17:11:08.580		91.1		5.23		TAS		12.4	0.64	m_e	mb	5.3
WET	81.10		P	17:10:59.515		91.1		5.23		TAS		16.3	0.97	m_e	mb	5.0

Event 91230004 Eastern Kashmir

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/12/30	17:18:51.88			34.7130	75.7750				33.0			20		46.77	51.88	m i ke	BGR
OrigID 91230010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.5		BGR	91230010
Ms	5.3		BGR	91230010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	50.72		P	17:27:46.361		82.4		7.70		TAS		17.0	1.07	m_e	mb	4.9
BRG	46.77		P	17:27:16.448	0.2	82.4		7.70		TAS		51.0	1.25	m_e	mb	5.5
BUG	50.87		P	17:27:47.976	-0.0	82.4		7.70		TAS		49.7	1.26	m_e	mb	5.3
CLL	47.32		P	17:27:20.216	-0.1	82.4		7.70		TAS		52.6	1.48	m_e	mb	5.5
CLZ	48.90		P	17:27:33.135	-0.1	82.4		7.70		TAS		54.5	1.33	m_e	mb	5.4
FLT1	48.32		P	17:27:27.752	-0.6	82.4		7.70		TAS		47.0	1.06	m_e	mb	5.5
FUR	48.81		P	17:27:32.549		82.4		7.70		TAS		157.4	1.30	m_e	mb	5.9
GEC2	47.12		P	17:27:19.139		82.4		7.70		TAS		43.0	1.37	m_e	mb	5.4
GRA1	48.63		P	17:27:31.750		82.4		7.70		TAS		123.6	1.47	m_e	mb	5.7
GRA1	48.63		L	17:50:11.169						T__		2747.8	20.10	a_e	Ms	5.2
GTTG	49.19		P	17:27:35.365	-0.1	82.4		7.70		TAS		78.1	1.24	m_e	mb	5.6
KAST	50.20		P	17:27:42.824	-0.0	82.4		7.70		TAS		330.0	3.38	m_e	mb	5.7
MANZ	48.02		P	17:27:26.521	-0.7	82.4		7.70		TAS		28.7	1.68	m_e	mb	5.1
MOX	48.26		P	17:27:28.059	0.1	82.4		7.70		TAS		85.9	1.59	m_e	mb	5.6
MOX	48.26		L	17:49:47.622						T__		4398.8	20.50	a_e	Ms	5.4
PLN	47.93		P	17:27:25.522	0.8	82.4		7.70		TAS		22.3	1.60	m_e	mb	5.0
ROTZ	47.98		P	17:27:26.444	0.3	82.4		7.70		TAS		22.8	1.47	m_e	mb	5.1
TANN	47.75		P	17:27:24.138	-0.2	82.4		7.70		TAS		168.1	2.11	m_e	mb	5.8
UBBA	49.26		P	17:27:35.595	0.5	82.4		7.70		TAS		157.9	2.44	m_e	mb	5.6
UBR	49.67		P	17:27:38.594		82.4		7.70		TAS		101.8	1.43	m_e	mb	5.5
WET	47.62		P	17:27:22.984		82.4		7.70		TAS		62.3	1.53	m_e	mb	5.5
WLF	51.88		P	17:27:56.050	-0.1	82.4		7.70		TAS		52.9	1.23	m_e	mb	5.3