

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

(produced by the Federal Seismological Survey/BGR - HANNOVER)

October 2022

UPDATED 14.February 2024

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

Event 21001001 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/01	01:19:09.19			53.7620	-33.3110				33.0				26	24.47	29.34	m i ke	BGR
OrigID 21001007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	21001007
Ms	5.9		BGR	21001007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	24.73		P	01:24:27.039	-0.4	295.8		8.96		TAS		582.5	2.00	m_e mb	6.0
ASSE	26.21		P	01:24:39.545	0.3	295.8		8.96		TAS		300.8	2.14	m_e mb	5.5
BFO	26.42		P	01:24:42.269	0.6	295.8		8.96		TAS		191.4	1.59	m_e mb	5.5
BRG	28.58		P	01:25:00.911	-0.5	295.8		8.96		TAS		210.3	1.78	m_e mb	5.7
BSEG	25.41		P	01:24:32.249	1.0	295.8		8.96		TAS		421.9	1.64	m_e mb	5.9
BUG	24.50		P	01:24:24.401	-0.3	295.8		8.96		TAS		300.0	1.48	m_e mb	5.8
CLL	27.86		P	01:24:54.443	-0.7	295.8		8.96		TAS		143.7	1.32	m_e mb	5.6
CLZ	26.15		P	01:24:39.743	0.0	295.8		8.96		TAS		230.0	1.89	m_e mb	5.5
FLT1	26.46		P	01:24:41.615	-0.3	295.8		8.96		TAS		729.4	2.62	m_e mb	5.8
FUR	28.23		P	01:24:58.918		295.8		8.96		TAS		172.6	1.24	m_e mb	5.7
GEC2	29.34		P	01:25:08.337	0.6	295.8		8.96		TAS		111.3	1.31	m_e mb	5.5
GOR1	26.27		P	01:24:40.543	0.7	295.8		8.96		TAS		555.6	1.87	m_e mb	5.9
GRA1	27.50		P	01:24:52.241	-0.2	295.8		8.96		TAS		464.0	1.78	m_e mb	6.0
GRA1	27.50		L	01:35:38.414						T__		30259.8	18.00	a_e Ms	5.9
GTTG	26.02		P	01:24:38.506	-0.7	295.8		8.96		TAS		134.7	1.10	m_e mb	5.5
IBBN	24.47		P	01:24:24.273	-0.3	295.8		8.96		TAS		215.7	1.13	m_e mb	5.6
KAST	25.25		P	01:24:31.186	-0.3	295.8		8.96		TAS		135.3	1.23	m_e mb	5.5
MOX	27.33		P	01:24:50.176	-0.1	295.8		8.96		TAS		329.8	2.14	m_e mb	5.7
MOX	27.33		L	01:35:07.148						T__		31310.7	20.80	a_e Ms	5.9
NEUB	27.20		P	01:24:48.743	-0.4	295.8		8.96		TAS		326.9	1.79	m_e mb	5.8

PLN	27.71	P	01:24:53.418	-0.3	295.8	8.96	TAS	76.2	1.56	m_e	mb	5.3
RUE	27.86	P	01:24:54.473	-0.3	295.8	8.96	TAS	289.3	1.88	m_e	mb	5.8
STU	26.72	P	01:24:44.995	0.6	295.8	8.96	TAS	124.3	1.24	m_e	mb	5.5
TANN	27.92	P	01:24:55.343	0.2	295.8	8.96	TAS	103.5	1.18	m_e	mb	5.5
TNS	25.66	P	01:24:35.776	0.1	295.8	8.96	TAS	272.6	1.54	m_e	mb	5.7
UBBA	26.32	P	01:24:40.952	-0.2	295.8	8.96	TAS	268.3	1.97	m_e	mb	5.5
UBR	27.78	P	01:24:54.450		295.8	8.96	TAS	69.1	1.23	m_e	mb	5.3
WET	28.72	P	01:25:02.603	0.2	295.8	8.96	TAS	214.6	1.93	m_e	mb	5.7

Event 21001004 Kyushu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/01	15:02:33.92			31.8360	131.7650				33.0			26		80.08	85.50	m i ke	BGR
OrigID 21001010																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	21001010
Ms	6.4		BGR	21001010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	84.46		P	15:15:02.434	-0.0	47.5		5.17		TAS		149.8	1.38	m_e	mb 6.0
ASSE	81.73		P	15:14:48.473	0.4	47.5		5.17		TAS		126.1	1.80	m_e	mb 5.8
BFO	85.45		P	15:15:07.087	0.1	47.5		5.17		TAS		362.9	2.27	m_e	mb 6.1
BRG	81.04		P	15:14:44.518	0.1	47.5		5.17		TAS		22.4	0.84	m_e	mb 5.2
BSEG	80.66		P	15:14:42.656	-0.0	47.5		5.17		TAS		57.1	1.27	m_e	mb 5.5
BUG	83.73		P	15:14:58.478	-0.3	47.5		5.17		TAS		94.3	1.41	m_e	mb 5.8
CLL	81.20		P	15:14:45.216	0.1	47.5		5.17		TAS		53.4	0.73	m_e	mb 5.7
CLZ	82.06		P	15:14:50.335	0.2	47.5		5.17		TAS		135.4	1.50	m_e	mb 5.9
FLT1	81.34		P	15:14:45.914	0.2	47.5		5.17		TAS		38.0	0.80	m_e	mb 5.5
FUR	84.14		P	15:15:00.805	-0.1	47.5		5.17		TAS		417.7	1.98	m_e	mb 6.3
GEC2	82.48		P	15:14:52.196	-0.1	47.5		5.17		TAS		50.7	1.56	m_e	mb 5.5
GOR1	80.87		P	15:14:43.820	-0.1	47.5		5.17		TAS		290.2	1.96	m_e	mb 6.0
GRA1	83.13		P	15:14:55.919	0.2	47.5		5.17		TAS		488.0	1.84	m_e	mb 6.4
GRA1	83.13		L	15:56:23.202						T__		15541.0	18.40	a_e	Ms 6.4
GTTG	82.45		P	15:14:52.196	-0.1	47.5		5.17		TAS		33.1	0.84	m_e	mb 5.6
IBBN	82.90		P	15:14:54.057	-0.3	47.5		5.17		TAS		90.1	1.15	m_e	mb 5.9
KAST	83.39		P	15:14:56.850	0.0	47.5		5.17		TAS		91.1	1.43	m_e	mb 5.8
MOX	82.30		P	15:14:50.800	0.1	47.5		5.17		TAS		90.4	1.56	m_e	mb 5.7
MOX	82.30		L	15:55:34.106						T__		17426.8	19.00	a_e	Ms 6.4
NEUB	81.86		P	15:14:48.939	-0.1	47.5		5.17		TAS		127.2	1.38	m_e	mb 5.9
RUE	80.08		P	15:14:39.631	-0.2	47.5		5.17		TAS		117.0	1.22	m_e	mb 5.7
STU	84.73		P	15:15:03.597	-0.4	47.5		5.17		TAS		102.1	0.80	m_e	mb 6.1
TANN	82.05		P	15:14:49.869	0.1	47.5		5.17		TAS		77.2	1.75	m_e	mb 5.5
TNS	84.06		P	15:15:00.340	0.1	47.5		5.17		TAS		65.4	1.26	m_e	mb 5.7
UBBA	82.93		P	15:14:54.523	-0.4	47.5		5.17		TAS		164.0	1.64	m_e	mb 6.0
UBR	85.04		P	15:15:05.226		47.5		5.17		TAS		70.4	1.47	m_e	mb 5.7

WET	82.69	P	15:14:53.359	0.1	47.5	5.17	TAS	64.9	1.57	m_e	mb	5.6
WLF	85.50	P	15:15:07.785	0.5	47.5	5.17	TAS	356.9	2.04	m_e	mb	6.1

Event 21002002 Crete, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/02	04:04:05.90			34.3200	26.1800				60.0			22		17.21	22.57	m i ke	EMSC
OrigID 21002034																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	21002008
Ms	4.8		BGR	21002008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
AHRW	21.38		P	04:08:48.394	1.4	138.7		10.60		TAS		309.7	1.53	m_e	mb	5.4
ASSE	21.00		P	04:08:43.084	-0.0	138.7		10.60		TAS		90.6	1.31	m_e	mb	4.9
BFO	19.31		P	04:08:25.929		138.7		10.60		TAS		47.3	0.95	m_e	mb	4.7
BRG	18.79		P	04:08:21.397	-0.5	138.7		10.60		TAS		60.4	1.35	m_e	mb	4.7
BSEG	22.57		P	04:08:58.774	-0.4	138.7		10.60		TAS		225.1	1.85	m_e	mb	5.4
BUG	21.90		P	04:08:53.716	-0.4	138.7		10.60		TAS		330.2	1.70	m_e	mb	5.5
CLL	19.48		P	04:08:27.018	1.6	138.7		10.60		TAS		674.4	3.12	m_e	mb	5.3
CLZ	20.89		P	04:08:42.214	-0.3	138.7		10.60		TAS		70.1	1.16	m_e	mb	4.9
FLT1	20.95		P	04:08:42.496	-0.5	138.7		10.60		TAS		120.5	1.28	m_e	mb	5.1
FUR	17.75		P	04:08:08.439		138.7		10.60		TAS		191.9	1.28	m_e	mb	5.1
GEC2	17.21		P	04:08:02.613		138.7		10.60		TAS		46.9	0.96	m_e	mb	4.6
GOR1	21.45		P	04:08:47.621	-0.4	138.7		10.60		TAS		183.9	1.29	m_e	mb	5.2
GRA1	18.90		P	04:08:23.279	-1.4	138.7		10.60		TAS		105.6	1.05	m_e	mb	5.0
GRA1	18.90		L	04:17:37.893						T__		3313.0	20.00	a_e	Ms	4.6
GTTG	20.82		P	04:08:42.264	0.2	138.7		10.60		TAS		208.1	1.15	m_e	mb	5.4
IBBN	22.30		P	04:08:57.827	-0.5	138.7		10.60		TAS		232.2	1.65	m_e	mb	5.3
KAST	21.22		P	04:08:46.443	2.1	138.7		10.60		TAS		50.2	0.81	m_e	mb	4.9
MOX	19.47		P	04:08:27.239	-0.1	138.7		10.60		TAS		85.8	1.20	m_e	mb	4.9
MOX	19.47		L	04:17:41.801						T__		5935.5	18.40	a_e	Ms	5.0
NEUB	19.84		P	04:08:32.996	-1.1	138.7		10.60		TAS		136.7	1.16	m_e	mb	5.1
TNS	20.52		P	04:08:39.177	-1.3	138.7		10.60		TAS		126.4	1.08	m_e	mb	5.2
UBBA	20.26		P	04:08:35.432	0.2	138.7		10.60		TAS		44.6	1.18	m_e	mb	4.6
UBR	17.98		P	04:08:11.783		138.7		10.60		TAS		438.2	1.61	m_e	mb	5.3
WLF	21.26		P	04:08:47.703	0.4	138.7		10.60		TAS		179.2	0.97	m_e	mb	5.4

Event 21003004 Reykjanes Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/03	18:08:30.60			53.8690	-34.5320				33.0			17		25.15	30.03	m i ke	BGR
OrigID																	

21003010

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	21003010
Ms	4.5		BGR	21003010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
AHRW	25.42		P	18:13:55.867		296.3		8.92		TAS		36.5	1.46	m_e	mb	4.9
BFO	27.13		P	18:14:11.538		296.3		8.92		TAS		41.7	1.48	m_e	mb	5.0
BUG	25.18		P	18:13:53.772	0.4	296.3		8.92		TAS		66.7	1.68	m_e	mb	5.1
CLL	28.54		P	18:14:23.922	-1.4	296.3		8.92		TAS		13.1	0.87	m_e	mb	4.8
CLZ	26.82		P	18:14:09.362	0.1	296.3		8.92		TAS		61.3	1.92	m_e	mb	5.0
FLT1	27.13		P	18:14:10.758	0.2	296.3		8.92		TAS		11.0	1.12	m_e	mb	4.5
FUR	28.94		P	18:14:28.202		296.3		8.92		TAS		166.1	2.28	m_e	mb	5.5
GEC2	30.03		P	18:14:37.283		296.3		8.92		TAS		36.0	1.57	m_e	mb	5.0
GRA1	28.20		P	18:14:19.832		296.3		8.92		TAS		58.7	1.61	m_e	mb	5.2
GRA1	28.20		L	18:25:05.322						T__		1357.7	18.20	a_e	Ms	4.6
GTTG	26.70		P	18:14:07.966	-0.2	296.3		8.92		TAS				m_e		
IBBN	25.15		P	18:13:53.898	-0.7	296.3		8.92		TAS		62.1	1.38	m_e	mb	5.2
KAST	25.94		P	18:14:00.753	-0.2	296.3		8.92		TAS		108.6	2.02	m_e	mb	5.1
MOX	28.02		P	18:14:19.600		296.3		8.92		TAS		75.1	2.23	m_e	mb	5.1
MOX	28.02		L	18:24:33.874						T__		1336.1	20.70	a_e	Ms	4.5
TANN	28.60		P	18:14:24.718		296.3		8.92		TAS		17.2	1.12	m_e	mb	4.8
TNS	26.35		P	18:14:04.476		296.3		8.92		TAS		43.0	1.52	m_e	mb	4.8
UBBA	27.01		P	18:14:09.827		296.3		8.92		TAS		94.7	2.26	m_e	mb	5.1
WLF	25.25		P	18:13:54.936		296.3		8.92		TAS		70.7	1.68	m_e	mb	5.1

Event 21003005 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/03	20:05:32.35			-22.2800	171.6840				33.0			19		145.32	150.75	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
Ms	4.5		BGR	21003011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	150.75		PKPbc	20:25:21.434		36.4		2.72		TAS				m_e		
BRG	146.55		PKPbc	20:25:10.694	0.1	36.4		2.72		TAS				m_e		
BSEG	145.32		PKPbc	20:25:07.115	-0.5	36.4		2.72		TAS				m_e		
CLL	146.57		PKPbc	20:25:10.609	0.4	36.4		2.72		TAS				m_e		
CLZ	147.08		PKPbc	20:25:12.740	-0.0	36.4		2.72		TAS				m_e		
FLT1	146.38		PKPbc	20:25:10.013	0.2	36.4		2.72		TAS				m_e		
GEC2	148.20		PKPbc	20:25:15.297		36.4		2.72		TAS				m_e		
GOR1	145.81		PKPbc	20:25:08.990	-0.3	36.4		2.72		TAS				m_e		
GRA1	148.55		L	21:44:14.530						T__		69.8	20.70	a_e	Ms	4.4

GTTG	147.47	PKPbc	20:25:13.763	0.2	36.4	2.72	TAS	m_e										
IBBN	147.50	PKPbc	20:25:13.507	-0.1	36.4	2.72	TAS	m_e										
KAST	148.27	PKPbc	20:25:15.808	0.3	36.4	2.72	TAS	m_e										
MOX	147.63	PKPbc	20:25:13.848	-0.5	36.4	2.72	TAS	m_e										
MOX	147.63	L	21:44:57.115				T__		89.3	19.90	a_e	Ms					4.5	
RUE	145.35	PKPbc	20:25:06.944	0.5	36.4	2.72	TAS	m_e										
STU	150.06	PKPbc	20:25:20.326		36.4	2.72	TAS	m_e										
TANN	147.49	PKPbc	20:25:13.678		36.4	2.72	TAS	m_e										
UBBA	148.07	PKPbc	20:25:14.871	-0.7	36.4	2.72	TAS	m_e										
UBR	150.61	PKPbc	20:25:21.263		36.4	2.72	TAS	m_e										
WET	148.32	PKPbc	20:25:15.808		36.4	2.72	TAS	m_e										
WLF	150.31	PKPbc	20:25:21.604		36.4	2.72	TAS	m_e										

Event 21004005 Strait of Gibraltar

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/04	15:39:29.00	0.43	5.81	35.2920	-3.6510	51.1	36.7	53	10.0				19 137	15.76	21.46	m i ke	USGS
OrigID 21004023																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.5		BGR	21004011
Ms	3.8		BGR	21004011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	19.69		P	15:44:00.672		222.7		10.89		TAS		58.1	1.47	m_e	mb 4.6
BFO	15.76		P	15:43:15.886	-1.6	222.7		10.89		TAS		31.3	1.49	m_e	mb 4.2
BRG	20.10		P	15:44:04.070		222.7		10.89		TAS				m_e	
BSEG	21.05		P	15:44:14.508		222.7		10.89		TAS		103.9	1.12	m_e	mb 5.1
BUG	17.95		P	15:43:41.483	-0.5	222.7		10.89		TAS		37.1	1.37	m_e	mb 4.3
CLL	19.99		P	15:44:03.099		222.7		10.89		TAS		44.2	1.16	m_e	mb 4.6
CLZ	19.35		P	15:43:55.200	-0.6	222.7		10.89		TAS		9.3	0.93	m_e	mb 4.0
FLT1	20.06		P	15:44:03.828		222.7		10.89		TAS		25.4	1.34	m_e	mb 4.3
GEC2	18.62		P	15:43:48.778	-0.3	222.7		10.89		TAS		31.9	1.26	m_e	mb 4.4
GOR1	20.61		P	15:44:10.746		222.7		10.89		TAS		139.4	1.22	m_e	mb 5.2
GRA1	18.04		P	15:43:41.859	-0.4	222.7		10.89		TAS		21.3	1.00	m_e	mb 4.2
GRA1	18.04		L	15:51:09.390						T__		448.1	21.10	a_e	Ms 3.7
KAST	18.12		P	15:43:44.287	-1.3	222.7		10.89		TAS		6.9	0.90	m_e	mb 3.8
MOX	18.91		P	15:43:51.205	0.0	222.7		10.89		TAS		141.8	2.53	m_e	mb 4.8
MOX	18.91		L	15:51:39.257						T__		640.9	19.30	a_e	Ms 3.9
NEUB	19.39		P	15:43:56.821	-1.1	222.7		10.89		TAS		50.6	1.39	m_e	mb 4.6
RUE	21.18		P	15:44:15.844		222.7		10.89		TAS		120.9	1.36	m_e	mb 5.0
SCHI	21.46		P	15:44:18.392		222.7		10.89		TAS		127.4	1.21	m_e	mb 5.1
TANN	19.11		P	15:43:53.147	0.4	222.7		10.89		TAS		84.9	2.26	m_e	mb 4.6
UBR	16.07		P	15:43:18.920	1.3	222.7		10.89		TAS		30.3	1.03	m_e	mb 4.4
WET	18.42		P	15:43:45.379	0.5	222.7		10.89		TAS		11.0	1.07	m_e	mb 3.9

Event 21005001 Iran-Armenia-Azerbaijan border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/05	00:21:29.00			38.5110	45.0380				15.0			18		25.11	29.74	m i ke	USGS

Magnitude	Err	Nsta	Author	OrigID
mb	5.4		BGR	21005007
Ms	5.0		BGR	21005007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	29.28		P	00:27:32.304	0.2	102.0		9.03		TAS		41.9	1.41	m_e mb	5.1
ASSE	27.43		P	00:27:15.467	-0.4	102.0		9.03		TAS		170.2	1.88	m_e mb	5.5
BRG	25.11		P	00:26:54.062	0.1	102.0		9.03		TAS		50.5	1.25	m_e mb	5.1
BSEG	28.18		P	00:27:22.254	-0.4	102.0		9.03		TAS		121.5	1.69	m_e mb	5.5
BUG	29.32		P	00:27:32.434	-0.3	102.0		9.03		TAS		76.3	1.47	m_e mb	5.3
CLZ	27.53		P	00:27:16.511	0.6	102.0		9.03		TAS		103.2	1.60	m_e mb	5.4
FLT1	27.15		P	00:27:12.726	-0.4	102.0		9.03		TAS		194.4	1.51	m_e mb	5.6
GOR1	27.31		P	00:27:15.192	-0.9	102.0		9.03		TAS		217.1	1.73	m_e mb	5.6
GRA1	26.50		L	00:40:03.614						T__		4924.7	18.70	a_e Ms	5.1
GTTG	27.70		P	00:27:17.878	0.2	102.0		9.03		TAS		28.8	1.12	m_e mb	5.0
IBBN	29.20		P	00:27:31.912	0.4	102.0		9.03		TAS		147.4	1.48	m_e mb	5.6
KAST	28.57		P	00:27:25.778	1.4	102.0		9.03		TAS		83.9	1.80	m_e mb	5.3
MOX	26.47		P	00:27:06.157	-0.0	102.0		9.03		TAS		35.2	1.57	m_e mb	4.8
MOX	26.47		L	00:40:33.632						T__		4087.1	20.00	m_e Ms	5.0
RGN	26.76		P	00:27:09.833		102.0		9.03		TAS		142.9	1.11	m_e mb	5.6
STU	27.65		P	00:27:16.380		102.0		9.03		TAS		150.6	1.41	m_e mb	5.6
TNS	28.36		P	00:27:24.081		102.0		9.03		TAS		147.2	1.76	m_e mb	5.5
UBR	26.90		P	00:27:09.724		102.0		9.03		TAS		76.8	0.96	m_e mb	5.4
WET	25.33		P	00:26:56.019		102.0		9.03		TAS		134.7	1.23	m_e mb	5.5
WLF	29.74		P	00:27:35.436		102.0		9.03		TAS		44.0	1.30	m_e mb	5.1

Event 21006002 Ryukyu Islands, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/06	16:35:50.23			27.0220	127.4080				33.0			20		81.95	87.48	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	21006008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	82.78		P	16:48:10.177	-0.4	53.4		5.03		TAS		18.7	0.88	m_e mb	5.3

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CLL	83.02	P	16:48:11.198	0.1	53.4	5.03	TAS	34.4	0.73	m_e	mb	5.7
CLZ	84.02	P	16:48:17.109	0.1	53.4	5.03	TAS	98.1	0.92	m_e	mb	6.0
FLT1	83.31	P	16:48:12.632	-0.4	53.4	5.03	TAS	38.2	1.01	m_e	mb	5.6
FUR	85.77	P	16:48:26.061		53.4	5.03	TAS	160.2	0.98	m_e	mb	6.1
GEC2	84.07	P	16:48:16.879		53.4	5.03	TAS	28.4	0.80	m_e	mb	5.5
GRA1	84.89	P	16:48:21.265		53.4	5.03	TAS	100.1	1.05	m_e	mb	6.0
GTTG	84.41	P	16:48:19.134	-0.2	53.4	5.03	TAS	79.4	0.83	m_e	mb	6.0
IBBN	85.01	P	16:48:21.692	0.6	53.4	5.03	TAS	102.4	0.93	m_e	mb	6.0
KAST	85.38	P	16:48:23.610	-0.2	53.4	5.03	TAS	40.4	0.89	m_e	mb	5.7
MOX	84.12	P	16:48:17.160	0.2	53.4	5.03	TAS	81.8	1.84	m_e	mb	5.7
NEUB	83.71	P	16:48:15.127	-0.0	53.4	5.03	TAS	53.7	1.05	m_e	mb	5.7
RUE	81.95	P	16:48:06.131	0.5	53.4	5.03	TAS	66.0	1.10	m_e	mb	5.7
STU	86.50	P	16:48:29.169		53.4	5.03	TAS	97.0	0.70	m_e	mb	6.0
TANN	83.82	P	16:48:15.431	0.1	53.4	5.03	TAS	15.5	1.15	m_e	mb	5.1
TNS	85.98	P	16:48:26.488	0.6	53.4	5.03	TAS	25.4	0.92	m_e	mb	5.3
UBBA	84.83	P	16:48:20.413	0.3	53.4	5.03	TAS	30.2	1.02	m_e	mb	5.5
UBR	86.69	P	16:48:29.498		53.4	5.03	TAS	71.8	0.89	m_e	mb	5.8
WET	84.33	P	16:48:18.388		53.4	5.03	TAS	32.2	1.30	m_e	mb	5.4
WLF	87.48	P	16:48:33.629	-0.6	53.4	5.03	TAS	21.5	0.80	m_e	mb	5.5

Event 21007001 Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/07	09:24:55.86			-17.2780	178.4930				33.0					145.99	145.99	m i ke	BGR
OrigID 21007007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	145.99		PKPbc	09:44:31.718		15.8		2.99		TAS					m_e

Event 21008006 Chagos Archipelago region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/08	21:46:07.19			-4.2510	68.0620				33.0					72.68	72.68	m i ke	BGR
OrigID 21008012																	

Magnitude Err Nsta Author OrigID  
mb 4.7 BGR 21008012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	72.68		P	21:57:32.629		119.9		7.28		TAS		7.0	1.12	m_e	mb	4.7

Event 21008007 Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/08	22:02:28.10	2.37	0.98	38.2930	22.6010	57.8	45.6	77	5.0			15	353	10.13	15.61	m i ke	NOA

Magnitude	Err	Nsta	Author	OrigID
Ms	4.5		BGR	21008013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	10.34		Pn	22:04:53.800	-0.6					T__					m_e
BERGE	14.21		Pn	22:05:47.141	-0.9					T__					m_e
BFO	14.41		Pn	22:05:48.676	-2.2					T__					m_e
DAVA	12.94		Pn	22:05:32.413	1.2					T__					m_e
FETA	12.33		Pn	22:05:22.923	-0.1					T__					m_e
LESA	11.66		Pn	22:05:12.652	-1.1					T__					m_e
MOA	11.32		Pn	22:05:08.380	0.4					T__					m_e
MOTA	12.36		Pn	22:05:22.615	-0.7					T__					m_e
MOX	14.60		L	22:12:37.214						T__		3747.5	20.70	a_e Ms	4.5
OBKA	10.13		Pn	22:04:53.182	0.3					T__					m_e
RETA	12.62		Pn	22:05:28.200	1.3					T__					m_e
RJOB	11.84		Pn	22:05:16.560	0.6					T__					m_e
TNS	15.61		Pn	22:06:11.858						T__					m_e
UBR	13.08		Pn	22:05:34.424	1.4					T__					m_e
WALHA	13.64		Pn	22:05:40.795	0.3					T__					m_e
WTTA	12.04		Pn	22:05:18.344	-0.7					T__					m_e
ZUGS	12.47		Pn	22:05:25.599	0.8					T__					m_e

Event 21009001 South Atlantic Ocean

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/09	16:38:01.46			-2.3720	-23.6230				10.0			5		57.68	63.09	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	21009007
Ms	5.8		BGR	21009007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	58.93		P	16:47:58.055		221.2		6.86		TAS		25.1	0.80	m_e mb	5.3
ASSE	61.57		P	16:48:16.539		221.2		6.86		TAS		8.0	0.85	m_e mb	5.0
BFO	57.68		P	16:47:49.601		221.2		6.86		TAS		42.0	0.91	m_e mb	5.5
BRG	61.99		P	16:48:19.906		221.2		6.86		TAS		9.6	0.81	m_e mb	5.1

BSEG	62.83	P	16:48:24.978	221.2	6.86	TAS	29.2	0.91	m_e	mb	5.4
BUG	59.72	P	16:48:03.377	221.2	6.86	TAS	33.7	0.89	m_e	mb	5.4
CLL	61.90	P	16:48:18.948	221.2	6.86	TAS	24.0	1.02	m_e	mb	5.4
CLZ	61.23	P	16:48:14.586	221.2	6.86	TAS	10.5	1.07	m_e	mb	4.6
FLT1	61.95	P	16:48:19.240	221.2	6.86	TAS	41.6	1.12	m_e	mb	5.6
FUR	58.83	P	16:47:57.941	221.2	6.86	TAS	74.2	0.87	m_e	mb	5.7
GEC2	60.42	P	16:48:08.035	221.2	6.86	TAS	41.3	1.02	m_e	mb	5.4
GRA1	59.94	P	16:48:05.672	221.2	6.86	TAS	37.3	0.90	m_e	mb	5.4
GRA1	59.94	L	17:12:24.874			T__	8943.9	20.60	a_e	Ms	5.9
GTTG	60.84	P	16:48:11.899	221.2	6.86	TAS	19.3	0.92	m_e	mb	4.9
IBBN	60.60	P	16:48:09.597	221.2	6.86	TAS	41.0	0.92	m_e	mb	5.2
KAST	59.97	P	16:48:05.433	221.2	6.86	TAS	10.5	0.84	m_e	mb	4.9
MOX	60.83	P	16:48:11.529	221.2	6.86	TAS	36.4	0.89	m_e	mb	5.2
MOX	60.83	L	17:12:18.681			T__	7028.7	21.70	a_e	Ms	5.8
NEUB	61.30	P	16:48:14.511	221.2	6.86	TAS	64.3	0.90	m_e	mb	5.5
RUE	63.09	P	16:48:26.988	221.2	6.86	TAS	36.0	0.94	m_e	mb	5.5
STU	58.38	P	16:47:54.499	221.2	6.86	TAS	123.3	0.94	m_e	mb	5.9
TANN	61.01	P	16:48:12.762	221.2	6.86	TAS	41.7	1.00	m_e	mb	5.2
TNS	59.21	P	16:48:00.484	221.2	6.86	TAS	34.7	0.86	m_e	mb	5.4
UBBA	60.29	P	16:48:08.192	221.2	6.86	TAS	14.9	0.99	m_e	mb	5.0
UBR	57.94	P	16:47:51.870	221.2	6.86	TAS	92.2	0.89	m_e	mb	5.8
WET	60.27	P	16:48:07.646	221.2	6.86	TAS	37.9	0.91	m_e	mb	5.4
WLF	57.87	P	16:47:50.516	221.2	6.86	TAS	9.9	0.98	m_e	mb	4.8

Event 21010001 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/10	00:03:20.04			42.8560	143.2080				33.0					78.60	78.60	m i ke	BGR
OrigID 21010007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	21010007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	78.60		P	00:15:17.658		34.1		4.70		TAS		46.0	1.74	m_e	mb 5.2

Event 21010002 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
2022/10/10	00:26:22.16			39.8670	142.1520				33.0				9	77.69	83.01	m i ke	BGR
OrigID 21010008																	

Magnitude	Err	Nsta	Author	OrigID

mb 4.7 BGR 21010008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	81.62		P	00:38:36.504		36.0		5.35		TAS		5.3	0.82	m_e mb	4.7
BFO	83.01		P	00:38:43.617		36.0		5.35		TAS		5.0	0.84	m_e mb	4.8
BRG	78.81		P	00:38:21.218	-0.1	36.0		5.35		TAS		5.2	0.74	m_e mb	4.7
BSEG	77.69		P	00:38:15.148	0.2	36.0		5.35		TAS		8.0	0.79	m_e mb	4.9
CLL	78.83		P	00:38:21.236	0.3	36.0		5.35		TAS		11.0	0.75	m_e mb	5.0
CLZ	79.37		P	00:38:24.185	0.3	36.0		5.35		TAS		7.7	0.81	m_e mb	4.8
FLT1	78.67		P	00:38:20.073	0.1	36.0		5.35		TAS		10.8	0.77	m_e mb	5.0
FUR	82.02		P	00:38:38.291		36.0		5.35		TAS		11.6	0.74	m_e mb	5.1
GEC2	80.51		P	00:38:30.318		36.0		5.35		TAS		2.8	0.81	m_e mb	4.3
GRA1	80.81		P	00:38:31.785		36.0		5.35		TAS		11.1	0.74	m_e mb	5.0
GTTG	79.76		P	00:38:26.326	0.3	36.0		5.35		TAS		6.5	0.84	m_e mb	4.6
IBBN	79.91		P	00:38:27.182	0.3	36.0		5.35		TAS		10.3	0.73	m_e mb	4.8
MOX	79.88		P	00:38:26.603		36.0		5.35		TAS		3.2	0.79	m_e mb	4.3
NEUB	79.38		P	00:38:24.144	-0.1	36.0		5.35		TAS		9.1	0.87	m_e mb	4.8
TANN	79.75		P	00:38:26.009		36.0		5.35		TAS		1.8	0.81	m_e mb	4.0
WET	80.60		P	00:38:30.694		36.0		5.35		TAS		2.7	0.89	m_e mb	4.3

Event 21010003 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/10	12:17:51.28			23.5240	122.1860				33.0					84.87	84.87	m i ke	BGR
OrigID 21010009																	

Magnitude Err Nsta Author OrigID  
mb 5.0 BGR 21010009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	84.87		P	12:30:22.318		63.8		4.63		TAS		6.5	0.59	m_e mb	5.0

Event 21010004 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/10	19:24:45.52			24.3110	122.3520				33.0				17	81.54	87.11	m i ke	BGR
OrigID 21010010																	

Magnitude Err Nsta Author OrigID  
mb 5.6 BGR 21010010  
MBB 6.2 BGR 21010010  
Ms 6.0 BGR 21010010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	86.12		P	19:37:22.712	-0.9	58.7		5.07		TAS		41.1	1.09	m_e	MBB 6.1
ASSE	83.36		P	19:37:08.396	0.7	58.7		5.07		TAS		26.6	1.15	m_e	MBB 6.2
BFO	86.68		P	19:37:24.439		58.7		5.07		TAS		45.9	1.31	m_e	MBB 6.1
BRG	82.24		P	19:37:02.705	0.1	58.7		5.07		TAS		16.0	0.95	m_e	MBB 6.0
BSEG	82.60		P	19:37:04.630	0.3	58.7		5.07		TAS		49.2	1.17	m_e	MBB 6.2
BUG	85.51		P	19:37:19.495	0.7	58.7		5.07		TAS		115.0	1.19	m_e	MBB 6.2
CLL	82.54		P	19:37:03.784	-0.0	58.7		5.07		TAS		28.3	0.90	m_e	MBB 6.1
CLZ	83.67		P	19:37:10.255	0.7	58.7		5.07		TAS		82.3	1.14	m_e	MBB 6.4
FLT1	82.96		P	19:37:05.933	-0.6	58.7		5.07		TAS		96.2	1.40	m_e	MBB 6.2
FUR	85.10		P	19:37:17.732		58.7		5.07		TAS		142.7	0.94	m_e	MBB 6.6
GEC2	83.37		P	19:37:08.822		58.7		5.07		TAS		61.6	0.95	m_e	MBB 6.2
GRA1	84.34		P	19:37:13.860		58.7		5.07		TAS		163.3	1.30	m_e	MBB 6.4
GRA1	84.34		L	20:19:18.848						T__		5088.0	20.80	a_e	Ms 5.9
GTTG	84.04		P	19:37:11.859	0.7	58.7		5.07		TAS		41.0	1.04	m_e	MBB 6.3
IBBN	84.77		P	19:37:15.718	-0.6	58.7		5.07		TAS		91.7	1.21	m_e	MBB 6.3
KAST	85.04		P	19:37:16.920	0.7	58.7		5.07		TAS		31.0	1.11	m_e	MBB 6.2
MOX	83.63		P	19:37:09.692	-0.1	58.7		5.07		TAS		40.3	1.13	m_e	MBB 6.1
MOX	83.63		L	20:18:53.450						T__		7280.1	18.50	a_e	Ms 6.1
NEUB	83.26		P	19:37:07.617	0.7	58.7		5.07		TAS		64.8	1.04	m_e	MBB 6.3
RUE	81.54		P	19:36:59.322	0.0	58.7		5.07		TAS		85.3	1.05	m_e	MBB 6.2
STU	85.95		P	19:37:21.573		58.7		5.07		TAS		62.7	0.91	m_e	MBB 6.4
TANN	83.28		P	19:37:07.958	0.7	58.7		5.07		TAS		26.0	1.09	m_e	MBB 6.0
TNS	85.57		P	19:37:19.689	-0.6	58.7		5.07		TAS		34.6	1.18	m_e	MBB 6.0
UBBA	84.41		P	19:37:13.585		58.7		5.07		TAS		16.1	1.05	m_e	MBB 6.1
UBR	86.03		P	19:37:21.906		58.7		5.07		TAS		50.3	1.01	m_e	MBB 6.1
WET	83.69		P	19:37:10.333		58.7		5.07		TAS		59.8	1.27	m_e	MBB 6.2
WLF	87.11		P	19:37:27.664		58.7		5.07		TAS		98.4	1.02	m_e	MBB 6.3

Event 21010005 Sea of Okhotsk

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/10	23:07:11.15		51.5020	148.4760				33.0				9		70.33	74.75	m i ke	BGR
OrigID 21010011																	

Magnitude Err Nsta Author

mb 4.7 BGR 21010011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	74.75		P	23:18:46.634		26.3		5.96		TAS		3.0	0.85	m_e	mb 4.3
BRG	70.85		P	23:18:24.293	-0.1	26.3		5.96		TAS		2.8	0.74	m_e	mb 4.5
CLL	70.75		P	23:18:23.581	-0.1	26.3		5.96		TAS		14.2	0.70	m_e	mb 5.2
CLZ	71.01		P	23:18:25.291	0.2	26.3		5.96		TAS		9.6	0.76	m_e	mb 5.0
FLT1	70.33		P	23:18:21.058	-0.1	26.3		5.96		TAS		8.8	0.74	m_e	mb 5.0
GEC2	72.72		P	23:18:34.799		26.3		5.96		TAS		3.4	0.65	m_e	mb 4.6
GRA1	72.70		P	23:18:34.886		26.3		5.96		TAS		12.7	0.75	m_e	mb 5.1

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GTTG	71.39	P	23:18:27.144	0.2	26.3	5.96	TAS	5.7	0.78	m_e mb	4.8
KAST	72.11	P	23:18:31.506	0.2	26.3	5.96	TAS	5.9	0.96	m_e mb	4.7
MOX	71.73	P	23:18:29.436	0.2	26.3	5.96	TAS	5.5	0.96	m_e mb	4.7
TANN	71.70	P	23:18:29.284	-0.4	26.3	5.96	TAS	2.0	0.75	m_e mb	4.3
TNS	72.99	P	23:18:36.804		26.3	5.96	TAS	6.6	0.65	m_e mb	4.9
UBBA	72.03	P	23:18:30.650	-0.1	26.3	5.96	TAS	3.3	0.65	m_e mb	4.6
WET	72.70	P	23:18:34.902		26.3	5.96	TAS	5.2	0.83	m_e mb	4.7

Event 21011001 Pakistan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/11	08:09:47.20			33.2600	71.5750				33.0					46.80	46.80	m i ke	BGR
OrigID 21011007																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	21011007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	46.80		P	08:18:13.167		98.4		7.33		TAS		9.4	0.97	m_e mb	4.9

Event 21011002 North of Ascension Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/11	11:03:25.40			-2.2900	-12.6900				10.0				21	53.64	59.24	m i ke	BGR
OrigID 21011008																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	21011008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	55.31		P	11:12:55.852	0.1	208.9		7.14		TAS		13.8	0.80	m_e mb	5.0
ASSE	57.73		P	11:13:13.142	-0.0	208.9		7.14		TAS		8.4	0.92	m_e mb	4.8
BFO	53.67		P	11:12:43.719	-0.4	208.9		7.14		TAS		12.0	0.76	m_e mb	5.0
BRG	57.67		P	11:13:12.602	-0.5	208.9		7.14		TAS		6.4	0.93	m_e mb	4.6
BSEG	59.24		P	11:13:23.694	-0.1	208.9		7.14		TAS		27.4	0.73	m_e mb	5.4
BUG	56.19		P	11:13:01.947	0.1	208.9		7.14		TAS		7.6	0.81	m_e mb	4.8
CLL	57.73		P	11:13:13.227	0.1	208.9		7.14		TAS		5.2	0.95	m_e mb	4.5
CLZ	57.39		P	11:13:10.861	0.1	208.9		7.14		TAS		6.1	0.73	m_e mb	4.7
FLT1	58.07		P	11:13:15.345	-0.3	208.9		7.14		TAS		6.5	0.72	m_e mb	4.8
FUR	54.45		P	11:12:49.513	-0.1	208.9		7.14		TAS		49.9	0.99	m_e mb	5.5
GEC2	55.87		P	11:12:59.628	0.0	208.9		7.14		TAS		19.0	0.96	m_e mb	5.1
GRA1	55.76		P	11:12:59.225	0.2	208.9		7.14		TAS		12.5	0.70	m_e mb	5.0
GTTG	57.01		P	11:13:08.294	0.3	208.9		7.14		TAS		15.4	0.84	m_e mb	5.1

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KAST	56.27	P	11:13:02.654	0.0	208.9	7.14	TAS	6.4	0.73	m_e	mb	4.7
MOX	56.72	P	11:13:05.987	0.1	208.9	7.14	TAS	13.3	0.80	m_e	mb	5.0
STU	54.32	P	11:12:48.914	0.1	208.9	7.14	TAS	47.6	1.02	m_e	mb	5.5
TNS	55.40	P	11:12:56.647	0.2	208.9	7.14	TAS	15.8	0.76	m_e	mb	5.1
UBBA	56.38	P	11:13:03.460	-0.0	208.9	7.14	TAS	4.8	0.84	m_e	mb	4.6
UBR	53.64	P	11:12:43.856	-0.1	208.9	7.14	TAS	45.8	0.74	m_e	mb	5.6
WET	55.84	P	11:12:59.833	0.4	208.9	7.14	TAS	13.0	0.87	m_e	mb	5.0
WLF	54.27	P	11:12:48.019	-0.2	208.9	7.14	TAS	12.3	0.94	m_e	mb	4.9

Event 21011003 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/11	14:44:50.81			-22.5050	178.7380				515.4			15		148.63	153.04	m i ke	BGR
OrigID 21011009																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.95		PKPbc	15:03:40.237	0.3	24.4		2.56		TAS				m_e	
BFO	153.04		PKPab	15:04:06.662	0.2	24.4		2.56		TAS				m_e	
BRG	149.23		PKPbc	15:03:40.854		24.4		2.56		TAS				m_e	
BRG	149.23		PKPab	15:03:51.286	0.2	24.4		2.56		TAS				m_e	
BUG	150.28		PKPbc	15:03:43.961		24.4		2.56		TAS				m_e	
BUG	150.28		PKPab	15:03:53.355	0.2	24.4		2.56		TAS				m_e	
CLL	149.12		PKPbc	15:03:40.424	-0.3	24.4		2.56		TAS				m_e	
CLL	149.12		PKPab	15:03:50.397	0.2	24.4		2.56		TAS				m_e	
CLL	149.12		pPKPbc	15:05:40.789	0.2					T__				m_e	
CLZ	149.29		PKPbc	15:03:41.233	0.2	24.4		2.56		TAS				m_e	
FLT1	148.63		PKPbc	15:03:39.374	-0.2	24.4		2.56		TAS				m_e	
FLT1	148.63		PKPab	15:03:47.571	0.2	24.4		2.56		TAS				m_e	
FUR	152.44		PKPab	15:04:05.367	0.2	24.4		2.56		TAS				m_e	
GEC2	151.09		PKPbc	15:03:45.231		24.4		2.56		TAS				m_e	
IBBN	149.37		PKPbc	15:03:41.626	-0.2	24.4		2.56		TAS				m_e	
MOX	150.09		PKPbc	15:03:42.819		24.4		2.56		TAS				m_e	
MOX	150.09		PKPab	15:03:54.529	0.2	24.4		2.56		TAS				m_e	
STU	152.42		PKPab	15:04:05.080	0.2	24.4		2.56		TAS				m_e	
TNS	151.22		PKPbc	15:03:45.687		24.4		2.56		TAS				m_e	
TNS	151.22		PKPab	15:03:58.813	0.2	24.4		2.56		TAS				m_e	
UBBA	150.33		PKPab	15:03:54.752	0.2	24.4		2.56		TAS				m_e	
WET	151.08		PKPab	15:03:59.076	0.2	24.4		2.56		TAS				m_e	

Event 21011004 Turkey

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
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OrigID  
 2022/10/11 15:48:49.11 37.1100 35.9500 33.0 23 19.97 24.92 m i ke BGR  
 21011010

Magnitude Err Nsta Author OrigID  
 mb 4.8 BGR 21011010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	24.59	P		15:54:06.634		117.3		10.19		TAS		21.1	1.07	m_e	mb 4.8
ASSE	23.26	P		15:53:53.241	-1.4	117.3		10.19		TAS		27.7	1.16	m_e	mb 4.7
BFO	23.05	P		15:53:51.380		117.3		10.19		TAS		54.9	0.91	m_e	mb 5.1
BRG	20.86	P		15:53:29.126	-0.5	117.3		10.19		TAS		27.0	1.10	m_e	mb 4.5
BSEG	24.39	P		15:54:05.339	1.0	117.3		10.19		TAS		47.0	1.31	m_e	mb 4.8
BUG	24.82	P		15:54:09.747		117.3		10.19		TAS				m_e	
CLL	21.59	P		15:53:37.423	0.1	117.3		10.19		TAS		30.6	0.94	m_e	mb 4.7
CLZ	23.28	P		15:53:54.056	-1.0	117.3		10.19		TAS		36.5	0.95	m_e	mb 4.9
FLT1	23.06	P		15:53:51.131	-1.4	117.3		10.19		TAS		28.4	1.10	m_e	mb 4.7
FUR	21.15	P		15:53:32.483		117.3		10.19		TAS				m_e	
GEC2	19.97	P		15:53:20.130		117.3		10.19		TAS		66.7	1.69	m_e	mb 4.6
GOR1	23.38	P		15:53:55.586	1.5	117.3		10.19		TAS		130.3	1.77	m_e	mb 5.2
GRA1	21.80	P		15:53:39.037		117.3		10.19		TAS		19.6	1.17	m_e	mb 4.4
GTTG	23.36	P		15:53:55.091	1.0	117.3		10.19		TAS				m_e	
IBBN	24.92	P		15:54:10.447	-0.9	117.3		10.19		TAS		42.2	1.01	m_e	mb 5.1
KAST	24.07	P		15:54:02.092		117.3		10.19		TAS		28.6	1.07	m_e	mb 4.7
PLN	21.63	P		15:53:38.046		117.3		10.19		TAS		11.5	1.21	m_e	mb 4.2
RUE	21.85	P		15:53:38.961	0.3	117.3		10.19		TAS		132.9	1.53	m_e	mb 5.1
STU	22.66	P		15:53:47.118		117.3		10.19		TAS		50.0	0.95	m_e	mb 5.0
TNS	23.65	P		15:53:57.819		117.3		10.19		TAS		17.9	0.99	m_e	mb 4.6
UBBA	23.00	P		15:53:51.440		117.3		10.19		TAS				m_e	
UBR	21.71	P		15:53:38.046		117.3		10.19		TAS		27.0	0.98	m_e	mb 4.6
WET	20.59	P		15:53:25.902		117.3		10.19		TAS		23.8	1.01	m_e	mb 4.5

Event 21011005 South of Fiji Islands

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
 OrigID  
 2022/10/11 20:53:55.60 -22.3750 -176.8350 476.4 0.1 22 147.94 153.69 m i ke BGR  
 21011011

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	151.63		PKPbc	21:12:55.696	0.0	16.0		2.46		TAS				m_e	
AHRW	151.63		PKPab	21:13:02.551		14.2		4.20		TAS				m_e	
ASSE	149.65		PKPbc	21:12:50.309	-0.0	16.0		2.46		TAS				m_e	
BFO	153.69		PKPbc	21:13:00.035	-0.4	16.0		2.46		TAS				m_e	
BFO	153.69		PKPab	21:13:11.218		14.2		4.20		TAS				m_e	

BFO	153.69	pPKPbc	21:14:52.722	-0.1													T__	m_e
BRG	150.26	PKPbc	21:12:52.237	0.4	16.0		2.46										TAS	m_e
BRG	150.26	PKPab	21:12:57.343	0.3	14.2		4.20										TAS	m_e
BSEG	147.94	PKPbc	21:12:45.963	-0.2	16.0		2.46										TAS	m_e
BUG	150.72	PKPbc	21:12:53.151	-0.1	16.0		2.46										TAS	m_e
CLL	150.04	PKPbc	21:12:51.294	0.0	16.0		2.46										TAS	m_e
CLL	150.04	PKPab	21:12:55.770	-0.1	14.2		4.20										TAS	m_e
CLZ	149.97	PKPbc	21:12:51.133	-0.0	16.0		2.46										TAS	m_e
FLT1	149.37	PKPbc	21:12:49.624	-0.0	16.0		2.46										TAS	m_e
FLT1	149.37	PKPab	21:12:53.477	-0.0	14.2		4.20										TAS	m_e
FUR	153.38	PKPbc	21:12:59.050		16.0		2.46										TAS	m_e
FUR	153.38	PKPab	21:13:10.532		14.2		4.20										TAS	m_e
GEC2	152.21	PKPbc	21:12:56.693	-0.3	16.0		2.46										TAS	m_e
GEC2	152.21	PKPab	21:13:05.632		14.2		4.20										TAS	m_e
GOR1	148.72	PKPbc	21:12:47.858	-0.2	16.0		2.46										TAS	m_e
GRA1	151.92	PKPbc	21:12:55.879	0.2	16.0		2.46										TAS	m_e
GRA1	151.92	PKPab	21:13:04.277		14.2		4.20										TAS	m_e
GTTG	150.32	PKPbc	21:12:51.917	-0.1	16.0		2.46										TAS	m_e
GTTG	150.32	PKPab	21:12:57.529	0.2	14.2		4.20										TAS	m_e
IBBN	149.82	PKPbc	21:12:51.041	0.0	16.0		2.46										TAS	m_e
IBBN	149.82	PKPab	21:12:55.497	-0.5	14.2		4.20										TAS	m_e
KAST	150.85	PKPbc	21:12:53.634	0.2	16.0		2.46										TAS	m_e
MOX	150.94	PKPbc	21:12:53.628	0.2	16.0		2.46										TAS	m_e
PLN	150.99	PKPbc	21:12:53.601	0.2	16.0		2.46										TAS	m_e
SCHI	148.13	PKPbc	21:12:46.496	-0.1	16.0		2.46										TAS	m_e
TNS	151.81	PKPbc	21:12:55.925	0.2	16.0		2.46										TAS	m_e
TNS	151.81	PKPab	21:13:03.680		14.2		4.20										TAS	m_e
WET	152.12	PKPbc	21:12:56.607	-0.0	16.0		2.46										TAS	m_e
WET	152.12	PKPab	21:13:05.201		14.2		4.20										TAS	m_e
WLF	152.57	PKPbc	21:12:58.114	-0.0	16.0		2.46										TAS	m_e
WLF	152.57	pPKPbc	21:14:50.832	-0.1													T__	m_e

Event 21012001 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/12	01:22:47.63			-25.1710	-179.6630				503.6	0.4		21		150.24	155.96	m i ke	BGR
21012007																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	151.88		PKPbc	01:41:45.234	0.3	23.0		2.27		TAS					m_e
BFO	155.96		PKPab	01:42:11.548	-0.2	19.5		4.20		TAS					m_e
BRG	152.22		PKPbc	01:41:45.861	0.1	23.0		2.27		TAS					m_e
BSEG	150.24		PKPbc	01:41:41.512	-0.0	23.0		2.27		TAS					m_e
BSEG	150.24		PKPab	01:41:47.649	-0.2	19.5		4.20		TAS					m_e

CLL	152.09	PKPbc	01:41:45.530	-0.2	23.0	2.27	TAS	m_e
CLZ	152.21	PKPbc	01:41:46.246	-0.1	23.0	2.27	TAS	m_e
FLT1	151.57	PKPbc	01:41:44.375	0.1	23.0	2.27	TAS	m_e
FLT1	151.57	PKPab	01:41:52.889	-0.2	19.5	4.20	TAS	m_e
FUR	155.41	PKPab	01:42:09.720	-0.2	19.5	4.20	TAS	m_e
GEC2	154.09	PKPbc	01:41:50.150		23.0	2.27	TAS	m_e
GOR1	150.94	PKPbc	01:41:43.107	0.1	23.0	2.27	TAS	m_e
GRA1	154.03	PKPab	01:42:03.254	-0.2	19.5	4.20	TAS	m_e
GTTG	152.58	PKPbc	01:41:46.665	-0.0	23.0	2.27	TAS	m_e
GTTG	152.58	PKPab	01:41:57.321	-0.2	19.5	4.20	TAS	m_e
IBBN	152.24	PKPbc	01:41:46.148	-0.1	23.0	2.27	TAS	m_e
KAST	153.20	PKPbc	01:41:48.121	-0.0	23.0	2.27	TAS	m_e
MOX	153.05	PKPab	01:41:59.281	-0.2	19.5	4.20	TAS	m_e
PLN	153.06	PKPbc	01:41:47.897	0.1	23.0	2.27	TAS	m_e
PLN	153.06	PKPab	01:41:59.083	-0.2	19.5	4.20	TAS	m_e
RUE	150.82	PKPbc	01:41:42.634	-0.1	23.0	2.27	TAS	m_e
SCHI	150.27	PKPbc	01:41:41.412	-0.0	23.0	2.27	TAS	m_e
SCHI	150.27	pPKPbc	01:43:40.048				T__	m_e
TNS	154.13	PKPbc	01:41:50.278	-0.1	23.0	2.27	TAS	m_e
TNS	154.13	PKPab	01:42:03.390	-0.2	19.5	4.20	TAS	m_e
WET	154.07	PKPab	01:42:04.209	-0.2	19.5	4.20	TAS	m_e
WLF	155.05	PKPbc	01:41:52.796		23.0	2.27	TAS	m_e
WLF	155.05	pPKPbc	01:43:51.258				T__	m_e

Event 21012002 Off east coast of Kamchatka Peninsula, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/12	09:10:56.92			51.9150	160.0520				33.0					75.24	75.24	m i ke	BGR
21012008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	21012008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	75.24		P	09:22:35.471		21.9		4.97		TAS		8.2	0.86	m_e mb	4.8

Event 21013001 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/13	06:20:54.72			46.5800	149.4100				33.0				18	73.89	79.45	m i ke	BGR
21013007																	

Magnitude	Err	Nsta	Author	OrigID
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mb 4.8 BGR 21013007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	77.81		P	06:32:49.864	-0.4	28.1		5.56		TAS		8.7	1.04	m_e	mb 4.8
ASSE	75.38		P	06:32:36.007		28.1		5.56		TAS		7.6	1.02	m_e	mb 4.7
BFO	79.45		P	06:32:58.889		28.1		5.56		TAS		4.2	0.75	m_e	mb 4.5
BRG	75.49		P	06:32:36.912	0.2	28.1		5.56		TAS		5.8	0.72	m_e	mb 4.8
BSEG	73.89		P	06:32:27.659	0.4	28.1		5.56		TAS		10.2	0.81	m_e	mb 4.9
CLL	75.41		P	06:32:36.220	-0.0	28.1		5.56		TAS		16.8	0.77	m_e	mb 5.2
CLZ	75.72		P	06:32:37.960	-0.4	28.1		5.56		TAS		12.6	0.85	m_e	mb 5.1
FLT1	75.04		P	06:32:33.985	-0.5	28.1		5.56		TAS		29.7	1.14	m_e	mb 5.2
GEC2	77.34		P	06:32:47.023		28.1		5.56		TAS		3.3	0.68	m_e	mb 4.6
GRA1	77.37		P	06:32:47.342		28.1		5.56		TAS		12.4	0.75	m_e	mb 5.1
GTTG	76.10		P	06:32:39.892	-0.3	28.1		5.56		TAS		6.8	0.86	m_e	mb 4.8
KAST	76.85		P	06:32:44.415	-0.0	28.1		5.56		TAS		4.5	0.82	m_e	mb 4.6
MOX	76.41		P	06:32:41.961	-0.1	28.1		5.56		TAS		5.0	0.98	m_e	mb 4.6
NEUB	75.88		P	06:32:39.230	-0.4	28.1		5.56		TAS		9.2	0.73	m_e	mb 5.0
TANN	76.36		P	06:32:41.408	-0.4	28.1		5.56		TAS		2.0	0.77	m_e	mb 4.3
TNS	77.72		P	06:32:49.282	-0.4	28.1		5.56		TAS		4.1	0.80	m_e	mb 4.6
UBBA	76.74		P	06:32:43.835	-0.4	28.1		5.56		TAS		2.5	0.77	m_e	mb 4.4
WET	77.34		P	06:32:47.191		28.1		5.56		TAS		5.3	0.81	m_e	mb 4.7

Event 21013002 East of Australia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/13	14:03:53.80			-40.4310	173.4980				158.3			21		162.34	167.15	m i ke	EMSC
OrigID 21013038																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	166.12		PKPab	14:24:39.855	0.3	54.9		4.41		TAS				m_e	
ASSE	163.37		PKPab	14:24:27.103	-0.2	54.9		4.41		TAS				m_e	
BFO	166.80		PKPab	14:24:42.430	-0.5	54.9		4.41		TAS				m_e	
BRG	162.37		PKPab	14:24:23.039	0.4	54.9		4.41		TAS				m_e	
BSEG	162.34		PKPab	14:24:23.146	-0.3	54.9		4.41		TAS				m_e	
BUG	165.41		PKPab	14:24:36.514	-0.1	54.9		4.41		TAS				m_e	
CLL	162.66		PKPab	14:24:24.110	0.0	54.9		4.41		TAS				m_e	
CLZ	163.69		PKPab	14:24:28.731	0.0	54.9		4.41		TAS				m_e	
FLT1	162.97		PKPab	14:24:25.306	-0.2	54.9		4.41		TAS				m_e	
GEC2	163.41		PKPab	14:24:28.386	-0.1	54.9		4.41		TAS				m_e	
GRA1	164.47		PKPab	14:24:32.180	-0.1	54.9		4.41		TAS				m_e	
GTTG	164.08		PKPab	14:24:30.434	0.1	54.9		4.41		TAS				m_e	
IBBN	164.58		PKPab	14:24:32.938	-0.2	54.9		4.41		TAS				m_e	
KAST	165.04		PKPab	14:24:34.657	-0.0	54.9		4.41		TAS				m_e	
MOX	163.75		PKPab	14:24:28.682	0.4	54.9		4.41		TAS				m_e	

NEUB	163.37	PKPab	14:24:27.368	0.1	54.9	4.41	TAS	m_e
TANN	163.41	PKPab	14:24:27.377	-0.0	54.9	4.41	TAS	m_e
TNS	165.65	PKPab	14:24:37.231	0.4	54.9	4.41	TAS	m_e
UBR	166.07	PKPab	14:24:39.582		54.9	4.41	TAS	m_e
WET	163.77	PKPab	14:24:29.574	-0.0	54.9	4.41	TAS	m_e
WLF	167.15	PKPab	14:24:44.287	-0.1	54.9	4.41	TAS	m_e

Event 21014010 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/14	10:05:19.38			-21.0610	-178.2430				591.3	4.0		29		145.36	152.52	m i ke	BGR
OrigID 21014016																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	150.19		PKPbc	10:24:04.169	0.0	18.1		2.42		TAS				a_e	
ASSE	148.14		PKPbc	10:23:59.119	0.2	18.1		2.42		TAS				a_e	
ASSE	148.14		PKPab	10:24:03.718	-0.1	16.9		4.26		TAS				m_e	
BFO	152.20		PKPbc	10:24:08.419	-0.4	18.1		2.42		TAS				a_e	
BFO	152.20		PKPab	10:24:20.762		16.9		4.26		TAS				m_e	
BRG	148.67		PKPbc	10:24:00.469	0.2	18.1		2.42		TAS				a_e	
BRG	148.67		PKPab	10:24:05.662	-0.1	16.9		4.26		TAS				m_e	
BRG	148.67		pPKPbc	10:26:15.635		16.5		2.62		TAS				m_e	
BSEG	146.45		PKPbc	10:23:54.669	-0.3	18.1		2.42		TAS				a_e	
BUG	149.28		PKPbc	10:24:01.769	-0.2	18.1		2.42		TAS				a_e	
CLL	148.48		PKPbc	10:23:59.819	0.1	18.1		2.42		TAS				a_e	
CLL	148.48		PKPab	10:24:05.020	-0.0	16.9		4.26		TAS				m_e	
CLZ	148.47		PKPbc	10:24:00.219	0.5	18.1		2.42		TAS				a_e	
CLZ	148.47		PKPab	10:24:05.376	-0.1	16.9		4.26		TAS				m_e	
FLT1	147.85		PKPbc	10:23:58.069	-0.2	18.1		2.42		TAS				a_e	
FLT1	147.85		PKPab	10:24:02.103	-0.4	16.9		4.26		TAS				m_e	
FLT1	147.85		pPKPbc	10:26:13.063		16.5		2.62		TAS				m_e	
FUR	151.81		PKPbc	10:24:07.324	-0.5	18.1		2.42		TAS				m_e	
FUR	151.81		PKPab	10:24:19.512		16.9		4.26		TAS				m_e	
GEC2	150.60		PKPbc	10:24:04.919	-0.0	18.1		2.42		TAS				m_e	
GEC2	150.60		pPKPbc	10:26:21.079		16.5		2.62		TAS				m_e	
GOR1	147.21		PKPbc	10:23:56.919	0.2	18.1		2.42		TAS				a_e	
GOR1	147.21		pPKPbc	10:26:12.154	0.1	16.5		2.62		TAS				m_e	
GRA1	150.38		PKPbc	10:24:04.317	0.0	18.1		2.42		TAS				m_e	
GRA1	150.38		PKPab	10:24:13.467		16.9		4.26		TAS				m_e	
GTTG	148.82		PKPbc	10:24:00.919	0.3	18.1		2.42		TAS				a_e	
GTTG	148.82		PKPab	10:24:06.574	0.1	16.9		4.26		TAS				m_e	
IBBN	148.38		PKPbc	10:23:59.719	-0.1	18.1		2.42		TAS				a_e	
KAST	149.38		PKPbc	10:24:02.269	0.2	18.1		2.42		TAS				a_e	
MOX	149.39		PKPbc	10:24:02.219	0.3	18.1		2.42		TAS				a_e	

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MOX	149.39	PKPab	10:24:08.869	0.2	16.9	4.26	TAS	m_e
NEUB	148.84	PKPbc	10:24:00.819	0.2	18.1	2.42	TAS	a_e
NEUB	148.84	PKPab	10:24:06.568	0.0	16.9	4.26	TAS	m_e
PLN	149.43	PKPbc	10:24:02.269	0.2	18.1	2.42	TAS	a_e
PLN	149.43	PKPab	10:24:09.061		16.9	4.26	TAS	m_e
RGN	145.36	PKPbc	10:23:51.319	-0.8	18.1	2.42	TAS	a_e
RUE	147.21	PKPbc	10:23:56.569	-0.1	18.1	2.42	TAS	a_e
SCHI	146.59	PKPbc	10:23:55.069	-0.1	18.1	2.42	TAS	a_e
STU	151.63	PKPbc	10:24:07.319	-0.1	18.1	2.42	TAS	a_e
STU	151.63	PKPab	10:24:18.369		16.9	4.26	TAS	m_e
TANN	149.43	PKPbc	10:24:02.369	0.3	18.1	2.42	TAS	a_e
TANN	149.43	PKPab	10:24:09.256		16.9	4.26	TAS	m_e
TNS	150.33	PKPbc	10:24:04.469	0.1	18.1	2.42	TAS	a_e
TNS	150.33	PKPab	10:24:12.764		16.9	4.26	TAS	m_e
UBBA	149.52	PKPbc	10:24:02.077	-0.2	18.1	2.42	TAS	m_e
UBR	152.52	PKPbc	10:24:09.019	-0.5	18.1	2.42	TAS	m_e
WET	150.53	PKPbc	10:24:04.781	0.1	18.1	2.42	TAS	m_e
WET	150.53	PKPab	10:24:13.984		16.9	4.26	TAS	m_e
WLF	151.15	PKPbc	10:24:06.869	0.3	18.1	2.42	TAS	a_e
WLF	151.15	PKPab	10:24:16.827		16.9	4.26	TAS	m_e

Event 21015003 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/15	02:41:32.34			-18.1110	-173.3130				33.0			28		144.04	150.28	m i ke	BGR
	21015009																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	147.55		PKPbc	03:01:13.552	0.0	8.2		2.76		TAS				m_e	
ASSE	145.82		PKPbc	03:01:08.222	0.7	8.2		2.76		TAS				a_e	
BFO	149.73		PKPbc	03:01:18.272		8.2		2.76		TAS				a_e	
BRG	146.72		PKPbc	03:01:11.072	0.2	8.2		2.76		TAS				a_e	
BSEG	144.04		PKPbc	03:01:02.522	-0.8	8.2		2.76		TAS				a_e	
BUG	146.65		PKPbc	03:01:10.226	-0.1	8.2		2.76		TAS				m_e	
CLL	146.41		PKPbc	03:01:09.922	-0.5	8.2		2.76		TAS				a_e	
CLZ	146.12		PKPbc	03:01:09.322	0.3	8.2		2.76		TAS				m_e	
FLT1	145.57		PKPbc	03:01:07.372	0.3	8.2		2.76		TAS				a_e	
FUR	149.70		PKPbc	03:01:18.172		8.2		2.76		TAS				a_e	
GEC2	148.73		PKPbc	03:01:16.222	-0.8	8.2		2.76		TAS				a_e	
GOR1	144.91		PKPbc	03:01:04.822	-0.1	8.2		2.76		TAS				a_e	
GRA1	148.19		PKPbc	03:01:14.578	-0.0	8.2		2.76		TAS				m_e	
GTTG	146.44		PKPbc	03:01:10.566	0.4	8.2		2.76		TAS				m_e	
IBBN	145.77		PKPbc	03:01:08.934	0.2	8.2		2.76		TAS				m_e	
KAST	146.86		PKPbc	03:01:11.172	0.2	8.2		2.76		TAS				a_e	

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MOX	147.21	PKPbc	03:01:12.122	0.4	8.2	2.76	TAS	a_e
NEUB	146.65	PKPbc	03:01:10.722	0.0	8.2	2.76	TAS	a_e
PLN	147.31	PKPbc	03:01:12.472	0.1	8.2	2.76	TAS	a_e
RUE	145.17	PKPbc	03:01:06.172	0.7	8.2	2.76	TAS	a_e
SCHI	144.43	PKPbc	03:01:03.872	-0.2	8.2	2.76	TAS	a_e
STU	149.25	PKPbc	03:01:18.114	-0.4	8.2	2.76	TAS	m_e
TANN	147.35	PKPbc	03:01:12.672	-0.1	8.2	2.76	TAS	a_e
TNS	147.84	PKPbc	03:01:13.898	0.1	8.2	2.76	TAS	m_e
UBBA	147.17	PKPbc	03:01:11.772	0.3	8.2	2.76	TAS	a_e
UBR	150.28	PKPbc	03:01:20.018		8.2	2.76	TAS	m_e
WET	148.55	PKPbc	03:01:15.802	-0.6	8.2	2.76	TAS	m_e
WLF	148.43	PKPbc	03:01:15.722	0.5	8.2	2.76	TAS	a_e

Event 21016006 Off coast of central America

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/16	12:48:21.00			4.3580	-87.5670				15.0			29		89.13	94.13	m i ke	USGS
	21016024																

Magnitude	Err	Nsta	Author	OrigID
mb	5.6		BGR	21016012
Ms	6.1		BGR	21016012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	89.62		S	13:12:10.310	0.9	280.9		9.54		TAS				a_e	
AHRW	89.62		P	13:01:20.014	0.2	279.5		4.63		TAS		186.4	1.96	a_e mb	6.0
ASSE	91.64		S	13:12:27.710	-0.5	280.9		9.54		TAS				a_e	
ASSE	91.64		P	13:01:29.564	0.1	279.5		4.63		TAS		580.8	3.31	a_e mb	6.3
BFO	90.70		S	13:12:19.210	-0.9	280.9		9.54		TAS				a_e	
BFO	90.70		P	13:01:26.355		279.5		4.63		TAS		14.7	0.81	m_e mb	5.4
BRG	93.88		S	13:12:49.660	-0.1	280.9		9.54		TAS				a_e	
BRG	93.88		P	13:01:39.714	-0.2	279.5		4.63		TAS		38.3	1.60	a_e mb	5.5
BSEG	91.14		S	13:12:23.110	-0.0	280.9		9.54		TAS				a_e	
BUG	89.64		S	13:12:08.560	-0.8	280.9		9.54		TAS				a_e	
BUG	89.64		P	13:01:19.764	-0.0	279.5		4.63		TAS		76.4	1.51	a_e mb	5.7
CLL	93.21		S	13:12:42.760	-0.6	280.9		9.54		TAS				a_e	
CLL	93.21		P	13:01:36.464	-0.0	279.5		4.63		TAS		25.1	1.38	a_e mb	5.5
CLZ	91.50		S	13:12:27.510	0.5	280.9		9.54		TAS				a_e	
CLZ	91.50		P	13:01:28.914	0.1	279.5		4.63		TAS		65.7	1.71	a_e mb	5.7
FLT1	91.95		S	13:12:30.010	-1.1	280.9		9.54		TAS				a_e	
FLT1	91.95		P	13:01:30.314	-0.1	279.5		4.63		TAS		29.3	1.26	a_e mb	5.5
FUR	92.68		S	13:12:38.410	-0.5	280.9		9.54		TAS				a_e	
FUR	92.68		P	13:01:34.164		279.5		4.63		TAS		20.5	1.09	a_e mb	5.5
GEC2	94.13		S	13:12:53.010	0.4	280.9		9.54		TAS				a_e	
GEC2	94.13		P	13:01:40.814		279.5		4.63		TAS		43.6	1.47	m_e mb	5.6
GRA1	92.38		S	13:12:36.460	0.7	280.9		9.54		TAS				m_e	

GRA1	92.38	P	13:01:32.914	-0.2	279.5	4.63	TAS	16.9	0.83	a_e	mb	5.4
GRA1	92.38	L	13:36:46.655				T__	8098.5	21.50	a_e	Ms	6.1
GTTG	91.30	S	13:12:25.960	0.9	280.9	9.54	TAS			a_e		
GTTG	91.30	P	13:01:27.814	-0.1	279.5	4.63	TAS	36.9	1.37	a_e	mb	5.5
HLG	89.68	S	13:12:08.910	-0.3	280.9	9.54	TAS			a_e		
IBBN	89.84	S	13:12:10.910	-0.2	280.9	9.54	TAS			a_e		
IBBN	89.84	P	13:01:20.764	-0.0	279.5	4.63	TAS	162.6	1.85	a_e	mb	5.9
KAST	90.39	S	13:12:16.760	0.3	280.9	9.54	TAS			a_e		
KAST	90.39	P	13:01:23.314	0.0	279.5	4.63	TAS	65.8	1.66	a_e	mb	5.6
MOX	92.47	S	13:12:37.160	0.7	280.9	9.54	TAS			a_e		
MOX	92.47	P	13:01:33.114	0.1	279.5	4.63	TAS	46.2	1.78	a_e	mb	5.5
MOX	92.47	L	13:39:28.841				T__	6633.9	20.40	a_e	Ms	6.1
NEUB	92.47	S	13:12:36.060	-0.3	280.9	9.54	TAS			a_e		
NEUB	92.47	P	13:01:33.214	0.2	279.5	4.63	TAS	91.0	1.70	a_e	mb	5.8
PLN	92.84	S	13:12:40.210	0.2	280.9	9.54	TAS			a_e		
PLN	92.84	P	13:01:34.864	-0.2	279.5	4.63	TAS	30.2	1.83	a_e	mb	5.4
RGN	92.76	S	13:12:39.510	1.0	280.9	9.54	TAS			a_e		
RUE	93.45	S	13:12:44.110	-1.3	280.9	9.54	TAS			a_e		
RUE	93.45	P	13:01:37.164	-0.2	279.5	4.63	TAS			a_e		
SCHI	92.72	S	13:12:37.660	-0.7	280.9	9.54	TAS			a_e		
STU	91.21	S	13:12:23.610	-1.3	280.9	9.54	TAS			a_e		
STU	91.21	P	13:01:26.964		279.5	4.63	TAS	51.6	0.75	a_e	mb	5.9
TANN	93.04	S	13:12:43.060	1.1	280.9	9.54	TAS			a_e		
TANN	93.04	P	13:01:35.964	-0.6	279.5	4.63	TAS	11.8	0.84	a_e	mb	5.3
TNS	90.53	S	13:12:18.910	0.8	280.9	9.54	TAS			a_e		
TNS	90.53	P	13:01:24.014	1.1	279.5	4.63	TAS	13.4	0.73	a_e	mb	5.4
UBBA	91.43	S	13:12:27.110	0.6	280.9	9.54	TAS			a_e		
UBBA	91.43	P	13:01:28.214	-0.1	279.5	4.63	TAS	26.6	1.38	a_e	mb	5.4
UBR	91.98	S	13:12:31.960	-0.4	280.9	9.54	TAS			a_e		
UBR	91.98	P	13:01:31.014		279.5	4.63	TAS	48.4	1.57	a_e	mb	5.6
WET	93.55	S	13:12:47.460	0.5	280.9	9.54	TAS			a_e		
WET	93.55	P	13:01:38.464		279.5	4.63	TAS	35.3	1.07	a_e	mb	5.6
WLF	89.13	S	13:12:05.210	0.4	280.9	9.54	TAS			a_e		
WLF	89.13	P	13:01:17.714	-0.2	279.5	4.63	TAS	99.8	1.22	a_e	mb	5.9

Event 21017005 Taiwan region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/17	13:20:44.45			21.3900	121.1320				33.0					85.28	85.96	m i k e	BGR
21017011																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	21017011
Ms	5.2		BGR	21017011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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./bul2210.txt

Thu Feb 15 10:44:47 2024

22

GRA1	85.96	P	13:33:20.986	66.9	5.18	TAS	7.1	1.27	m_e	mb	4.7
GRA1	85.96	L	14:16:31.420			T__	870.5	19.30	a_e	Ms	5.2
MOX	85.28	L	14:17:45.670			T__	1064.1	18.40	a_e	Ms	5.3

Event 21019008 Ascension Island region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/19	15:02:56.34			-8.7050	-12.7080				10.0			29		59.71	66.74	m i ke	BGR
OrigID 21019014																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.0		BGR	21019014
Ms	5.2		BGR	21019014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
AHRW	61.49		P	15:13:15.222	0.1	207.0		6.73		TAS		148.1	1.35	a_e	mb	5.6
ASSE	63.86		P	15:13:30.872	0.5	207.0		6.73		TAS		116.1	1.49	a_e	mb	5.9
BFO	59.78		P	15:13:02.822	-0.2	207.0		6.73		TAS		134.7	1.12	a_e	mb	5.9
BRG	63.70		P	15:13:29.772	0.1	207.0		6.73		TAS		65.2	1.08	a_e	mb	5.8
BSEG	65.40		P	15:13:40.672	-0.2	207.0		6.73		TAS		155.7	1.15	a_e	mb	6.1
BUG	62.37		P	15:13:20.522	0.2	207.0		6.73		TAS		105.4	1.43	a_e	mb	5.9
CLL	63.80		P	15:13:30.222	0.0	207.0		6.73		TAS		118.3	1.59	a_e	mb	5.9
CLZ	63.52		P	15:13:28.622	0.0	207.0		6.73		TAS		110.6	1.42	m_e	mb	5.8
FLT1	64.20		P	15:13:33.022	0.1	207.0		6.73		TAS		203.2	1.33	a_e	mb	6.2
FUR	60.49		P	15:13:08.172		207.0		6.73		TAS		264.4	1.11	a_e	mb	6.2
GEC2	61.87		P	15:13:17.772	-0.5	207.0		6.73		TAS		179.1	1.21	a_e	mb	6.2
GOR1	64.81		P	15:13:37.622	-0.0	207.0		6.73		TAS		302.3	1.28	a_e	mb	6.4
GRA1	61.83		P	15:13:17.022	0.5	207.0		6.73		TAS		97.9	1.05	a_e	mb	6.0
GRA1	61.83		L	15:40:01.204						T__		2044.6	19.10	a_e	Ms	5.3
GTTG	63.15		P	15:13:26.472	-0.1	207.0		6.73		TAS		134.8	1.25	a_e	mb	5.9
IBBN	63.28		P	15:13:26.822	0.1	207.0		6.73		TAS		156.4	1.38	a_e	mb	6.0
KAST	62.43		P	15:13:21.222	0.1	207.0		6.73		TAS		172.8	1.97	a_e	mb	5.9
MOX	62.80		P	15:13:23.722	-0.1	207.0		6.73		TAS		171.6	1.24	a_e	mb	6.0
MOX	62.80		L	15:41:38.003						T__		1578.2	19.00	a_e	Ms	5.2
NEUB	63.33		P	15:13:27.272	-0.4	207.0		6.73		TAS		201.7	1.21	a_e	mb	6.1
PLN	62.82		P	15:13:23.672	-0.0	207.0		6.73		TAS		49.8	1.20	a_e	mb	5.5
RGN	66.74		P	15:13:49.772	-0.4	207.0		6.73		TAS		263.7	1.25	a_e	mb	6.3
RUE	65.05		P	15:13:38.822	-0.0	207.0		6.73		TAS		170.2	1.07	a_e	mb	6.2
SCHI	65.54		P	15:13:41.922	0.5	207.0		6.73		TAS		366.8	1.66	a_e	mb	6.3
STU	60.42		P	15:13:07.122	0.1	207.0		6.73		TAS		261.3	1.28	a_e	mb	6.1
TANN	62.85		P	15:13:24.072	-0.0	207.0		6.73		TAS		164.1	1.12	a_e	mb	6.1
TNS	61.54		P	15:13:15.072	-0.1	207.0		6.73		TAS		115.7	1.16	a_e	mb	5.6
UBBA	62.50		P	15:13:21.172	0.6	207.0		6.73		TAS		202.5	1.53	a_e	mb	6.1
UBR	59.71		P	15:13:02.572		207.0		6.73		TAS		264.2	1.14	a_e	mb	6.2
WET	61.86		P	15:13:17.522	-0.5	207.0		6.73		TAS		175.4	1.13	a_e	mb	6.2
WLF	60.45		P	15:13:07.572	0.2	207.0		6.73		TAS		141.0	1.26	a_e	mb	5.8

Event 21020008 Panama

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/20	11:57:23.00			8.8430	-81.2340				33.0			29		81.64	86.64	m i ke	BGR
OrigID 21020014																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.3		BGR	21020014
Ms	6.7		BGR	21020014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	82.17		S	12:19:57.515	0.5	277.1		9.08		TAS				m_e	
AHRW	82.17		SS	12:25:52.995	0.3	279.4		14.96		TAS				a_e	
AHRW	82.17		P	12:09:40.960	-0.0	277.7		5.02		TAS		410.2	1.69	a_e mb	6.3
ASSE	84.25		S	12:20:14.681	-1.4	277.1		9.08		TAS				a_e	
ASSE	84.25		SS	12:26:23.245	0.3	279.4		14.96		TAS				a_e	
ASSE	84.25		P	12:09:51.610		277.7		5.02		TAS		472.6	1.75	a_e mb	6.4
BFO	83.18		S	12:20:02.081	-3.9	277.1		9.08		TAS				a_e	
BFO	83.18		SS	12:26:07.245	-1.4	279.4		14.96		TAS				a_e	
BFO	83.18		P	12:09:45.360	0.1	277.7		5.02		TAS		169.6	1.52	a_e mb	6.0
BRG	86.46		S	12:20:37.881	3.0	277.1		9.08		TAS				a_e	
BRG	86.46		SS	12:26:56.995	0.6	279.4		14.96		TAS				a_e	
BRG	86.46		P	12:10:02.260		277.7		5.02		TAS		255.7	1.63	a_e mb	6.1
BSEG	83.83		S	12:20:09.581	-2.7	277.1		9.08		TAS				a_e	
BSEG	83.83		SS	12:26:15.845	0.2	279.4		14.96		TAS				a_e	
BSEG	83.83		P	12:09:49.160	-0.1	277.7		5.02		TAS		373.1	1.83	a_e mb	6.3
BUG	82.22		S	12:20:00.654	3.1	277.1		9.08		TAS				m_e	
BUG	82.22		SS	12:25:52.545	-0.4	279.4		14.96		TAS				a_e	
BUG	82.22		P	12:09:40.760	0.1	277.7		5.02		TAS		348.1	1.74	a_e mb	6.2
CLL	85.80		S	12:20:30.381	1.5	277.1		9.08		TAS				a_e	
CLL	85.80		SS	12:26:46.295	-0.1	279.4		14.96		TAS				a_e	
CLL	85.80		P	12:09:58.860		277.7		5.02		TAS		303.6	1.59	m_e mb	6.2
CLZ	84.11		S	12:20:13.431	-1.2	277.1		9.08		TAS				a_e	
CLZ	84.11		SS	12:26:21.595	0.7	279.4		14.96		TAS				a_e	
CLZ	84.11		P	12:09:50.810		277.7		5.02		TAS		323.1	1.58	a_e mb	6.3
FLT1	84.57		S	12:20:16.981	-2.0	277.1		9.08		TAS				a_e	
FLT1	84.57		SS	12:26:27.795	0.2	279.4		14.96		TAS				a_e	
FLT1	84.57		P	12:09:52.460		277.7		5.02		TAS		359.1	1.73	a_e mb	6.3
FUR	85.16		S	12:20:24.281	0.4	277.1		9.08		TAS				a_e	
FUR	85.16		SS	12:26:37.845	-0.4	279.4		14.96		TAS				a_e	
FUR	85.16		P	12:09:55.910		277.7		5.02		TAS		798.0	2.14	a_e mb	6.6
GEC2	86.64		S	12:20:40.531		277.1		9.08		TAS				a_e	
GEC2	86.64		SS	12:27:01.245	1.1	279.4		14.96		TAS				a_e	
GEC2	86.64		P	12:10:03.010		277.7		5.02		TAS		240.8	1.64	a_e mb	6.1
GOR1	84.53		P	12:09:52.760	0.2	277.7		5.02		TAS		511.4	1.95	a_e mb	6.4

GRA1	84.91	S	12:20:21.831	-0.0	277.1	9.08	TAS			a_e		
GRA1	84.91	SS	12:26:34.245	0.3	279.4	14.96	TAS			a_e		
GRA1	84.91	P	12:09:54.710		277.7	5.02	TAS	363.2	1.65	a_e	mb	6.3
GRA1	84.91	L	12:43:32.035				T__	30042.2	20.80	a_e	Ms	6.7
GTTG	83.89	S	12:20:10.981	-1.7	277.1	9.08	TAS			a_e		
GTTG	83.89	SS	12:26:18.295	0.5	279.4	14.96	TAS			m_e		
GTTG	83.89	P	12:09:49.610		277.7	5.02	TAS	361.2	1.76	a_e	mb	6.3
HLG	82.38	S	12:20:02.223	3.2	277.1	9.08	TAS			m_e		
HLG	82.38	SS	12:25:54.645	0.8	279.4	14.96	TAS			a_e		
HLG	82.38	P	12:09:41.710	0.1	277.7	5.02	TAS	387.8	1.24	a_e	mb	6.4
IBBN	82.45	S	12:20:00.654	1.0	277.1	9.08	TAS			m_e		
IBBN	82.45	SS	12:25:56.395	0.4	279.4	14.96	TAS			a_e		
IBBN	82.45	P	12:09:42.060	0.3	277.7	5.02	TAS	325.4	1.66	a_e	mb	6.2
KAST	82.96	S	12:20:00.531	-3.7	277.1	9.08	TAS			a_e		
KAST	82.96	SS	12:26:04.745	0.6	279.4	14.96	TAS			a_e		
KAST	82.96	P	12:09:44.660	-0.3	277.7	5.02	TAS	213.5	1.70	a_e	mb	6.1
MOX	85.03	S	12:20:23.331	0.3	277.1	9.08	TAS			m_e		
MOX	85.03	SS	12:26:36.295	1.0	279.4	14.96	TAS			a_e		
MOX	85.03	P	12:09:55.160		277.7	5.02	TAS	240.7	1.70	a_e	mb	6.2
MOX	85.03	L	12:44:16.518				T__	38645.2	20.20	a_e	Ms	6.8
NEUB	85.06	S	12:20:22.831	-0.4	277.1	9.08	TAS			a_e		
NEUB	85.06	SS	12:26:35.995	0.6	279.4	14.96	TAS			a_e		
NEUB	85.06	P	12:09:55.410		277.7	5.02	TAS	486.1	1.79	a_e	mb	6.4
PLN	85.40	S	12:20:26.531	0.2	277.1	9.08	TAS			a_e		
PLN	85.40	SS	12:26:40.545	-0.3	279.4	14.96	TAS			a_e		
PLN	85.40	P	12:09:56.960		277.7	5.02	TAS	118.9	1.68	a_e	mb	5.8
RGN	85.49	S	12:20:28.181	1.2	277.1	9.08	TAS			a_e		
RGN	85.49	SS	12:26:39.045	-1.0	279.4	14.96	TAS			a_e		
RGN	85.49	P	12:09:57.460		277.7	5.02	TAS	714.6	1.82	a_e	mb	6.5
RUE	86.09	S	12:20:32.931	1.9	277.1	9.08	TAS			a_e		
RUE	86.09	SS	12:26:47.945	-2.2	279.4	14.96	TAS			a_e		
RUE	86.09	P	12:10:00.060		277.7	5.02	TAS	251.7	1.50	a_e	mb	6.1
SCHI	85.40	SS	12:26:37.895	-1.5	279.4	14.96	TAS			a_e		
SCHI	85.40	P	12:09:57.060		277.7	5.02	TAS	106.2	0.69	a_e	mb	6.2
STU	83.71	S	12:20:07.781	-3.0	277.1	9.08	TAS			a_e		
STU	83.71	SS	12:26:15.045	-1.3	279.4	14.96	TAS			a_e		
STU	83.71	P	12:09:48.360	-0.1	277.7	5.02	TAS	3782.7	2.72	a_e	mb	7.1
TANN	85.60	S	12:20:29.381	0.3	277.1	9.08	TAS			a_e		
TANN	85.60	SS	12:26:45.095	1.2	279.4	14.96	TAS			a_e		
TANN	85.60	P	12:09:58.160		277.7	5.02	TAS	319.1	1.62	a_e	mb	6.2
TNS	83.07	S	12:20:02.531	-2.6	277.1	9.08	TAS			a_e		
TNS	83.07	SS	12:26:07.345	1.1	279.4	14.96	TAS			a_e		
TNS	83.07	P	12:09:45.410	0.2	277.7	5.02	TAS	350.8	1.67	m_e	mb	6.3
UBBA	83.99	S	12:20:11.731	-1.9	277.1	9.08	TAS			a_e		
UBBA	83.99	SS	12:26:19.345	-0.4	279.4	14.96	TAS			a_e		
UBBA	83.99	P	12:09:49.110		277.7	5.02	TAS	299.9	1.83	a_e	mb	6.2
UBR	84.44	S	12:20:17.431	0.1	277.1	9.08	TAS			a_e		
UBR	84.44	SS	12:26:27.045	-0.7	279.4	14.96	TAS			a_e		
UBR	84.44	P	12:09:52.510		277.7	5.02	TAS	439.6	1.67	a_e	mb	6.4



Event 21023001 Southern Xinjiang, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/23	15:06:57.00			37.6290	77.8250				10.0			12		47.69	48.13	m i ke	USGS

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	21023007
Ms	4.7		BGR	21023007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	48.13		P	15:15:39.499	0.1	78.0		6.40		TAS		27.3	0.95	m_e mb	5.4
GRA1	48.13		L	15:37:00.983						T__		665.4	21.70	a_e Ms	4.6
GRA2	48.05		P	15:15:38.876	0.0	78.0		6.40		TAS		12.4	0.80	m_e mb	5.1
GRA3	48.05		P	15:15:38.911	-0.1	78.0		6.40		TAS		20.7	0.82	m_e mb	5.3
GRA4	48.02		P	15:15:38.564	-0.1	78.0		6.40		TAS		20.0	1.24	m_e mb	5.1
GRB1	47.92		P	15:15:37.872	0.0	78.0		6.40		TAS		18.8	0.83	m_e mb	5.2
GRB2	47.93		P	15:15:37.872	0.0	78.0		6.40		TAS		17.2	0.84	m_e mb	5.2
GRB3	47.83		P	15:15:37.249	0.0	78.0		6.40		TAS		24.8	0.95	m_e mb	5.3
GRB4	47.96		P	15:15:38.149	-0.0	78.0		6.40		TAS		17.7	0.94	m_e mb	5.2
GRB5	47.96		P	15:15:37.941	0.0	78.0		6.40		TAS		21.9	0.83	m_e mb	5.3
GRC1	48.09		P	15:15:38.668	0.0	78.0		6.40		TAS		19.0	0.95	m_e mb	5.2
GRC3	48.07		P	15:15:38.391	-0.1	78.0		6.40		TAS		10.7	0.90	m_e mb	5.0
GRC4	48.06		P	15:15:38.634	0.1	78.0		6.40		TAS		22.8	0.86	m_e mb	5.3
MOX	47.69		L	15:37:47.248						T__		1209.3	18.60	a_e Ms	4.9

Event 21024003 Samoa Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/24	07:51:02.88			-15.8260	-172.4930				33.0			21		143.37	148.07	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
Ms	5.8		BGR	21024009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	145.28		PKPbc	08:10:36.136	-0.6	6.4		3.40		TAS				a_e	
ASSE	143.60		PKPbc	08:10:29.945	0.2	6.4		3.40		TAS				m_e	
BFO	147.48		PKPbc	08:10:42.936		6.4		3.40		TAS				a_e	
BRG	144.57		PKPbc	08:10:33.086	0.4	6.4		3.40		TAS				a_e	
BUG	144.38		PKPbc	08:10:32.586	0.6	6.4		3.40		TAS				a_e	
CLL	144.24		PKPbc	08:10:32.424	0.3	6.4		3.40		TAS				m_e	
CLZ	143.90		PKPbc	08:10:30.872	0.2	6.4		3.40		TAS				m_e	

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FLT1	143.37	PKPbc	08:10:28.686	0.0	6.4	3.40	TAS	a_e										
FUR	147.51	PKPbc	08:10:42.986		6.4	3.40	TAS	a_e										
GEC2	146.59	PKPbc	08:10:40.286		6.4	3.40	TAS	a_e										
GRA1	145.99	PKPbc	08:10:38.736		6.4	3.40	TAS	a_e										
GRA1	145.99	L	09:18:50.208				T__		1552.1	20.40	a_e Ms						5.8	
GTTG	144.22	PKPbc	08:10:32.286	0.1	6.4	3.40	TAS	a_e										
KAST	144.61	PKPbc	08:10:33.636	-0.0	6.4	3.40	TAS	a_e										
MOX	145.01	PKPbc	08:10:34.936	0.2	6.4	3.40	TAS	m_e										
MOX	145.01	L	09:18:02.624				T__		1879.3	20.10	a_e Ms						5.9	
PLN	145.13	PKPbc	08:10:35.386	-0.4	6.4	3.40	TAS	a_e										
STU	147.02	PKPbc	08:10:41.936		6.4	3.40	TAS	a_e										
TANN	145.17	PKPbc	08:10:35.536	-0.3	6.4	3.40	TAS	a_e										
TNS	145.59	PKPbc	08:10:37.186		6.4	3.40	TAS	a_e										
UBR	148.07	PKPbc	08:10:44.636		6.4	3.40	TAS	a_e										
WET	146.39	PKPbc	08:10:39.936		6.4	3.40	TAS	a_e										
WLF	146.13	PKPbc	08:10:39.536		6.4	3.40	TAS	a_e										

Event 21025001 Luzon, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/25	14:59:03.00			17.6620	120.8230				27.3			12		88.08	88.86	m i ke	USGS
21025019																	

Magnitude Err Nsta Author OrigID  
Ms 6.8 BGR 21025007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	88.73		P	15:11:54.792	0.0	63.9		4.53		TAS				m_e	
GRA1	88.73		pP	15:12:01.146	0.1	64.3		4.56		TAS		595.4	2.09	m_e	
GRA1	88.73		L	15:54:54.335						T__	37109.2	20.90	a_e Ms		6.8
GRA2	88.66		P	15:11:54.517	-0.1	63.9		4.53		TAS				m_e	
GRA2	88.66		pP	15:12:00.745	-0.1	64.3		4.56		TAS		441.8	1.90	m_e	
GRA3	88.64		P	15:11:54.489	0.2	63.9		4.53		TAS				m_e	
GRA3	88.64		pP	15:12:00.868	0.2	64.3		4.56		TAS		865.5	2.10	m_e	
GRA4	88.66		P	15:11:54.283	-0.1	63.9		4.53		TAS				m_e	
GRA4	88.66		pP	15:12:00.621	-0.1	64.3		4.56		TAS		119.7	1.30	m_e	
GRB1	88.61		P	15:11:53.884	0.0	63.9		4.53		TAS				m_e	
GRB1	88.61		pP	15:12:00.560	0.0	64.3		4.56		TAS		158.1	0.99	m_e	
GRB2	88.65		P	15:11:54.283	0.0	63.9		4.53		TAS				m_e	
GRB2	88.65		pP	15:12:00.683	-0.0	64.3		4.56		TAS		222.8	1.44	m_e	
GRB3	88.54		P	15:11:53.870	0.0	63.9		4.53		TAS				m_e	
GRB3	88.54		pP	15:12:00.313	0.1	64.3		4.56		TAS		120.1	0.97	m_e	
GRB4	88.63		P	15:11:54.173	-0.1	63.9		4.53		TAS				m_e	
GRB4	88.63		pP	15:12:00.436	-0.2	64.3		4.56		TAS		167.8	1.36	m_e	
GRB5	88.71		P	15:11:54.819	0.1	63.9		4.53		TAS		22.2	0.83	m_e	
GRB5	88.71		pP	15:12:01.084	0.1	64.3		4.56		TAS		180.4	1.03	m_e	

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GRC1	88.86	P	15:11:55.639	0.0	63.9	4.53	TAS	21.9	0.82	m_e							
GRC1	88.86	pP	15:12:01.717	0.1	64.3	4.56	TAS	146.5	0.98	m_e							
GRC3	88.86	P	15:11:55.507	-0.0	63.9	4.53	TAS	22.0	0.83	m_e							
GRC3	88.86	pP	15:12:01.670	-0.0	64.3	4.56	TAS	138.7	1.02	m_e							
GRC4	88.81	P	15:11:55.067	-0.0	63.9	4.53	TAS	20.8	0.85	m_e							
GRC4	88.81	pP	15:12:01.454	-0.0	64.3	4.56	TAS	173.6	0.97	m_e							
MOX	88.08	L	15:54:52.617				T__	30744.6	19.70	a_e Ms							6.7

Event 21026001 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/26	07:06:03.00			41.9620	144.7350				35.1			7		78.99	80.40	m i ke	USGS
OrigID																	
21026019																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	21026007
Ms	5.4		BGR	21026007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.93		P	07:18:11.359	0.1	33.3		4.56		TAS		30.1	0.85	m_e mb	5.2
GRA1	79.93		L	07:56:45.824						T__		1620.5	20.20	a_e Ms	5.4
GRA2	79.91		P	07:18:11.140	-0.0	33.3		4.56		TAS		37.6	1.05	m_e mb	5.2
GRA3	79.84		P	07:18:10.753	-0.1	33.3		4.56		TAS		27.9	0.95	m_e mb	5.2
GRA4	79.96		P	07:18:11.393	0.0	33.3		4.56		TAS		32.4	1.06	m_e mb	5.2
GRB3	80.01		P	07:18:11.759	-0.0	33.3		4.56		TAS		40.7	1.04	m_e mb	5.3
GRB4	79.99		P	07:18:11.341	-0.2	33.3		4.56		TAS		39.3	1.27	m_e mb	5.2
GRC1	80.40		P	07:18:13.422		33.3		4.56		TAS		25.6	1.03	m_e mb	5.2
MOX	78.99		L	07:56:27.789						T__		1748.3	19.70	a_e Ms	5.4

Event 21026002 Alaska Peninsula, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/26	09:30:50.00			54.8560	-160.2250				41.9			7		74.52	76.05	m i ke	USGS
OrigID																	
21026020																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	21026008
Ms	4.2		BGR	21026008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	75.45		L	10:11:38.701						T__		97.6	20.90	a_e Ms	4.1
GRA2	75.49		P	09:42:31.726	0.0	354.9		5.26		TAS		23.4	1.04	m_e mb	5.2
GRA3	75.38		P	09:42:31.051	-0.1	354.9		5.26		TAS		45.2	1.40	m_e mb	5.4

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GRA4	75.58	P	09:42:32.191	-0.0	354.9	5.26	TAS	26.4	1.14	m_e	mb	5.3
GRB2	75.89	P	09:42:33.914		354.9	5.26	TAS	23.8	0.85	m_e	mb	5.3
GRB3	75.83	P	09:42:33.549	-0.0	354.9	5.26	TAS	25.6	0.92	m_e	mb	5.3
GRB4	75.69	P	09:42:32.758	-0.0	354.9	5.26	TAS	36.0	1.08	m_e	mb	5.4
GRB5	76.05	P	09:42:34.642		354.9	5.26	TAS	13.1	0.85	m_e	mb	5.1
MOX	74.52	L	10:07:33.251				T__	128.3	19.40	a_e	Ms	4.2

Event 21026005 Owen Fracture Zone region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/26	23:00:07.00			11.9330	57.8990				10.0			9		53.10	53.92	m i ke	USGS
OrigID 21026023																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	21026011
Ms	3.9		BGR	21026011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	53.69	P		23:09:29.256	-0.0	117.9		8.99		TAS		24.2	0.95	m_e	mb	5.2
GRA1	53.69	L		23:21:43.712						T__	126.2	20.10	a_e	Ms	4.0	
GRA2	53.59	P		23:09:28.400	-0.0	117.9		8.99		TAS		14.3	0.96	m_e	mb	5.0
GRA3	53.67	P		23:09:29.256	0.2	117.9		8.99		TAS		18.8	0.93	m_e	mb	5.1
GRA4	53.51	P		23:09:27.568	-0.1	117.9		8.99		TAS		13.7	1.11	m_e	mb	4.8
GRB1	53.30	P		23:09:25.907	0.0	117.9		8.99		TAS		13.5	1.10	m_e	mb	4.8
GRB4	53.39	P		23:09:26.614	-0.0	117.9		8.99		TAS		13.1	1.02	m_e	mb	4.8
GRC1	53.19	P		23:09:25.014		117.9		8.99		TAS		9.2	0.95	m_e	mb	4.7
GRC3	53.10	P		23:09:24.531		117.9		8.99		TAS		13.0	0.95	m_e	mb	4.8
GRC4	53.23	P		23:09:25.275		117.9		8.99		TAS		8.2	0.92	m_e	mb	4.7
MOX	53.92	L		23:33:14.691						T__	88.9	20.00	a_e	Ms	3.8	

Event 21027002 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/27	10:10:51.00			46.6280	152.6510				50.2			12		77.31	78.90	m i ke	USGS
OrigID 21027020																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	21027008
Ms	4.7		BGR	21027008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	78.28	P		10:22:47.054	0.1	26.0		4.87		TAS		112.7	0.89	m_e	mb	6.0
GRA1	78.28	L		11:03:24.804						T__	387.2	18.40	a_e	Ms	4.8	

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GRA2	78.28	P	10:22:46.991	0.1	26.0	4.87	TAS	116.8	0.89	m_e	mb	6.0
GRA3	78.19	P	10:22:46.481	-0.0	26.0	4.87	TAS	93.9	0.93	m_e	mb	5.9
GRA4	78.34	P	10:22:47.096	-0.1	26.0	4.87	TAS	100.5	0.92	m_e	mb	5.9
GRB1	78.43	P	10:22:47.722	0.1	26.0	4.87	TAS	82.3	0.85	m_e	mb	5.8
GRB2	78.53	P	10:22:48.080	-0.1	26.0	4.87	TAS	63.8	0.88	m_e	mb	5.7
GRB3	78.43	P	10:22:47.743	0.1	26.0	4.87	TAS	94.6	0.99	m_e	mb	5.8
GRB4	78.39	P	10:22:47.428	-0.0	26.0	4.87	TAS	99.3	1.03	m_e	mb	5.8
GRB5	78.68	P	10:22:48.858	0.0	26.0	4.87	TAS	53.0	0.86	m_e	mb	5.6
GRC1	78.82	P	10:22:49.625	0.1	26.0	4.87	TAS	45.8	0.85	m_e	mb	5.5
GRC3	78.90	P	10:22:49.973	0.0	26.0	4.87	TAS	69.4	0.91	m_e	mb	5.7
GRC4	78.74	P	10:22:49.110	-0.1	26.0	4.87	TAS	49.7	0.87	m_e	mb	5.5
MOX	77.31	L	10:59:12.074				T__	340.0	20.40	a_e	Ms	4.7

Event 21027003 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/27	18:01:10.00			44.2970	146.7330				133.6			12		78.46	79.12	m i ke	USGS
OrigID 21027021																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	21027009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	78.56		P	18:12:58.638	0.1	30.9		5.44		TAS		28.8	0.80	m_e	mb	5.4
GRA2	78.54		P	18:12:58.515	0.0	30.9		5.44		TAS		22.2	0.79	m_e	mb	5.2
GRA3	78.46		P	18:12:58.059	-0.0	30.9		5.44		TAS		20.4	0.88	m_e	mb	5.2
GRA4	78.59		P	18:12:58.673	-0.1	30.9		5.44		TAS		23.9	0.83	m_e	mb	5.3
GRB1	78.67		P	18:12:59.041	-0.0	30.9		5.44		TAS		20.8	1.15	m_e	mb	5.1
GRB2	78.77		P	18:12:59.515	-0.1	30.9		5.44		TAS		18.3	0.85	m_e	mb	5.1
GRB3	78.66		P	18:12:59.129	0.1	30.9		5.44		TAS		18.0	0.98	m_e	mb	5.1
GRB4	78.63		P	18:12:58.796	-0.1	30.9		5.44		TAS		14.5	0.95	m_e	mb	5.0
GRB5	78.90		P	18:13:00.234	-0.0	30.9		5.44		TAS		15.7	0.81	m_e	mb	5.1
GRC1	79.05		P	18:13:01.213	0.1	30.9		5.44		TAS		12.1	0.74	m_e	mb	5.0
GRC3	79.12		P	18:13:01.339	-0.1	30.9		5.44		TAS		15.9	0.74	m_e	mb	5.1
GRC4	78.97		P	18:13:00.778	0.1	30.9		5.44		TAS		17.0	0.85	m_e	mb	5.1

Event 21028001 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/28	20:22:18.52			-20.3820	-177.1430				550.0			23		145.94	152.05	m i ke	BGR
OrigID 21028007																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	147.65		PKPbc	20:41:00.683	0.1	15.8		2.47		TAS				m_e	
BFO	151.68		PKPbc	20:41:10.324		15.8		2.47		TAS				m_e	
BRG	148.26		PKPbc	20:41:02.265	0.1	15.8		2.47		TAS				m_e	
BSEG	145.94		PKPbc	20:40:56.152	-0.1	15.8		2.47		TAS				m_e	
BUG	148.72		PKPbc	20:41:03.572	0.3	15.8		2.47		TAS				m_e	
CLL	148.04		PKPbc	20:41:01.565	0.1	15.8		2.47		TAS				m_e	
CLZ	147.97		PKPbc	20:41:01.808	-0.1	15.8		2.47		TAS				m_e	
FLT1	147.37		PKPbc	20:40:59.680	0.0	15.8		2.47		TAS				m_e	
FUR	151.38		PKPbc	20:41:09.716		15.8		2.47		TAS				m_e	
GEC2	150.22		PKPbc	20:41:07.009		15.8		2.47		TAS				m_e	
GOR1	146.72		PKPbc	20:40:58.341	-0.3	15.8		2.47		TAS				m_e	
GRA1	149.92		PKPbc	20:41:06.674		15.8		2.47		TAS				m_e	
GTTG	148.32		PKPbc	20:41:02.508	0.2	15.8		2.47		TAS				m_e	
IBBN	147.82		PKPbc	20:41:01.048	0.4	15.8		2.47		TAS				m_e	
KAST	148.84		PKPbc	20:41:03.907	0.4	15.8		2.47		TAS				m_e	
MOX	148.93		PKPbc	20:41:03.968	0.0	15.8		2.47		TAS				m_e	
NEUB	148.38		PKPbc	20:41:02.842	0.1	15.8		2.47		TAS				m_e	
PLN	148.99		PKPbc	20:41:04.181	-0.1	15.8		2.47		TAS				m_e	
TANN	149.00		PKPbc	20:41:04.120	0.4	15.8		2.47		TAS				m_e	
TNS	149.80		PKPbc	20:41:06.401	-0.5	15.8		2.47		TAS				m_e	
UBR	152.05		PKPbc	20:41:11.084		15.8		2.47		TAS				m_e	
WET	150.12		PKPbc	20:41:06.857		15.8		2.47		TAS				m_e	
WLF	150.57		PKPbc	20:41:08.712		15.8		2.47		TAS				m_e	

Event 21029002 Near coast of Peru

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/29	00:09:47.00			-14.5130	-76.2260				15.0			18		96.12	101.25	m i ke	USGS
	21029020																

Magnitude	Err	Nsta	Author	OrigID
Ms	5.5		BGR	21029008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	96.91		Pdiff	00:23:20.244	0.5					T__				m_e	
ASSE	99.46		Pdiff	00:23:32.251	-0.3					T__				m_e	
BFO	97.18		Pdiff	00:23:20.352	-0.5					T__				m_e	
BRG	101.25		Pdiff	00:23:39.980						T__				m_e	
BSEG	99.61		Pdiff	00:23:32.885	-0.3					T__				m_e	
BUG	97.25		Pdiff	00:23:21.720	0.4					T__				m_e	
CLL	100.74		Pdiff	00:23:37.841						T__				m_e	
CLZ	99.23		Pdiff	00:23:30.830	0.4					T__				m_e	
FUR	99.06		Pdiff	00:23:30.042	0.4					T__				m_e	
GEC2	100.77		Pdiff	00:23:37.343						T__				m_e	



./bul2210.txt

Thu Feb 15 10:44:47 2024

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RGN	85.46	P	22:33:58.114	0.1	91.7	4.84	TAS	37.4	1.17	m_e	mb	5.5
RUE	85.06	P	22:33:56.502	0.4	91.7	4.84	TAS	26.8	0.85	m_e	mb	5.5
RUE	85.06	pP	22:34:39.576	-0.2	90.4	4.90	TAS			m_e		
SCHI	85.67	pP	22:34:42.985	-0.4	90.4	4.90	TAS			m_e		
TNS	88.33	P	22:34:12.305		91.7	4.84	TAS	14.6	0.81	m_e	mb	5.4
TNS	88.33	pP	22:34:55.921		90.4	4.90	TAS			m_e		
UBR	87.24	P	22:34:06.554		91.7	4.84	TAS			m_e		
WET	85.44	P	22:33:58.091	0.2	91.7	4.84	TAS	4.0	0.85	m_e	mb	4.7
WET	85.44	pP	22:34:42.153	0.3	90.4	4.90	TAS			m_e		

Event 21031003 Colombia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2022/10/31	13:22:59.98			-0.4300	-73.3790				140.0			22		83.57	88.65	m i ke	BGR
21031009																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	21031009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
AHRW	84.28		P	13:35:16.167	0.2	265.6		4.82		TAS		20.2	0.80	m_e	mb	5.4
BFO	84.82		P	13:35:18.843	0.2	265.6		4.82		TAS		12.6	1.21	m_e	mb	5.0
BRG	88.65		P	13:35:37.026		265.6		4.82		TAS		13.9	0.97	m_e	mb	5.2
BSEG	86.63		P	13:35:27.201	-0.2	265.6		4.82		TAS		22.9	0.95	m_e	mb	5.3
BUG	84.52		P	13:35:16.621	-0.5	265.6		4.82		TAS		18.2	0.72	m_e	mb	5.4
CLL	88.08		P	13:35:34.043		265.6		4.82		TAS		7.4	0.67	m_e	mb	5.1
CLZ	86.48		P	13:35:26.370	-0.1	265.6		4.82		TAS		12.3	0.97	m_e	mb	5.0
FLT1	87.05		P	13:35:29.317	0.3	265.6		4.82		TAS		12.7	1.11	m_e	mb	5.0
GRA1	86.84		P	13:35:28.637	-0.1	265.6		4.82		TAS		9.5	0.64	m_e	mb	5.1
GTTG	86.20		P	13:35:25.746	0.3	265.6		4.82		TAS		24.4	1.10	m_e	mb	5.2
HLG	85.24		P	13:35:21.032	0.4	265.6		4.82		TAS		110.1	0.79	m_e	mb	6.1
IBBN	84.93		P	13:35:19.114	-0.0	265.6		4.82		TAS		16.7	0.74	m_e	mb	5.3
KAST	85.20		P	13:35:20.399	-0.1	265.6		4.82		TAS		14.2	1.00	m_e	mb	5.2
MOX	87.16		P	13:35:29.695	0.2	265.6		4.82		TAS		3.9	0.95	m_e	mb	4.5
NEUB	87.30		P	13:35:30.560	-0.1	265.6		4.82		TAS		8.5	0.67	m_e	mb	5.0
PLN	87.50		P	13:35:31.282		265.6		4.82		TAS		4.0	0.91	m_e	mb	4.5
RGN	88.43		P	13:35:36.230		265.6		4.82		TAS		19.3	0.79	m_e	mb	5.5
TANN	87.69		P	13:35:32.340		265.6		4.82		TAS		14.2	0.98	m_e	mb	5.3
TNS	85.11		P	13:35:20.248	0.2	265.6		4.82		TAS		11.2	0.67	m_e	mb	5.2
UBR	85.95		P	13:35:23.951	0.5	265.6		4.82		TAS		15.2	0.74	m_e	mb	5.2
WET	87.89		P	13:35:33.707		265.6		4.82		TAS		5.9	0.90	m_e	mb	4.9
WLF	83.57		P	13:35:12.270	-0.3	265.6		4.82		TAS		17.5	0.79	m_e	mb	5.3

Event 21031002 South Atlantic Ocean  
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
 OrigID  
 2022/10/31 13:23:56.68 -2.1770 -22.7680 33.0 19 57.15 62.56 m i ke BGR  
 21031008

Magnitude Err Nsta Author OrigID  
 mb 4.9 BGR 21031008  
 Ms 4.7 BGR 21031008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	57.15		P	13:33:41.402	-0.2	220.4		6.90		TAS		13.4	1.07	m_e	mb 4.9
BRG	61.45		P	13:34:10.000		220.4		6.90		TAS		4.4	1.01	m_e	mb 4.2
BSEG	62.34		P	13:34:16.839		220.4		6.90		TAS		12.1	0.97	m_e	mb 5.1
CLL	61.37		P	13:34:10.831		220.4		6.90		TAS		16.8	1.26	m_e	mb 4.7
FLT1	61.43		P	13:34:10.543		220.4		6.90		TAS		17.5	1.28	m_e	mb 4.7
GEC2	59.86		P	13:34:00.752	0.3	220.4		6.90		TAS		22.6	1.47	m_e	mb 5.0
GOR1	61.97		P	13:34:14.974		220.4		6.90		TAS		35.8	1.43	m_e	mb 5.4
GRA1	59.40		P	13:33:57.178	0.3	220.4		6.90		TAS		18.1	1.02	m_e	mb 5.0
GRA1	59.40		L	13:58:00.996						T__		553.1	20.00	a_e	Ms 4.7
GTTG	60.33		P	13:34:04.016	0.0	220.4		6.90		TAS		6.5	0.94	m_e	mb 4.6
IBBN	60.11		P	13:34:02.229	-0.6	220.4		6.90		TAS		22.9	1.07	m_e	mb 5.1
MOX	60.29		P	13:34:03.649	-1.3	220.4		6.90		TAS		11.5	0.88	m_e	mb 4.9
MOX	60.29		L	13:58:04.999						T__		472.2	21.00	a_e	Ms 4.6
NEUB	60.77		P	13:34:06.969		220.4		6.90		TAS		16.0	0.77	m_e	mb 4.9
PLN	60.40		P	13:34:04.094	0.2	220.4		6.90		TAS		4.7	1.14	m_e	mb 4.4
RUE	62.56		P	13:34:19.334		220.4		6.90		TAS		68.2	1.71	m_e	mb 5.5
TANN	60.47		P	13:34:04.716	-0.3	220.4		6.90		TAS		20.2	1.34	m_e	mb 5.0
TNS	58.69		P	13:33:52.204	0.5	220.4		6.90		TAS		11.6	0.86	m_e	mb 4.9
UBR	57.39		P	13:33:43.213	-0.1	220.4		6.90		TAS		24.8	1.03	m_e	mb 5.2
WET	59.71		P	13:33:59.515	0.1	220.4		6.90		TAS		25.0	1.37	m_e	mb 5.1
WLF	57.37		P	13:33:42.567	-0.4	220.4		6.90		TAS		36.1	1.61	m_e	mb 5.2

Event 21031004 Southern Italy  
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author  
 OrigID  
 2022/10/31 21:42:50.00 2.83 0.69 39.8770 15.6390 45.6 31.1 173 271.2 28 341 8.76 14.75 m i ke USGS  
 21031022

Magnitude Err Nsta Author OrigID  
 ML 5.5 BGR 21031010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
AHRW	12.24		P	21:45:37.547	-0.8	160.6		12.63		TAS				m_e	
ASSE	12.72		P	21:45:43.551	-0.7	160.6		12.63		TAS				m_e	
BFO	9.94		P	21:45:07.412	0.6	160.6		12.63		TAS				m_e	

BRG	11.06	P	21:45:22.697	2.1	160.6	12.63	TAS			m_e	
BSEG	14.51	P	21:46:04.375		160.6	12.63	TAS	760.0	1.37	m_e	
BUG	12.94	P	21:45:46.377	-0.5	160.6	12.63	TAS			m_e	
CLL	11.57	P	21:45:29.453	1.2	160.6	12.63	TAS			m_e	
CLZ	12.51	P	21:45:40.766	2.5	160.6	12.63	TAS			m_e	
FLT1	12.81	P	21:45:44.365	-0.0	160.6	12.63	TAS			m_e	
FUR	8.85	P	21:44:54.957	-0.7	160.6	12.63	TAS			m_e	ML 5.6
GEC2	9.07	P	21:44:57.554	0.6	160.6	12.63	TAS			m_e	
GOR1	13.44	P	21:45:52.278	0.2	160.6	12.63	TAS			m_e	
GRA1	10.30	P	21:45:12.196	-1.7	160.6	12.63	TAS			m_e	
GTTG	12.31	P	21:45:38.638	-1.2	160.6	12.63	TAS			m_e	
IBBN	13.56	P	21:45:55.173	-2.2	160.6	12.63	TAS			m_e	
KAST	12.39	P	21:45:38.841	-1.0	160.6	12.63	TAS			m_e	
MOX	11.13	P	21:45:22.856	-1.2	160.6	12.63	TAS			m_e	
NEUB	11.63	P	21:45:30.459	3.8	160.6	12.63	TAS			m_e	
PLN	10.88	P	21:45:19.701	-1.0	160.6	12.63	TAS			m_e	
RGN	14.75	P	21:46:07.234		160.6	12.63	TAS			m_e	
RUE	12.66	P	21:45:42.752	-0.7	160.6	12.63	TAS			m_e	
SCHI	13.60	P	21:45:53.607	1.1	160.6	12.63	TAS			m_e	
STU	10.01	P	21:45:08.313	-0.9	160.6	12.63	TAS			m_e	
TANN	10.77	P	21:45:18.352	-0.7	160.6	12.63	TAS			m_e	
TNS	11.51	P	21:45:28.259	-0.3	160.6	12.63	TAS			m_e	
UBR	8.76	P	21:44:53.607	0.1	160.6	12.63	TAS			m_e	ML 5.3
WET	9.47	P	21:45:02.306	-0.4	160.6	12.63	TAS			m_e	
WLF	11.87	P	21:45:33.372	0.9	160.6	12.63	TAS			m_e	