

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

(produced by SZO/BGR - HANNOVER)

June 2019 UPDATED 20.April 2021

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

Event 90601005 Greece-Albania border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/01	04:26:18.60			40.4700	20.8000				10.0					9.27	13.82	m i ke	EMSC
OrigID 90601037																	

Magnitude	Err	Nsta	Author	OrigID
Ms 4.5			BGR	90601011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	11.88		P	04:29:05.646		140.2				TAS				m_e	
BRG	11.45		P	04:29:02.892		140.2				TAS				m_e	
GEC2	9.78		P	04:28:41.111		140.2				TAS				m_e	
GRA1	11.43		P	04:29:00.756		140.2				TAS		27.3	0.83	m_e	
GRA1	11.43		L	04:34:04.284						T__		5814.4	20.60	a_e Ms	4.5
KAST	13.75		P	04:29:34.234		140.2				TAS				m_e	
MANZ	11.31		P	04:29:00.279		140.2				TAS				m_e	
MOX	12.03		P	04:29:10.854		140.2				TAS		15.5	0.91	m_e	
MOX	12.03		L	04:35:08.818						T__		4209.4	19.30	a_e Ms	4.4
RJOB	9.27		P	04:28:32.889		140.2				TAS				m_e	
ROTZ	11.09		P	04:28:57.278		140.2				TAS				m_e	
STU	11.70		P	04:29:03.653		140.2				TAS				m_e	
TANN	11.53		P	04:29:04.885		140.2				TAS				m_e	
TNS	13.04		P	04:29:23.226		140.2				TAS				m_e	
UBR	10.53		P	04:28:48.753		140.2				TAS				m_e	
WET	10.33		P	04:28:46.949		140.2				TAS				m_e	
WLF	13.82		P	04:29:34.442		140.2				TAS				m_e	

Event 90601006 Greece-Albania border region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/01 04:51:58.30 40.4600 20.8100 10.0 9.28 13.84 m i ke EMSC
 90601038

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	11.89		P	04:54:45.153		140.2				TAS				m_e	
BRG	11.46		P	04:54:42.012		140.2				TAS				m_e	
GEC2	9.79		P	04:54:20.360		140.2				TAS				m_e	
GRA1	11.44		P	04:54:41.603		140.2				TAS				m_e	
GRA1	11.44		L	04:59:52.553						T__		910.2	21.10	a_e	
MOX	12.04		P	04:54:50.245		140.2				TAS				m_e	
MOX	12.04		L	05:00:38.669						T__		700.4	18.40	a_e	
RJOB	9.28		P	04:54:12.137		140.2				TAS				m_e	
STU	11.72		P	04:54:43.709		140.2				TAS				m_e	
TANN	11.54		P	04:54:45.079		140.2				TAS				m_e	
TNS	13.06		P	04:55:04.510		140.2				TAS				m_e	
UBR	10.55		P	04:54:27.190		140.2				TAS				m_e	
WET	10.35		P	04:54:27.332		140.2				TAS				m_e	
WLF	13.84		P	04:55:15.468		140.2				TAS				m_e	

Event 90601007 Greece-Albania border region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/01 07:00:28.30 40.4800 20.7800 10.0 9.25 13.80 m i ke EMSC
 90601039

Magnitude Err Nsta Author OrigID
 Ms 4.2 BGR 90601013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	11.86		P	07:03:14.863		140.2				TAS				m_e	
CLL	12.10		P	07:03:20.047		140.2				TAS				m_e	
FUR	10.26		P	07:02:54.808		140.2				TAS				m_e	
GEC2	9.76		P	07:02:49.214		140.2				TAS				m_e	
GRA1	11.41		P	07:03:09.584		140.2				TAS				m_e	
GRA1	11.41		L	07:09:06.990						T__		2996.5	18.60	a_e Ms	4.3
MOX	12.01		P	07:03:19.501		140.2				TAS				m_e	
MOX	12.01		L	07:09:27.924						T__		1881.9	18.60	a_e Ms	4.1
RJOB	9.25		P	07:02:41.913		140.2				TAS				m_e	
STU	11.69		P	07:03:13.226		140.2				TAS				m_e	
TANN	11.52		P	07:03:13.220		140.2				TAS				m_e	
TNS	13.03		P	07:03:31.607		140.2				TAS				m_e	

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UBR	10.52	P	07:02:57.023	140.2	TAS	m_e
WET	10.32	P	07:02:55.672	140.2	TAS	m_e
WLF	13.80	P	07:03:42.848	140.2	TAS	m_e

Event 90601002 Mindanao, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/01	09:45:28.70			6.2400	126.6100				86.0					100.61	101.23	m i ke	EMSC
OrigID 90601034																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	101.23		Pdiff	09:59:09.437						T__					m_e

Event 90601003 Southern Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/01	10:17:49.26			-13.7310	-12.8290				33.0				21	64.47	70.24	m i ke	BGR
OrigID 90601009																	

Magnitude Err Nsta Author OrigID

mb	5.4		BGR	90601009
Ms	4.8		BGR	90601009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	68.67		P	10:28:51.355	0.0	205.5		6.37		TAS		52.4	1.86	m_e mb	5.5
BFO	64.59		P	10:28:25.330		205.5		6.37		TAS		22.2	0.99	m_e mb	5.3
BFO	64.59		L	10:56:34.309						T__		732.4	18.20	a_e Ms	4.9
BRG	68.45		P	10:28:50.075	0.1	205.5		6.37		TAS		9.9	1.07	m_e mb	5.0
BSEG	70.24		P	10:29:01.195	0.6	205.5		6.37		TAS		27.8	1.20	m_e mb	5.3
BSEG	70.24		L	11:01:15.324						T__		413.9	18.10	a_e Ms	4.7
CLL	68.57		L	10:57:20.264						T__		694.0	21.60	a_e Ms	4.8
CLZ	68.34		P	10:28:49.129	-0.0	205.5		6.37		TAS		48.7	1.83	m_e mb	5.4
FLT1	69.00		P	10:28:53.792	-0.1	205.5		6.37		TAS		122.4	2.13	m_e mb	5.8
FUR	65.25		L	10:55:04.372						T__		654.7	20.30	a_e Ms	4.8
GEC2	66.59		P	10:28:38.563		205.5		6.37		TAS		72.1	2.01	m_e mb	5.6
GEC2	66.59		L	10:56:32.158						T__		1092.4	21.70	a_e Ms	5.0
GRA1	66.61		P	10:28:38.438		205.5		6.37		TAS		55.2	1.68	m_e mb	5.5
GRA1	66.61		L	10:56:10.545						T__		827.8	21.90	a_e Ms	4.9
KAST	67.26		P	10:28:42.436	0.2	205.5		6.37		TAS		35.5	1.79	m_e mb	5.3
MANZ	67.13		P	10:28:41.878		205.5		6.37		TAS		35.4	2.49	m_e mb	5.2
MOX	67.58		P	10:28:44.706	-0.3	205.5		6.37		TAS		15.4	1.08	m_e mb	5.2

MOX	67.58	L	10:56:48.650						T__	822.2	21.40	a_e	Ms	4.9
NEUB	68.12	P	10:28:48.126	-0.1	205.5		6.37		TAS	20.8	0.90	m_e	mb	5.4
NRDL	68.87	P	10:28:53.438	-0.3	205.5		6.37		TAS	28.3	1.20	m_e	mb	5.4
RETH	68.91	P	10:28:53.379	-0.3	205.5		6.37		TAS	84.4	1.74	m_e	mb	5.7
RJOB	65.33	P	10:28:30.298		205.5		6.37		TAS	8.4	0.84	m_e	mb	5.0
ROTZ	66.96	P	10:28:40.744		205.5		6.37		TAS	8.0	1.34	m_e	mb	4.8
TANN	67.61	P	10:28:44.860	0.0	205.5		6.37		TAS	58.5	2.13	m_e	mb	5.4
TNS	66.36	P	10:28:36.988	-0.1	205.5		6.37		TAS	41.9	1.39	m_e	mb	5.5
TNS	66.36	L	10:57:19.784						T__	335.8	19.90	a_e	Ms	4.5
UBR	64.47	P	10:28:24.835		205.5		6.37		TAS	33.3	0.92	m_e	mb	5.6
WET	66.60	P	10:28:38.481		205.5		6.37		TAS	20.7	1.20	m_e	mb	5.2
WET	66.60	L	10:57:03.094						T__	673.4	21.00	a_e	Ms	4.8
WLF	65.30	P	10:28:30.184		205.5		6.37		TAS	81.6	1.62	m_e	mb	5.7

Event 90601004 Central Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/01	15:03:06.14			0.4540	-24.5390				33.0				23	55.50	60.91	m i ke	BGR
90601010																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90601010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	59.35		P	15:13:06.359	0.5	223.6		7.02		TAS		10.4	1.14	m_e	mb	4.8
BFO	55.50		P	15:12:39.398	-0.3	223.6		7.02		TAS		11.2	1.12	m_e	mb	4.8
BFO	55.50		L	15:33:15.167						T__		394.0	20.60	a_e		
BRG	59.86		P	15:13:09.991		223.6		7.02		TAS		6.2	1.02	m_e	mb	4.6
BSEG	60.56		P	15:13:14.343		223.6		7.02		TAS		24.0	0.89	m_e	mb	5.0
BSEG	60.56		L	15:38:39.541						T__		353.9	19.80	a_e		
BUG	57.45		P	15:12:53.096	0.1	223.6		7.02		TAS		14.9	1.04	m_e	mb	5.0
CLL	59.75		P	15:13:09.208		223.6		7.02		TAS		8.4	1.12	m_e	mb	4.7
CLL	59.75		L	15:39:23.807						T__		321.4	18.00	a_e		
CLZ	59.01		P	15:13:04.261	-0.2	223.6		7.02		TAS		3.6	0.92	m_e	mb	4.4
FLT1	59.73		P	15:13:08.918		223.6		7.02		TAS		10.2	0.99	m_e	mb	4.8
FUR	56.72		P	15:12:48.343	0.0	223.6		7.02		TAS		26.3	1.12	m_e	mb	5.2
FUR	56.72		L	15:35:17.980						T__		308.1	21.50	a_e		
GEC2	58.35		P	15:12:59.739	0.0	223.6		7.02		TAS		19.0	1.28	m_e	mb	5.0
GEC2	58.35		L	15:35:31.102						T__		541.5	21.80	a_e		
GRA1	57.79		L	15:37:55.549						T__		393.0	20.60	a_e		
GTTG	58.62		P	15:13:01.699	-0.2	223.6		7.02		TAS		27.7	1.43	m_e	mb	5.1
IBBN	58.32		P	15:12:59.195	0.1	223.6		7.02		TAS		31.1	1.06	m_e	mb	5.3
KAST	57.72		P	15:12:54.944	-0.4	223.6		7.02		TAS		5.8	0.90	m_e	mb	4.6
MANZ	58.41		P	15:12:59.863	0.1	223.6		7.02		TAS		2.7	0.97	m_e	mb	4.2
MOX	58.66		P	15:13:01.952	0.4	223.6		7.02		TAS		8.6	0.93	m_e	mb	4.8
MOX	58.66		L	15:37:27.871						T__		391.3	18.50	a_e		

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NRDL	59.39	P	15:13:07.155		223.6		7.02		TAS	15.2	1.15	m_e	mb	4.9
RJOB	57.15	P	15:12:51.033	-0.1	223.6		7.02		TAS	11.7	0.81	m_e	mb	5.0
ROTZ	58.29	P	15:12:58.879	0.3	223.6		7.02		TAS	2.8	1.04	m_e	mb	4.2
RUE	60.91	P	15:13:18.106		223.6		7.02		TAS	25.2	0.73	m_e	mb	5.1
TANN	58.87	P	15:13:03.334	-0.3	223.6		7.02		TAS	12.4	0.99	m_e	mb	4.9
TNS	56.99	P	15:12:50.046	0.1	223.6		7.02		TAS	14.8	0.94	m_e	mb	5.0
TNS	56.99	L	15:37:46.078						T__	510.4	18.80	a_e		
UBR	55.83	P	15:12:41.905	0.2	223.6		7.02		TAS	16.1	1.00	m_e	mb	5.0
WET	58.16	P	15:12:58.341	-0.2	223.6		7.02		TAS	9.2	1.01	m_e	mb	4.8
WET	58.16	L	15:38:10.252						T__	433.7	19.30	a_e		

Event 90601008 Greece-Albania border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/01	18:50:15.40			40.4600	20.7800				10.0					9.26	12.03	m i ke	EMSC
OrigID 90601040																	

Magnitude	Err	Nsta	Author	OrigID
Ms	3.7		BGR	90601014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	11.87		P	18:53:02.003		140.3		0.00		TAS				m_e	
GEC2	9.78		P	18:52:36.617		140.3		0.00		TAS				m_e	
GRA1	11.43		L	18:58:00.246						T__		973.7	19.30	a_e	Ms 3.8
MANZ	11.31		P	18:52:59.910		140.3		0.00		TAS				m_e	
MOX	12.03		P	18:53:06.751		140.3		0.00		TAS				m_e	
MOX	12.03		L	18:58:54.934						T__		655.0	18.30	a_e	Ms 3.6
RJOB	9.26		P	18:51:03.457		140.3		0.00		TAS				m_e	
TANN	11.53		P	18:53:02.284		140.3		0.00		TAS				m_e	
UBR	10.53		P	18:52:44.502		140.3		0.00		TAS				m_e	
WET	10.33		P	18:52:44.047		140.3		0.00		TAS				m_e	

Event 90602002 Northern Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/06/02	03:03:10.80			0.5240	97.3700				33.0					30	85.43	90.40	m i ke	BGR
OrigID 90602008																		

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90602008
MBB	5.9		BGR	90602008
Ms	4.3		BGR	90602008

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90602009
Ms	3.7		BGR	90602009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	78.77		P	10:05:25.376		25.2		5.67		TAS		7.4	0.95	m_e	mb	4.7
BRG	74.91		P	10:05:03.753		25.2		5.67		TAS		3.5	0.95	m_e	mb	4.4
CLL	74.79		P	10:05:03.031	-0.7	25.2		5.67		TAS		5.3	0.70	m_e	mb	4.7
CLZ	75.02		P	10:05:05.278		25.2		5.67		TAS		14.6	1.30	m_e	mb	4.8
FLT1	74.35		P	10:05:00.575	0.0	25.2		5.67		TAS		6.9	0.94	m_e	mb	4.7
GRA1	76.74		P	10:05:14.595		25.2		5.67		TAS		6.5	0.59	m_e	mb	4.9
GRA1	76.74		L	10:38:32.109						T__		31.0	20.70	a_e	Ms	3.6
KAST	76.11		P	10:05:11.173		25.2		5.67		TAS		8.7	1.16	m_e	mb	4.8
MOX	75.77		P	10:05:09.050		25.2		5.67		TAS		2.9	0.72	m_e	mb	4.5
MOX	75.77		L	10:35:07.685						T__		39.9	18.80	a_e	Ms	3.8
RJOB	78.05		P	10:05:22.196		25.2		5.67		TAS		3.2	0.97	m_e	mb	4.4
TANN	75.74		P	10:05:09.024		25.2		5.67		TAS		1.4	0.67	m_e	mb	4.2
TNS	77.00		P	10:05:16.304		25.2		5.67		TAS		9.7	1.00	m_e	mb	4.9
WET	76.76		P	10:05:14.993		25.2		5.67		TAS		7.3	1.12	m_e	mb	4.7

Event 90602004 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/02	10:36:29.70			-21.3000	-173.8900				10.0					146.36	153.49	m i ke	EMSC
	OrigID																
	90602036																

Magnitude	Err	Nsta	Author	OrigID
Ms	6.3		BGR	90602010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	149.03		PKPbc	10:56:20.971		10.0		2.81		TAS				m_e		
BFO	152.97		PKPdf	10:56:23.512		10.0		1.63		TAS				m_e		
BFO	152.97		PKPbc	10:56:32.411		10.0		2.81		TAS				m_e		
BFO	152.97		L	12:06:36.986						T__		3858.5	20.50	a_e	Ms	6.2
BRG	149.85		PKPdf	10:56:16.103		10.0		1.63		TAS				m_e		
BRG	149.85		PKPbc	10:56:21.274		10.0		2.81		TAS				m_e		
BSEG	147.26		PKPbc	10:56:15.567		10.0		2.81		TAS				m_e		
BSEG	147.26		L	12:09:37.436						T__		4147.9	19.60	a_e	Ms	6.2
BUG	149.90		PKPbc	10:56:21.812		10.0		2.81		TAS				m_e		
CLL	149.57		PKPbc	10:56:21.022		10.0		2.81		TAS				m_e		
CLL	149.57		L	12:10:13.936						T__		3737.8	19.80	a_e	Ms	6.2
CLZ	149.34		PKPdf	10:56:15.358		10.0		1.63		TAS				m_e		
CLZ	149.34		PKPbc	10:56:20.906		10.0		2.81		TAS				m_e		
FLT1	148.77		PKPbc	10:56:20.251		10.0		2.81		TAS				m_e		
FUR	152.88		PKPdf	10:56:23.647		10.0		1.63		TAS				m_e		
FUR	152.88		PKPbc	10:56:32.438		10.0		2.81		TAS				m_e		

FUR	152.88	L	12:10:53.354			T__	5090.7	19.70	a_e Ms	6.3
GEC2	151.85	PKPpdf	10:56:19.661	10.0	1.63	TAS			m_e	
GEC2	151.85	PKPbc	10:56:30.827	10.0	2.81	TAS			m_e	
GEC2	151.85	L	12:10:08.208			T__	4672.6	20.10	a_e Ms	6.3
GOR1	148.11	PKPpdf	10:56:14.111	10.0	1.63	TAS			m_e	
GOR1	148.11	PKPbc	10:56:19.258	10.0	2.81	TAS			m_e	
GRA1	151.38	PKPpdf	10:56:18.900	10.0	1.63	TAS			m_e	
GRA1	151.38	PKPbc	10:56:27.724	10.0	2.81	TAS			m_e	
GRA1	151.38	L	12:05:16.424			T__	5445.3	20.90	a_e Ms	6.3
GTTG	149.66	PKPbc	10:56:21.526	10.0	2.81	TAS			m_e	
HLG	147.14	PKPbc	10:56:16.222	10.0	2.81	TAS			m_e	
IBBN	149.02	PKPbc	10:56:21.460	10.0	2.81	TAS			m_e	
KAST	150.10	PKPpdf	10:56:16.854	10.0	1.63	TAS			m_e	
KAST	150.10	PKPbc	10:56:22.114	10.0	2.81	TAS			m_e	
MANZ	150.98	PKPpdf	10:56:18.612	10.0	1.63	TAS			m_e	
MANZ	150.98	PKPbc	10:56:26.596	10.0	2.81	TAS			m_e	
MOX	150.40	PKPpdf	10:56:18.892	10.0	1.63	TAS			m_e	
MOX	150.40	PKPbc	10:56:24.852	10.0	2.81	TAS			m_e	
MOX	150.40	L	12:04:36.530			T__	5451.7	20.40	a_e Ms	6.3
NEUB	149.84	PKPbc	10:56:21.560	10.0	2.81	TAS			m_e	
NRDL	148.71	PKPbc	10:56:20.770	10.0	2.81	TAS			m_e	
RETH	148.52	PKPbc	10:56:20.503	10.0	2.81	TAS			m_e	
RGN	146.36	PKPbc	10:56:14.711	10.0	2.81	TAS			m_e	
RJOB	153.08	PKPpdf	10:56:23.221	10.0	1.63	TAS			m_e	
RJOB	153.08	PKPbc	10:56:32.814	10.0	2.81	TAS			m_e	
ROTZ	151.18	PKPpdf	10:56:19.034	10.0	1.63	TAS			m_e	
ROTZ	151.18	PKPbc	10:56:27.271	10.0	2.81	TAS			m_e	
RUE	148.32	PKPbc	10:56:19.697	10.0	2.81	TAS			m_e	
STU	152.48	PKPbc	10:56:31.884	10.0	2.81	TAS			m_e	
TANN	150.51	PKPpdf	10:56:18.139	10.0	1.63	TAS			m_e	
TANN	150.51	PKPbc	10:56:25.740	10.0	2.81	TAS			m_e	
TNS	151.08	PKPpdf	10:56:18.385	10.0	1.63	TAS			m_e	
TNS	151.08	PKPbc	10:56:27.069	10.0	2.81	TAS			m_e	
TNS	151.08	L	12:08:17.783			T__	6912.1	19.90	a_e Ms	6.5
UBBA	150.38	PKPbc	10:56:22.937	10.0	2.81	TAS			m_e	
UBR	153.49	PKPpdf	10:56:23.669	10.0	1.63	TAS			m_e	
UBR	153.49	PKPbc	10:56:33.519	10.0	2.81	TAS			m_e	
WET	151.70	PKPpdf	10:56:19.707	10.0	1.63	TAS			m_e	
WET	151.70	PKPbc	10:56:28.510	10.0	2.81	TAS			m_e	
WET	151.70	L	12:05:17.399			T__	4852.9	20.00	a_e Ms	6.3
WLF	151.70	PKPbc	10:56:28.309	10.0	2.81	TAS			m_e	

Event 90602006 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/02	15:43:15.50			-21.1000	-174.1900				10.0					147.04	152.83	m i ke	NEIC

90602045

Magnitude	Err	Nsta	Author	OrigID
Ms	4.4		BGR	90602012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.80		PKPab	16:03:06.224		10.5		3.70		TAS				m_e	
BFO	152.76		PKPab	16:03:22.412		10.5		3.70		TAS				m_e	
BRG	149.61		PKPab	16:03:09.052		10.5		3.70		TAS				m_e	
BSEG	147.04		PKPab	16:02:59.245		10.5		3.70		TAS				m_e	
BUG	149.70		PKPab	16:03:09.854		10.5		3.70		TAS				m_e	
CLL	149.33		PKPab	16:03:07.864		10.5		3.70		TAS				m_e	
CLL	149.33		L	17:20:13.193						T__		54.6	21.20	a_e Ms	4.3
CLZ	149.11		PKPab	16:03:07.102		10.5		3.70		TAS				m_e	
FLT1	148.54		PKPab	16:03:04.642		10.5		3.70		TAS				m_e	
GRA1	151.15		PKPab	16:03:15.916		10.5		3.70		TAS				m_e	
GRA1	151.15		L	17:21:06.289						T__		61.3	18.10	a_e Ms	4.5
GTTG	149.44		PKPab	16:03:09.009		10.5		3.70		TAS				m_e	
IBBN	148.81		PKPab	16:03:06.299		10.5		3.70		TAS				m_e	
MOX	150.16		PKPab	16:03:11.471		10.5		3.70		TAS				m_e	
MOX	150.16		L	17:20:48.813						T__		61.3	19.10	a_e Ms	4.4
NEUB	149.60		PKPab	16:03:09.592		10.5		3.70		TAS				m_e	
NRDL	148.49		PKPab	16:03:05.429		10.5		3.70		TAS				m_e	
RETH	148.30		PKPab	16:03:03.879		10.5		3.70		TAS				m_e	
RJOB	152.83		PKPab	16:03:22.422		10.5		3.70		TAS				m_e	
TANN	150.28		PKPab	16:03:11.024		10.5		3.70		TAS				m_e	
TNS	150.86		PKPab	16:03:15.107		10.5		3.70		TAS				m_e	
TNS	150.86		L	17:13:22.712						T__		53.5	20.50	a_e Ms	4.3

Event 90602007 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/02	21:24:12.90			-22.0800	173.8400				59.0					145.82	151.36	m i ke	NEIC

Magnitude	Err	Nsta	Author	OrigID
Ms	4.6		BGR	90602013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	151.36		PKPbc	21:44:02.439		32.8		1.78		TAS				m_e	
BFO	151.36		L	22:48:19.354						T__		83.8	21.50	a_e Ms	4.5
BSEG	145.82		L	22:45:36.233						T__		162.9	21.70	a_e Ms	4.8
BUG	148.89		PKPbc	21:43:57.596		32.8		1.78		TAS				m_e	
CLL	147.23		L	22:56:45.169						T__		121.8	18.10	a_e Ms	4.7
FUR	150.47		L	22:51:40.853						T__		87.6	20.40	a_e Ms	4.5
GEC2	148.97		PKPbc	21:43:56.938		32.8		1.78		TAS				m_e	

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GEC2	148.97	L	22:48:51.784			T__	149.1	21.90	a_e Ms	4.7
GRA1	149.21	PKPbc	21:43:59.363	32.8	1.78	TAS			m_e	
GRA1	149.21	L	22:46:33.063			T__	83.3	21.80	a_e Ms	4.5
KAST	148.79	PKPbc	21:43:56.679	32.8	1.78	TAS			m_e	
MOX	148.27	L	22:46:51.921			T__	121.5	21.80	a_e Ms	4.7
ROTZ	148.79	PKPbc	21:43:57.111	32.8	1.78	TAS			m_e	
TNS	149.65	PKPbc	21:43:58.754	32.8	1.78	TAS			m_e	
TNS	149.65	L	22:50:48.817			T__	73.5	20.80	a_e Ms	4.5
UBR	151.30	PKPbc	21:44:01.926	32.8	1.78	TAS			m_e	
WET	149.05	PKPbc	21:43:57.375	32.8	1.78	TAS			m_e	
WET	149.05	L	22:49:32.637			T__	145.1	22.00	a_e Ms	4.7
WLF	150.80	PKPbc	21:44:01.515	32.8	1.78	TAS			m_e	

Event 90602009 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/02	23:05:45.60			-21.2040	-174.7490				10.0					147.09	152.82	m i ke	IDCSEL3
	90602047																

Magnitude	Err	Nsta	Author	OrigID
Ms	4.4		BGR	90602015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	152.82		PKPab	23:25:53.824		11.6		3.70		TAS				m_e	
BFO	152.82		L	00:43:07.431						T__	45.5	18.10		a_e Ms	4.3
BRG	149.61		PKPab	23:25:40.480		11.6		3.70		TAS				m_e	
BSEG	147.09		PKPbc	23:25:28.704		11.6		3.70		TAS				m_e	
BSEG	147.09		PKPab	23:25:30.757		11.6		3.70		TAS				m_e	
BSEG	147.09		L	00:29:18.660						T__	51.7	19.10		a_e Ms	4.3
BUG	149.78		PKPab	23:25:41.161		11.6		3.70		TAS				m_e	
CLL	149.35		PKPab	23:25:39.205		11.6		3.70		TAS				m_e	
CLL	149.35		L	00:40:23.723						T__	43.8	19.30		a_e Ms	4.3
FLT1	148.59		PKPbc	23:25:33.034		11.6		3.70		TAS				m_e	
FLT1	148.59		PKPab	23:25:35.796		11.6		3.70		TAS				m_e	
FUR	152.67		PKPab	23:25:52.599		11.6		3.70		TAS				m_e	
FUR	152.67		L	00:34:06.340						T__	60.7	18.60		a_e Ms	4.4
GRA1	151.18		PKPab	23:25:46.568		11.6		3.70		TAS				m_e	
GRA1	151.18		L	00:38:23.777						T__	58.6	18.90		a_e Ms	4.4
IBBN	148.89		PKPbc	23:25:35.076		11.6		3.70		TAS				m_e	
IBBN	148.89		PKPab	23:25:37.726		11.6		3.70		TAS				m_e	
MOX	150.19		L	00:38:54.182						T__	77.5	19.20		a_e Ms	4.5
NEUB	149.63		PKPbc	23:25:35.970		11.6		3.70		TAS				m_e	
NRDL	148.54		PKPbc	23:25:33.556		11.6		3.70		TAS				m_e	
NRDL	148.54		PKPab	23:25:35.752		11.6		3.70		TAS				m_e	
RUE	148.09		PKPab	23:25:34.379		11.6		3.70		TAS				m_e	
STU	152.31		PKPab	23:25:51.193		11.6		3.70		TAS				m_e	

Event 90604005 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/04	01:15:38.70			-21.3300	-174.3700				10.0					147.25	152.97	m i ke	EMSC
OrigID 90604037																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.9		BGR	90604011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	149.01		PKPab	01:35:30.537		10.9		1.55		TAS				m_e	
BFO	152.97		L	02:52:54.246						T__		128.6	19.50	a_e Ms	4.8
BSEG	147.25		L	02:48:54.938						T__		195.0	18.80	a_e Ms	4.9
CLL	149.53		L	02:53:41.177						T__		144.8	18.60	a_e Ms	4.8
FUR	152.85		L	02:48:06.876						T__		170.1	19.20	a_e Ms	4.9
GEC2	151.80		L	02:49:44.400						T__		183.9	19.20	a_e Ms	4.9
GRA1	151.35		PKPab	01:35:38.686		10.9		3.61		TAS				m_e	
GRA1	151.35		L	02:43:51.215						T__		146.1	21.40	a_e Ms	4.8
KAST	150.11		PKPab	01:35:35.031		10.9		3.61		TAS				m_e	
MANZ	150.95		PKPab	01:35:36.880		10.9		3.61		TAS				m_e	
MOX	150.37		L	02:48:42.465						T__		229.3	18.70	a_e Ms	5.0
TNS	151.08		L	02:47:34.522						T__		202.6	19.50	a_e Ms	4.9
WET	151.65		L	02:43:23.162						T__		152.0	20.60	a_e Ms	4.8

Event 90604004 Southeast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/04	04:38:35.14			29.5820	139.7330				33.0				27	86.04	91.07	m i ke	BGR
OrigID 90604010																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.1		BGR	90604010
MBB	6.6		BGR	90604010
Ms	5.6		BGR	90604010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	87.23		P	04:51:16.748	-0.3	42.9		4.72		TAS		61.0	1.05	m_e mb	5.7
BFO	91.07		P	04:51:34.717		42.9		4.72		TAS		755.5	1.33	m_e mb	6.8
BRG	86.72		P	04:51:14.410	0.0	42.9		4.72		TAS		96.4	0.82	m_e mb	6.0
BRG	86.72		L	05:38:34.575						T__		2239.9	19.10	a_e Ms	5.6
BSEG	86.04		P	04:51:11.322	0.2	42.9		4.72		TAS		62.2	0.65	m_e MBB	6.5
BSEG	86.04		L	05:35:18.576						T__		2662.0	18.50	a_e Ms	5.7

BUG	89.14	P	04:51:25.621	-0.2	42.9	4.72	TAS	85.8	0.80	m_e	mb	6.0
CLL	86.83	P	04:51:14.734	-0.1	42.9	4.72	TAS	423.6	1.25	m_e	mb	6.4
CLL	86.83	L	05:34:09.149				T__	3004.2	19.40	a_e	Ms	5.7
FLT1	86.84	P	04:51:14.645	0.4	42.9	4.72	TAS	66.8	0.65	m_e	mb	5.9
FUR	89.88	P	04:51:29.793		42.9	4.72	TAS	303.3	0.78	m_e	MBB	6.9
FUR	89.88	L	05:36:09.963				T__	2430.5	18.40	a_e	Ms	5.7
GEC2	88.27	P	04:51:21.604	0.1	42.9	4.72	TAS	64.7	0.79	m_e	MBB	6.5
GEC2	88.27	L	05:40:17.452				T__	2467.5	18.30	a_e	Ms	5.7
GOR1	86.33	P	04:51:12.867	-0.1	42.9	4.72	TAS	286.6	1.38	m_e	mb	6.2
GRA1	88.78	P	04:51:24.636	-0.3	42.9	4.72	TAS	221.2	0.94	m_e	mb	6.4
GRA1	88.78	L	05:29:28.525				T__	2249.2	18.20	a_e	Ms	5.6
GTTG	87.96	P	04:51:20.726	-0.3	42.9	4.72	TAS	40.9	0.70	m_e	mb	5.9
HLG	86.80	P	04:51:15.130	0.1	42.9	4.72	TAS			m_e		
IBBN	88.28	P	04:51:21.879	-0.1	42.9	4.72	TAS	204.9	0.72	m_e	mb	6.5
KAST	88.86	P	04:51:24.407	-0.0	42.9	4.72	TAS	27.7	0.63	m_e	mb	5.6
MANZ	88.17	P	04:51:21.522	0.0	42.9	4.72	TAS	77.4	1.36	m_e	mb	5.9
MOX	87.91	P	04:51:20.126	0.2	42.9	4.72	TAS	34.8	0.77	m_e	MBB	6.5
MOX	87.91	L	05:28:42.583				T__	1247.1	21.00	a_e	Ms	5.3
NRDL	87.19	P	04:51:16.650	0.0	42.9	4.72	TAS	101.6	1.25	m_e	mb	5.8
RETH	87.32	P	04:51:17.156	-0.1	42.9	4.72	TAS	210.1	1.30	m_e	mb	6.1
RJOB	89.48	P	04:51:27.695		42.9	4.72	TAS	260.7	0.88	m_e	mb	6.5
ROTZ	88.29	P	04:51:22.155	-0.2	42.9	4.72	TAS	31.1	0.95	m_e	MBB	6.1
STU	90.36	P	04:51:31.702	-0.3	42.9	4.72	TAS	1114.0	1.18	m_e	mb	7.0
TANN	87.71	P	04:51:19.178	0.3	42.9	4.72	TAS	311.7	1.56	m_e	mb	6.4
TNS	89.59	P	04:51:28.046	0.4	42.9	4.72	TAS	48.2	0.68	m_e	mb	5.8
TNS	89.59	L	05:36:01.892				T__	2852.8	18.10	a_e	Ms	5.7
UBR	90.77	P	04:51:33.272		42.9	4.72	TAS	65.1	0.67	m_e	mb	6.1
WET	88.43	P	04:51:22.635	0.4	42.9	4.72	TAS	65.5	1.02	m_e	MBB	6.5
WET	88.43	L	05:34:02.695				T__	3437.2	18.20	a_e	Ms	5.8
WLF	90.97	P	04:51:34.834	0.0	42.9	4.72	TAS	341.9	1.22	m_e	mb	6.5

Event 90604003 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/04	06:24:31.90			-16.8400	173.2500				10.0			12		140.67	146.26	m i ke	EMSC
90604035																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.8		BGR	90604009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	146.25		PKPbc	06:44:12.655		30.3		3.17		TAS				m_e		
BFO	146.25		L	07:48:54.585						T__		147.8	21.00	a_e	Ms	4.7
BSEG	140.67		L	07:43:00.180						T__		314.7	21.90	a_e	Ms	5.0
FUR	145.44		PKPbc	06:44:10.656		30.3		3.17		TAS				m_e		
FUR	145.44		L	07:47:29.492						T__		123.9	21.50	a_e	Ms	4.7

Event 90605005 Iran-Iraq border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/05	03:36:16.90			34.4900	45.7500				10.0					29.48	29.55	m i ke	EMSC
OrigID 90605037																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90605011
Ms	3.5		BGR	90605011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	29.48		P	03:42:16.943		107.9		9.18		TAS		30.5	1.46	m_e mb	4.9
GRA1	29.48		L	03:57:00.192						T__		102.1	18.20	a_e Ms	3.5
MOX	29.55		L	03:56:58.584						T__		132.2	18.70	a_e Ms	3.6

Event 90605006 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/05	10:58:09.18			54.8620	164.7360				33.0					69.53	75.28	m i ke	BGR
OrigID 90605012																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90605012
Ms	4.3		BGR	90605012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	71.22		P	11:09:22.603		14.3		5.17		TAS		36.8	1.49	m_e mb	5.3
BFO	75.28		P	11:09:46.286		14.3		5.17		TAS		18.5	1.19	m_e mb	5.0
BFO	75.28		L	11:45:12.045						T__		151.8	19.30	a_e Ms	4.3
BRG	71.85		P	11:09:26.040		14.3		5.17		TAS		6.3	0.82	m_e mb	4.8
BSEG	69.53		L	11:43:20.022						T__		159.5	20.40	a_e Ms	4.2
BUG	72.41		P	11:09:29.443		14.3		5.17		TAS		36.1	1.34	m_e mb	5.3
CLL	71.61		P	11:09:24.507		14.3		5.17		TAS		32.7	1.32	m_e mb	5.3
CLL	71.61		L	11:42:04.752						T__		161.3	21.40	a_e Ms	4.3
FLT1	70.93		P	11:09:20.411		14.3		5.17		TAS		6.8	0.82	m_e mb	4.8
FUR	74.94		L	11:42:08.310						T__		156.1	21.90	a_e Ms	4.3
GEC2	73.84		P	11:09:38.404		14.3		5.17		TAS		8.8	0.79	m_e mb	4.8
GEC2	73.84		L	11:44:08.209						T__		171.7	21.00	a_e Ms	4.3
GRA1	73.48		P	11:09:36.743		14.3		5.17		TAS		18.4	0.66	m_e mb	5.3
GRA1	73.48		L	11:43:11.442						T__		157.6	21.40	a_e Ms	4.3
IBBN	71.50		P	11:09:24.452		14.3		5.17		TAS		41.0	1.14	m_e mb	5.5
KAST	72.48		P	11:09:30.137		14.3		5.17		TAS		32.7	1.64	m_e mb	5.2

MANZ	73.04	P	11:09:33.577	14.3	5.17	TAS	2.0	0.77	m_e	mb	4.3
MOX	72.49	P	11:09:30.263	14.3	5.17	TAS	29.2	1.35	m_e	mb	5.2
MOX	72.49	L	11:42:31.300			T__	151.3	22.00	a_e	Ms	4.2
NRDL	70.96	P	11:09:21.016	14.3	5.17	TAS	16.4	1.29	m_e	mb	5.0
RETH	70.84	P	11:09:20.134	14.3	5.17	TAS	21.2	1.42	m_e	mb	5.1
ROTZ	73.23	P	11:09:34.675	14.3	5.17	TAS	3.9	1.22	m_e	mb	4.4
TANN	72.56	P	11:09:30.811	14.3	5.17	TAS	9.2	0.87	m_e	mb	4.9
TNS	73.42	P	11:09:35.705	14.3	5.17	TAS	11.6	0.91	m_e	mb	5.0
TNS	73.42	L	11:45:29.839			T__	186.1	19.90	a_e	Ms	4.4
UBBA	72.60	P	11:09:30.654	14.3	5.17	TAS	19.1	1.28	m_e	mb	5.1
WET	73.71	P	11:09:37.924	14.3	5.17	TAS	12.9	0.82	m_e	mb	5.0
WET	73.71	L	11:45:11.008			T__	176.9	19.00	a_e	Ms	4.4
WLF	74.31	P	11:09:40.996	14.3	5.17	TAS	12.0	1.10	m_e	mb	4.8

Event 90605007 Mindanao, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/05	20:41:49.40			6.5400	124.1700				470.0			22		97.02	101.14	m i ke	EMSC
OrigID 90605039																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90605013
Ms	4.3		BGR	90605013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BRG	97.48		Pdiff	20:54:32.311	-0.1					T__		31.9	0.67	a_e	mb	6.1
BSEG	98.41		Pdiff	20:54:36.367	0.2					T__		30.4	0.75	m_e	mb	6.1
BUG	101.14		Pdiff	20:54:48.861	0.2					T__		34.0	0.92	a_e	mb	5.9
CLL	97.88		Pdiff	20:54:33.591	-0.2					T__		16.6	0.63	m_e	mb	5.9
CLL	97.88		L	21:45:59.556						T__		112.5	19.10	a_e	Ms	4.4
FLT1	98.53		Pdiff	20:54:36.627	-0.4					T__		30.2	0.70	m_e	mb	6.1
GEC2	98.31		Pdiff	20:54:36.011						T__		22.7	1.01	a_e	mb	5.8
GRA1	99.53		P	20:54:41.704	0.1	68.1		4.54		TAS				m_e		
GRA1	99.53		Pdiff	20:54:41.723						T__		16.8	1.00	m_e	mb	5.6
GRA1	99.53		L	21:42:01.840						T__		118.3	21.40	a_e	Ms	4.4
GTTG	99.56		Pdiff	20:54:41.664	0.1					T__				m_e		
IBBN	100.49		Pdiff	20:54:45.990	0.1					T__		39.2	0.74	m_e	mb	6.1
KAST	100.58		Pdiff	20:54:46.234	-0.1					T__		18.9	1.01	m_e	mb	5.6
MANZ	98.89		Pdiff	20:54:38.851	0.1					T__		2.0	0.84	m_e	mb	4.9
MOX	98.94		Pdiff	20:54:38.642	0.2					T__		14.8	0.77	m_e	mb	5.8
MOX	98.94		P	20:54:38.665	0.1	68.1		4.54		TAS				m_e		
MOX	98.94		L	21:32:46.657						T__		76.4	20.30	a_e	Ms	4.2
NEUB	98.64		Pdiff	20:54:37.511	-0.1					T__		31.6	0.66	a_e	mb	6.2
NRDL	99.10		Pdiff	20:54:39.745	-0.3					T__		54.5	0.94	m_e	mb	6.3
RETH	99.42		Pdiff	20:54:41.091	0.1					T__			0.73	m_e		
RJOB	99.26		Pdiff	20:54:39.961						T__		15.8	0.91	a_e	mb	5.7

ROTZ	98.91	Pdiff	20:54:38.857	-0.3	T__	5.4	0.96	m_e	mb	5.2
RUE	97.02	Pdiff	20:54:30.206	0.1	T__	88.4	0.64	m_e	mb	6.5
TANN	98.52	Pdiff	20:54:36.829	0.3	T__	15.5	0.82	m_e	mb	5.8
TNS	100.97	Pdiff	20:54:47.895	0.0	T__	49.3	1.50	m_e	mb	5.8
UBBA	99.82	Pdiff	20:54:42.569	0.3	T__			m_e		
WET	98.72	Pdiff	20:54:37.822		T__	14.7	1.01	m_e	mb	5.7

Event 90608001 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/08	14:11:13.60			-17.6900	-178.6800				543.0					147.09	147.09	m i ke	EMSC
	90608033																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	147.09		PKP	14:29:55.075		17.6		1.97		TAS				m_e	

Event 90608002 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/08	14:19:03.50			-25.4600	-176.7700				135.0					155.02	155.02	m i ke	EMSC
	90608034																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	155.02		PKP	14:39:07.094		17.3		3.89		TAS				m_e	

Event 90608003 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/08	15:37:29.50			44.1800	147.4300				86.0					79.00	79.00	m i ke	EMSC
	90608035																

Magnitude Err Nsta Author OrigID
mb 4.9 BGR 90608009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.00		P	15:49:23.999		30.5		4.75		TAS		9.6	0.82	m_e mb	4.9

Event 90608004 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/08	18:10:42.60			45.2600	150.1300				48.0					78.89	78.89	m i ke	EMSC
OrigID 90608036																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90608010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	78.89		P	18:22:39.989		28.2		4.84		TAS		12.6	1.16	m_e mb	4.8

Event 90609001 Jan Mayen Island region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/09	03:45:17.70			69.0900	-17.0600				10.0					23.79	23.79	m i ke	EMSC
OrigID 90609033																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90609007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	23.79		P	03:50:29.199		335.1		9.52		TAS		111.3	2.09	m_e mb	5.0

Event 90610003 Kuril Islands, Russia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/10	17:18:56.00			43.4500	146.7600				40.0					79.42	79.42	m i ke	EMSC
OrigID 90610035																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90610009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	79.42		P	17:30:58.386		31.3		4.55		TAS		11.8	1.10	m_e mb	4.8

Event 90611001 Tonga Islands
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/11 07:00:02.10 -21.3200 -173.8600 10.0 151.40 151.40 m i ke EMSC
 90611033

Magnitude Err Nsta Author OrigID

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
 GRA1 151.40 PKPab 07:20:04.920 9.9 3.61 TAS m_e

Event 90612001 East of Kuril Islands, Russia
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/12 00:54:48.60 49.5500 157.1700 10.0 76.91 76.91 m i ke EMSC
 90612033

Magnitude Err Nsta Author OrigID
 mb 4.8 BGR 90612007

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
 GRA1 76.91 P 01:06:41.218 22.0 4.94 TAS 6.6 0.93 m_e mb 4.8

Event 90613002 Hokkaido, Japan, region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/13 00:56:12.10 41.0800 144.0700 10.0 19 77.81 82.75 m i ke EMSC
 90613034

Magnitude Err Nsta Author OrigID
 mb 4.9 BGR 90613008
 Ms 3.9 BGR 90613008

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
 ASSE 78.74 P 01:08:15.254 0.1 34.2 4.81 TAS 7.0 0.93 m_e mb 4.7
 BFO 82.75 P 01:08:36.420 34.2 4.81 TAS 29.6 1.56 m_e mb 5.3
 BRG 78.60 P 01:08:14.326 -0.8 34.2 4.81 TAS 5.8 0.93 m_e mb 4.6
 BUG 80.47 P 01:08:24.389 0.2 34.2 4.81 TAS 8.7 0.98 m_e mb 4.7
 CLL 78.59 P 01:08:13.933 -6.8 34.2 4.81 TAS 15.9 0.78 m_e mb 5.1
 FLT1 78.38 P 01:08:12.696 -1.6 34.2 4.81 TAS m_e
 FUR 81.81 P 01:08:31.900 34.2 4.81 TAS 31.4 1.03 m_e mb 5.4
 GEC2 80.33 P 01:08:24.093 34.2 4.81 TAS 12.3 1.28 m_e mb 4.7
 GOR1 77.81 P 01:08:09.969 0.4 34.2 4.81 TAS 28.2 1.33 m_e mb 5.2

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GRA1	80.57	P	01:08:25.822		34.2	4.81	TAS	21.5	0.95	m_e	mb	5.2
GRA1	80.57	L	14:26:32.198				T__	59.9	21.40	a_e	Ms	3.9
GTTG	79.47	P	01:08:19.245	0.1	34.2	4.81	TAS	10.7	0.74	m_e	mb	5.0
IBBN	79.57	P	01:08:19.513	-0.1	34.2	4.81	TAS	24.8	1.08	m_e	mb	5.1
MANZ	80.00	P	01:08:22.323		34.2	4.81	TAS	1.8	0.98	m_e	mb	4.0
MOX	79.64	P	01:08:20.196	1.9	34.2	4.81	TAS	12.6	1.21	m_e	mb	4.7
MOX	79.64	L	14:23:17.786				T__	53.7	20.80	a_e	Ms	3.9
NEUB	79.13	P	01:08:17.377	0.1	34.2	4.81	TAS	17.6	0.99	m_e	mb	5.0
ROTZ	80.14	P	01:08:23.292		34.2	4.81	TAS	2.8	1.07	m_e	mb	4.1
STU	82.07	P	01:08:33.398		34.2	4.81	TAS	36.0	0.76	m_e	mb	5.6
WET	80.40	P	01:08:24.838		34.2	4.81	TAS	16.6	1.07	m_e	mb	4.9

Event 90613003 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/13	23:10:11.20			-33.8100	-178.0600				10.0				13	159.02	164.72	m i ke	EMSC
90613035																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	160.63		PKPab	23:30:51.957	-0.7	25.2		4.39		TAS					m_e
BFO	164.72		PKPab	23:31:08.568		25.2		4.39		TAS					m_e
BRG	160.82		PKPab	23:30:52.161		25.2		4.39		TAS					m_e
BSEG	159.02		PKPab	23:30:43.694	-0.5	25.2		4.39		TAS					m_e
CLL	160.75		PKPab	23:30:51.735	-0.2	25.2		4.39		TAS					m_e
FLT1	160.31		PKPab	23:30:49.415	2.5	25.2		4.39		TAS					m_e
GTTG	161.34		PKPab	23:30:53.960	0.2	25.2		4.39		TAS					m_e
IBBN	161.04		PKPab	23:30:54.266	-0.2	25.2		4.39		TAS					m_e
NEUB	161.21		PKPab	23:30:54.052		25.2		4.39		TAS					m_e
RJOB	163.86		PKPab	23:31:06.013		25.2		4.39		TAS					m_e
ROTZ	162.34		PKPab	23:30:59.180		25.2		4.39		TAS					m_e
TNS	162.91		PKPab	23:31:00.880		25.2		4.39		TAS					m_e
UBBA	162.01		PKPab	23:30:59.858		25.2		4.39		TAS					m_e

Event 90614002 Near coast of central Chile

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	00:19:11.40			-30.0500	-71.9700				10.0				31	105.23	111.31	m i ke	EMSC
90614034																	

Magnitude Err Nsta Author OrigID
Ms 6.4 BGR 90614008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	108.90		SS	00:53:27.205						T__				m_e	
ASSE	108.90		Pdiff	00:33:37.776	0.1	246.7		4.61		TAS				a_e	
ASSE	108.90		PP	00:38:06.272	0.2	243.6		7.06		TAS				m_e	
BFO	105.88		SKSac	00:44:06.590	-1.4	243.6		4.75		TAS				m_e	
BFO	105.88		PS	00:47:08.815	-3.9	248.7		9.52		TAS				m_e	
BFO	105.88		Sdiff	00:45:26.402	-1.8	251.6		9.09		TAS				m_e	
BFO	105.88		SS	00:52:42.232	-4.0	244.6		13.88		TAS				m_e	
BFO	105.88		Pdiff	00:33:23.776	-0.3	246.7		4.61		TAS				a_e	
BFO	105.88		PP	00:37:42.540	1.9	243.6		7.06		TAS				m_e	
BRG	110.26		SKSac	00:44:26.671		243.6		4.75		TAS				m_e	
BRG	110.26		PS	00:47:45.280		248.7		9.52		TAS				m_e	
BRG	110.26		Sdiff	00:46:08.605		251.6		9.09		TAS				m_e	
BRG	110.26		Pdiff	00:33:44.126	0.0	246.7		4.61		TAS				a_e	
BRG	110.26		PP	00:38:14.648		243.6		7.06		TAS				m_e	
BSEG	109.45		SKSac	00:44:22.287		243.6		4.75		TAS				m_e	
BSEG	109.45		PS	00:47:37.046		248.7		9.52		TAS				m_e	
BSEG	109.45		Pdiff	00:33:39.776	-0.3	246.7		4.61		TAS				a_e	
BSEG	109.45		PP	00:38:10.460		243.6		7.06		TAS				m_e	
BUG	106.69		SKSac	00:44:10.156	0.3	243.6		4.75		TAS				m_e	
BUG	106.69		PS	00:47:08.815	2.8	248.7		9.52		TAS				m_e	
BUG	106.69		Sdiff	00:45:33.439	0.7	251.6		9.09		TAS				m_e	
BUG	106.69		Pdiff	00:33:27.126	-0.4	246.7		4.61		TAS				a_e	
BUG	106.69		PP	00:37:50.683	0.2	243.6		7.06		TAS				m_e	
CLL	109.89		SKSac	00:44:24.772		243.6		4.75		TAS				m_e	
CLL	109.89		PS	00:47:42.928		248.7		9.52		TAS				m_e	
CLL	109.89		Sdiff	00:46:04.079	-1.0	251.6		9.09		TAS				m_e	
CLL	109.89		Pdiff	00:33:42.426	0.1	246.7		4.61		TAS				a_e	
CLL	109.89		PP	00:38:12.322		243.6		7.06		TAS				m_e	
FLT1	109.30		Sdiff	00:45:55.243	-1.2	251.6		9.09		TAS				m_e	
FLT1	109.30		SS	00:53:34.295		244.6		13.88		TAS				m_e	
FLT1	109.30		Pdiff	00:33:39.326	-0.2	246.7		4.61		TAS				a_e	
FLT1	109.30		PP	00:38:08.986	-0.6	243.6		7.06		TAS				m_e	
FUR	107.57		SKSac	00:44:14.225	-1.8	243.6		4.75		TAS				m_e	
FUR	107.57		PS	00:47:25.283	0.3	248.7		9.52		TAS				m_e	
FUR	107.57		Sdiff	00:45:42.503	-1.9	251.6		9.09		TAS				m_e	
FUR	107.57		SS	00:53:17.811	-2.4	244.6		13.88		TAS				m_e	
FUR	107.57		Pdiff	00:33:31.676	-0.3	246.7		4.61		TAS				a_e	
FUR	107.57		PP	00:37:55.104	0.5	243.6		7.06		TAS				m_e	
GEC2	109.32		SKSac	00:44:23.165		243.6		4.75		TAS				m_e	
GEC2	109.32		PS	00:47:38.223		248.7		9.52		TAS				m_e	
GEC2	109.32		Sdiff	00:45:59.034	1.0	251.6		9.09		TAS				m_e	
GEC2	109.32		SS	00:53:32.097		244.6		13.88		TAS				m_e	
GEC2	109.32		Pdiff	00:33:39.876	-0.2	246.7		4.61		TAS				a_e	
GOR1	109.60		Pdiff	00:33:40.026	-0.8	246.7		4.61		TAS				a_e	
GOR1	109.60		PP	00:38:11.623		243.6		7.06		TAS				m_e	
GRA1	108.19		SKSac	00:44:18.857	-1.9	243.6		4.75		TAS				m_e	
GRA1	108.19		PS	00:47:29.988	-1.9	248.7		9.52		TAS				m_e	

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GRA1	108.19	Sdiff	00:45:51.140	2.5	251.6	9.09	TAS		m_e	
GRA1	108.19	SS	00:53:19.404	2.1	244.6	13.88	TAS		m_e	
GRA1	108.19	Pdiff	00:33:34.776	0.1	246.7	4.61	TAS		m_e	
GRA1	108.19	PP	00:38:00.980	0.4	243.6	7.06	TAS		m_e	
GRA1	108.19	L	01:20:59.078				T__	7901.1	21.70	a_e Ms 6.2
GTTG	108.25	Sdiff	00:45:47.794	0.4	251.6	9.09	TAS		m_e	
GTTG	108.25	SS	00:53:16.965	-1.2	244.6	13.88	TAS		m_e	
GTTG	108.25	Pdiff	00:33:35.076	0.4	246.7	4.61	TAS		a_e	
GTTG	108.25	PP	00:38:02.009	-0.4	243.6	7.06	TAS		m_e	
HLG	108.26	Sdiff	00:45:44.318	-0.9	251.6	9.09	TAS		m_e	
HLG	108.26	Pdiff	00:33:34.576	-0.0	246.7	4.61	TAS		a_e	
IBBN	107.36	Sdiff	00:45:37.458	-0.8	251.6	9.09	TAS		m_e	
IBBN	107.36	Pdiff	00:33:30.026	-0.5	246.7	4.61	TAS		a_e	
IBBN	107.36	PP	00:37:54.956	0.3	243.6	7.06	TAS		m_e	
KAST	107.23	Sdiff	00:45:40.544	2.5	251.6	9.09	TAS		m_e	
KAST	107.23	Pdiff	00:33:30.326	0.3	246.7	4.61	TAS		a_e	
KAST	107.23	PP	00:37:54.308	-0.9	243.6	7.06	TAS		m_e	
MANZ	108.83	Sdiff	00:45:56.021	1.6	251.6	9.09	TAS		m_e	
MANZ	108.83	SS	00:53:21.631	-1.7	244.6	13.88	TAS		m_e	
MANZ	108.83	Pdiff	00:33:37.826	0.2	246.7	4.61	TAS		a_e	
MANZ	108.83	PP	00:38:04.643	0.5	243.6	7.06	TAS		m_e	
MOX	108.82	SKSac	00:44:24.141		243.6	4.75	TAS		m_e	
MOX	108.82	PS	00:47:40.575		248.7	9.52	TAS		m_e	
MOX	108.82	Sdiff	00:45:55.369	1.8	251.6	9.09	TAS		m_e	
MOX	108.82	SS	00:53:29.052	0.3	244.6	13.88	TAS		m_e	
MOX	108.82	Pdiff	00:33:37.776	0.3	246.7	4.61	TAS		a_e	
MOX	108.82	PP	00:38:04.643	-0.2	243.6	7.06	TAS		m_e	
MOX	108.82	L	01:24:43.068				T__	12430.8	18.00	a_e Ms 6.5
NEUB	109.13	Sdiff	00:45:55.393	0.6	251.6	9.09	TAS		m_e	
NEUB	109.13	SS	00:53:33.834		244.6	13.88	TAS		m_e	
NEUB	109.13	Pdiff	00:33:38.926	0.1	246.7	4.61	TAS		a_e	
NEUB	109.13	PP	00:38:07.203	0.5	243.6	7.06	TAS		m_e	
NRDL	108.73	SKSac	00:44:22.750		243.6	4.75	TAS		m_e	
NRDL	108.73	PS	00:47:37.046		248.7	9.52	TAS		m_e	
NRDL	108.73	Sdiff	00:45:49.469	-1.6	251.6	9.09	TAS		m_e	
NRDL	108.73	Pdiff	00:33:37.626	0.8	246.7	4.61	TAS		a_e	
RETH	108.43	Pdiff	00:33:35.676	0.2	246.7	4.61	TAS		a_e	
RETH	108.43	PP	00:38:02.445	-0.5	243.6	7.06	TAS		m_e	
RGN	111.31	Pdiff	00:33:48.626	-0.1	246.7	4.61	TAS		a_e	
RJOB	108.31	Sdiff	00:45:50.548	-1.5	251.6	9.09	TAS		m_e	
RJOB	108.31	Pdiff	00:33:35.276	-0.3	246.7	4.61	TAS		a_e	
RJOB	108.31	PP	00:38:01.619	-0.5	243.6	7.06	TAS		m_e	
ROTZ	108.80	Sdiff	00:45:52.916	-1.4	251.6	9.09	TAS		m_e	
ROTZ	108.80	SS	00:53:30.449	-0.6	244.6	13.88	TAS		m_e	
ROTZ	108.80	Pdiff	00:33:37.626	0.1	246.7	4.61	TAS		a_e	
ROTZ	108.80	PP	00:38:05.109	-0.4	243.6	7.06	TAS		m_e	
RUE	110.78	Sdiff	00:46:09.402		251.6	9.09	TAS		m_e	
RUE	110.78	Pdiff	00:33:46.176	-0.2	246.7	4.61	TAS		a_e	
STU	106.59	SKSac	00:44:08.497	-0.7	243.6	4.75	TAS		m_e	

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STU	106.59	PS	00:47:09.991	-4.5	248.7	9.52	TAS	m_e
STU	106.59	Sdiff	00:45:34.604	0.1	251.6	9.09	TAS	m_e
STU	106.59	SS	00:52:57.640	1.6	244.6	13.88	TAS	m_e
STU	106.59	Pdiff	00:33:27.276	-0.1	246.7	4.61	TAS	a_e
TANN	109.21	Sdiff	00:45:58.231	-1.3	251.6	9.09	TAS	m_e
TANN	109.21	SS	00:53:31.834		244.6	13.88	TAS	m_e
TANN	109.21	Pdiff	00:33:39.576	0.3	246.7	4.61	TAS	a_e
TANN	109.21	PP	00:38:08.366	-0.4	243.6	7.06	TAS	m_e
TNS	106.81	Sdiff	00:45:34.924	-0.1	251.6	9.09	TAS	m_e
TNS	106.81	SS	00:52:58.612	8.3	244.6	13.88	TAS	m_e
TNS	106.81	Pdiff	00:33:28.126	-0.0	246.7	4.61	TAS	a_e
TNS	106.81	PP	00:37:50.728	-0.4	243.6	7.06	TAS	m_e
UBBA	107.96	SKSac	00:44:16.932	0.4	243.6	4.75	TAS	m_e
UBBA	107.96	PS	00:47:28.812	-2.4	248.7	9.52	TAS	m_e
UBBA	107.96	Sdiff	00:45:45.120	-0.2	251.6	9.09	TAS	m_e
UBBA	107.96	SS	00:53:16.097	3.8	244.6	13.88	TAS	m_e
UBBA	107.96	Pdiff	00:33:33.876	0.4	246.7	4.61	TAS	a_e
UBBA	107.96	PP	00:37:59.485	0.7	243.6	7.06	TAS	m_e
UBR	106.65	Sdiff	00:45:37.857	1.6	251.6	9.09	TAS	m_e
UBR	106.65	SS	00:52:52.938	-3.9	244.6	13.88	TAS	m_e
UBR	106.65	Pdiff	00:33:27.876	0.1	246.7	4.61	TAS	a_e
UBR	106.65	PP	00:37:51.381	-0.2	243.6	7.06	TAS	m_e
WET	108.94	SKSac	00:44:19.244		243.6	4.75	TAS	m_e
WET	108.94	PS	00:47:37.046		248.7	9.52	TAS	m_e
WET	108.94	Sdiff	00:45:56.400	-0.7	251.6	9.09	TAS	m_e
WET	108.94	SS	00:53:25.916		244.6	13.88	TAS	m_e
WET	108.94	Pdiff	00:33:38.226	-0.0	246.7	4.61	TAS	a_e
WET	108.94	PP	00:38:05.341	0.1	243.6	7.06	TAS	m_e
WLF	105.23	Sdiff	00:45:20.608	-0.0	251.6	9.09	TAS	m_e
WLF	105.23	SS	00:52:39.458	1.9	244.6	13.88	TAS	m_e
WLF	105.23	Pdiff	00:33:21.026	0.1	246.7	4.61	TAS	a_e

Event 90614004 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	03:53:15.10			-21.2500	-174.1500				10.0			32		146.28	154.10	m i ke	EMSC
	90614036																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.95		PKP	04:13:03.048	-0.2	10.5		3.91		TAS					a_e
BALST	153.93		PKP	04:13:26.699		10.5		3.91		TAS					m_e
BFO	152.91		PKP	04:13:17.348	-2.1	10.5		3.91		TAS					a_e
BRG	149.76		PKP	04:13:05.048	-1.9	10.5		3.91		TAS					a_e
BSEG	147.19		PKP	04:12:58.548	1.5	10.5		3.91		TAS					a_e

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BUG	149.85	PKP	04:13:04.748	-0.3	10.5	3.91	TAS	a_e
CLL	149.48	PKP	04:13:04.198	-0.3	10.5	3.91	TAS	a_e
FLT1	148.70	PKP	04:13:02.018	-0.6	10.5	3.91	TAS	m_e
FUR	152.80	PKP	04:13:17.048	0.2	10.5	3.91	TAS	a_e
GEC2	151.76	PKP	04:13:12.425	-0.3	10.5	3.91	TAS	m_e
GOR1	148.04	PKP	04:13:00.548	1.3	10.5	3.91	TAS	a_e
GRA1	151.30	PKP	04:13:11.048	-2.8	10.5	3.91	TAS	a_e
GTTG	149.59	PKP	04:13:05.009	-0.4	10.5	3.91	TAS	m_e
IBBN	148.96	PKP	04:13:02.948	0.4	10.5	3.91	TAS	a_e
KAST	150.04	PKP	04:13:05.548	-1.8	10.5	3.91	TAS	a_e
MANZ	150.90	PKP	04:13:07.898	-1.3	10.5	3.91	TAS	a_e
MOX	150.31	PKP	04:13:06.398	-1.1	10.5	3.91	TAS	m_e
NEUB	149.76	PKP	04:13:05.199	-2.4	10.5	3.91	TAS	m_e
NRDL	148.64	PKP	04:13:02.128	0.4	10.5	3.91	TAS	m_e
PLONS	154.10	PKP	04:13:27.862		10.5	3.91	TAS	m_e
RETH	148.45	PKP	04:13:01.648	0.5	10.5	3.91	TAS	a_e
RGN	146.28	PKP	04:12:55.398	3.5	10.5	3.91	TAS	a_e
RJOB	152.99	PKP	04:13:18.148	4.3	10.5	3.91	TAS	a_e
ROTZ	151.10	PKP	04:13:08.298	-0.6	10.5	3.91	TAS	a_e
RUE	148.23	PKP	04:13:00.748	0.6	10.5	3.91	TAS	a_e
SULZ	153.72	PKP	04:13:26.001		10.5	3.91	TAS	m_e
TANN	150.43	PKP	04:13:06.948	-2.0	10.5	3.91	TAS	a_e
TNS	151.01	PKP	04:13:09.918	-2.4	10.5	3.91	TAS	m_e
UBBA	150.31	PKP	04:13:06.248	-1.4	10.5	3.91	TAS	a_e
UBR	153.41	PKP	04:13:17.847	4.0	10.5	3.91	TAS	m_e
WET	151.61	PKP	04:13:12.148	-0.7	10.5	3.91	TAS	a_e
WLF	151.65	PKP	04:13:11.659	-0.5	10.5	3.91	TAS	m_e

Event 90614005 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	04:28:30.50			-18.8400	168.6600				100.0			27		142.19	146.53	m i ke	EMSC
90614037																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	142.56		PKPbc	04:47:48.407	0.2	38.5		2.95		TAS					m_e
BFO	146.53		PKPbc	04:48:00.384		38.5		2.95		TAS					m_e
BRG	142.27		PKPbc	04:47:46.850	-0.1	38.5		2.95		TAS					m_e
BUG	144.30		PKPbc	04:47:53.119	0.4	38.5		2.95		TAS					m_e
CLL	142.33		PKPbc	04:47:47.358	-0.0	38.5		2.95		TAS					m_e
FLT1	142.19		PKPbc	04:47:46.838	-0.3	38.5		2.95		TAS					m_e
FUR	145.46		PKPbc	04:47:57.482	0.3	38.5		2.95		TAS					m_e
GEC2	143.88		PKPbc	04:47:52.412	0.1	38.5		2.95		TAS					m_e
GRA1	144.30		PKPbc	04:47:53.664	0.5	38.5		2.95		TAS					m_e

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GTTG	143.29	PKPbc	04:47:50.729	-0.2	38.5	2.95	TAS	m_e
IBBN	143.41	PKPbc	04:47:50.175	-0.2	38.5	2.95	TAS	m_e
KAST	144.12	PKPbc	04:47:52.802	0.2	38.5	2.95	TAS	m_e
MANZ	143.71	PKPbc	04:47:51.573	-0.3	38.5	2.95	TAS	m_e
MOX	143.39	PKPbc	04:47:50.136	-0.1	38.5	2.95	TAS	m_e
NEUB	142.90	PKPbc	04:47:49.369	-0.9	38.5	2.95	TAS	m_e
NRDL	142.46	PKPbc	04:47:48.042	-0.0	38.5	2.95	TAS	m_e
RJOB	145.11	PKPbc	04:47:56.244	0.1	38.5	2.95	TAS	m_e
ROTZ	143.84	PKPbc	04:47:52.001	-0.6	38.5	2.95	TAS	m_e
STU	145.84	PKPbc	04:47:58.518		38.5	2.95	TAS	m_e
TANN	143.23	PKPbc	04:47:50.048	-0.7	38.5	2.95	TAS	m_e
TNS	144.93	PKPbc	04:47:55.649	0.7	38.5	2.95	TAS	m_e
UBR	146.33	PKPbc	04:47:59.692		38.5	2.95	TAS	m_e
WET	144.03	PKPbc	04:47:52.770	0.0	38.5	2.95	TAS	m_e
WLF	146.19	PKPbc	04:47:59.908		38.5	2.95	TAS	m_e

Event 90614007 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	07:54:25.64			-17.1080	-177.8570				503.7			27		142.70	148.81	m i ke	BGR
90614013																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	144.41		PKPbc	08:13:02.442	0.1	15.1		2.81		TAS					m_e
BFO	148.45		PKPbc	08:13:13.253		15.1		2.81		TAS					m_e
BRG	145.01		PKPbc	08:13:04.380	0.6	15.1		2.81		TAS					m_e
BSEG	142.70		PKPbc	08:12:56.731	-0.2	15.1		2.81		TAS					m_e
BUG	145.50		PKPbc	08:13:06.453	0.4	15.1		2.81		TAS					m_e
CLL	144.80		PKPbc	08:13:03.805	0.4	15.1		2.81		TAS					m_e
CLL	144.80		pPKPbc	08:15:01.254						T__					m_e
FLT1	144.13		PKPbc	08:13:01.381	-0.1	15.1		2.81		TAS					m_e
FUR	148.14		PKPbc	08:13:13.105	-0.5	15.1		2.81		TAS					m_e
GEC2	146.97		PKPbc	08:13:09.834	-0.9	15.1		2.81		TAS					m_e
GRA1	146.68		PKPbc	08:13:09.553	0.4	15.1		2.81		TAS					m_e
GTTG	145.08		PKPbc	08:13:04.901	0.1	15.1		2.81		TAS					m_e
IBBN	144.60		PKPbc	08:13:03.202	0.4	15.1		2.81		TAS					m_e
KAST	145.62		PKPbc	08:13:06.223	-0.1	15.1		2.81		TAS					m_e
MANZ	146.23		PKPbc	08:13:08.019	0.6	15.1		2.81		TAS					m_e
MOX	145.69		PKPbc	08:13:06.191	0.4	15.1		2.81		TAS					m_e
NEUB	145.13		PKPbc	08:13:04.962	0.1	15.1		2.81		TAS					m_e
NRDL	144.14		PKPbc	08:13:01.806	0.2	15.1		2.81		TAS					m_e
RETH	144.00		PKPbc	08:13:01.269	-0.1	15.1		2.81		TAS					m_e
RJOB	148.22		PKPbc	08:13:12.502		15.1		2.81		TAS					m_e
ROTZ	146.42		PKPbc	08:13:08.642	0.1	15.1		2.81		TAS					m_e

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RUE	143.53	PKPbc	08:12:59.849	0.0	15.1	2.81	TAS	m_e
TANN	145.75	PKPbc	08:13:06.732	0.4	15.1	2.81	TAS	m_e
TNS	146.58	PKPbc	08:13:08.688	-0.0	15.1	2.81	TAS	m_e
UBBA	145.78	PKPbc	08:13:06.348	-0.1	15.1	2.81	TAS	m_e
UBR	148.81	PKPbc	08:13:14.489		15.1	2.81	TAS	m_e
WET	146.88	PKPbc	08:13:09.623	0.1	15.1	2.81	TAS	m_e
WLF	147.36	PKPbc	08:13:11.600	-0.8	15.1	2.81	TAS	m_e

Event 90614008 Austria

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	13:57:27.02	0.34	2.13	46.3570	13.0420	11.1	5.6	5	10.0			25	206	1.05	5.68	m i ke	BGR
90614014																	

Magnitude	Err	Nsta	Author	OrigID
ML	4.0		BGR	90614014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ARSA	1.92		Sg	13:58:26.093	-2.0					T__				m_e	
ARSA	1.92		Pn	13:57:58.690	-0.2					T__				m_e ML	3.5
BALST	3.80		Pn	13:58:24.475	0.3					T__				m_e ML	4.2
BFO	3.76		Sn	13:59:08.079	3.5					T__				m_e	
BFO	3.76		Pn	13:58:23.851	0.2					T__				m_e ML	4.1
DAVA	2.36		Sg	13:58:38.998	-3.0					T__				m_e	
DAVA	2.36		Pn	13:58:05.937	1.2					T__				m_e ML	3.9
FUR	2.17		Sg	13:58:33.449	-2.5					T__				m_e	
FUR	2.17		Pn	13:58:02.722	0.5					T__				m_e ML	4.3
GEC2	2.53		Pn	13:58:06.930	-0.1					T__				m_e ML	3.9
GRA1	3.55		Sn	13:59:04.822	5.1					T__				m_e	
GRA1	3.55		Pn	13:58:20.768	-0.1					T__				m_e ML	4.7
MANZ	3.69		Sn	13:59:05.519	2.7					T__				m_e	
MANZ	3.69		Pn	13:58:21.933	-0.7					T__				m_e ML	4.1
MOA	1.71		Sg	13:58:20.563	-0.8					T__				m_e	
MOA	1.71		Pn	13:57:56.447	0.5					T__				m_e ML	3.7
MOX	4.39		Sn	13:59:20.874	1.5					T__				m_e	
MOX	4.39		Pn	13:58:31.531	-0.6					T__				m_e ML	4.3
NORI	2.88		Sn	13:58:47.141	3.3					T__				m_e	
NORI	2.88		Pn	13:58:11.756	0.1					T__				m_e ML	4.4
OBER	2.16		Sg	13:58:32.484	-3.0					T__				m_e	
OBER	2.16		Pn	13:58:03.135	1.1					T__				m_e ML	3.6
OBKA	1.05		Sg	13:58:00.147	-0.4					T__				m_e	
OBKA	1.05		Pg	13:57:44.034	-2.9					T__				m_e ML	3.9
PART	1.75		Sg	13:58:21.318	-1.1					T__				m_e ML	3.7
PLONS	2.61		Pn	13:58:09.404	1.3					T__				m_e ML	3.5
RJOB	1.39		Sg	13:58:10.383	-0.8					T__				m_e	
RJOB	1.39		Pn	13:57:49.215	-2.5					T__				m_e ML	3.5

ROTZ	3.46	Sn	13:58:59.703	2.2	T__	m_e		
ROTZ	3.46	Pn	13:58:18.565	-1.0	T__	m_e ML	4.1	
SLE	3.41	Pn	13:58:19.080	0.1	T__	m_e ML	4.6	
STU	3.55	Pn	13:58:21.298	0.5	T__	m_e ML	4.5	
TNS	4.94	Sn	13:59:36.461	4.5	T__	m_e		
TNS	4.94	Pn	13:58:40.149	0.7	T__	m_e ML	4.3	
UBR	2.40	Sg	13:58:39.929	-3.4	T__	m_e		
UBR	2.40	Pn	13:58:06.226	0.9	T__	m_e ML	4.2	
WET	2.79	Pn	13:58:10.372	-0.2	T__	m_e ML	3.9	
WILA	3.03	Pn	13:58:14.285	0.6	T__	m_e ML	4.2	
WLF	5.68	Pn	13:58:51.632	2.1	T__	m_e ML	4.3	
WTTA	1.32	Sg	13:58:04.335	-4.8	T__	m_e		
WTTA	1.32	Pn	13:57:47.923	-2.9	T__	m_e ML	3.7	

Event 90614010 Near coast of Chiapas, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	16:26:32.70			14.5200	-92.9300				50.0				10	85.01	89.78	m i ke	EMSC
OrigID 90614042																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.0		BGR	90614016
Ms	4.7		BGR	90614016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	86.80		P	16:39:12.416	-0.1	290.0		4.87		TAS		8.6	1.07	m_e mb	4.8
BFO	86.60		P	16:39:10.763		290.0		4.87		TAS		7.9	1.11	m_e mb	4.8
BSEG	86.00		P	16:39:08.433	0.1	290.0		4.87		TAS		12.3	0.78	m_e mb	5.1
BUG	85.01		P	16:39:04.552		290.0		4.87		TAS		23.4	1.35	m_e mb	5.2
CLL	88.45		P	16:39:21.203		290.0		4.87		TAS		2.8	0.64	m_e mb	4.7
FLT1	87.06		P	16:39:13.563		290.0		4.87		TAS		7.5	0.97	m_e mb	4.8
GEC2	89.78		P	16:39:26.932		290.0		4.87		TAS				m_e	
GRA1	87.96		P	16:39:16.868		290.0		4.87		TAS		13.9	1.14	m_e mb	5.2
GRA1	87.96		L	17:20:38.325						T__		312.7	18.30	a_e Ms	4.8
KAST	85.77		P	16:39:07.604		290.0		4.87		TAS		11.6	1.17	m_e mb	4.9
MOX	87.86		L	17:19:00.234						T__		244.3	20.50	a_e Ms	4.6
RETH	85.85		P	16:39:07.026	0.5	290.0		4.87		TAS		13.9	1.03	m_e mb	5.0
TNS	86.09		P	16:39:07.485		290.0		4.87		TAS		15.8	0.92	m_e mb	5.1
WET	89.16		P	16:39:23.827		290.0		4.87		TAS		8.5	1.25	m_e mb	4.8

Event 90614011 Near coast of Chiapas, Mexico

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

2019/06/14 18:13:04.00 14.4400 -92.9800 47.0 6 85.86 87.16 m i ke EMSC
90614043

Magnitude Err Nsta Author OrigID
mb 4.8 BGR 90614017

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	86.69		P	18:25:42.396		290.0		4.51		TAS		4.5	0.95	m_e	mb 4.6
BSEG	86.10		P	18:25:39.558	0.1	290.0		4.51		TAS		7.4	0.92	m_e	mb 4.8
FLT1	87.16		P	18:25:44.605		290.0		4.51		TAS		9.1	1.13	m_e	mb 4.8
KAST	85.86		P	18:25:39.033		290.0		4.51		TAS		10.7	1.35	m_e	mb 4.8
RETH	85.94		P	18:25:39.456	-0.6	290.0		4.51		TAS		13.2	1.23	m_e	mb 4.9
TNS	86.18		P	18:25:39.435		290.0		4.51		TAS		22.4	1.47	m_e	mb 5.1

Event 90614012 Banda Sea

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
OrigID
2019/06/14 20:10:52.10 -5.9300 130.7140 104.0 29 110.90 116.40 m i ke NEIC
90614051

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	112.82		PKiKP	20:29:15.758	0.3	73.1		1.93		TAS				m_e	
BFO	115.59		PKiKP	20:29:20.382		73.1		1.93		TAS				m_e	
BRG	111.30		PKiKP	20:29:12.766	-0.2	73.1		1.93		TAS				m_e	
BSEG	112.36		PKiKP	20:29:15.146	-0.1	73.1		1.93		TAS				m_e	
BUG	115.03		PKiKP	20:29:20.110	0.7	73.1		1.93		TAS				m_e	
CLL	111.73		PKiKP	20:29:13.514	0.1	73.1		1.93		TAS				m_e	
FLT1	112.42		PKiKP	20:29:14.942	-0.0	73.1		1.93		TAS				m_e	
FUR	113.80		PKiKP	20:29:17.594	-0.3	73.1		1.93		TAS				m_e	
GEC2	112.06		PKiKP	20:29:14.262	0.2	73.1		1.93		TAS				m_e	
GOR1	112.15		PKiKP	20:29:14.874	0.4	73.1		1.93		TAS				m_e	
GRA1	113.33		PKiKP	20:29:16.642	0.0	73.1		1.93		TAS				m_e	
GTTG	113.44		PKiKP	20:29:17.118	-0.2	73.1		1.93		TAS				m_e	
IBBN	114.41		PKiKP	20:29:18.886	-0.0	73.1		1.93		TAS				m_e	
KAST	114.47		PKiKP	20:29:19.294	-0.0	73.1		1.93		TAS				m_e	
MANZ	112.69		PKiKP	20:29:15.622	-0.1	73.1		1.93		TAS				m_e	
MOX	112.78		PKiKP	20:29:15.554	-0.4	73.1		1.93		TAS				m_e	
NEUB	112.50		PKiKP	20:29:15.554	-0.2	73.1		1.93		TAS				m_e	
NRDL	113.01		PKiKP	20:29:16.642	-0.0	73.1		1.93		TAS				m_e	
RETH	113.34		PKiKP	20:29:16.900	0.1	73.1		1.93		TAS				m_e	
RJOB	112.96		PKiKP	20:29:15.418	-0.2	73.1		1.93		TAS				m_e	
ROTZ	112.70		PKiKP	20:29:15.424	0.2	73.1		1.93		TAS				m_e	
RUE	110.90		PKiKP	20:29:12.358	-0.1	73.1		1.93		TAS				m_e	
STU	114.90		PKiKP	20:29:19.702	-0.6	73.1		1.93		TAS				m_e	

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TANN	112.34	PKiKP	20:29:15.010	0.1	73.1	1.93	TAS	m_e
TNS	114.82	PKiKP	20:29:19.634	-0.1	73.1	1.93	TAS	m_e
UBBA	113.68	PKiKP	20:29:17.171	0.2	73.1	1.93	TAS	m_e
UBR	114.70	PKiKP	20:29:19.158	0.0	73.1	1.93	TAS	m_e
WET	112.48	PKiKP	20:29:15.350	0.3	73.1	1.93	TAS	m_e
WLF	116.40	PKiKP	20:29:23.443		73.1	1.93	TAS	m_e

Event 90614013 Northern Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/14	20:44:54.00			15.3900	-46.5600				10.0			19		55.48	59.67	m i ke	EMSC
90614045																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90614019
Ms	4.7		BGR	90614019

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	58.03		P	20:54:47.252	0.2	254.9		6.61		TAS		53.1	1.88	m_e mb	5.2
BFO	55.48		P	20:54:29.153		254.9		6.61		TAS		7.6	0.99	m_e mb	4.7
BRG	59.67		P	20:54:58.113	-0.2	254.9		6.61		TAS		43.5	2.40	m_e mb	5.1
BSEG	58.38		P	20:54:49.243	0.3	254.9		6.61		TAS		26.6	1.54	m_e mb	5.0
CLL	59.20		P	20:54:53.999	-0.9	254.9		6.61		TAS		7.0	0.95	m_e mb	4.7
FLT1	58.42		P	20:54:49.754	0.1	254.9		6.61		TAS		18.7	1.38	m_e mb	4.9
FUR	57.34		P	20:54:42.215		254.9		6.61		TAS		19.1	1.00	m_e mb	5.1
GEC2	59.06		P	20:54:53.068		254.9		6.61		TAS		31.0	1.99	m_e mb	5.0
GRA1	57.69		P	20:54:44.503		254.9		6.61		TAS		21.3	1.64	m_e mb	4.9
GRA1	57.69		L	21:19:56.020						T__		405.1	20.30	a_e Ms	4.5
KAST	56.41		P	20:54:35.621	0.1	254.9		6.61		TAS		20.3	1.61	m_e mb	4.9
MANZ	58.32		P	20:54:48.822		254.9		6.61		TAS		4.4	1.84	m_e mb	4.2
MOX	58.18		P	20:54:47.943	-0.2	254.9		6.61		TAS		39.4	2.22	m_e mb	5.0
MOX	58.18		L	21:19:28.173						T__		664.5	18.30	a_e Ms	4.8
NRDL	57.81		P	20:54:45.643	-0.6	254.9		6.61		TAS		11.7	1.16	m_e mb	4.8
RETH	57.45		P	20:54:42.401	0.4	254.9		6.61		TAS		15.3	1.38	m_e mb	4.8
RJOB	58.23		P	20:54:47.252		254.9		6.61		TAS		5.6	0.77	m_e mb	4.7
ROTZ	58.33		P	20:54:47.717		254.9		6.61		TAS		9.0	2.08	m_e mb	4.4
TANN	58.64		P	20:54:50.742	0.6	254.9		6.61		TAS		32.4	1.86	m_e mb	5.0
TNS	56.12		P	20:54:33.900		254.9		6.61		TAS		7.8	1.04	m_e mb	4.7
UBBA	57.24		P	20:54:41.696	0.5	254.9		6.61		TAS		35.1	2.08	m_e mb	5.0
UBR	56.46		P	20:54:36.482		254.9		6.61		TAS		83.2	2.28	m_e mb	5.4
WET	58.60		P	20:54:50.276		254.9		6.61		TAS		4.8	1.15	m_e mb	4.4

Event 90615003 Off east coast of Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/15	04:47:50.51			39.5240	143.4970				42.2				6	79.73	83.91	m i ke	BGR
OrigID 90615009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90615009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	83.91		P	05:00:13.852		38.3		4.43		TAS		8.8	1.17	m_e	mb 4.9
BRG	79.73		P	04:59:51.670		38.3		4.43		TAS		5.1	1.21	m_e	mb 4.3
GRA1	81.72		P	05:00:03.087		38.3		4.43		TAS		12.9	1.29	m_e	mb 4.9
GRA1	81.72		pP	05:00:15.282						T__				m_e	
RJOB	82.69		P	05:00:08.163		38.3		4.43		TAS		3.4	0.76	m_e	mb 4.7
ROTZ	81.28		P	05:00:01.166		38.3		4.43		TAS		4.4	1.91	m_e	mb 4.2
WET	81.53		P	05:00:01.407		38.3		4.43		TAS		3.9	1.15	m_e	mb 4.4

Event 90615009 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/15	18:33:16.63			-24.3310	179.3440				510.8				26	149.31	155.18	m i ke	BGR
OrigID 90615015																	

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	151.20		PKPbc	18:52:11.578	0.0	24.4		2.15		TAS				m_e	
BRG	151.20		PKPab	18:52:23.377		22.4		4.53		TAS				m_e	
BSEG	149.31		PKPbc	18:52:07.442	0.1	24.4		2.15		TAS				m_e	
BUG	152.25		PKPab	18:52:28.438	-0.1	22.4		4.53		TAS				m_e	
CLL	151.09		PKPbc	18:52:11.332	0.5	24.4		2.15		TAS				m_e	
CLL	151.09		PKPab	18:52:23.146	-0.1	22.4		4.53		TAS				m_e	
CLL	151.09		pPKPbc	18:54:11.450						T__				m_e	
FLT1	150.61		PKPbc	18:52:10.100	-0.2	24.4		2.15		TAS				m_e	
FUR	154.41		PKPab	18:52:37.864		22.4		4.53		TAS				m_e	
GEC2	153.05		PKPbc	18:52:15.494		24.4		2.15		TAS				m_e	
GOR1	149.98		PKPbc	18:52:08.991	-0.3	24.4		2.15		TAS				m_e	
GRA1	153.03		PKPbc	18:52:15.851		24.4		2.15		TAS				m_e	
GRA1	153.03		PKPab	18:52:31.977		22.4		4.53		TAS				m_e	
GTTG	151.63		PKPbc	18:52:12.581	-0.1	24.4		2.15		TAS				m_e	
GTTG	151.63		PKPab	18:52:25.283	0.1	22.4		4.53		TAS				m_e	
IBBN	151.34		PKPbc	18:52:12.643	0.2	24.4		2.15		TAS				m_e	
IBBN	151.34		PKPab	18:52:23.963	-0.1	22.4		4.53		TAS				m_e	
KAST	152.28		PKPbc	18:52:13.892	-0.1	24.4		2.15		TAS				m_e	
MANZ	152.53		PKPbc	18:52:14.220	0.0	24.4		2.15		TAS				m_e	
MANZ	152.53		PKPab	18:52:29.307		22.4		4.53		TAS				m_e	

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MOX	152.06	PKPbc	18:52:13.529	-0.2	24.4	2.15	TAS	m_e
MOX	152.06	PKPab	18:52:26.882		22.4	4.53	TAS	m_e
NEUB	151.52	PKPbc	18:52:12.695	0.1	24.4	2.15	TAS	m_e
NRDL	150.71	PKPbc	18:52:10.359	0.0	24.4	2.15	TAS	m_e
RETH	150.63	PKPbc	18:52:10.217	0.0	24.4	2.15	TAS	m_e
RJOB	154.31	PKPab	18:52:37.872		22.4	4.53	TAS	m_e
ROTZ	152.69	PKPab	18:52:30.430		22.4	4.53	TAS	m_e
RUE	149.82	PKPbc	18:52:08.713	-0.2	24.4	2.15	TAS	m_e
TANN	152.04	PKPbc	18:52:13.551	-0.5	24.4	2.15	TAS	m_e
TANN	152.04	PKPab	18:52:27.270		22.4	4.53	TAS	m_e
TNS	153.20	PKPbc	18:52:16.217		24.4	2.15	TAS	m_e
UBBA	152.30	PKPbc	18:52:13.488	0.2	24.4	2.15	TAS	m_e
UBR	155.18	PKPbc	18:52:19.798		24.4	2.15	TAS	m_e
WET	153.05	PKPab	18:52:32.171		22.4	4.53	TAS	m_e
WLF	154.16	PKPbc	18:52:18.290		24.4	2.15	TAS	m_e

Event 90615013 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/15	21:56:14.90			-21.3030	-174.4300				33.0			34		147.22	153.43	m i ke	BGR
90615019																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.98		PKPbc	22:15:59.231	0.1	11.0		2.44		TAS					m_e
BFO	152.94		PKPdf	22:16:01.179		16.2		1.38		TAS					m_e
BFO	152.94		PKPbc	22:16:08.535	-0.6	11.0		2.44		TAS					m_e
BRG	149.76		PKPdf	22:15:57.065	-0.3	16.2		1.38		TAS					m_e
BRG	149.76		PKPbc	22:16:01.194	0.1	11.0		2.44		TAS					m_e
BSEG	147.22		PKPbc	22:15:54.576	0.1	11.0		2.44		TAS					m_e
BUG	149.89		PKPbc	22:16:01.506	0.1	11.0		2.44		TAS					m_e
CLL	149.49		PKPdf	22:15:56.388	-0.1	16.2		1.38		TAS					m_e
CLL	149.49		PKPbc	22:16:00.617	0.2	11.0		2.44		TAS					m_e
DPC	149.77		PKPdf	22:15:56.740		16.2		1.38		TAS					m_e
DPC	149.77		PKPbc	22:16:02.119	0.4	11.0		2.44		TAS					m_e
FLT1	148.72		PKPbc	22:15:58.362	-0.2	11.0		2.44		TAS					m_e
FUR	152.81		PKPbc	22:16:08.498		11.0		2.44		TAS					m_e
GEC2	151.76		PKPdf	22:15:59.956		16.2		1.38		TAS					m_e
GEC2	151.76		PKPbc	22:16:06.173	-0.1	11.0		2.44		TAS					m_e
GOR1	148.06		PKPbc	22:15:57.083	-0.0	11.0		2.44		TAS					m_e
GRA1	151.32		PKPbc	22:16:05.056	-0.2	11.0		2.44		TAS					m_e
GTTG	149.62		PKPbc	22:16:01.100	-0.1	11.0		2.44		TAS					m_e
IBBN	149.01		PKPbc	22:15:59.524	0.3	11.0		2.44		TAS					m_e
KAST	150.07		PKPdf	22:15:57.905	-0.4	16.2		1.38		TAS					m_e
KAST	150.07		PKPbc	22:16:01.939	-0.0	11.0		2.44		TAS					m_e

KSP	149.34	PKPdf	22:15:56.304	0.5	16.2	1.38	TAS	m_e
KSP	149.34	PKPbc	22:16:00.662	0.2	11.0	2.44	TAS	m_e
MANZ	150.91	PKPdf	22:15:58.137		16.2	1.38	TAS	m_e
MANZ	150.91	PKPbc	22:16:04.369	0.4	11.0	2.44	TAS	m_e
MORC	150.04	PKPdf	22:15:56.789		16.2	1.38	TAS	m_e
MORC	150.04	PKPbc	22:16:02.437	0.1	11.0	2.44	TAS	m_e
MOX	150.33	PKPdf	22:15:57.306		16.2	1.38	TAS	m_e
MOX	150.33	PKPbc	22:16:02.763	0.6	11.0	2.44	TAS	m_e
NEUB	149.77	PKPbc	22:16:01.219	0.1	11.0	2.44	TAS	m_e
NRDL	148.67	PKPbc	22:15:58.488	-0.2	11.0	2.44	TAS	m_e
OJC	149.03	PKPdf	22:15:55.412		16.2	1.38	TAS	m_e
OJC	149.03	PKPbc	22:15:59.440	-0.3	11.0	2.44	TAS	m_e
OKC	149.83	PKPbc	22:16:01.664	0.1	11.0	2.44	TAS	m_e
RETH	148.49	PKPbc	22:15:58.182	-0.0	11.0	2.44	TAS	m_e
RJOB	152.99	PKPdf	22:16:01.311		16.2	1.38	TAS	m_e
RJOB	152.99	PKPbc	22:16:09.575		11.0	2.44	TAS	m_e
ROTZ	151.11	PKPdf	22:15:58.597		16.2	1.38	TAS	m_e
ROTZ	151.11	PKPbc	22:16:04.867	0.1	11.0	2.44	TAS	m_e
STU	152.44	PKPbc	22:16:07.518	0.5	11.0	2.44	TAS	m_e
TANN	150.44	PKPdf	22:15:57.662		16.2	1.38	TAS	m_e
TANN	150.44	PKPbc	22:16:02.937	0.0	11.0	2.44	TAS	m_e
TNS	151.05	PKPdf	22:15:59.263		16.2	1.38	TAS	m_e
TNS	151.05	PKPbc	22:16:04.452	0.0	11.0	2.44	TAS	m_e
UBBA	150.34	PKPbc	22:16:02.691	0.1	11.0	2.44	TAS	m_e
UBR	153.43	PKPbc	22:16:09.491		11.0	2.44	TAS	m_e
WERD	150.43	PKPdf	22:15:57.879		16.2	1.38	TAS	m_e
WERD	150.43	PKPbc	22:16:02.932	-0.9	11.0	2.44	TAS	m_e
WET	151.61	PKPdf	22:15:59.618		16.2	1.38	TAS	m_e
WET	151.61	PKPbc	22:16:05.832	-0.5	11.0	2.44	TAS	m_e
WLF	151.69	PKPdf	22:15:59.744		16.2	1.38	TAS	m_e
WLF	151.69	PKPbc	22:16:06.355	0.0	11.0	2.44	TAS	m_e

Event 90615014 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/15	22:55:01.57			-30.0420	-177.4690				33.0			20		154.30	161.44	m i ke	BGR
90615020																	

Magnitude	Err	Nsta	Author	OrigID
Ms	7.5		BGR	90615020

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	157.13		PKPdf	23:14:53.382	-0.1	26.4		1.07		TAS					m_e
ASSE	157.13		PP	23:19:03.726	0.1	21.7		5.43		TAS					a_e
BFO	161.20		PKPdf	23:14:57.554	-0.3	26.4		1.07		TAS					m_e
BFO	161.20		PKPab	23:15:47.646						T__					m_e

BFO	161.20	PP	23:19:25.776	-0.1	21.7	5.43	TAS	a_e		
BRG	157.50	PKPdf	23:14:53.681	-0.1	26.4	1.07	TAS	m_e		
BRG	157.50	PKPab	23:15:31.409	0.8			T__	m_e		
BRG	157.50	PP	23:19:05.426	-0.3	21.7	5.43	TAS	a_e		
BSEG	155.46	PKPdf	23:14:51.477	-0.2	26.4	1.07	TAS	m_e		
BSEG	155.46	PKPab	23:15:23.096	-0.2			T__	m_e		
BSEG	155.46	PP	23:18:55.176	0.2	21.7	5.43	TAS	a_e		
BUG	158.33	PKPdf	23:14:54.878	0.1	26.4	1.07	TAS	m_e		
BUG	158.33	PP	23:19:10.926	-0.2	21.7	5.43	TAS	a_e		
CLL	157.37	PKPdf	23:14:53.445	0.1	26.4	1.07	TAS	m_e		
CLL	157.37	PKPab	23:15:30.852	0.0			T__	m_e		
CLL	157.37	PP	23:19:04.826	-0.0	21.7	5.43	TAS	a_e		
FLT1	156.82	PKPdf	23:14:52.700	-0.1	26.4	1.07	TAS	m_e		
FLT1	156.82	PKPab	23:15:28.177	-0.5			T__	m_e		
FLT1	156.82	PP	23:19:01.526	-0.4	21.7	5.43	TAS	a_e		
FUR	160.70	PKPdf	23:14:56.708	-0.1	26.4	1.07	TAS	m_e		
FUR	160.70	PKPab	23:15:45.736				T__	m_e		
FUR	160.70	PP	23:19:23.176	0.2	21.7	5.43	TAS	a_e		
GEC2	159.38	PKPdf	23:14:55.847	-0.2	26.4	1.07	TAS	m_e		
GEC2	159.38	PKPab	23:15:40.002				T__	m_e		
GEC2	159.38	PP	23:19:15.926	-0.2	21.7	5.43	TAS	a_e		
GOR1	156.18	PKPdf	23:14:52.659	0.1	26.4	1.07	TAS	m_e		
GRA1	159.30	PKPdf	23:14:55.699	0.3	26.4	1.07	TAS	m_e		
GRA1	159.30	PKPab	23:15:39.501				T__	m_e		
GRA1	159.30	PP	23:19:15.376	0.1	21.7	5.43	TAS	a_e		
GRA1	159.30	L	00:39:14.305				T__	a_e	Ms	7.5
GTTG	157.82	PKPdf	23:14:54.000	-0.0	26.4	1.07	TAS	m_e	68866.3	21.80
GTTG	157.82	PKPab	23:15:33.399	0.2			T__	m_e		
GTTG	157.82	PP	23:19:07.726	0.2	21.7	5.43	TAS	a_e		
HLG	155.56	PP	23:18:56.276	-0.0	21.7	5.43	TAS	a_e		
IBBN	157.42	PKPdf	23:14:53.933	0.0	26.4	1.07	TAS	m_e		
IBBN	157.42	PKPab	23:15:31.409	0.4			T__	m_e		
IBBN	157.42	PP	23:19:05.726	-0.4	21.7	5.43	TAS	a_e		
KAST	158.41	PKPdf	23:14:54.964	0.1	26.4	1.07	TAS	m_e		
KAST	158.41	PP	23:19:11.226	0.2	21.7	5.43	TAS	a_e		
MANZ	158.81	PKPdf	23:14:55.069	0.3	26.4	1.07	TAS	m_e		
MANZ	158.81	PKPab	23:15:38.175	0.4			T__	m_e		
MANZ	158.81	PP	23:19:12.626	-0.0	21.7	5.43	TAS	m_e		
MOX	158.32	PKPdf	23:14:54.437	0.1	26.4	1.07	TAS	m_e		
MOX	158.32	PKPab	23:15:35.230	-0.2			T__	m_e		
MOX	158.32	PP	23:19:10.176	0.2	21.7	5.43	TAS	a_e		
MOX	158.32	L	00:49:28.972				T__	a_e	Ms	7.5
NEUB	157.77	PKPdf	23:14:54.012	-0.0	26.4	1.07	TAS	m_e		
NEUB	157.77	PKPab	23:15:33.001	0.0			T__	m_e		
NEUB	157.77	PP	23:19:06.976	-0.0	21.7	5.43	TAS	a_e		
NRDL	156.88	PKPdf	23:14:53.292	-0.1	26.4	1.07	TAS	m_e		
NRDL	156.88	PKPab	23:15:29.499	0.2			T__	m_e		
NRDL	156.88	PP	23:19:02.726	0.2	21.7	5.43	TAS	a_e		
RETH	156.77	PKPdf	23:14:52.993	0.3	26.4	1.07	TAS	m_e		

RETH	156.77	PKPab	23:15:28.585							T__						m_e
RGN	154.30	PP	23:18:48.526	0.3	21.7		5.43			TAS						a_e
RJOB	160.64	PKPdf	23:14:56.561		26.4		1.07			TAS						m_e
RJOB	160.64	PKPab	23:15:45.258							T__						m_e
RJOB	160.64	PP	23:19:23.276	0.3	21.7		5.43			TAS						a_e
ROTZ	158.98	PKPdf	23:14:55.091	0.1	26.4		1.07			TAS						m_e
ROTZ	158.98	PP	23:19:13.626	0.0	21.7		5.43			TAS						a_e
RUE	156.10	PKPdf	23:14:52.393	-0.3	26.4		1.07			TAS						m_e
RUE	156.10	PKPab	23:15:25.400	0.5						T__						m_e
RUE	156.10	PP	23:18:57.626	-0.3	21.7		5.43			TAS						a_e
STU	160.62	PKPdf	23:14:57.484	-0.3	26.4		1.07			TAS						m_e
STU	160.62	PKPab	23:15:45.019							T__						m_e
STU	160.62	PP	23:19:22.576	0.0	21.7		5.43			TAS						a_e
TANN	158.32	PKPdf	23:14:54.364	0.1	26.4		1.07			TAS						m_e
TANN	158.32	PKPab	23:15:35.707	-0.2						T__						m_e
TANN	158.32	PP	23:19:10.126	0.1	21.7		5.43			TAS						a_e
TNS	159.35	PKPdf	23:14:55.990	-0.1	26.4		1.07			TAS						m_e
TNS	159.35	PKPab	23:15:40.085							T__						m_e
TNS	159.35	PP	23:19:15.976	-0.1	21.7		5.43			TAS						a_e
UBBA	158.50	PKPdf	23:14:54.823	-0.1	26.4		1.07			TAS						m_e
UBBA	158.50	PP	23:19:11.326	0.2	21.7		5.43			TAS						a_e
UBR	161.44	PKPdf	23:14:57.756		26.4		1.07			TAS						m_e
UBR	161.44	PKPab	23:15:49.238							T__						m_e
UBR	161.44	PP	23:19:26.876	-0.1	21.7		5.43			TAS						a_e
WET	159.36	PKPdf	23:14:55.636	0.4	26.4		1.07			TAS						m_e
WET	159.36	PKPab	23:15:39.465							T__						m_e
WET	159.36	PP	23:19:15.726	-0.1	21.7		5.43			TAS						a_e
WLF	160.21	PKPdf	23:14:57.367	0.1	26.4		1.07			TAS						m_e
WLF	160.21	PKPab	23:15:43.985							T__						m_e
WLF	160.21	PP	23:19:21.426	-0.1	21.7		5.43			TAS						a_e

Event 90616003 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	03:02:34.40			-30.8100	-177.9700				10.0			6		156.82	162.32	m i ke	EMSC
90616035																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BERGE	162.32		PKPdf	03:22:34.884		33.2		1.18		TAS					m_e
BFO	161.85		PKPab	03:23:19.327		13.0		4.19		TAS					m_e
BUG	159.03		PKPdf	03:22:32.075		33.2		1.18		TAS					m_e
GOR1	156.82		PKPdf	03:22:28.994		33.2		1.18		TAS					m_e
IBBN	158.11		PKPdf	03:22:31.208		33.2		1.18		TAS					m_e
IBBN	158.11		PKPab	03:23:03.928		13.0		4.19		TAS					m_e

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KAST	159.08	PKPdf	03:22:31.826	33.2	1.18	TAS	m_e
MANZ	159.40	PKPdf	03:22:31.876	33.2	1.18	TAS	m_e
RJOB	161.19	PKPab	03:23:20.293	13.0	4.19	TAS	m_e
ROTZ	159.57	PKPab	03:23:11.974	13.0	4.19	TAS	m_e
STU	161.25	PKPdf	03:22:34.477	33.2	1.18	TAS	m_e
TANN	158.91	PKPdf	03:22:31.644	33.2	1.18	TAS	m_e
TANN	158.91	PKPab	03:23:09.126	13.0	4.19	TAS	m_e
WET	159.93	PKPdf	03:22:31.650	33.2	1.18	TAS	m_e
WLF	160.91	PKPab	03:23:16.387	13.0	4.19	TAS	m_e

Event 90616005 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	05:17:17.11			-29.5300	-177.5080				27.0			31		153.80	160.94	m i ke	BGR
90616011																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.5		BGR	90616011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	156.62		PKPdf	05:37:09.467	0.2	21.6		1.06		TAS					m_e
ASSE	156.62		PP	05:41:17.406	0.2	21.4		5.45		TAS					a_e
BFO	160.70		PKPab	05:37:59.587		14.0		4.40		TAS					m_e
BFO	160.70		PP	05:41:38.906	-0.6	21.4		5.45		TAS					a_e
BRG	157.01		PKPdf	05:37:08.853		21.6		1.06		TAS					m_e
BRG	157.01		PP	05:41:18.806	-0.5	21.4		5.45		TAS					a_e
BSEG	154.96		PP	05:41:08.806	0.4	21.4		5.45		TAS					a_e
BUG	157.82		PP	05:41:24.506	-0.1	21.4		5.45		TAS					a_e
CLL	156.87		PKPdf	05:37:10.224	-0.6	21.6		1.06		TAS					m_e
CLL	156.87		PP	05:41:17.906	-0.5	21.4		5.45		TAS					a_e
FLT1	156.32		PKPdf	05:37:07.569	0.7	21.6		1.06		TAS					m_e
FLT1	156.32		PP	05:41:15.356	-0.1	21.4		5.45		TAS					a_e
FUR	160.20		PP	05:41:36.656	0.1	21.4		5.45		TAS					a_e
GEC2	158.89		PKPdf	05:37:10.704		21.6		1.06		TAS					m_e
GEC2	158.89		PP	05:41:29.656	-0.1	21.4		5.45		TAS					a_e
GOR1	155.68		PP	05:41:12.306	0.3	21.4		5.45		TAS					a_e
GRA1	158.80		PP	05:41:29.056	0.2	21.4		5.45		TAS					a_e
GRA1	158.80		L	06:51:43.658						T_		7108.4	21.80	a_e Ms	6.5
GTTG	157.31		PKPab	05:37:44.464		14.0		4.40		TAS					m_e
GTTG	157.31		PP	05:41:21.356	0.3	21.4		5.45		TAS					a_e
HLG	155.05		PP	05:41:09.556	-0.2	21.4		5.45		TAS					a_e
IBBN	156.91		PKPab	05:37:41.439		14.0		4.40		TAS					m_e
IBBN	156.91		PP	05:41:19.156	-0.4	21.4		5.45		TAS					a_e
KAST	157.90		PKPdf	05:37:10.896	-0.3	21.6		1.06		TAS					m_e
KAST	157.90		PP	05:41:24.906	0.3	21.4		5.45		TAS					a_e
MANZ	158.31		PP	05:41:26.356	0.1	21.4		5.45		TAS					a_e

MOX	157.82	PKPdf	05:37:10.865	21.6	1.06	TAS	m_e				
MOX	157.82	PKPab	05:37:46.092	14.0	4.40	TAS	m_e				
MOX	157.82	PP	05:41:23.506	-0.0	21.4	5.45	TAS	a_e			
MOX	157.82	L	06:51:25.234			T__	9074.7	21.90	a_e	Ms	6.6
NEUB	157.27	PP	05:41:20.306	-0.3	21.4	5.45	TAS	a_e			
NRDL	156.38	PKPdf	05:37:08.541	0.6	21.6	1.06	TAS	m_e			
NRDL	156.38	PP	05:41:16.256	0.3	21.4	5.45	TAS	a_e			
RETH	156.27	PKPdf	05:37:07.193	1.2	21.6	1.06	TAS	m_e			
RETH	156.27	PKPab	05:37:40.275	-0.4	14.0	4.40	TAS	m_e			
RETH	156.27	PP	05:41:15.806	0.2	21.4	5.45	TAS	a_e			
RGN	153.80	PP	05:41:01.806	0.1	21.4	5.45	TAS	a_e			
RJOB	160.15	PP	05:41:37.506	0.9	21.4	5.45	TAS	a_e			
ROTZ	158.48	PKPdf	05:37:10.448		21.6	1.06	TAS	m_e			
ROTZ	158.48	PP	05:41:27.406	0.2	21.4	5.45	TAS	a_e			
RUE	155.60	PP	05:41:11.056	-0.4	21.4	5.45	TAS	a_e			
STU	160.11	PP	05:41:35.856	-0.3	21.4	5.45	TAS	a_e			
TANN	157.82	PKPdf	05:37:10.781		21.6	1.06	TAS	m_e			
TANN	157.82	PP	05:41:23.456	-0.1	21.4	5.45	TAS	a_e			
TNS	158.85	PKPdf	05:37:11.452		21.6	1.06	TAS	m_e			
TNS	158.85	PP	05:41:29.606	0.0	21.4	5.45	TAS	a_e			
UBBA	158.00	PP	05:41:24.556	-0.1	21.4	5.45	TAS	m_e			
UBR	160.94	PKPdf	05:37:13.036		21.6	1.06	TAS	m_e			
UBR	160.94	PP	05:41:40.556	-0.0	21.4	5.45	TAS	a_e			
WET	158.87	PKPdf	05:37:10.869		21.6	1.06	TAS	m_e			
WET	158.87	PP	05:41:29.556	0.1	21.4	5.45	TAS	a_e			
WLF	159.70	PKPab	05:37:54.003		14.0	4.40	TAS	m_e			
WLF	159.70	PP	05:41:35.106	0.1	21.4	5.45	TAS	a_e			

Event 90616008 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	12:35:52.60			-15.5500	-174.7500				10.0			11		144.74	148.41	m i ke	EMSC
90616040																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BALST	148.24		PKP	12:55:39.384						T__					m_e
BFO	147.21		PKP	12:55:35.628						T__					m_e
GEC2	146.08		PKP	12:55:33.903						T__					m_e
GRA1	145.60		PKP	12:55:32.645						T__					m_e
MANZ	145.21		PKP	12:55:30.537						T__					m_e
PLONS	148.41		PKP	12:55:41.212						T__					m_e
RJOB	147.30		PKP	12:55:35.796						T__					m_e
ROTZ	145.41		PKP	12:55:30.845						T__					m_e
TANN	144.74		PKP	12:55:30.136						T__					m_e

WET 145.92 PKP 12:55:33.662 T__ m_e
 WLF 145.97 PKP 12:55:32.306 T__ m_e

Event 90616007 Pakistan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	12:39:07.60			34.6100	72.4000				12.0			7		44.70	48.85	m i ke	EMSC
OrigID 90616039																	

Magnitude Err Nsta Author OrigID
 mb 4.6 BGR 90616013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	48.57		P	12:47:49.993		84.9		8.48		TAS		11.0	1.40	m_e mb	4.7
BRG	44.70		P	12:47:18.037	0.5	84.9		8.48		TAS		6.8	1.22	m_e mb	4.5
BUG	48.85		P	12:47:52.890		84.9		8.48		TAS		5.8	0.85	m_e mb	4.6
FLT1	46.33		P	12:47:30.340		84.9		8.48		TAS		5.8	0.67	m_e mb	4.7
GRA1	46.51		P	12:47:34.126		84.9		8.48		TAS		3.3	0.91	m_e mb	4.5
GTTG	47.16		P	12:47:38.969		84.9		8.48		TAS		7.7	0.95	m_e mb	4.8
MOX	46.19		P	12:47:30.099		84.9		8.48		TAS		3.7	1.12	m_e mb	4.3
UBR	47.47		P	12:47:39.843		84.9		8.48		TAS		7.7	0.92	m_e mb	4.8

Event 90616010 Guerrero, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	17:25:27.00			18.8200	-101.6200				92.0			23		86.55	91.54	m i ke	EMSC
OrigID 90616042																	

Magnitude Err Nsta Author OrigID
 mb 4.8 BGR 90616016
 Ms 4.0 BGR 90616016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	88.23		P	17:38:07.710	-0.5	299.2		4.62		TAS		9.9	0.94	m_e mb	5.1
BFO	88.67		P	17:38:09.554	-0.4	299.2		4.62		TAS		2.5	0.87	m_e mb	4.5
BRG	90.62		P	17:38:18.347		299.2		4.62		TAS		4.6	0.82	m_e mb	4.8
BSEG	87.17		P	17:38:02.929	-0.3	299.2		4.62		TAS		14.0	1.09	m_e mb	5.0
CLL	89.89		P	17:38:15.109	0.3	299.2		4.62		TAS		3.8	0.85	m_e mb	4.7
FLT1	88.43		P	17:38:08.656	-0.1	299.2		4.62		TAS		19.3	1.59	m_e mb	5.2
GEC2	91.54		P	17:38:23.100		299.2		4.62		TAS		3.8	0.76	m_e mb	4.8
GRA1	89.71		P	17:38:15.193	-0.6	299.2		4.62		TAS		12.2	1.08	m_e mb	5.0
GRA1	89.71		L	18:20:30.698						T__		50.0	21.00	a_e Ms	3.9
GTTG	88.12		P	17:38:07.713	0.2	299.2		4.62		TAS		10.5	1.00	m_e mb	5.1

IBBN	86.55	P	17:38:00.148	0.2	299.2	4.62	TAS	9.7	0.71	m_e	mb	5.0
KAST	87.42	P	17:38:03.880	-0.4	299.2	4.62	TAS	7.0	0.95	m_e	mb	4.8
MANZ	90.07	P	17:38:16.752		299.2	4.62	TAS	0.8	0.94	m_e	mb	3.9
MOX	89.46	P	17:38:13.515	-0.0	299.2	4.62	TAS	5.2	1.09	m_e	mb	4.7
MOX	89.46	L	18:18:44.657				T__	67.9	21.60	a_e	Ms	4.0
NEUB	89.28	P	17:38:12.867	0.4	299.2	4.62	TAS	6.6	0.74	m_e	mb	5.0
NRDL	87.75	P	17:38:05.849	0.3	299.2	4.62	TAS	10.9	0.94	m_e	mb	5.2
RETH	87.23	P	17:38:03.321	0.2	299.2	4.62	TAS	10.3	1.06	m_e	mb	4.9
ROTZ	90.23	P	17:38:17.396		299.2	4.62	TAS	1.5	1.19	m_e	mb	4.1
TANN	90.05	P	17:38:16.452	-0.1	299.2	4.62	TAS	7.6	1.23	m_e	mb	4.8
TNS	87.88	P	17:38:05.924	-0.1	299.2	4.62	TAS	10.3	0.84	m_e	mb	5.2
UBBA	88.48	P	17:38:09.247	0.4	299.2	4.62	TAS	2.5	0.81	m_e	mb	4.6
UBR	90.03	P	17:38:16.312		299.2	4.62	TAS	7.9	1.36	m_e	mb	4.8
WET	90.92	P	17:38:20.654		299.2	4.62	TAS	4.9	0.86	m_e	mb	4.9
WLF	86.80	P	17:38:01.561	0.1	299.2	4.62	TAS	14.6	1.00	m_e	mb	5.1

Event 90616012 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	20:58:24.30			-31.8500	-177.7900				30.0			30		157.17	163.08	m i ke	EMSC
	90616044																

Magnitude	Err	Nsta	Author	OrigID
Ms	5.6		BGR	90616018

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	158.81		PKPab	21:18:53.737	0.4	24.1		4.46		TAS				a_e		
BFO	162.90		PKPab	21:19:11.337	-0.2	24.1		4.46		TAS				a_e		
BRG	159.10		PKPab	21:18:54.937	-0.3	24.1		4.46		TAS				a_e		
BSEG	157.17		PKPab	21:18:46.587	0.5	24.1		4.46		TAS				a_e		
BUG	160.07		PKPab	21:18:58.787	-0.5	24.1		4.46		TAS				a_e		
CLL	158.99		PKPab	21:18:54.287	-0.1	24.1		4.46		TAS				a_e		
FLT1	158.50		PKPab	21:18:51.737	-0.2	24.1		4.46		TAS				a_e		
FUR	162.31		PKPab	21:19:09.487	0.2	24.1		4.46		TAS				a_e		
GEC2	160.94		PKPab	21:19:03.187	-0.7	24.1		4.46		TAS				a_e		
GOR1	157.87		PKPab	21:18:48.387	-0.7	24.1		4.46		TAS				a_e		
GRA1	160.94		PKPab	21:19:03.637	0.7	24.1		4.46		TAS				a_e		
GRA1	160.94		L	22:39:00.744						T__		807.5	18.30	a_e	Ms	5.6
GTTG	159.51		PKPab	21:18:56.737	0.3	24.1		4.46		TAS				a_e		
HLG	157.31		PKPab	21:18:47.337	0.3	24.1		4.46		TAS				a_e		
IBBN	159.16		PKPab	21:18:55.137	-0.0	24.1		4.46		TAS				m_e		
KAST	160.13		PKPab	21:18:59.237	-0.0	24.1		4.46		TAS				a_e		
MANZ	160.43		PKPab	21:19:01.137	0.3	24.1		4.46		TAS				a_e		
MOX	159.97		PKPab	21:18:58.737	0.1	24.1		4.46		TAS				a_e		
MOX	159.97		L	22:51:37.075						T__		911.9	18.00	a_e	Ms	5.7
NEUB	159.42		PKPab	21:18:56.187	0.0	24.1		4.46		TAS				a_e		

NRDL	158.58	PKPab	21:18:50.987	-1.3	24.1	4.46	TAS	a_e
RETH	158.49	PKPab	21:18:52.187	0.2	24.1	4.46	TAS	a_e
RJOB	162.20	PKPab	21:19:09.287	-0.2	24.1	4.46	TAS	a_e
ROTZ	160.60	PKPab	21:19:02.187	0.5	24.1	4.46	TAS	a_e
RUE	157.73	PKPab	21:18:49.037	0.2	24.1	4.46	TAS	a_e
STU	162.29	PKPab	21:19:08.687	-0.2	24.1	4.46	TAS	a_e
TANN	159.94	PKPab	21:18:58.987	0.3	24.1	4.46	TAS	m_e
TNS	161.06	PKPab	21:19:03.387	-0.0	24.1	4.46	TAS	a_e
UBBA	160.19	PKPab	21:18:59.537	0.1	24.1	4.46	TAS	a_e
UBR	163.08	PKPab	21:19:12.587	0.0	24.1	4.46	TAS	a_e
WET	160.95	PKPab	21:19:03.637	0.1	24.1	4.46	TAS	a_e
WLF	161.96	PKPab	21:19:07.837	0.1	24.1	4.46	TAS	m_e

Event 90616013 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	22:28:23.50			-31.0900	-177.6600				30.0			19		156.45	162.40	m i ke	EMSC
OrigID 90616045																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.10		PKPab	22:48:50.088	0.4	22.6		4.41		TAS					m_e
BRG	158.43		PKPab	22:48:51.297	0.4	22.6		4.41		TAS					m_e
BSEG	156.45		PKPab	22:48:43.142	0.0	22.6		4.41		TAS					m_e
CLL	158.31		PKPab	22:48:51.037	0.0	22.6		4.41		TAS					m_e
FUR	161.64		PKPab	22:49:05.959		22.6		4.41		TAS					m_e
GEC2	160.28		PKPab	22:48:59.539		22.6		4.41		TAS					m_e
GRA1	160.25		PKPab	22:48:59.539		22.6		4.41		TAS					m_e
GTTG	158.80		PKPab	22:48:53.206	-0.5	22.6		4.41		TAS					m_e
IBBN	158.43		PKPab	22:48:51.905	0.9	22.6		4.41		TAS					m_e
MANZ	159.75		PKPab	22:48:58.238		22.6		4.41		TAS					m_e
MOX	159.28		PKPab	22:48:55.213	-0.2	22.6		4.41		TAS					m_e
NRDL	157.87		PKPab	22:48:49.189	-0.0	22.6		4.41		TAS					m_e
RETH	157.77		PKPab	22:48:48.975	-0.3	22.6		4.41		TAS					m_e
RJOB	161.55		PKPab	22:49:05.352		22.6		4.41		TAS					m_e
ROTZ	159.92		PKPab	22:48:58.498		22.6		4.41		TAS					m_e
TANN	159.26		PKPab	22:48:55.558	-0.5	22.6		4.41		TAS					m_e
TNS	160.35		PKPab	22:49:00.031		22.6		4.41		TAS					m_e
UBR	162.40		PKPab	22:49:08.977		22.6		4.41		TAS					m_e
WET	160.28		PKPab	22:48:59.366		22.6		4.41		TAS					m_e

Event 90616014 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
2019/06/16	23:00:12.58			36.9990	140.7640				75.2	1.0		30		78.26	85.08	m i k e	BGR
OrigID 90616020																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90616020

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	81.14		P	23:12:17.693	-0.0	38.4		5.19		TAS		16.3	1.03	a_e	mb	5.0
ASSE	81.14		pP	23:12:37.972	0.0	38.1		5.19		TAS				a_e		
BEAM			pP	23:13:41.672		38.1		5.19		TAS				a_e		
BFO	85.08		P	23:12:37.793	-0.4	38.4		5.19		TAS		34.7	0.80	a_e	mb	5.6
BFO	85.08		pP	23:12:58.072	0.0	38.1		5.19		TAS				m_e		
BRG	80.82		P	23:12:15.843	-0.2	38.4		5.19		TAS		17.6	0.82	a_e	mb	5.1
BRG	80.82		pP	23:12:36.122	-0.2	38.1		5.19		TAS				a_e		
BSEG	79.86		P	23:12:11.143	0.2	38.4		5.19		TAS		29.5	0.91	a_e	mb	5.2
BSEG	79.86		pP	23:12:31.322	0.1	38.1		5.19		TAS				a_e		
BUG	82.97		P	23:12:26.843	-0.3	38.4		5.19		TAS		15.5	0.71	a_e	mb	5.3
BUG	82.97		pP	23:12:47.122	-0.2	38.1		5.19		TAS				a_e		
CLL	80.87		P	23:12:16.043	-0.3	38.4		5.19		TAS		39.9	0.79	m_e	mb	5.5
CLL	80.87		pP	23:12:36.272	-0.3	38.1		5.19		TAS				a_e		
FLT1	80.77		P	23:12:15.293	-0.5	38.4		5.19		TAS		38.7	0.78	a_e	mb	5.5
FLT1	80.77		pP	23:12:35.522	-0.5	38.1		5.19		TAS				a_e		
FUR	84.02		P	23:12:32.693	0.0	38.4		5.19		TAS		50.5	0.72	m_e	mb	5.8
FUR	84.02		pP	23:12:53.022	0.3	38.1		5.19		TAS				a_e		
GEC2	82.47		P	23:12:24.443	-0.2	38.4		5.19		TAS		11.4	0.86	a_e	mb	5.0
GEC2	82.47		pP	23:12:44.722	-0.1	38.1		5.19		TAS				a_e		
GOR1	80.23		P	23:12:13.293	0.3	38.4		5.19		TAS		33.7	1.10	a_e	mb	5.2
GOR1	80.23		pP	23:12:33.522	0.3	38.1		5.19		TAS				a_e		
GRA1	82.84		P	23:12:27.093	0.5	38.4		5.19		TAS		50.7	0.80	a_e	mb	5.8
GRA1	82.84		pP	23:12:47.372	0.2	38.1		5.19		TAS				a_e		
GTTG	81.87		P	23:12:21.693	0.2	38.4		5.19		TAS		23.0	0.77	a_e	mb	5.4
GTTG	81.87		pP	23:12:41.972	0.2	38.1		5.19		TAS				a_e		
IBBN	82.09		P	23:12:22.493	-0.1	38.4		5.19		TAS		43.6	0.79	a_e	mb	5.6
IBBN	82.09		pP	23:12:42.772	0.0	38.1		5.19		TAS				a_e		
KAST	82.73		P	23:12:25.943	-0.0	38.4		5.19		TAS		11.4	0.82	m_e	mb	5.1
KAST	82.73		pP	23:12:46.222	0.1	38.1		5.19		TAS				a_e		
MANZ	82.25		P	23:12:23.643	0.1	38.4		5.19		TAS		4.1	0.75	a_e	mb	4.6
MANZ	82.25		pP	23:12:43.922	0.1	38.1		5.19		TAS				a_e		
MOX	81.94		P	23:12:21.893	0.0	38.4		5.19		TAS		11.7	0.78	a_e	mb	5.1
MOX	81.94		pP	23:12:42.122	-0.0	38.1		5.19		TAS				a_e		
NEUB	81.45		P	23:12:19.193	-0.1	38.4		5.19		TAS		47.1	0.88	a_e	mb	5.5
NEUB	81.45		pP	23:12:39.472	-0.1	38.1		5.19		TAS				a_e		
NRDL	81.07		P	23:12:17.293	-0.0	38.4		5.19		TAS		13.1	0.76	a_e	mb	5.0
NRDL	81.07		pP	23:12:37.572	0.0	38.1		5.19		TAS				a_e		
RETH	81.15		P	23:12:17.793	0.1	38.4		5.19		TAS		20.2	0.87	a_e	mb	5.2
RETH	81.15		pP	23:12:38.072	0.1	38.1		5.19		TAS				a_e		
RGN	78.26		P	23:12:02.543	-0.2	38.4		5.19		TAS		47.6	0.80	a_e	mb	5.7

RGN	78.26	pP	23:12:22.772	-0.2	38.1	5.19	TAS			a_e							
RJOB	83.71	P	23:12:31.219	0.2	38.4	5.19	TAS	21.2	1.01	m_e mb							5.3
RJOB	83.71	pP	23:12:51.722	-0.5	38.1	5.19	TAS			a_e							
ROTZ	82.38	P	23:12:24.543	0.4	38.4	5.19	TAS	3.6	0.77	a_e mb							4.6
ROTZ	82.38	pP	23:12:44.822	0.3	38.1	5.19	TAS			a_e							
RUE	79.66	P	23:12:09.993	-0.1	38.4	5.19	TAS	41.8	1.07	a_e mb							5.3
RUE	79.66	pP	23:12:30.272	-0.1	38.1	5.19	TAS			a_e							
STU	84.38	P	23:12:34.393	-0.1	38.4	5.19	TAS	82.8	0.78	a_e mb							6.0
STU	84.38	pP	23:12:54.722	-0.4	38.1	5.19	TAS			a_e							
TANN	81.77	P	23:12:21.043	0.0	38.4	5.19	TAS	6.5	0.82	a_e mb							4.8
TANN	81.77	pP	23:12:41.322	0.0	38.1	5.19	TAS			a_e							
TNS	83.51	P	23:12:30.043	0.1	38.4	5.19	TAS	9.3	0.74	a_e mb							5.1
TNS	83.51	pP	23:12:50.322	0.1	38.1	5.19	TAS			a_e							
UBBA	82.44	P	23:12:24.743	0.3	38.4	5.19	TAS	6.0	0.79	a_e mb							4.8
UBBA	82.44	pP	23:12:45.022	0.3	38.1	5.19	TAS			a_e							
UBR	84.88	P	23:12:36.561	-0.6	38.4	5.19	TAS	3.8	0.86	m_e mb							4.7
UBR	84.88	pP	23:12:56.972		38.1	5.19	TAS			a_e							
WET	82.58	P	23:12:25.493	0.3	38.4	5.19	TAS	11.7	0.90	a_e mb							5.1
WET	82.58	pP	23:12:45.772	-0.2	38.1	5.19	TAS			a_e							
WLF	84.83	P	23:12:37.136	0.3	38.4	5.19	TAS	11.1	1.03	m_e mb							5.0

Event 90616015 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/16	23:20:00.90			-32.1100	-178.0600				30.0			25		157.37	163.25	m i ke	EMSC
	90616047																

Magnitude	Err	Nsta	Author	OrigID
Ms	4.8		BGR	90616021

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	159.00		PKPab	23:40:31.374	0.1	25.0		4.49		TAS				m_e	
BFO	163.09		PKPab	23:40:49.234		25.0		4.49		TAS				m_e	
BRG	159.26		PKPab	23:40:32.573	0.2	25.0		4.49		TAS				m_e	
BSEG	157.37		PKPab	23:40:24.477	0.2	25.0		4.49		TAS				m_e	
CLL	159.16		PKPab	23:40:31.437	-0.1	25.0		4.49		TAS				m_e	
FLT1	158.69		PKPab	23:40:28.723	-0.5	25.0		4.49		TAS				m_e	
FUR	162.47		PKPab	23:40:46.902		25.0		4.49		TAS				m_e	
GEC2	161.08		PKPab	23:40:40.589		25.0		4.49		TAS				m_e	
GRA1	161.11		PKPab	23:40:40.905	-0.8	25.0		4.49		TAS				m_e	
GRA1	161.11		L	00:56:00.919						T__		136.8	20.70	a_e Ms	4.8
GTTG	159.70		PKPab	23:40:33.204	0.4	25.0		4.49		TAS				m_e	
IBBN	159.38		PKPab	23:40:32.762	-1.0	25.0		4.49		TAS				m_e	
KAST	160.33		PKPab	23:40:37.283	-0.1	25.0		4.49		TAS				m_e	
MANZ	160.60		PKPab	23:40:38.615	0.3	25.0		4.49		TAS				m_e	
MOX	160.14		PKPab	23:40:36.171	0.3	25.0		4.49		TAS				m_e	

MOX	160.14	L	00:55:52.721							T__	136.2	20.40	a_e	Ms	4.8
NEUB	159.60	PKPab	23:40:34.151	0.2	25.0	4.49				TAS			m_e		
NRDL	158.78	PKPab	23:40:30.301	-0.9	25.0	4.49				TAS			m_e		
RETH	158.69	PKPab	23:40:29.606	-0.4	25.0	4.49				TAS			m_e		
RJOB	162.34	PKPab	23:40:46.081		25.0	4.49				TAS			m_e		
ROTZ	160.76	PKPab	23:40:39.984	-0.2	25.0	4.49				TAS			m_e		
RUE	157.90	PKPab	23:40:26.894	0.3	25.0	4.49				TAS			m_e		
STU	162.48	PKPab	23:40:46.940		25.0	4.49				TAS			m_e		
TANN	160.11	PKPab	23:40:36.171	0.3	25.0	4.49				TAS			m_e		
TNS	161.27	PKPab	23:40:41.509	-0.6	25.0	4.49				TAS			m_e		
UBR	163.25	PKPab	23:40:50.817		25.0	4.49				TAS			m_e		
WET	161.10	PKPab	23:40:41.284	0.6	25.0	4.49				TAS			m_e		

Event 90617001 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	00:54:10.33			-17.6930	-177.5670				600.0			4		143.32	149.44	m i ke	BGR
	90617007																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	145.03		PKPbc	01:12:40.166	0.0	15.6		2.73		TAS					m_e
BFO	149.07		PKPbc	01:12:50.663		15.6		2.73		TAS					m_e
BRG	145.64		PKPbc	01:12:41.693	-0.3	15.6		2.73		TAS					m_e
BSEG	143.32		PKPbc	01:12:34.921	-0.2	15.6		2.73		TAS					m_e
BUG	146.11		PKPbc	01:12:42.895	0.3	15.6		2.73		TAS					m_e
CLL	145.42		PKPbc	01:12:41.032	0.0	15.6		2.73		TAS					m_e
FLT1	144.75		PKPbc	01:12:38.870	0.2	15.6		2.73		TAS					m_e
FUR	148.76		PKPbc	01:12:49.915		15.6		2.73		TAS					m_e
GEC2	147.60		PKPbc	01:12:46.980	-0.6	15.6		2.73		TAS					m_e
GOR1	144.10		PKPbc	01:12:37.242	-0.3	15.6		2.73		TAS					m_e
GRA1	147.30		PKPbc	01:12:46.559	0.2	15.6		2.73		TAS					m_e
GTTG	145.70		PKPbc	01:12:42.022	-0.1	15.6		2.73		TAS					m_e
IBBN	145.21		PKPbc	01:12:40.858	0.2	15.6		2.73		TAS					m_e
KAST	146.23		PKPbc	01:12:43.315	0.4	15.6		2.73		TAS					m_e
MANZ	146.86		PKPbc	01:12:45.358	0.3	15.6		2.73		TAS					m_e
MOX	146.31		PKPbc	01:12:43.676	0.1	15.6		2.73		TAS					m_e
NEUB	145.76		PKPbc	01:12:41.934	0.2	15.6		2.73		TAS					m_e
NRDL	144.75		PKPbc	01:12:39.050	0.0	15.6		2.73		TAS					m_e
RETH	144.61		PKPbc	01:12:38.797	0.2	15.6		2.73		TAS					m_e
RJOB	148.85		PKPbc	01:12:49.884		15.6		2.73		TAS					m_e
ROTZ	147.05		PKPbc	01:12:45.598	-0.1	15.6		2.73		TAS					m_e
STU	148.52		PKPbc	01:12:49.743	-0.4	15.6		2.73		TAS					m_e
TANN	146.38		PKPbc	01:12:43.976	0.2	15.6		2.73		TAS					m_e
TNS	147.19		PKPbc	01:12:46.199	0.4	15.6		2.73		TAS					m_e

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UBR	149.44	PKPbc	01:12:51.545	15.6	2.73	TAS	m_e
WET	147.50	PKPbc	01:12:47.040	-0.2	15.6	TAS	m_e
WLF	147.97	PKPbc	01:12:48.701	-0.4	15.6	TAS	m_e

Event 90617003 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	06:02:04.10			-31.0500	-177.4900				10.0			31		155.27	162.40	m i ke	EMSC
OrigID 90617035																	

Magnitude	Err	Nsta	Author	OrigID
Ms 6.3		BGR		90617009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.10		PP	06:26:09.348	0.2	21.1		5.45		TAS				a_e	
BFO	162.18		PP	06:26:31.098	-0.3	21.1		5.45		TAS				a_e	
BRG	158.44		PKPdf	06:21:59.884		23.7		1.46		TAS				m_e	
BRG	158.44		PP	06:26:11.098	-0.2	21.1		5.45		TAS				a_e	
BSEG	156.44		PP	06:26:00.698	0.4	21.1		5.45		TAS				a_e	
BUG	159.32		PP	06:26:16.198	-0.3	21.1		5.45		TAS				m_e	
CLL	158.32		PKPdf	06:21:59.884		23.7		1.46		TAS				m_e	
CLL	158.32		PP	06:26:10.298	-0.1	21.1		5.45		TAS				a_e	
FLT1	157.79		PKPdf	06:21:58.721	0.5	23.7		1.46		TAS				m_e	
FLT1	157.79		PP	06:26:06.848	-0.5	21.1		5.45		TAS				a_e	
FUR	161.65		PP	06:26:28.798	0.2	21.1		5.45		TAS				a_e	
GEC2	160.30		PKPdf	06:22:02.444		23.7		1.46		TAS				m_e	
GEC2	160.30		PP	06:26:21.448	-0.3	21.1		5.45		TAS				a_e	
GOR1	157.16		PKPdf	06:21:58.023	0.3	23.7		1.46		TAS				m_e	
GOR1	157.16		PKPab	06:22:30.991	0.4	22.6		4.44		TAS				m_e	
GOR1	157.16		PP	06:26:04.048	0.1	21.1		5.45		TAS				a_e	
GRA1	160.26		PKPab	06:22:44.325		22.6		4.44		TAS				m_e	
GRA1	160.26		PP	06:26:20.798	-0.1	21.1		5.45		TAS				a_e	
GRA1	160.26		L	07:35:56.992						T__		4584.4	21.20	a_e Ms	6.3
GTTG	158.79		PP	06:26:13.298	0.4	21.1		5.45		TAS				a_e	
HLG	156.56		PP	06:26:01.198	-0.4	21.1		5.45		TAS				a_e	
IBBN	158.41		PP	06:26:11.648	0.2	21.1		5.45		TAS				a_e	
KAST	159.39		PP	06:26:16.798	0.3	21.1		5.45		TAS				a_e	
MANZ	159.76		PKPdf	06:22:02.211		23.7		1.46		TAS				m_e	
MANZ	159.76		PKPab	06:22:42.464		22.6		4.44		TAS				m_e	
MANZ	159.76		PP	06:26:18.398	0.2	21.1		5.45		TAS				a_e	
MOX	159.28		PKPdf	06:22:01.513		23.7		1.46		TAS				m_e	
MOX	159.28		PP	06:26:15.748	0.2	21.1		5.45		TAS				a_e	
MOX	159.28		L	07:43:37.126						T__		5229.7	19.10	a_e Ms	6.4
NEUB	158.73		PP	06:26:12.098	-0.4	21.1		5.45		TAS				a_e	
NRDL	157.86		PKPdf	06:21:58.721	0.1	23.7		1.46		TAS				m_e	
NRDL	157.86		PP	06:26:08.448	0.6	21.1		5.45		TAS				a_e	

RETH	157.76	PKPab	06:22:33.226	-0.8	22.6	4.44	TAS	m_e
RETH	157.76	PP	06:26:08.148	0.7	21.1	5.45	TAS	a_e
RGN	155.27	PP	06:25:53.048	-0.6	21.1	5.45	TAS	a_e
RJOB	161.57	PKPab	06:22:50.333		22.6	4.44	TAS	m_e
RJOB	161.57	PP	06:26:29.248	0.6	21.1	5.45	TAS	a_e
ROTZ	159.93	PKPab	06:22:41.998		22.6	4.44	TAS	m_e
ROTZ	159.93	PP	06:26:19.398	0.2	21.1	5.45	TAS	a_e
RUE	157.05	PP	06:26:03.098	-0.3	21.1	5.45	TAS	a_e
STU	161.59	PP	06:26:28.048	-0.0	21.1	5.45	TAS	a_e
TANN	159.27	PKPdf	06:22:00.815		23.7	1.46	TAS	m_e
TANN	159.27	PP	06:26:15.898	0.3	21.1	5.45	TAS	a_e
TNS	160.34	PP	06:26:21.398	-0.1	21.1	5.45	TAS	a_e
UBBA	159.48	PKPdf	06:22:01.513		23.7	1.46	TAS	m_e
UBBA	159.48	PKPab	06:22:41.068		22.6	4.44	TAS	m_e
UBBA	159.48	PP	06:26:16.648	0.1	21.1	5.45	TAS	a_e
UBR	162.40	PKPab	06:22:53.942		22.6	4.44	TAS	m_e
UBR	162.40	PP	06:26:32.348	-0.2	21.1	5.45	TAS	a_e
WET	160.30	PKPdf	06:22:01.979		23.7	1.46	TAS	m_e
WET	160.30	PKPab	06:22:44.790		22.6	4.44	TAS	m_e
WET	160.30	PP	06:26:21.048	-0.4	21.1	5.45	TAS	a_e
WLF	161.20	PP	06:26:26.298	-0.6	21.1	5.45	TAS	a_e

Event 90617004 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	09:57:16.90			-31.3600	-177.6900				2.0			3		160.53	161.78	m i ke	EMSC
90617036																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
RJOB	161.78		PKPab	10:18:03.900						T__				m_e	
TNS	160.60		PKPab	10:17:57.818						T__				m_e	
WET	160.53		PKPab	10:17:58.065						T__				m_e	

Event 90617005 Southwest of Sumatera, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	11:04:05.90			-0.2800	97.2650				33.0			26		85.96	90.93	m i ke	BGR
90617011																	

Magnitude Err Nsta Author OrigID

mb	5.0		BGR	90617011
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Ms 4.5 BGR 90617011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	88.12		P	11:16:53.440	-0.0	93.2		4.78		TAS		26.3	1.26	m_e	mb 5.4
BFO	89.50		P	11:16:59.933		93.2		4.78		TAS		7.2	0.89	m_e	mb 4.9
BRG	85.99		P	11:16:43.564	0.2	93.2		4.78		TAS		20.2	1.62	m_e	mb 5.0
BSEG	88.42		P	11:16:55.089	-0.2	93.2		4.78		TAS		11.6	0.84	m_e	mb 5.2
BUG	90.21		P	11:17:03.544	0.2	93.2		4.78		TAS		15.8	1.13	m_e	mb 5.2
CLL	86.62		P	11:16:46.227	-0.3	93.2		4.78		TAS		15.5	1.46	m_e	mb 4.9
FLT1	87.78		P	11:16:51.081	0.3	93.2		4.78		TAS		5.7	0.72	m_e	mb 5.0
FUR	87.52		P	11:16:49.506		93.2		4.78		TAS		15.1	0.64	m_e	mb 5.5
GEC2	85.96		P	11:16:43.658	-0.3	93.2		4.78		TAS		12.2	1.16	m_e	mb 4.9
GOR1	87.78		P	11:16:51.560	0.5	93.2		4.78		TAS		7.8	0.76	m_e	mb 5.1
GRA1	87.64		P	11:16:51.760		93.2		4.78		TAS		7.6	0.70	m_e	mb 5.1
GRA1	87.64		L	12:25:08.398						T__		229.5	20.40	a_e	Ms 4.6
GTTG	88.53		P	11:16:55.811	-0.1	93.2		4.78		TAS		11.4	0.67	m_e	mb 5.2
IBBN	89.92		P	11:17:01.903	-0.1	93.2		4.78		TAS		15.5	0.98	m_e	mb 5.2
KAST	89.49		P	11:17:00.257	0.2	93.2		4.78		TAS		12.3	1.10	m_e	mb 5.0
MANZ	87.09		P	11:16:48.994	0.3	93.2		4.78		TAS		2.2	0.96	m_e	mb 4.3
MOX	87.45		P	11:16:50.574	0.2	93.2		4.78		TAS		10.4	1.18	m_e	mb 4.8
MOX	87.45		L	12:28:25.698						T__		179.7	21.10	a_e	Ms 4.5
NEUB	87.38		P	11:16:49.711	0.1	93.2		4.78		TAS		15.1	0.99	m_e	mb 5.1
NRDL	88.48		P	11:16:55.712	-0.2	93.2		4.78		TAS		35.3	1.33	m_e	mb 5.5
RETH	88.95		P	11:16:57.293	-0.1	93.2		4.78		TAS		18.6	1.33	m_e	mb 5.1
RGN	86.70		P	11:16:47.610		93.2		4.78		TAS		18.8	0.75	m_e	mb 5.3
RJOB	86.48		P	11:16:45.420		93.2		4.78		TAS		4.6	1.01	m_e	mb 4.6
ROTZ	87.01		P	11:16:48.697	0.4	93.2		4.78		TAS		1.2	0.99	m_e	mb 4.0
RUE	86.24		P	11:16:44.444	-0.8	93.2		4.78		TAS		29.9	0.46	m_e	mb 5.7
TANN	86.89		P	11:16:47.709	0.4	93.2		4.78		TAS		6.8	1.14	m_e	mb 4.7
TNS	89.45		P	11:17:00.158	0.5	93.2		4.78		TAS		31.3	1.33	m_e	mb 5.4
UBBA	88.48		P	11:16:55.317	0.0	93.2		4.78		TAS		4.0	0.79	m_e	mb 4.8
UBR	88.28		P	11:16:54.329		93.2		4.78		TAS		5.6	1.03	m_e	mb 4.8
WET	86.53		P	11:16:46.326	-1.2	93.2		4.78		TAS		11.7	1.28	m_e	mb 4.9
WLF	90.93		P	11:17:07.334	0.4	93.2		4.78		TAS		6.4	0.77	m_e	mb 5.0

Event 90617007 Sichuan, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	14:55:45.31			28.3100	105.5400				33.0			31		68.68	74.62	m i ke	BGR
90617013																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.8		BGR	90617013
MBB	6.3		BGR	90617013
Ms	5.8		BGR	90617013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	71.01		S	15:16:13.804	-0.9	68.2		11.96		TAS				a_e	
ASSE	71.01		P	15:06:59.936	-0.3	68.6		6.05		TAS		6.2	0.29	a_e	MBB 6.3
BFO	73.89		S	15:16:48.304		68.2		11.96		TAS				a_e	
BFO	73.89		P	15:07:16.986	-0.6	68.6		6.05		TAS		63.1	0.81	a_e	MBB 6.2
BRG	69.55		S	15:15:57.354	0.1	68.2		11.96		TAS				a_e	
BRG	69.55		P	15:06:50.786	-0.6	68.6		6.05		TAS		49.3	0.73	a_e	MBB 6.4
BSEG	70.55		S	15:16:10.804	2.0	68.2		11.96		TAS				a_e	
BSEG	70.55		P	15:06:57.886	0.5	68.6		6.05		TAS		119.5	0.87	a_e	MBB 6.5
BUG	73.23		S	15:16:41.704	-0.7	68.2		11.96		TAS				a_e	
BUG	73.23		P	15:07:13.486	-0.2	68.6		6.05		TAS		109.4	1.14	a_e	MBB 6.4
CLL	69.96		S	15:16:01.854	-0.3	68.2		11.96		TAS				a_e	
CLL	69.96		P	15:06:53.236	-0.6	68.6		6.05		TAS		84.2	1.07	a_e	MBB 6.2
FLT1	70.62		S	15:16:09.404	-0.5	68.2		11.96		TAS				a_e	
FLT1	70.62		P	15:06:57.136	-0.8	68.6		6.05		TAS		61.7	0.98	a_e	MBB 6.2
FUR	72.15		S	15:16:29.753	1.6	68.2		11.96		TAS				m_e	
FUR	72.15		P	15:07:07.336	0.4	68.6		6.05		TAS		176.7	0.64	a_e	MBB 6.8
GEC2	70.40		S	15:16:09.054	1.8	68.2		11.96		TAS				a_e	
GEC2	70.40		P	15:06:56.336	-0.0	68.6		6.05		TAS		45.3	0.64	a_e	MBB 6.2
GOR1	70.34		P	15:06:56.486	0.3	68.6		6.05		TAS		327.7	1.30	a_e	MBB 6.6
GRA1	71.60		S	15:16:23.154	1.4	68.2		11.96		TAS				m_e	
GRA1	71.60		P	15:07:04.036	0.3	68.6		6.05		TAS		64.0	0.75	a_e	MBB 6.5
GRA1	71.60		L	15:39:57.098						T__		6540.5	20.00	a_e	Ms 5.9
GTTG	71.64		S	15:16:22.004	-0.2	68.2		11.96		TAS				a_e	
GTTG	71.64		P	15:07:04.036	-0.1	68.6		6.05		TAS		58.7	0.72	a_e	MBB 6.3
HLG	71.78		S	15:16:23.054	-0.3	68.2		11.96		TAS				a_e	
HLG	71.78		P	15:07:05.086	0.3	68.6		6.05		TAS		324.8	1.34	a_e	MBB 6.5
IBBN	72.60		S	15:16:34.054	0.5	68.2		11.96		TAS				a_e	
IBBN	72.60		P	15:07:09.786	-0.1	68.6		6.05		TAS		88.7	1.04	a_e	MBB 6.5
KAST	72.67		S	15:16:36.820	2.3	68.2		11.96		TAS				m_e	
KAST	72.67		P	15:07:10.865	0.6	68.6		6.05		TAS		68.6	1.32	m_e	MBB 6.1
MANZ	70.96		S	15:16:15.154	1.1	68.2		11.96		TAS				a_e	
MANZ	70.96		P	15:07:01.236	1.4	68.6		6.05		TAS		14.3	1.03	a_e	MBB 5.6
MOX	71.01		S	15:16:09.435	-5.3	68.2		11.96		TAS				m_e	
MOX	71.01		P	15:07:00.036	-0.2	68.6		6.05		TAS		38.5	0.99	a_e	MBB 6.2
MOX	71.01		L	15:40:50.662						T__		3558.9	20.90	a_e	Ms 5.6
NEUB	70.72		S	15:16:11.054	-0.2	68.2		11.96		TAS				a_e	
NEUB	70.72		P	15:06:58.136	-0.4	68.6		6.05		TAS		73.0	0.80	a_e	MBB 6.5
NRDL	71.20		S	15:16:15.619	-1.2	68.2		11.96		TAS				m_e	
NRDL	71.20		P	15:07:01.786	0.4	68.6		6.05		TAS		183.8	1.20	a_e	MBB 6.5
RETH	71.53		P	15:07:03.486	0.1	68.6		6.05		TAS		486.3	2.11	a_e	MBB 6.3
RGN	68.68		S	15:15:48.404	1.9	68.2		11.96		TAS				a_e	
RGN	68.68		P	15:06:46.136	0.1	68.6		6.05		TAS		252.5	1.22	a_e	MBB 6.7
RJOB	71.36		S	15:16:19.004	0.4	68.2		11.96		TAS				a_e	
RJOB	71.36		P	15:07:02.876	0.8	68.6		6.05		TAS		42.9	0.86	m_e	MBB 6.3
ROTZ	70.98		S	15:16:11.202	-3.1	68.2		11.96		TAS				m_e	
ROTZ	70.98		P	15:07:00.236	0.2	68.6		6.05		TAS		16.3	0.74	m_e	MBB 5.8
RUE	69.11		S	15:15:51.104	-0.8	68.2		11.96		TAS				a_e	
RUE	69.11		P	15:06:48.386	-0.3	68.6		6.05		TAS		35.5	0.46	a_e	MBB 6.6

STU	73.19	S	15:16:41.304	-0.8	68.2	11.96	TAS						a_e		
STU	73.19	P	15:07:13.086	-0.2	68.6	6.05	TAS	180.0	0.57	a_e	MBB	6.8			
TANN	70.59	S	15:16:07.668	-2.1	68.2	11.96	TAS						m_e		
TANN	70.59	P	15:06:57.486	-0.2	68.6	6.05	TAS	37.2	0.85	a_e	MBB	6.2			
TNS	73.04	P	15:07:12.386	-0.2	68.6	6.05	TAS	60.5	0.99	a_e	MBB	6.2			
UBBA	71.90	S	15:16:25.336	0.0	68.2	11.96	TAS						m_e		
UBBA	71.90	P	15:07:05.636	0.0	68.6	6.05	TAS	7.6	0.45	a_e	MBB	6.2			
UBR	73.06	P	15:07:11.936	-0.5	68.6	6.05	TAS	41.0	0.70	a_e	MBB	6.2			
WET	70.80	S	15:16:14.304	2.2	68.2	11.96	TAS						m_e		
WET	70.80	P	15:06:58.936	0.1	68.6	6.05	TAS	38.8	0.88	a_e	MBB	6.2			
WLF	74.62	S	15:16:57.254		68.2	11.96	TAS						a_e		
WLF	74.62	P	15:07:22.186	0.1	68.6	6.05	TAS	124.2	0.72	a_e	MBB	6.5			

Event 90617008 Sichuan, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	15:36:07.27		28.3000	104.2400				33.0				30		67.97	73.87	m i ke	BGR
OrigID 90617014																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.3		BGR	90617014

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	70.27		P	15:47:17.232	-0.3	68.9		6.05	TAS			14.1	1.13	a_e	mb	5.0
BFO	73.10		P	15:47:34.332	-0.4	68.9		6.05	TAS			22.9	1.05	a_e	mb	5.1
BRG	68.78		P	15:47:08.082	-0.5	68.9		6.05	TAS			23.6	1.19	a_e	mb	5.3
BSEG	69.84		P	15:47:15.132	0.4	68.9		6.05	TAS			64.9	1.21	a_e	mb	5.6
BUG	72.49		P	15:47:31.339	-0.1	68.9		6.05	TAS			22.1	1.03	m_e	mb	5.2
CLL	69.20		P	15:47:10.532	-0.6	68.9		6.05	TAS			24.3	1.16	a_e	mb	5.2
FLT1	69.88		P	15:47:15.371	-0.7	68.9		6.05	TAS			26.7	1.12	m_e	mb	5.3
FUR	71.35		P	15:47:24.632	0.5	68.9		6.05	TAS			110.2	1.27	a_e	mb	5.8
GEC2	69.60		P	15:47:13.632	0.1	68.9		6.05	TAS			28.0	1.21	a_e	mb	5.3
GOR1	69.61		P	15:47:13.832	0.4	68.9		6.05	TAS			43.1	1.08	a_e	mb	5.5
GRA1	70.82		P	15:47:21.382	0.4	68.9		6.05	TAS			47.0	1.28	m_e	mb	5.5
GTTG	70.89		P	15:47:21.382	0.0	68.9		6.05	TAS			50.3	1.31	a_e	mb	5.5
IBBN	71.87		P	15:47:27.182	0.0	68.9		6.05	TAS			36.5	1.33	a_e	mb	5.3
KAST	71.92		P	15:47:27.532	-0.0	68.9		6.05	TAS			9.0	1.03	a_e	mb	4.8
MANZ	70.18		P	15:47:17.432	0.3	68.9		6.05	TAS			3.1	1.11	a_e	mb	4.3
MOX	70.25		P	15:47:17.382	-0.1	68.9		6.05	TAS			17.9	1.24	a_e	mb	5.1
NEUB	69.96		P	15:47:16.082	-0.3	68.9		6.05	TAS			38.5	1.02	m_e	mb	5.5
NRDL	70.47		P	15:47:19.182	0.5	68.9		6.05	TAS			51.6	1.32	a_e	mb	5.5
RETH	70.80		P	15:47:20.882	0.2	68.9		6.05	TAS			20.4	1.27	a_e	mb	5.1
RGN	67.97		P	15:47:03.382	-0.0	68.9		6.05	TAS			49.9	1.12	a_e	mb	5.7
RJOB	70.55		P	15:47:19.312	0.1	68.9		6.05	TAS			12.7	0.82	m_e	mb	5.1
ROTZ	70.20		P	15:47:17.532	0.3	68.9		6.05	TAS			9.2	1.12	m_e	mb	4.8
RUE	68.36		P	15:47:06.048	0.1	68.9		6.05	TAS			22.6	0.53	m_e	mb	5.6

STU	72.40	P	15:47:31.145	-0.2	68.9	6.05	TAS	110.6	1.17	m_e	mb	5.9
TANN	69.82	P	15:47:14.782	-0.1	68.9	6.05	TAS	14.8	1.13	a_e	mb	5.0
TNS	72.29	P	15:47:29.682	-0.1	68.9	6.05	TAS	21.4	1.11	a_e	mb	5.2
UBBA	71.14	P	15:47:22.732	-0.1	68.9	6.05	TAS	26.4	1.64	a_e	mb	5.1
UBR	72.26	P	15:47:29.332	-0.3	68.9	6.05	TAS	13.2	0.83	a_e	mb	5.1
WET	70.01	P	15:47:16.232	0.2	68.9	6.05	TAS	16.1	1.05	a_e	mb	5.1
WLF	73.87	P	15:47:39.532	0.2	68.9	6.05	TAS	60.2	1.11	a_e	mb	5.5

Event 90617009 Southeastern China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	16:37:54.73			27.5900	105.1800				33.0			18		69.86	74.95	m i ke	BGR
OrigID 90617015																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90617015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
BFO	74.19		P	16:49:28.769		68.9		5.95		TAS		61.0	2.39	m_e	mb	5.2
BRG	69.86		P	16:49:02.561	0.6	68.9		5.95		TAS		3.1	0.79	m_e	mb	4.5
BSEG	70.91		P	16:49:09.159	-0.1	68.9		5.95		TAS		9.2	0.88	m_e	mb	4.9
CLL	70.28		P	16:49:05.241	-0.1	68.9		5.95		TAS				m_e		
FUR	72.44		P	16:49:18.756		68.9		5.95		TAS		14.6	0.89	m_e	mb	5.1
GEC2	70.69		P	16:49:07.614		68.9		5.95		TAS		3.9	0.85	m_e	mb	4.6
GRA1	71.91		P	16:49:15.512		68.9		5.95		TAS		6.1	0.83	m_e	mb	4.8
GTTG	71.97		P	16:49:15.616	-0.2	68.9		5.95		TAS		11.2	1.07	m_e	mb	4.9
NEUB	71.04		P	16:49:09.712	0.2	68.9		5.95		TAS		13.5	1.36	m_e	mb	4.9
NRDL	71.54		P	16:49:12.765	-0.2	68.9		5.95		TAS		5.7	0.87	m_e	mb	4.7
RETH	71.88		P	16:49:14.690	-0.1	68.9		5.95		TAS		2.1	0.87	m_e	mb	4.3
RJOB	71.64		P	16:49:13.234		68.9		5.95		TAS		4.9	1.18	m_e	mb	4.5
ROTZ	71.29		P	16:49:11.391		68.9		5.95		TAS		1.6	0.92	m_e	mb	4.1
TANN	70.91		P	16:49:09.312		68.9		5.95		TAS		4.7	1.16	m_e	mb	4.5
TNS	73.37		P	16:49:23.586		68.9		5.95		TAS		3.4	0.74	m_e	mb	4.6
UBR	73.35		P	16:49:23.062		68.9		5.95		TAS		11.2	1.43	m_e	mb	4.8
WET	71.09		P	16:49:10.081		68.9		5.95		TAS		3.3	0.93	m_e	mb	4.5
WLF	74.95		P	16:49:32.937		68.9		5.95		TAS		13.4	0.85	m_e	mb	5.0

Event 90617010 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	16:53:02.20			-30.9800	-177.5000				10.0	6.0		8		157.69	162.11	m i ke	EMSC
OrigID 90617042																	

Magnitude Err Nsta Author OrigID
Ms 5.7 BGR 90617016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.03		pPKPdf	17:13:07.098	0.3	22.6		1.08		TAS				m_e	
ASSE	158.03		PKPab	17:13:30.682	-0.3	17.2		4.53		TAS				m_e	
BFO	162.11		pPKPdf	17:13:10.675		22.6		1.08		TAS				m_e	
BRG	158.38		PKPab	17:13:33.332		17.2		4.53		TAS				m_e	
BRG	158.38		PKP	17:13:44.205						T__				m_e	
BUG	159.25		pPKPdf	17:13:08.290	-0.4	22.6		1.08		TAS				m_e	
CLL	158.25		pPKPdf	17:13:07.230	0.3	22.6		1.08		TAS				m_e	
CLL	158.25		PKPab	17:13:32.405		17.2		4.53		TAS				m_e	
FLT1	157.72		pPKPdf	17:13:06.038	0.3	22.6		1.08		TAS				m_e	
FLT1	157.72		PKPab	17:13:29.755	0.1	17.2		4.53		TAS				m_e	
FLT1	157.72		PKP	17:13:41.245						T__				m_e	
FUR	161.58		PKP	17:13:58.716						T__				m_e	
GEC2	160.24		pPKPdf	17:13:09.218		22.6		1.08		TAS				m_e	
GEC2	160.24		PKPab	17:13:42.475		17.2		4.53		TAS				m_e	
GRA1	160.19		L	18:30:08.398						T__		1027.6	19.80	a_e Ms	5.7
GTTG	158.72		PKP	17:13:45.699						T__				m_e	
IBBN	158.34		PKP	17:13:43.535	0.2					T__				m_e	
KAST	159.32		pPKPdf	17:13:08.158	-0.5	22.6		1.08		TAS				m_e	
MANZ	159.69		PKPdf	17:13:00.005		24.9		1.84		TAS				m_e	
MANZ	159.69		pPKPdf	17:13:09.085		22.6		1.08		TAS				m_e	
MANZ	159.69		PKP	17:13:49.315						T__				m_e	
MOX	159.21		pPKPdf	17:13:08.423		22.6		1.08		TAS				m_e	
MOX	159.21		L	18:34:44.583						T__		1248.8	18.40	a_e Ms	5.8
NRDL	157.79		pPKPdf	17:13:06.700	0.0	22.6		1.08		TAS				m_e	
RETH	157.69		pPKPdf	17:13:05.773	0.3	22.6		1.08		TAS				m_e	
RETH	157.69		PKPab	17:13:29.357	-0.2	17.2		4.53		TAS				m_e	
RJOB	161.50		PKPab	17:13:47.774		17.2		4.53		TAS				m_e	
ROTZ	159.86		PKPab	17:13:39.825		17.2		4.53		TAS				m_e	
STU	161.52		pPKPdf	17:13:10.808		22.6		1.08		TAS				m_e	
TANN	159.20		PKPab	17:13:37.042		17.2		4.53		TAS				m_e	
UBBA	159.41		PKPdf	17:12:59.649		24.9		1.84		TAS				m_e	
UBBA	159.41		pPKPdf	17:13:08.290		22.6		1.08		TAS				m_e	
WET	160.23		PKPdf	17:13:01.002		24.9		1.84		TAS				m_e	
WET	160.23		pPKPdf	17:13:09.615		22.6		1.08		TAS				m_e	
WET	160.23		PKPab	17:13:42.210		17.2		4.53		TAS				m_e	
WET	160.23		PKP	17:13:52.801						T__				m_e	
WLF	161.13		PKP	17:13:56.660						T__				m_e	

Event 90617012 Central Mid-Atlantic Ridge

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	20:03:02.88			-0.9860	-25.5460				33.0			24		57.23	63.92	m i ke	BGR

90617018

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90617018
Ms	4.7		BGR	90617018

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	61.07		P	20:13:14.645	0.7	223.9		6.89		TAS		7.4	1.20	m_e	mb	4.4
BFO	57.23		P	20:12:48.195	-0.4	223.9		6.89		TAS		5.3	1.04	m_e	mb	4.5
BRG	61.60		P	20:13:18.210	0.2	223.9		6.89		TAS		2.7	0.90	m_e	mb	4.5
BSEG	62.27		P	20:13:22.273	-0.3	223.9		6.89		TAS		13.0	0.88	m_e	mb	5.2
CLL	61.48		P	20:13:17.750	-0.4	223.9		6.89		TAS		6.8	1.11	m_e	mb	4.4
FLT1	61.45		P	20:13:17.388	-0.1	223.9		6.89		TAS		17.6	1.41	m_e	mb	4.7
FUR	58.45		P	20:12:56.692	-0.3	223.9		6.89		TAS		12.1	0.64	m_e	mb	5.1
GEC2	60.09		P	20:13:08.281	0.3	223.9		6.89		TAS		5.7	0.95	m_e	mb	4.6
GOR1	61.96		P	20:13:21.279	-0.7	223.9		6.89		TAS		29.9	1.37	m_e	mb	5.3
GRA1	59.52		P	20:13:04.307	0.2	223.9		6.89		TAS		5.6	0.92	m_e	mb	4.6
GRA1	59.52		L	20:38:17.876						T__		620.6	19.90	a_e	Ms	4.7
KAST	59.44		P	20:13:03.643	-0.1	223.9		6.89		TAS		9.8	1.21	m_e	mb	4.7
MANZ	60.14		P	20:13:08.198	0.1	223.9		6.89		TAS		3.0	1.25	m_e	mb	4.2
MOX	60.39		P	20:13:10.599	0.3	223.9		6.89		TAS		17.2	1.44	m_e	mb	4.9
MOX	60.39		L	20:35:24.590						T__		483.8	21.70	a_e	Ms	4.6
NEUB	60.85		P	20:13:14.220	-0.2	223.9		6.89		TAS		7.0	0.72	m_e	mb	4.6
NRDL	61.10		P	20:13:15.732	-0.2	223.9		6.89		TAS		20.1	1.47	m_e	mb	4.7
RETH	60.99		P	20:13:14.788	0.7	223.9		6.89		TAS		40.0	1.80	m_e	mb	5.0
RGN	63.92		P	20:13:34.182		223.9		6.89		TAS		15.3	1.12	m_e	mb	5.1
RJOB	58.89		P	20:13:00.201	0.0	223.9		6.89		TAS		7.7	0.58	m_e	mb	4.9
ROTZ	60.03		P	20:13:07.784	-0.4	223.9		6.89		TAS		2.3	1.25	m_e	mb	4.1
TANN	60.60		P	20:13:12.074	0.6	223.9		6.89		TAS		18.2	1.43	m_e	mb	4.7
TNS	58.71		P	20:12:58.346	0.4	223.9		6.89		TAS		4.7	0.85	m_e	mb	4.5
UBBA	59.81		P	20:13:06.468	-0.1	223.9		6.89		TAS		7.1	1.12	m_e	mb	4.6
UBR	57.56		P	20:12:50.829	0.0	223.9		6.89		TAS		9.0	0.90	m_e	mb	4.8
WET	59.90		P	20:13:06.791	-0.1	223.9		6.89		TAS		28.7	1.69	m_e	mb	5.0

Event 90617014 Sichuan, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	21:03:28.73			28.0500	104.6300				33.0			24		69.20	74.28	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90617020

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	70.69		P	21:14:40.730	-0.0	69.1		5.98		TAS		3.7	0.88	m_e	mb	4.5
BFO	73.52		P	21:14:57.895		69.1		5.98		TAS		5.7	0.96	m_e	mb	4.6

BRG	69.20	P	21:14:31.843	0.1	69.1	5.98	TAS	4.2	0.88	m_e	mb	4.7
BSEG	70.25	P	21:14:39.191	-0.1	69.1	5.98	TAS	11.2	1.03	m_e	mb	4.9
BUG	72.91	P	21:14:54.658		69.1	5.98	TAS	6.4	0.88	m_e	mb	4.8
CLL	69.61	P	21:14:34.482	0.5	69.1	5.98	TAS	2.8	0.97	m_e	mb	4.4
FUR	71.77	P	21:14:48.391	-0.6	69.1	5.98	TAS	15.5	0.79	m_e	mb	5.2
GEC2	70.02	P	21:14:37.520	-0.1	69.1	5.98	TAS	4.4	1.08	m_e	mb	4.5
GOR1	70.02	P	21:14:38.001	0.4	69.1	5.98	TAS	15.9	1.33	m_e	mb	5.0
GRA1	71.24	P	21:14:44.832	-0.5	69.1	5.98	TAS	6.7	0.87	m_e	mb	4.8
GTTG	71.31	P	21:14:45.263	-0.1	69.1	5.98	TAS	8.4	1.06	m_e	mb	4.8
IBBN	72.29	P	21:14:50.893	0.4	69.1	5.98	TAS	6.2	0.41	m_e	mb	5.1
KAST	72.34	P	21:14:50.956		69.1	5.98	TAS	8.9	1.66	m_e	mb	4.6
MANZ	70.60	P	21:14:40.983	1.1	69.1	5.98	TAS	1.6	1.25	m_e	mb	4.0
MOX	70.66	P	21:14:41.849	-0.0	69.1	5.98	TAS	4.8	1.16	m_e	mb	4.5
NEUB	70.38	P	21:14:38.578		69.1	5.98	TAS	8.5	0.74	m_e	mb	5.0
RETH	71.22	P	21:14:45.588	-0.5	69.1	5.98	TAS	35.4	2.03	m_e	mb	5.1
RJOB	70.97	P	21:14:44.158	-0.2	69.1	5.98	TAS	5.9	1.13	m_e	mb	4.6
ROTZ	70.62	P	21:14:41.368	0.9	69.1	5.98	TAS	1.8	1.05	m_e	mb	4.1
STU	72.82	P	21:14:54.370		69.1	5.98	TAS	33.0	0.85	m_e	mb	5.5
TANN	70.24	P	21:14:38.738	-0.1	69.1	5.98	TAS	2.2	0.93	m_e	mb	4.3
TNS	72.70	P	21:14:53.497		69.1	5.98	TAS	4.0	0.91	m_e	mb	4.5
UBR	72.68	P	21:14:52.913		69.1	5.98	TAS	3.3	0.95	m_e	mb	4.4
WET	70.43	P	21:14:39.871	-0.8	69.1	5.98	TAS	3.5	1.15	m_e	mb	4.4
WLF	74.28	P	21:15:03.496		69.1	5.98	TAS	10.3	0.86	m_e	mb	4.9

Event 90617015 Andaman Islands, India, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	22:19:59.47			12.0000	92.4800				34.7	2.0		30		73.56	78.59	m i ke	BGR
OrigID 90617021																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90617021

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	75.60		P	22:31:41.300	-0.3	89.0		5.74		TAS		8.2	1.04	m_e	mb	4.8
ASSE	75.60		pP	22:31:51.446	-0.1	89.1		5.65		TAS				m_e		
BFO	77.27		P	22:31:50.690	-0.4	89.0		5.74		TAS		10.2	1.28	m_e	mb	4.8
BFO	77.27		pP	22:32:01.008	0.0	89.1		5.65		TAS				m_e		
BRG	73.56		P	22:31:29.892	-0.0	89.0		5.74		TAS		10.9	0.85	m_e	mb	4.9
BRG	73.56		pP	22:31:39.864	-0.1	89.1		5.65		TAS				m_e		
BSEG	75.79		P	22:31:43.007	0.4	89.0		5.74		TAS		16.0	0.87	m_e	mb	5.2
BSEG	75.79		pP	22:31:52.779	0.3	89.1		5.65		TAS				m_e		
BUG	77.75		P	22:31:53.872	0.4	89.0		5.74		TAS		11.1	1.10	m_e	mb	4.9
BUG	77.75		pP	22:32:03.878		89.1		5.65		TAS				m_e		
CLL	74.16		P	22:31:32.841	-0.5	89.0		5.74		TAS		7.0	0.88	m_e	mb	4.7
CLL	74.16		pP	22:31:43.130	-0.3	89.1		5.65		TAS				m_e		

FLT1	75.25	P	22:31:38.894	-0.7	89.0	5.74	TAS	5.4	0.83	m_e	mb	4.6
FLT1	75.25	pP	22:31:48.820	-0.8	89.1	5.65	TAS			m_e		
FUR	75.31	P	22:31:39.981	0.1	89.0	5.74	TAS	8.4	0.82	m_e	mb	4.8
FUR	75.31	pP	22:31:49.785	-0.0	89.1	5.65	TAS			m_e		
GEC2	73.69	P	22:31:31.056	0.4	89.0	5.74	TAS	14.0	0.84	m_e	mb	5.0
GEC2	73.69	pP	22:31:40.788	0.1	89.1	5.65	TAS			m_e		
GOR1	75.21	P	22:31:39.360	0.0	89.0	5.74	TAS	11.9	0.99	m_e	mb	4.9
GOR1	75.21	pP	22:31:49.443	0.2	89.1	5.65	TAS			m_e		
GRA1	75.31	P	22:31:40.601	0.7	89.0	5.74	TAS	11.5	0.93	m_e	mb	4.9
GRA1	75.31	pP	22:31:50.070	0.2	89.1	5.65	TAS			m_e		
GTTG	76.06	P	22:31:44.171	-0.1	89.0	5.74	TAS	14.5	0.82	m_e	mb	5.2
GTTG	76.06	pP	22:31:54.062	-0.3	89.1	5.65	TAS			m_e		
IBBN	77.39	P	22:31:52.010	-0.1	89.0	5.74	TAS	15.9	0.77	m_e	mb	5.2
IBBN	77.39	pP	22:32:01.657		89.1	5.65	TAS			m_e		
KAST	77.04	P	22:31:49.837	-0.1	89.0	5.74	TAS	6.1	1.06	m_e	mb	4.7
KAST	77.04	pP	22:31:59.541	0.0	89.1	5.65	TAS			m_e		
MANZ	74.73	P	22:31:37.342	0.7	89.0	5.74	TAS	1.9	0.85	m_e	mb	4.1
MANZ	74.73	pP	22:31:46.691	0.1	89.1	5.65	TAS			m_e		
MOX	75.04	P	22:31:38.273	-0.1	89.0	5.74	TAS	5.3	0.74	m_e	mb	4.7
MOX	75.04	pP	22:31:48.463	0.1	89.1	5.65	TAS			m_e		
NEUB	74.93	P	22:31:37.497	-0.3	89.0	5.74	TAS	12.5	0.92	m_e	mb	4.9
NEUB	74.93	pP	22:31:48.018	0.2	89.1	5.65	TAS			m_e		
NRDL	75.94	P	22:31:44.016	0.5	89.0	5.74	TAS	14.4	1.19	m_e	mb	5.0
NRDL	75.94	pP	22:31:53.528	0.1	89.1	5.65	TAS			m_e		
RETH	76.39	P	22:31:45.956	-0.2	89.0	5.74	TAS	5.7	0.95	m_e	mb	4.7
RETH	76.39	pP	22:31:55.609	0.1	89.1	5.65	TAS			m_e		
RGN	74.03	P	22:31:32.437	0.0	89.0	5.74	TAS	13.2	0.68	m_e	mb	5.1
RGN	74.03	pP	22:31:42.827	0.3	89.1	5.65	TAS			m_e		
RJOB	74.30	P	22:31:33.617	-0.4	89.0	5.74	TAS	6.5	0.83	m_e	mb	4.7
RJOB	74.30	pP	22:31:44.113	0.1	89.1	5.65	TAS			m_e		
ROTZ	74.67	P	22:31:36.721	0.5	89.0	5.74	TAS	2.8	1.01	m_e	mb	4.2
ROTZ	74.67	pP	22:31:46.332	0.1	89.1	5.65	TAS			m_e		
RUE	73.70	P	22:31:30.512	-0.2	89.0	5.74	TAS	42.0	0.83	m_e	mb	5.5
RUE	73.70	pP	22:31:40.693	-0.1	89.1	5.65	TAS			m_e		
STU	76.67	P	22:31:47.541	-0.2	89.0	5.74	TAS	18.3	0.66	m_e	mb	5.3
STU	76.67	pP	22:31:57.602	-0.1	89.1	5.65	TAS			m_e		
TANN	74.50	P	22:31:35.402	0.1	89.0	5.74	TAS	6.0	0.97	m_e	mb	4.6
TANN	74.50	pP	22:31:45.310	-0.0	89.1	5.65	TAS			m_e		
TNS	77.08	P	22:31:50.147	0.1	89.0	5.74	TAS	2.9	0.68	m_e	mb	4.5
TNS	77.08	pP	22:31:59.894	0.1	89.1	5.65	TAS			m_e		
UBBA	76.06	P	22:31:44.283	0.0	89.0	5.74	TAS			m_e		
UBR	76.11	P	22:31:44.094	-0.4	89.0	5.74	TAS	8.8	0.79	m_e	mb	5.0
UBR	76.11	pP	22:31:54.035	-0.4	89.1	5.65	TAS			m_e		
WET	74.23	P	22:31:33.850	0.1	89.0	5.74	TAS	6.7	0.80	m_e	mb	4.7
WET	74.23	pP	22:31:43.750	-0.0	89.1	5.65	TAS			m_e		
WLF	78.59	P	22:31:59.181		89.0	5.74	TAS			m_e		

Event 90617016 Sichuan, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/17	23:34:44.07			28.1780	103.1120				33.0			34		67.44	73.29	m i ke	BGR
OrigID 90617022																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.1		BGR	90617022
Ms	4.1		BGR	90617022

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	69.71		P	23:45:49.276	0.5	69.6		6.14		TAS		6.9	1.05	m_e	mb	4.7
BALST	73.28		P	23:46:11.204		69.6		6.14		TAS		6.0	0.69	m_e	mb	4.8
BFO	72.50		P	23:46:07.325	0.2	69.6		6.14		TAS		10.6	0.93	m_e	mb	5.0
BRG	68.19		P	23:45:39.822	-0.9	69.6		6.14		TAS		7.7	0.82	m_e	mb	5.0
BSEG	69.31		P	23:45:47.111	-0.4	69.6		6.14		TAS		24.8	0.97	m_e	mb	5.4
BUG	71.93		P	23:46:03.390	0.4	69.6		6.14		TAS		8.2	0.79	m_e	mb	4.9
CLL	68.62		P	23:45:42.222	0.5	69.6		6.14		TAS		7.2	0.93	m_e	mb	4.9
FLT1	69.32		P	23:45:46.925	-0.6	69.6		6.14		TAS		15.3	1.32	m_e	mb	5.1
FUR	70.73		P	23:45:56.624	-0.0	69.6		6.14		TAS		28.7	0.83	m_e	mb	5.4
GEC2	68.98		P	23:45:45.821	0.7	69.6		6.14		TAS		10.6	0.88	m_e	mb	5.1
GOR1	69.06		P	23:45:46.347	-0.5	69.6		6.14		TAS		28.6	1.20	m_e	mb	5.4
GRA1	70.23		P	23:45:53.104	0.0	69.6		6.14		TAS		34.3	1.38	m_e	mb	5.3
GRA1	70.23		L	00:19:02.633						T__		169.9	19.40	a_e	Ms	4.3
GTTG	70.33		P	23:45:53.565	-0.1	69.6		6.14		TAS		9.9	0.78	m_e	mb	5.0
IBBN	71.33		P	23:45:59.364	-0.4	69.6		6.14		TAS		16.0	1.13	m_e	mb	5.0
KAST	71.36		P	23:45:59.857	0.4	69.6		6.14		TAS		5.5	1.27	m_e	mb	4.5
MANZ	69.59		P	23:45:49.591	0.4	69.6		6.14		TAS		1.6	1.24	m_e	mb	4.0
MOX	69.66		P	23:45:48.832	-0.5	69.6		6.14		TAS		29.4	1.80	m_e	mb	5.1
MOX	69.66		L	00:21:55.683						T__		80.0	19.70	a_e	Ms	4.0
NEUB	69.38		P	23:45:47.202	0.5	69.6		6.14		TAS		15.1	0.94	m_e	mb	5.2
NRDL	69.92		P	23:45:51.411	0.5	69.6		6.14		TAS		26.7	1.30	m_e	mb	5.2
PLONS	72.33		P	23:46:05.719	-0.4	69.6		6.14		TAS		6.0	0.80	m_e	mb	4.8
RETH	70.26		P	23:45:53.182	0.1	69.6		6.14		TAS		27.6	1.60	m_e	mb	5.1
RGN	67.44		P	23:45:35.795	0.3	69.6		6.14		TAS		79.5	1.51	m_e	mb	5.7
RJOB	69.92		P	23:45:51.562	0.2	69.6		6.14		TAS		12.7	1.24	m_e	mb	4.9
ROTZ	69.60		P	23:45:49.591	-0.7	69.6		6.14		TAS		3.2	0.96	m_e	mb	4.4
RUE	67.80		P	23:45:37.448		69.6		6.14		TAS		18.7	0.42	m_e	mb	5.7
SLE	72.62		P	23:46:07.915	0.3	69.6		6.14		TAS		46.5	0.84	m_e	mb	5.6
STU	71.80		P	23:46:02.796	-0.2	69.6		6.14		TAS		35.5	0.93	m_e	mb	5.5
SULZ	72.95		P	23:46:09.459	-0.6	69.6		6.14		TAS		65.4	1.04	m_e	mb	5.7
TANN	69.23		P	23:45:46.420	0.1	69.6		6.14		TAS		14.0	1.41	m_e	mb	5.0
TNS	71.71		P	23:46:02.445	0.0	69.6		6.14		TAS		7.2	1.05	m_e	mb	4.7
UBBA	70.56		P	23:45:54.930	-0.2	69.6		6.14		TAS		44.4	1.82	m_e	mb	5.3
UBR	71.64		P	23:46:01.218	0.1	69.6		6.14		TAS		6.4	0.78	m_e	mb	4.8
WET	69.40		P	23:45:48.358	0.5	69.6		6.14		TAS		22.6	1.68	m_e	mb	5.1
WILA	72.49		P	23:46:06.508	-0.2	69.6		6.14		TAS		22.1	1.41	m_e	mb	5.1
WLF	73.29		P	23:46:12.050		69.6		6.14		TAS		23.0	0.89	m_e	mb	5.3

Event 90618002 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	01:15:59.70			-30.9800	-177.5000				30.0				4	157.72	162.11	m i ke	EMSC
OrigID 90618034																	

Magnitude	Err	Nsta	Author	OrigID
Ms 4.9			BGR	90618008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	162.11		PKPab	01:36:44.943		21.4		4.47		TAS				m_e	
BFO	162.11		pPKPab	01:36:56.266		27.1		4.42		TAS				m_e	
BRG	158.38		PKPab	01:36:28.098		21.4		4.47		TAS				m_e	
CLL	158.25		PKPab	01:36:28.231		21.4		4.47		TAS				m_e	
CLL	158.25		pPKPab	01:36:38.804		27.1		4.42		TAS				m_e	
FLT1	157.72		PKPab	01:36:25.230	-0.2	21.4		4.47		TAS				m_e	
FLT1	157.72		pPKPab	01:36:36.702		27.1		4.42		TAS				m_e	
FUR	161.58		PKPab	01:36:42.507		21.4		4.47		TAS				m_e	
GRA1	160.19		L	02:52:51.645						T__		161.1	20.20	a_e Ms	4.9
GTTG	158.72		PKPab	01:36:30.349	0.1	21.4		4.47		TAS				m_e	
IBBN	158.34		PKPab	01:36:28.732	0.4	21.4		4.47		TAS				m_e	
MOX	159.21		L	02:57:29.029						T__		207.8	19.00	a_e Ms	5.0
RJOB	161.50		PKPab	01:36:42.910		21.4		4.47		TAS				m_e	
TNS	160.27		PKPab	01:36:36.371		21.4		4.47		TAS				m_e	
TNS	160.27		pPKPab	01:36:48.977		27.1		4.42		TAS				m_e	
WET	160.23		PKPab	01:36:37.242		21.4		4.47		TAS				m_e	
WLF	161.13		PKPab	01:36:41.904		21.4		4.47		TAS				m_e	

Event 90618003 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	04:23:52.40			-31.3200	-177.7100				30.0				11	158.01	161.74	m i ke	EMSC
OrigID 90618035																	

Magnitude	Err	Nsta	Author	OrigID
Ms 5.2			BGR	90618009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	158.63		PKPab	04:44:21.310		30.3		4.89		TAS				m_e	
CLL	158.51		PKPab	04:44:20.263		30.3		4.89		TAS				m_e	
FLT1	158.01		PKPab	04:44:17.566	0.2	30.3		4.89		TAS				m_e	
GEC2	160.48		PKPab	04:44:29.646		30.3		4.89		TAS				m_e	

./bul1906.txt

Wed Jul 21 10:35:24 2021

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GRA1	160.46	PKPab	04:44:30.263	30.3	4.89	TAS												m_e
GRA1	160.46	L	06:01:20.212			T__					442.8	19.30	a_e	Ms				5.3
MANZ	159.95	PKPab	04:44:28.237	30.3	4.89	TAS												m_e
MOX	159.48	PKPab	04:44:24.813	30.3	4.89	TAS												m_e
MOX	159.48	L	06:14:48.538			T__					320.1	18.80	a_e	Ms				5.2
RJOB	161.74	PKPab	04:44:35.706	30.3	4.89	TAS												m_e
ROTZ	160.12	PKPab	04:44:28.605	30.3	4.89	TAS												m_e
TANN	159.47	PKPab	04:44:24.951	30.3	4.89	TAS												m_e
WET	160.48	PKPab	04:44:30.249	30.3	4.89	TAS												m_e

Event 90618005 South of Fiji Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/06/18	05:14:52.27			-24.5230	178.6780				634.3	4.3		8		148.09	155.17	m i ke	BGR	
	90618011																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	150.96		PKPdf	05:33:26.895	0.1	31.2		1.35		TAS					m_e
ASSE	150.96		PKPbc	05:33:34.540	0.1	25.8		2.18		TAS					m_e
ASSE	150.96		PKPab	05:33:46.239	0.4	24.7		4.29		TAS					m_e
ASSE	150.96		pPKPbc	05:35:58.966		22.8		2.38		TAS					m_e
BFO	155.04		PKPdf	05:33:32.350		31.2		1.35		TAS					m_e
BFO	155.04		PKPbc	05:33:43.349		25.8		2.18		TAS					m_e
BFO	155.04		PKPab	05:34:04.087		24.7		4.29		TAS					m_e
BRG	151.17		PKPdf	05:33:27.232	-0.0	31.2		1.35		TAS					m_e
BRG	151.17		PKPbc	05:33:35.042	0.2	25.8		2.18		TAS					m_e
BSEG	149.36		PKPbc	05:33:31.098	0.1	25.8		2.18		TAS					m_e
BSEG	149.36		PKPab	05:33:39.798	0.0	24.7		4.29		TAS					m_e
BUG	152.32		PKPdf	05:33:29.492	-0.1	31.2		1.35		TAS					m_e
BUG	152.32		PKPbc	05:33:37.359	-0.3	25.8		2.18		TAS					m_e
BUG	152.32		PKPab	05:33:51.964	0.3	24.7		4.29		TAS					m_e
CLL	151.08		PKPdf	05:33:27.261	-0.0	31.2		1.35		TAS					m_e
CLL	151.08		PKPbc	05:33:34.668	0.0	25.8		2.18		TAS					m_e
CLL	151.08		PKPab	05:33:46.697	0.1	24.7		4.29		TAS					m_e
CLL	151.08		pPKPbc	05:35:59.025		22.8		2.38		TAS					m_e
FLT1	150.63		PKPdf	05:33:26.825	0.0	31.2		1.35		TAS					m_e
FLT1	150.63		PKPbc	05:33:33.545	-0.1	25.8		2.18		TAS					m_e
FLT1	150.63		PKPab	05:33:45.015	-0.2	24.7		4.29		TAS					m_e
FLT1	150.63		pPKPbc	05:35:58.051	0.4	22.8		2.38		TAS					m_e
FUR	154.39		PKPab	05:34:01.712		24.7		4.29		TAS					m_e
GEC2	153.00		PKPdf	05:33:29.719	0.6	31.2		1.35		TAS					m_e
GEC2	153.00		PKPbc	05:33:38.561	-0.4	25.8		2.18		TAS					m_e
GEC2	153.00		PKPab	05:33:55.017	0.3	24.7		4.29		TAS					m_e
GOR1	150.01		PKPbc	05:33:32.599	0.2	25.8		2.18		TAS					m_e

GOR1	150.01	PKPab	05:33:42.502	-0.1	24.7	4.29	TAS	m_e
GOR1	150.01	pPKPbc	05:35:56.066	-0.0	22.8	2.38	TAS	m_e
GRA1	153.03	PKPdf	05:33:30.155	0.2	31.2	1.35	TAS	m_e
GRA1	153.03	PKPbc	05:33:39.313	0.4	25.8	2.18	TAS	m_e
GRA1	153.03	PKPab	05:33:55.704	0.4	24.7	4.29	TAS	m_e
GTTG	151.66	PKPdf	05:33:28.356	-0.2	31.2	1.35	TAS	m_e
GTTG	151.66	PKPbc	05:33:36.033	0.1	25.8	2.18	TAS	m_e
GTTG	151.66	PKPab	05:33:49.918	-0.3	24.7	4.29	TAS	m_e
HLG	149.59	PKPbc	05:33:31.762	-0.1	25.8	2.18	TAS	m_e
IBBN	151.41	PKPdf	05:33:28.036	-0.0	31.2	1.35	TAS	m_e
IBBN	151.41	PKPbc	05:33:35.718	0.1	25.8	2.18	TAS	m_e
IBBN	151.41	PKPab	05:33:48.626	-0.8	24.7	4.29	TAS	m_e
IBBN	151.41	pPKPbc	05:36:00.155		22.8	2.38	TAS	m_e
KAST	152.33	PKPdf	05:33:29.174	0.0	31.2	1.35	TAS	m_e
KAST	152.33	PKPbc	05:33:37.334	-0.2	25.8	2.18	TAS	m_e
KAST	152.33	PKPab	05:33:52.195	-0.6	24.7	4.29	TAS	m_e
KAST	152.33	pPKPbc	05:36:01.497		22.8	2.38	TAS	m_e
MANZ	152.51	PKPdf	05:33:29.025	0.3	31.2	1.35	TAS	m_e
MANZ	152.51	PKPbc	05:33:37.438	-0.3	25.8	2.18	TAS	m_e
MANZ	152.51	PKPab	05:33:53.394	0.3	24.7	4.29	TAS	m_e
MANZ	152.51	pPKPbc	05:36:02.548		22.8	2.38	TAS	m_e
MOX	152.06	PKPdf	05:33:28.595	-0.1	31.2	1.35	TAS	m_e
MOX	152.06	PKPbc	05:33:36.793	0.0	25.8	2.18	TAS	m_e
MOX	152.06	PKPab	05:33:51.061	0.2	24.7	4.29	TAS	m_e
NRDL	150.75	PKPdf	05:33:27.330	-0.3	31.2	1.35	TAS	m_e
NRDL	150.75	PKPbc	05:33:34.163	0.1	25.8	2.18	TAS	m_e
RETH	150.68	PKPdf	05:33:27.197	-0.1	31.2	1.35	TAS	m_e
RETH	150.68	PKPbc	05:33:33.932	-0.0	25.8	2.18	TAS	m_e
RETH	150.68	PKPab	05:33:45.414	-0.3	24.7	4.29	TAS	m_e
RETH	150.68	pPKPbc	05:35:57.818	-0.4	22.8	2.38	TAS	m_e
RGN	148.09	PKPbc	05:33:27.754	-0.4	25.8	2.18	TAS	m_e
RGN	148.09	PKPab	05:33:34.722	0.6	24.7	4.29	TAS	m_e
RJOB	154.26	PKPdf	05:33:31.338		31.2	1.35	TAS	m_e
RJOB	154.26	PKPab	05:34:00.740	0.0	24.7	4.29	TAS	m_e
ROTZ	152.68	PKPdf	05:33:29.267	0.1	31.2	1.35	TAS	m_e
ROTZ	152.68	PKPbc	05:33:38.178	0.1	25.8	2.18	TAS	m_e
ROTZ	152.68	PKPab	05:33:54.274	0.2	24.7	4.29	TAS	m_e
RUE	149.82	PKPdf	05:33:25.979	0.2	31.2	1.35	TAS	m_e
RUE	149.82	PKPbc	05:33:32.093	0.2	25.8	2.18	TAS	m_e
STU	154.42	PKPdf	05:33:32.098		31.2	1.35	TAS	m_e
STU	154.42	PKPbc	05:33:42.036	-0.2	25.8	2.18	TAS	m_e
STU	154.42	PKPab	05:34:01.746		24.7	4.29	TAS	m_e
TANN	152.03	PKPdf	05:33:28.468	-0.3	31.2	1.35	TAS	m_e
TANN	152.03	PKPbc	05:33:36.914	0.2	25.8	2.18	TAS	m_e
TANN	152.03	PKPab	05:33:51.173	-0.2	24.7	4.29	TAS	m_e
TNS	153.24	PKPdf	05:33:30.562	-0.4	31.2	1.35	TAS	m_e
TNS	153.24	PKPbc	05:33:39.340	-0.1	25.8	2.18	TAS	m_e
TNS	153.24	PKPab	05:33:56.633	0.4	24.7	4.29	TAS	m_e
UBBA	152.33	PKPdf	05:33:28.874	0.1	31.2	1.35	TAS	m_e

UBBA	152.33	PKPbc	05:33:37.480	0.1	25.8	2.18	TAS	m_e
UBBA	152.33	PKPab	05:33:52.173	-0.1	24.7	4.29	TAS	m_e
UBR	155.17	PKPdf	05:33:32.780		31.2	1.35	TAS	m_e
UBR	155.17	PKPbc	05:33:43.314		25.8	2.18	TAS	m_e
UBR	155.17	PKPab	05:34:04.617		24.7	4.29	TAS	m_e
WET	153.02	PKPdf	05:33:29.804	-0.1	31.2	1.35	TAS	m_e
WET	153.02	PKPbc	05:33:38.947	0.0	25.8	2.18	TAS	m_e
WET	153.02	PKPab	05:33:55.430	-0.3	24.7	4.29	TAS	m_e
WLF	154.23	PKPdf	05:33:32.711	0.0	31.2	1.35	TAS	m_e
WLF	154.23	PKPbc	05:33:42.084	0.2	25.8	2.18	TAS	m_e
WLF	154.23	PKPab	05:34:01.250	0.1	24.7	4.29	TAS	m_e

Event 90618001 Near west coast of eastern Honshu, Japan

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	13:22:26.58			39.4220	139.8210				33.0			29		75.78	82.61	m i ke	BGR
OrigID 90618007																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.4		BGR	90618007
MBB	6.9		BGR	90618007
Ms	6.5		BGR	90618007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	78.67		S	13:44:23.081	-0.0	37.3		10.61		TAS				a_e	
ASSE	78.67		P	13:34:23.605	-0.0	37.8		5.39		TAS		508.5	1.85	a_e	MBB 6.9
BFO	82.61		S	13:45:05.081	-0.0	37.3		10.61		TAS				a_e	
BFO	82.61		P	13:34:44.605	-0.3	37.8		5.39		TAS		1217.4	1.64	m_e	MBB 7.0
BRG	78.36		S	13:44:19.831	-0.4	37.3		10.61		TAS				a_e	
BRG	78.36		P	13:34:21.805	-0.2	37.8		5.39		TAS		1365.9	2.27	a_e	MBB 6.9
BSEG	77.37		S	13:44:10.481	1.4	37.3		10.61		TAS				a_e	
BSEG	77.37		P	13:34:16.655	0.1	37.8		5.39		TAS		240.4	1.11	a_e	MBB 7.1
BUG	80.48		S	13:44:41.781	-0.3	37.3		10.61		TAS				m_e	
BUG	80.48		P	13:34:33.205	-0.1	37.8		5.39		TAS		489.2	1.33	a_e	MBB 6.7
CLL	78.41		S	13:44:19.781	-0.8	37.3		10.61		TAS				a_e	
CLL	78.41		P	13:34:21.855	-0.4	37.8		5.39		TAS		541.5	1.62	m_e	MBB 6.9
FLT1	78.29		S	13:44:17.781	-1.4	37.3		10.61		TAS				a_e	
FLT1	78.29		P	13:34:21.055	-0.6	37.8		5.39		TAS		281.6	1.22	a_e	MBB 7.0
FUR	81.57		S	13:44:53.581	-0.6	37.3		10.61		TAS				a_e	
FUR	81.57		P	13:34:39.355	0.1	37.8		5.39		TAS		976.3	1.56	a_e	MBB 7.1
GEC2	80.03		S	13:44:38.681	0.8	37.3		10.61		TAS				a_e	
GEC2	80.03		P	13:34:30.805	-0.2	37.8		5.39		TAS		270.1	1.51	a_e	MBB 6.7
GOR1	77.75		P	13:34:19.005	0.3	37.8		5.39		TAS		623.5	1.51	a_e	MBB 7.1
GRA1	80.38		S	13:44:42.131	0.6	37.3		10.61		TAS				a_e	
GRA1	80.38		P	13:34:33.405	0.5	37.8		5.39		TAS		1054.4	1.43	a_e	MBB 6.9
GRA1	80.38		L	14:13:12.252						T__		19382.2	19.30	a_e	Ms 6.5

GTTG	79.40	S	13:44:30.931	0.1	37.3	10.61	TAS				a_e		
GTTG	79.40	P	13:34:27.755	0.2	37.8	5.39	TAS	357.3	1.22	a_e	MBB	6.9	
HLG	78.03	S	13:44:16.081	0.3	37.3	10.61	TAS				a_e		
HLG	78.03	P	13:34:20.255	0.2	37.8	5.39	TAS	293.9	1.14	a_e	MBB	7.1	
IBBN	79.60	S	13:44:31.631	-1.1	37.3	10.61	TAS				a_e		
IBBN	79.60	P	13:34:28.505	-0.1	37.8	5.39	TAS	1297.5	2.02	a_e	MBB	6.8	
KAST	80.25	S	13:44:39.731	-0.1	37.3	10.61	TAS				a_e		
KAST	80.25	P	13:34:32.255	0.1	37.8	5.39	TAS	935.6	2.09	a_e	MBB	6.7	
MANZ	79.79	S	13:44:35.531	0.2	37.3	10.61	TAS				a_e		
MANZ	79.79	P	13:34:29.855	0.1	37.8	5.39	TAS	304.5	2.41	a_e	MBB	6.1	
MOX	79.47	S	13:44:31.881	0.0	37.3	10.61	TAS				a_e		
MOX	79.47	P	13:34:28.055	0.1	37.8	5.39	TAS	541.3	1.70	a_e	MBB	6.8	
MOX	79.47	L	14:12:42.768				T__	24939.9	18.70	a_e	Ms	6.6	
NRDL	78.59	S	13:44:22.181	0.0	37.3	10.61	TAS				a_e		
NRDL	78.59	P	13:34:23.205	0.0	37.8	5.39	TAS	1463.0	2.37	a_e	MBB	6.8	
RETH	78.67	P	13:34:23.755	0.1	37.8	5.39	TAS	591.8	1.49	a_e	MBB	6.9	
RGN	75.78	S	13:43:53.031	0.6	37.3	10.61	TAS				a_e		
RGN	75.78	P	13:34:07.855	-0.2	37.8	5.39	TAS	621.3	1.31	a_e	MBB	7.1	
RJOB	81.27	S	13:44:50.681	-0.4	37.3	10.61	TAS				a_e		
RJOB	81.27	P	13:34:38.005	0.3	37.8	5.39	TAS	1198.5	1.88	a_e	MBB	6.9	
ROTZ	79.93	S	13:44:37.581	0.8	37.3	10.61	TAS				a_e		
ROTZ	79.93	P	13:34:30.905	0.5	37.8	5.39	TAS	282.2	1.89	a_e	MBB	6.2	
RUE	77.20	S	13:44:06.931	-0.8	37.3	10.61	TAS				a_e		
RUE	77.20	P	13:34:15.655	-0.1	37.8	5.39	TAS	1013.3	1.74	a_e	MBB	7.1	
STU	81.92	S	13:44:57.231	-0.6	37.3	10.61	TAS				a_e		
STU	81.92	P	13:34:40.955	-0.2	37.8	5.39	TAS	951.3	1.27	a_e	MBB	7.3	
TNS	81.03	S	13:44:48.031	-0.2	37.3	10.61	TAS				a_e		
TNS	81.03	P	13:34:36.455	0.1	37.8	5.39	TAS	9061.8	4.40	a_e	MBB	6.8	
UBBA	79.96	S	13:44:37.031	0.1	37.3	10.61	TAS				a_e		
UBBA	79.96	P	13:34:30.555	-0.1	37.8	5.39	TAS	739.3	1.92	a_e	MBB	6.7	
UBR	82.43	S	13:45:03.681	0.4	37.3	10.61	TAS				a_e		
UBR	82.43	P	13:34:43.455	-0.5	37.8	5.39	TAS	480.7	1.64	a_e	MBB	6.9	
WET	80.14	S	13:44:39.681	0.6	37.3	10.61	TAS				a_e		
WET	80.14	P	13:34:31.855	0.3	37.8	5.39	TAS	1859.5	2.59	a_e	MBB	6.8	
WLF	82.34	S	13:45:02.781	0.8	37.3	10.61	TAS				a_e		
WLF	82.34	P	13:34:43.505	0.1	37.8	5.39	TAS	1126.8	2.05	a_e	MBB	6.9	

Event 90618007 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	16:05:17.73			-31.1200	-178.0500				33.0			29		155.21	162.32	m i ke	BGR
90618013																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.4		BGR	90618013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.05		SS	16:49:23.500	-1.4	21.3		10.77		TAS				a_e	
ASSE	158.05		PKPdf	16:25:12.550	-0.1	26.7		1.03		TAS				m_e	
ASSE	158.05		PKPab	16:25:46.812	-0.3	19.4		4.39		TAS				m_e	
BFO	162.14		SS	16:50:07.800	-1.1	21.3		10.77		TAS				a_e	
BFO	162.14		PKPdf	16:25:16.677		26.7		1.03		TAS				m_e	
BFO	162.14		PKPab	16:26:04.002		19.4		4.39		TAS				m_e	
BRG	158.34		SS	16:49:26.700	-2.4	21.3		10.77		TAS				a_e	
BRG	158.34		PKPdf	16:25:12.547	0.4	26.7		1.03		TAS				m_e	
BRG	158.34		PKPab	16:25:47.790	0.1	19.4		4.39		TAS				m_e	
BSEG	156.41		SS	16:49:09.450	2.0	21.3		10.77		TAS				a_e	
BSEG	156.41		PKPdf	16:25:10.809	-0.0	26.7		1.03		TAS				m_e	
BSEG	156.41		PKPab	16:25:39.639	-0.4	19.4		4.39		TAS				m_e	
BUG	159.32		SS	16:49:39.700	0.2	21.3		10.77		TAS				a_e	
BUG	159.32		PKPdf	16:25:14.387	-0.2	26.7		1.03		TAS				m_e	
CLL	158.23		SS	16:49:26.950	-0.4	21.3		10.77		TAS				a_e	
CLL	158.23		PKPdf	16:25:12.531	0.0	26.7		1.03		TAS				m_e	
CLL	158.23		PKPab	16:25:48.068	0.2	19.4		4.39		TAS				m_e	
CLL	158.23		PP	16:29:25.850		22.0		5.63		TAS				m_e	
FLT1	157.74		SS	16:49:21.900	0.4	21.3		10.77		TAS				a_e	
FLT1	157.74		PKPdf	16:25:12.090	-0.6	26.7		1.03		TAS				m_e	
FLT1	157.74		PKPab	16:25:45.032	0.4	19.4		4.39		TAS				m_e	
FUR	161.55		SS	16:50:04.450	1.2	21.3		10.77		TAS				a_e	
FUR	161.55		PKPab	16:26:03.007		19.4		4.39		TAS				m_e	
GEC2	160.18		SS	16:49:50.300	0.4	21.3		10.77		TAS				a_e	
GEC2	160.18		PKPdf	16:25:14.677		26.7		1.03		TAS				m_e	
GEC2	160.18		PKPab	16:25:56.498		19.4		4.39		TAS				m_e	
GOR1	157.11		PKPdf	16:25:12.340	-0.5	26.7		1.03		TAS				m_e	
GOR1	157.11		PKPab	16:25:41.982	0.0	19.4		4.39		TAS				m_e	
GRA1	160.18		SS	16:49:48.000	-0.1	21.3		10.77		TAS				a_e	
GRA1	160.18		PKPab	16:25:56.694	-0.1	19.4		4.39		TAS				m_e	
GRA1	160.18		L	17:42:48.090						T__		6126.8	19.90	a_e Ms	6.5
GTTG	158.75		SS	16:49:33.100	0.7	21.3		10.77		TAS				a_e	
GTTG	158.75		PKPab	16:25:49.652	-0.2	19.4		4.39		TAS				m_e	
HLG	156.56		SS	16:49:09.500	-0.7	21.3		10.77		TAS				a_e	
IBBN	158.41		SS	16:49:29.000	-0.6	21.3		10.77		TAS				a_e	
IBBN	158.41		PKPdf	16:25:12.595	-0.0	26.7		1.03		TAS				m_e	
IBBN	158.41		PKPab	16:25:47.973	0.2	19.4		4.39		TAS				m_e	
KAST	159.37		SS	16:49:40.450	1.0	21.3		10.77		TAS				a_e	
KAST	159.37		PKPdf	16:25:13.430	-0.1	26.7		1.03		TAS				m_e	
KAST	159.37		PKPab	16:25:51.925	0.1	19.4		4.39		TAS				m_e	
MANZ	159.67		SS	16:49:42.800	-0.0	21.3		10.77		TAS				a_e	
MANZ	159.67		PKPab	16:25:53.941	-0.6	19.4		4.39		TAS				m_e	
MOX	159.21		SS	16:49:36.350	-1.1	21.3		10.77		TAS				a_e	
MOX	159.21		PKPdf	16:25:13.348	-0.0	26.7		1.03		TAS				m_e	
MOX	159.21		PKPab	16:25:51.808	0.1	19.4		4.39		TAS				m_e	
MOX	159.21		PP	16:29:31.373		22.0		5.63		TAS				m_e	
MOX	159.21		L	17:56:17.707						T__		4172.0	18.40	a_e Ms	6.3
NEUB	158.66		SS	16:49:31.600	0.0	21.3		10.77		TAS				a_e	

NEUB	158.66	PKPab	16:25:49.086	0.3	19.4	4.39	TAS	m_e
NRDL	157.82	SS	16:49:22.600	0.1	21.3	10.77	TAS	m_e
NRDL	157.82	PKPab	16:25:45.444	-0.1	19.4	4.39	TAS	m_e
RETH	157.73	PKPdf	16:25:12.272	-0.1	26.7	1.03	TAS	m_e
RETH	157.73	PKPab	16:25:44.578	-0.1	19.4	4.39	TAS	m_e
RETH	157.73	PP	16:29:22.982		22.0	5.63	TAS	m_e
RGN	155.21	SS	16:48:56.250	1.9	21.3	10.77	TAS	a_e
RJOB	161.44	SS	16:50:04.100	0.7	21.3	10.77	TAS	a_e
RJOB	161.44	PKPab	16:26:02.502		19.4	4.39	TAS	m_e
ROTZ	159.84	SS	16:49:45.750	1.0	21.3	10.77	TAS	a_e
ROTZ	159.84	PKPab	16:25:54.919	-0.4	19.4	4.39	TAS	m_e
RUE	156.97	SS	16:49:12.300	-1.4	21.3	10.77	TAS	a_e
STU	161.53	SS	16:50:02.500	0.1	21.3	10.77	TAS	a_e
TANN	159.19	SS	16:49:36.650	-1.0	21.3	10.77	TAS	a_e
TANN	159.19	PKPdf	16:25:13.585	-0.3	26.7	1.03	TAS	m_e
TANN	159.19	PKPab	16:25:52.175	0.6	19.4	4.39	TAS	m_e
TANN	159.19	PP	16:29:30.912		22.0	5.63	TAS	m_e
TNS	160.31	SS	16:49:49.600	0.2	21.3	10.77	TAS	a_e
TNS	160.31	PKPdf	16:25:14.806		26.7	1.03	TAS	m_e
TNS	160.31	PKPab	16:25:56.453	0.3	19.4	4.39	TAS	m_e
TNS	160.31	PP	16:29:37.456		22.0	5.63	TAS	m_e
UBBA	159.43	SS	16:49:38.350	-1.4	21.3	10.77	TAS	a_e
UBBA	159.43	PKPdf	16:25:13.589	0.1	26.7	1.03	TAS	m_e
UBBA	159.43	PKPab	16:25:52.696	-0.1	19.4	4.39	TAS	m_e
UBR	162.32	SS	16:50:11.600	0.5	21.3	10.77	TAS	a_e
UBR	162.32	PKPdf	16:25:16.444		26.7	1.03	TAS	m_e
UBR	162.32	PKPab	16:26:05.249		19.4	4.39	TAS	m_e
WET	160.19	SS	16:49:50.400	1.2	21.3	10.77	TAS	a_e
WET	160.19	PKPdf	16:25:14.990		26.7	1.03	TAS	m_e
WET	160.19	PKPab	16:25:57.022	-0.2	19.4	4.39	TAS	m_e
WLF	161.21	SS	16:49:59.900	-0.2	21.3	10.77	TAS	a_e
WLF	161.21	PKPdf	16:25:16.758		26.7	1.03	TAS	m_e

Event 90618008 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	17:21:48.00			-31.2510	-177.6340				10.0			13		157.32	161.70	m i ke	NEIC
	90618047																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.26		PKPab	17:42:18.612	0.1	20.8		4.12		TAS					m_e
BRG	158.59		PKPab	17:42:20.008		20.8		4.12		TAS					m_e
GEC2	160.44		PKPab	17:42:28.397		20.8		4.12		TAS					m_e
GOR1	157.32		PKPab	17:42:16.518	-0.6	20.8		4.12		TAS					m_e

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GRA1	160.41	PKPab	17:42:28.151		20.8	4.12	TAS	m_e
IBBN	158.59	PKPab	17:42:21.163	-0.0	20.8	4.12	TAS	m_e
MANZ	159.91	PKPdf	17:42:00.244				T__	m_e
MANZ	159.91	PKPab	17:42:26.057		20.8	4.12	TAS	m_e
RETH	157.93	PKPab	17:42:17.216	-0.8	20.8	4.12	TAS	m_e
RJOB	161.70	PKPab	17:42:33.968		20.8	4.12	TAS	m_e
ROTZ	160.08	PKPab	17:42:27.221		20.8	4.12	TAS	m_e
TANN	159.42	PKPab	17:42:24.429		20.8	4.12	TAS	m_e
UBBA	159.64	PKPab	17:42:24.894		20.8	4.12	TAS	m_e
WET	160.44	PKPab	17:42:28.912		20.8	4.12	TAS	m_e

Event 90618009 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	18:12:09.80			-30.5280	-178.0640				35.0			15		157.15	161.56	m i ke	NEIC
90618048																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	161.56		PKPab	18:32:49.443		23.5		4.36		TAS					m_e
BRG	157.79		PKPab	18:32:33.358		23.5		4.36		TAS					m_e
CLL	157.67		PKPab	18:32:32.850	-0.1	23.5		4.36		TAS					m_e
FLT1	157.16		PKPab	18:32:30.318	-0.4	23.5		4.36		TAS					m_e
GRA1	159.61		PKPab	18:32:42.019		23.5		4.36		TAS					m_e
IBBN	157.82		PKPab	18:32:33.716	-0.4	23.5		4.36		TAS					m_e
KAST	158.79		PKPab	18:32:36.666	-0.2	23.5		4.36		TAS					m_e
MOX	158.64		PKPab	18:32:36.649		23.5		4.36		TAS					m_e
NEUB	158.09		PKPab	18:32:34.919	0.1	23.5		4.36		TAS					m_e
NRDL	157.25		PKPab	18:32:31.017	-1.0	23.5		4.36		TAS					m_e
RETH	157.15		PKPab	18:32:30.856	-0.1	23.5		4.36		TAS					m_e
RJOB	160.90		PKPab	18:32:47.700		23.5		4.36		TAS					m_e
ROTZ	159.28		PKPab	18:32:40.218		23.5		4.36		TAS					m_e
TNS	159.73		PKPab	18:32:42.120		23.5		4.36		TAS					m_e
WET	159.64		PKPab	18:32:41.714		23.5		4.36		TAS					m_e

Event 90618011 Southeast of Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	20:27:42.13			-22.8400	170.6300				33.0			30		145.50	150.92	m i ke	BGR
90618017																	

Magnitude Err Nsta Author OrigID

Ms	5.1	BGR	90618017													
Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	146.94		PKPbc	20:47:21.008	0.4	37.3		2.85		TAS				a_e		
BFO	150.92		PKPbc	20:47:31.462	-0.1	37.3		2.85		TAS				m_e		
BRG	146.66		PKPbc	20:47:19.758	-0.1	37.3		2.85		TAS				a_e		
BSEG	145.57		PKPbc	20:47:16.258	-0.0	37.3		2.85		TAS				a_e		
BUG	148.67		PKPbc	20:47:25.658	-0.0	37.3		2.85		TAS				a_e		
CLL	146.71		PKPbc	20:47:19.908	0.4	37.3		2.85		TAS				a_e		
FLT1	146.58		PKPbc	20:47:19.308	0.4	37.3		2.85		TAS				m_e		
FUR	149.84		PKPbc	20:47:28.903	-0.8	37.3		2.85		TAS				m_e		
GEC2	148.26		PKPdf	20:47:22.368		39.2		1.44		TAS				m_e		
GEC2	148.26		PKPbc	20:47:24.453	0.1	37.3		2.85		TAS				m_e		
GOR1	146.02		PKPbc	20:47:17.958	0.1	37.3		2.85		TAS				a_e		
GRA1	148.68		PKPdf	20:47:22.856		39.2		1.44		TAS				m_e		
GRA1	148.68		PKPbc	20:47:25.495	0.6	37.3		2.85		TAS				m_e		
GRA1	148.68		L	22:03:04.760						T__		270.5	18.50	a_e Ms	5.1	
GTTG	147.68		PKPbc	20:47:23.108	-0.1	37.3		2.85		TAS				a_e		
HLG	146.11		PKPbc	20:47:18.058	-0.6	37.3		2.85		TAS				a_e		
IBBN	147.77		PKPbc	20:47:23.058	-0.2	37.3		2.85		TAS				a_e		
KAST	148.50		PKPdf	20:47:22.796		39.2		1.44		TAS				m_e		
KAST	148.50		PKPbc	20:47:25.458	-0.1	37.3		2.85		TAS				a_e		
MANZ	148.09		PKPdf	20:47:22.021		39.2		1.44		TAS				m_e		
MANZ	148.09		PKPbc	20:47:24.558	0.3	37.3		2.85		TAS				a_e		
MOX	147.78		PKPdf	20:47:21.620		39.2		1.44		TAS				m_e		
MOX	147.78		PKPbc	20:47:23.033	0.5	37.3		2.85		TAS				m_e		
MOX	147.78		L	22:02:17.507						T__		289.1	18.10	a_e Ms	5.1	
NEUB	147.29		PKPbc	20:47:21.486	-0.1	37.3		2.85		TAS				m_e		
NRDL	146.84		PKPbc	20:47:20.558	-0.5	37.3		2.85		TAS				a_e		
RETH	146.89		PKPbc	20:47:20.708	0.2	37.3		2.85		TAS				a_e		
RJOB	149.48		PKPbc	20:47:27.344	-0.8	37.3		2.85		TAS				m_e		
ROTZ	148.22		PKPdf	20:47:22.167		39.2		1.44		TAS				m_e		
ROTZ	148.22		PKPbc	20:47:24.618	0.2	37.3		2.85		TAS				m_e		
RUE	145.50		PKPbc	20:47:16.008	-0.1	37.3		2.85		TAS				a_e		
STU	150.22		PKPbc	20:47:30.008	-0.4	37.3		2.85		TAS				a_e		
TANN	147.62		PKPbc	20:47:23.008	0.4	37.3		2.85		TAS				a_e		
TNS	149.31		PKPbc	20:47:27.758	0.7	37.3		2.85		TAS				a_e		
UBBA	148.26		PKPdf	20:47:22.415		39.2		1.44		TAS				m_e		
UBBA	148.26		PKPbc	20:47:24.253	0.1	37.3		2.85		TAS				m_e		
UBR	150.72		PKPbc	20:47:30.658		37.3		2.85		TAS				a_e		
WET	148.40		PKPdf	20:47:22.597		39.2		1.44		TAS				m_e		
WET	148.40		PKPbc	20:47:25.458	-0.1	37.3		2.85		TAS				a_e		
WLF	150.57		PKPbc	20:47:31.308	-0.1	37.3		2.85		TAS				a_e		

Event 90618012 Afghanistan-Tajikistan border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
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OrigID
 2019/06/18 23:00:57.60 36.6420 71.3990 186.0 9 42.79 45.28 m i ke NEIC
 90618051

Magnitude Err Nsta Author OrigID
 mb 4.0 BGR 90618018

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	42.79		P	23:08:36.840	-0.1	83.3		8.18		TAS		2.6	0.68	m_e mb	4.1
FLT1	44.38		P	23:08:48.649		83.3		8.18		TAS		5.0	0.65	m_e mb	4.4
GEC2	43.11		P	23:08:36.550	-0.6	83.3		8.18		TAS		1.2	0.95	m_e mb	3.6
HWTS	44.38		P	23:08:49.588		83.3		8.18		TAS		1.9	0.71	m_e mb	3.9
MOX	44.28		P	23:08:49.163		83.3		8.18		TAS		1.3	0.81	m_e mb	3.7
RUE	42.81		P	23:08:37.026		83.3		8.18		TAS				m_e	
SCHF	43.78		P	23:08:46.515		83.3		8.18		TAS		2.4	0.82	m_e mb	4.0
UBBA	45.28		P	23:08:56.600		83.3		8.18		TAS		1.9	0.65	m_e mb	4.2
WIMM	44.27		P	23:08:48.586		83.3		8.18		TAS		3.9	0.71	m_e mb	4.2

Event 90618013 Kermadec Islands region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/18 23:04:38.10 -31.0600 -177.7030 43.0 7 158.39 161.50 m i ke NEIC
 90618052

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BRG	158.39		PKPab	23:25:03.804		23.1		4.19		TAS				m_e	
GRA1	160.21		PKPab	23:25:11.731		23.1		4.19		TAS				m_e	
RJOB	161.50		PKPab	23:25:18.002		23.1		4.19		TAS				m_e	
ROTZ	159.88		PKPab	23:25:11.140		23.1		4.19		TAS				m_e	
TANN	159.22		PKPab	23:25:08.064		23.1		4.19		TAS				m_e	
WET	160.24		PKPab	23:25:12.441		23.1		4.19		TAS				m_e	
WLF	161.19		PKPab	23:25:11.850		23.1		4.19		TAS				m_e	

Event 90618014 Kermadec Islands region
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/18 23:24:23.10 -31.4520 -177.6020 35.0 10 156.82 162.55 m i ke NEIC
 90618053

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.47		PKPab	23:44:50.292	-0.2	22.0		4.59		TAS				m_e	
ASSE	158.47		pPKPab	23:45:03.283	-0.4	21.6		4.48		TAS				m_e	
BFO	162.55		PKPab	23:45:08.905		22.0		4.59		TAS				m_e	
BRG	158.79		PKPab	23:44:51.998	-0.5	22.0		4.59		TAS				m_e	
BSEG	156.82		PKPab	23:44:42.558	-0.1	22.0		4.59		TAS				m_e	
BSEG	156.82		pPKPab	23:44:55.200	0.6	21.6		4.48		TAS				m_e	
CLL	158.67		PKPab	23:44:51.023	0.2	22.0		4.59		TAS				m_e	
CLL	158.67		pPKPab	23:45:03.917		21.6		4.48		TAS				m_e	
FLT1	158.16		PKPab	23:44:48.587	-0.4	22.0		4.59		TAS				m_e	
FUR	161.99		PKPab	23:45:06.861		22.0		4.59		TAS				m_e	
GEC2	160.63		PKPab	23:45:00.160		22.0		4.59		TAS				m_e	
GRA1	160.61		PKPab	23:45:00.160		22.0		4.59		TAS				m_e	
IBBN	158.79		PKPab	23:44:52.187	0.1	22.0		4.59		TAS				m_e	
KAST	159.77		pPKPab	23:45:09.301		21.6		4.48		TAS				m_e	
MANZ	160.11		PKPab	23:44:58.577		22.0		4.59		TAS				m_e	
MANZ	160.11		pPKPab	23:45:09.745		21.6		4.48		TAS				m_e	
MOX	159.63		PKPab	23:44:55.287	0.4	22.0		4.59		TAS				m_e	
MOX	159.63		pPKPab	23:45:07.737		21.6		4.48		TAS				m_e	
NEUB	159.09		PKPab	23:44:53.704	-0.5	22.0		4.59		TAS				m_e	
NEUB	159.09		pPKPab	23:45:05.600		21.6		4.48		TAS				m_e	
RETH	158.13		PKPab	23:44:49.062	0.1	22.0		4.59		TAS				m_e	
RETH	158.13		pPKPab	23:45:01.073	0.5	21.6		4.48		TAS				m_e	
RJOB	161.90		PKPab	23:45:06.130		22.0		4.59		TAS				m_e	
ROTZ	160.28		PKPab	23:44:58.820		22.0		4.59		TAS				m_e	
TANN	159.62		PKPab	23:44:55.775	-0.3	22.0		4.59		TAS				m_e	
TANN	159.62		pPKPab	23:45:08.029		21.6		4.48		TAS				m_e	
TNS	160.71		pPKPab	23:45:12.649		21.6		4.48		TAS				m_e	
UBBA	159.84		PKPab	23:44:56.140	-0.1	22.0		4.59		TAS				m_e	
WET	160.64		PKPab	23:44:59.917		22.0		4.59		TAS				m_e	

Event 90619001 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/18	23:59:09.10			-31.0600	-177.7030				34.0			22		156.42	162.15	m i ke	NEIC
90619040																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.07		PKPab	00:19:34.374	0.3	19.4		4.36		TAS				m_e	
BFO	162.15		PKPab	00:19:52.045		19.4		4.36		TAS				m_e	
BRG	158.39		PKPab	00:19:35.437	0.0	19.4		4.36		TAS				m_e	
BSEG	156.42		PKPab	00:19:27.025	0.1	19.4		4.36		TAS				m_e	
CLL	158.27		PKPab	00:19:35.275	0.0	19.4		4.36		TAS				m_e	
FLT1	157.76		PKPab	00:19:32.996	-0.1	19.4		4.36		TAS				m_e	

FUR	161.59	PKPab	00:19:50.593		19.4		4.36	TAS		m_e
GEC2	160.24	PKPab	00:19:44.627		19.4		4.36	TAS		m_e
GRA1	160.21	PKPab	00:19:44.789	0.0	19.4		4.36	TAS		m_e
GTTG	158.76	PKPab	00:19:37.526	0.2	19.4		4.36	TAS		m_e
IBBN	158.39	PKPab	00:19:36.250	0.5	19.4		4.36	TAS		m_e
KAST	159.37	PKPab	00:19:40.443	-0.5	19.4		4.36	TAS		m_e
MANZ	159.71	PKPab	00:19:41.886	-0.9	19.4		4.36	TAS		m_e
MOX	159.24	PKPab	00:19:39.468	0.4	19.4		4.36	TAS		m_e
NRDL	157.83	PKPab	00:19:32.670	0.4	19.4		4.36	TAS		m_e
RETH	157.73	PKPab	00:19:32.907	-0.8	19.4		4.36	TAS		m_e
ROTZ	159.88	PKPab	00:19:42.854	0.6	19.4		4.36	TAS		m_e
TANN	159.22	PKPab	00:19:39.629	1.0	19.4		4.36	TAS		m_e
TNS	160.31	PKPab	00:19:43.476		19.4		4.36	TAS		m_e
UBBA	159.44	PKPab	00:19:39.951	-0.1	19.4		4.36	TAS		m_e
WET	160.24	PKPab	00:19:43.660		19.4		4.36	TAS		m_e
WLF	161.19	PKPab	00:19:47.302		19.4		4.36	TAS		m_e

Event 90619002 Turkey

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	00:45:31.70			39.5800	38.6000				5.0					21.84	21.84	m i ke	EMSC
90619034																	

Magnitude Err Nsta Author OrigID
mb 4.5 BGR 90619008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	21.84		P	00:50:27.084		107.2		9.51		TAS		15.8	0.75	m_e mb	4.5

Event 90619005 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	06:03:47.31			-21.9950	-174.5860				33.0				24	147.89	154.10	m i ke	BGR
90619011																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	149.65		PKPbc	06:23:32.342	0.2	11.7		2.43		TAS				m_e	
BFO	153.62		PKPbc	06:23:42.114		11.7		2.43		TAS				m_e	
BRG	150.41		PKPbc	06:23:34.669	0.3	11.7		2.43		TAS				m_e	
BSEG	147.89		PKPbc	06:23:29.411	-1.0	11.7		2.43		TAS				m_e	
BUG	150.57		PKPbc	06:23:34.436	0.1	11.7		2.43		TAS				m_e	

CLL	150.15	PKPbc	06:23:34.203	-0.2	11.7	2.43	TAS	m_e
FLT1	149.38	PKPbc	06:23:31.411	0.5	11.7	2.43	TAS	m_e
GEC2	152.41	PKPbc	06:23:38.857		11.7	2.43	TAS	m_e
GOR1	148.73	PKPbc	06:23:30.946	0.1	11.7	2.43	TAS	m_e
GTTG	150.29	PKPbc	06:23:34.242	-0.6	11.7	2.43	TAS	m_e
IBBN	149.69	PKPbc	06:23:32.603	0.3	11.7	2.43	TAS	m_e
KAST	150.75	PKPbc	06:23:35.541	-1.3	11.7	2.43	TAS	m_e
MANZ	151.57	PKPbc	06:23:37.693	0.0	11.7	2.43	TAS	m_e
MOX	151.00	PKPbc	06:23:34.901	0.6	11.7	2.43	TAS	m_e
NEUB	150.44	PKPbc	06:23:34.203	-0.8	11.7	2.43	TAS	m_e
NRDL	149.34	PKPbc	06:23:31.877	-0.2	11.7	2.43	TAS	m_e
RETH	149.16	PKPbc	06:23:30.481	-0.2	11.7	2.43	TAS	m_e
ROTZ	151.77	PKPbc	06:23:38.159	0.4	11.7	2.43	TAS	m_e
TANN	151.10	PKPbc	06:23:34.669	0.6	11.7	2.43	TAS	m_e
TNS	151.73	PKPbc	06:23:37.693	-0.3	11.7	2.43	TAS	m_e
UBBA	151.01	PKPbc	06:23:35.832	0.1	11.7	2.43	TAS	m_e
UBR	154.10	PKPbc	06:23:43.427		11.7	2.43	TAS	m_e
WET	152.27	PKPbc	06:23:38.796	0.3	11.7	2.43	TAS	m_e
WLF	152.38	PKPbc	06:23:39.787		11.7	2.43	TAS	m_e

Event 90619006 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	07:01:44.27			-30.2100	-178.5900				33.0			30		154.21	161.31	m i ke	BGR
OrigID 90619012																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.4		BGR	90619012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	157.06		PKPdf	07:21:36.158	-0.1	24.5		1.04		TAS				m_e	
ASSE	157.06		PKPab	07:22:12.789	0.9	10.3		4.06		TAS				m_e	
ASSE	157.06		PP	07:25:45.942	0.3	20.8		5.42		TAS				a_e	
BFO	161.14		PKPdf	07:21:40.243		24.5		1.04		TAS				m_e	
BFO	161.14		PKPab	07:22:28.027		10.3		4.06		TAS				m_e	
BFO	161.14		PP	07:26:07.642	-0.2	20.8		5.42		TAS				a_e	
BRG	157.33		PKPdf	07:21:36.832	-0.4	24.5		1.04		TAS				m_e	
BRG	157.33		PKPab	07:22:14.278	0.1	10.3		4.06		TAS				m_e	
BRG	157.33		PP	07:25:47.342	-0.6	20.8		5.42		TAS				a_e	
BSEG	155.43		PKPdf	07:21:34.967	-0.1	24.5		1.04		TAS				m_e	
BSEG	155.43		PKPab	07:22:04.752	-0.7	10.3		4.06		TAS				m_e	
BSEG	155.43		PP	07:25:37.492	0.6	20.8		5.42		TAS				a_e	
BUG	158.35		PKPdf	07:21:38.513	-0.2	24.5		1.04		TAS				m_e	
BUG	158.35		PP	07:25:52.642	-0.3	20.8		5.42		TAS				a_e	
CLL	157.22		PKPdf	07:21:36.553	-0.2	24.5		1.04		TAS				m_e	
CLL	157.22		PKPab	07:22:13.890	0.6	10.3		4.06		TAS				m_e	

CLL	157.22	PP	07:25:46.692	-0.3	20.8	5.42	TAS	a_e		
FLT1	156.74	PKPdf	07:21:36.014	-0.5	24.5	1.04	TAS	m_e		
FLT1	156.74	PKPab	07:22:12.448	-0.4	10.3	4.06	TAS	m_e		
FLT1	156.74	PP	07:25:43.742	-0.2	20.8	5.42	TAS	a_e		
FUR	160.54	PKPab	07:22:28.017		10.3	4.06	TAS	m_e		
FUR	160.54	PP	07:26:05.042	-0.0	20.8	5.42	TAS	a_e		
GEC2	159.16	PKPdf	07:21:38.400	-0.7	24.5	1.04	TAS	m_e		
GEC2	159.16	PKPab	07:22:23.358		10.3	4.06	TAS	m_e		
GEC2	159.16	PP	07:25:58.192	-0.2	20.8	5.42	TAS	a_e		
GOR1	156.11	PKPdf	07:21:35.556	-0.3	24.5	1.04	TAS	m_e		
GOR1	156.11	PKPab	07:22:07.057	-0.2	10.3	4.06	TAS	m_e		
GOR1	156.11	PP	07:25:40.692	0.1	20.8	5.42	TAS	a_e		
GRA1	159.17	PKPdf	07:21:40.098	0.1	24.5	1.04	TAS	m_e		
GRA1	159.17	PKPab	07:22:21.736	0.4	10.3	4.06	TAS	m_e		
GRA1	159.17	PP	07:25:57.642	0.3	20.8	5.42	TAS	a_e		
GRA1	159.17	L	08:35:57.169				T__	a_e Ms	6351.4	22.00 6.4
GTTG	157.76	PKPdf	07:21:37.307	0.3	24.5	1.04	TAS	m_e		
GTTG	157.76	PKPab	07:22:15.194	-1.2	10.3	4.06	TAS	m_e		
GTTG	157.76	PP	07:25:49.792	0.3	20.8	5.42	TAS	a_e		
HLG	155.59	PP	07:25:37.942	-0.2	20.8	5.42	TAS	a_e		
IBBN	157.43	PKPdf	07:21:37.271	-0.3	24.5	1.04	TAS	m_e		
IBBN	157.43	PKPab	07:22:11.966	0.5	10.3	4.06	TAS	m_e		
IBBN	157.43	PP	07:25:47.492	-0.5	20.8	5.42	TAS	a_e		
KAST	158.39	PKPdf	07:21:37.890	0.3	24.5	1.04	TAS	m_e		
KAST	158.39	PP	07:25:53.192	0.2	20.8	5.42	TAS	a_e		
MANZ	158.66	PKPdf	07:21:38.172	-0.0	24.5	1.04	TAS	m_e		
MANZ	158.66	PKPab	07:22:20.124	-0.3	10.3	4.06	TAS	m_e		
MANZ	158.66	PP	07:25:55.092	0.3	20.8	5.42	TAS	a_e		
MOX	158.20	PKPdf	07:21:37.718	0.3	24.5	1.04	TAS	m_e		
MOX	158.20	PKPab	07:22:18.215	-0.6	10.3	4.06	TAS	m_e		
MOX	158.20	PP	07:25:52.192	0.1	20.8	5.42	TAS	a_e		
MOX	158.20	L	08:41:52.903				T__	a_e Ms	4817.2	21.40 6.3
NEUB	157.66	PKPdf	07:21:37.528	-0.1	24.5	1.04	TAS	m_e		
NEUB	157.66	PKPab	07:22:16.229	1.1	10.3	4.06	TAS	m_e		
NEUB	157.66	PP	07:25:48.792	-0.3	20.8	5.42	TAS	a_e		
NRDL	156.83	PKPdf	07:21:36.130	0.7	24.5	1.04	TAS	m_e		
NRDL	156.83	PP	07:25:44.792	0.3	20.8	5.42	TAS	a_e		
RETH	156.75	PKPdf	07:21:36.122	-0.3	24.5	1.04	TAS	m_e		
RETH	156.75	PKPab	07:22:09.466	-0.5	10.3	4.06	TAS	m_e		
RETH	156.75	PP	07:25:43.942	-0.1	20.8	5.42	TAS	a_e		
RGN	154.21	PKPdf	07:21:34.012	0.3	24.5	1.04	TAS	m_e		
RGN	154.21	PP	07:25:30.292	-0.0	20.8	5.42	TAS	a_e		
ROTZ	158.83	PKPdf	07:21:38.423	0.6	24.5	1.04	TAS	m_e		
ROTZ	158.83	PKPab	07:22:20.778	-1.1	10.3	4.06	TAS	m_e		
ROTZ	158.83	PP	07:25:56.192	0.4	20.8	5.42	TAS	a_e		
RUE	155.96	PKPdf	07:21:36.143	0.1	24.5	1.04	TAS	m_e		
RUE	155.96	PKPab	07:22:09.031	0.7	10.3	4.06	TAS	m_e		
RUE	155.96	PP	07:25:39.742	-0.4	20.8	5.42	TAS	a_e		
STU	160.53	PKPdf	07:21:40.540	2.1	24.5	1.04	TAS	m_e		

STU	160.53	PKPab	07:22:25.018		10.3	4.06	TAS	m_e
STU	160.53	PP	07:26:04.342	-0.2	20.8	5.42	TAS	a_e
TANN	158.18	PKPdf	07:21:38.074	0.2	24.5	1.04	TAS	m_e
TANN	158.18	PKPab	07:22:18.437	0.2	10.3	4.06	TAS	m_e
TANN	158.18	PP	07:25:52.142	-0.0	20.8	5.42	TAS	a_e
TNS	159.32	PKPdf	07:21:39.214	-0.1	24.5	1.04	TAS	m_e
TNS	159.32	PKPab	07:22:21.709	-0.3	10.3	4.06	TAS	m_e
TNS	159.32	PP	07:25:58.192	0.2	20.8	5.42	TAS	a_e
UBBA	158.43	PKPdf	07:21:37.656	-0.1	24.5	1.04	TAS	m_e
UBBA	158.43	PKPab	07:22:18.490	-0.0	10.3	4.06	TAS	m_e
UBBA	158.43	PP	07:25:53.342	0.2	20.8	5.42	TAS	a_e
UBR	161.31	PKPdf	07:21:40.975		24.5	1.04	TAS	m_e
UBR	161.31	PP	07:26:09.092	0.1	20.8	5.42	TAS	a_e
WET	159.18	PKPdf	07:21:38.982	-0.5	24.5	1.04	TAS	m_e
WET	159.18	PKPab	07:22:22.623		10.3	4.06	TAS	m_e
WET	159.18	PP	07:25:58.192	0.2	20.8	5.42	TAS	m_e
WLF	160.24	PKPdf	07:21:40.796	1.3	24.5	1.04	TAS	m_e
WLF	160.24	PKPab	07:22:23.040	-0.2	10.3	4.06	TAS	m_e
WLF	160.24	PP	07:26:03.092	-0.2	20.8	5.42	TAS	a_e

Event 90619010 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	15:53:53.64			56.1000	164.4000				33.0			22		68.29	74.37	m i ke	BGR
OrigID 90619016																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90619016

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	69.98		P	16:05:02.128	-0.1	15.5		6.00		TAS		8.5	1.01	m_e mb	4.8
BFO	74.03		P	16:05:25.669		15.5		6.00		TAS		9.0	1.10	m_e mb	4.7
BRG	70.61		P	16:05:05.384	0.1	15.5		6.00		TAS		12.9	1.34	m_e mb	4.9
BSEG	68.29		P	16:04:52.296		15.5		6.00		TAS		10.7	1.03	m_e mb	5.0
BUG	71.17		P	16:05:09.219	0.3	15.5		6.00		TAS		8.3	0.88	m_e mb	4.9
CLL	70.37		P	16:05:04.163	0.1	15.5		6.00		TAS		9.0	0.95	m_e mb	4.9
CLZ	70.30		P	16:05:04.638	0.2	15.5		6.00		TAS		18.4	1.20	m_e mb	5.1
GEC2	72.60		P	16:05:18.003		15.5		6.00		TAS		6.3	1.02	m_e mb	4.7
GRA1	72.24		P	16:05:16.171		15.5		6.00		TAS		17.9	1.15	m_e mb	5.1
IBBN	70.25		P	16:05:04.095	0.0	15.5		6.00		TAS		15.2	1.07	m_e mb	5.0
KAST	71.23		P	16:05:09.620	0.4	15.5		6.00		TAS		6.1	0.99	m_e mb	4.7
MANZ	71.80		P	16:05:13.254	-0.9	15.5		6.00		TAS		1.5	1.02	m_e mb	4.1
MOX	71.25		P	16:05:09.930	0.1	15.5		6.00		TAS		9.4	1.15	m_e mb	4.8
NRDL	69.71		P	16:05:00.354	-0.1	15.5		6.00		TAS		4.7	0.97	m_e mb	4.6
RETH	69.59		P	16:04:59.889	-0.5	15.5		6.00		TAS		6.3	1.12	m_e mb	4.7
RJOB	73.84		P	16:05:25.669		15.5		6.00		TAS		7.8	0.92	m_e mb	4.7

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ROTZ	71.99	P	16:05:14.747	-0.4	15.5	6.00	TAS	2.5	1.15	m_e	mb	4.2
TANN	71.32	P	16:05:10.540	0.4	15.5	6.00	TAS	5.7	1.09	m_e	mb	4.6
TNS	72.18	P	16:05:15.633		15.5	6.00	TAS	5.9	1.10	m_e	mb	4.6
UBBA	71.35	P	16:05:10.626	0.3	15.5	6.00	TAS	1.4	0.55	m_e	mb	4.3
UBR	74.37	P	16:05:28.271		15.5	6.00	TAS	11.7	1.07	m_e	mb	4.8
WET	72.47	P	16:05:17.596		15.5	6.00	TAS	11.9	1.10	m_e	mb	4.9
WLF	73.06	P	16:05:21.001		15.5	6.00	TAS	3.9	0.91	m_e	mb	4.5

Event 90619011 Azores Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	17:09:27.12			40.5380	-30.4480				33.0					30.45	30.74	m i ke	BGR
OrigID																	
90619017																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.4		BGR	90619017
Ms	4.3		BGR	90619017

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	30.45		P	17:15:36.305		267.0		9.05		TAS		7.4	1.28	m_e	mb	4.4
GRA1	30.45		L	17:25:37.455						T__		668.9	19.90	a_e	Ms	4.3
MOX	30.74		L	17:25:39.291						T__		633.3	21.80	a_e	Ms	4.2

Event 90619012 Irian Jaya, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/06/19	17:24:50.00			-2.1700	138.4200				10.0					32	111.43	117.73	m i ke	EMSC
OrigID																		
90619044																		

Magnitude	Err	Nsta	Author	OrigID
Ms	6.7		BGR	90619018

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	114.00		PP	17:44:22.447	0.1	60.9		7.18		TAS				a_e	
BFO	117.22		PP	17:44:45.147	-0.4	60.9		7.18		TAS				a_e	
BRG	112.80		PP	17:44:13.597	-0.1	60.9		7.18		TAS				a_e	
BSEG	113.26		PP	17:44:17.297	0.0	60.9		7.18		TAS				a_e	
BUG	116.16		PP	17:44:37.747	-0.2	60.9		7.18		TAS				a_e	
CLL	113.13		PP	17:44:16.047	-0.0	60.9		7.18		TAS				a_e	
CLZ	114.31		PP	17:44:25.097	0.5	60.9		7.18		TAS				a_e	
FLT1	113.60		PP	17:44:19.397	-0.1	60.9		7.18		TAS				a_e	
FUR	115.59		PP	17:44:33.497	-0.4	60.9		7.18		TAS				a_e	
GEC2	113.84		PP	17:44:21.397	0.0	60.9		7.18		TAS				m_e	

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GOR1	113.23	PP	17:44:16.847	-0.1	60.9	7.18	TAS	a_e										
GRA1	114.89	Pdiff	17:39:41.866		62.2	4.24	TAS	m_e										
GRA1	114.89	PKiKP	17:43:34.813		54.0	0.84	TAS	m_e										
GRA1	114.89	PP	17:44:28.947	0.2	60.9	7.18	TAS	a_e										
GRA1	114.89	L	18:37:01.168				T__	a_e	Ms	15051.0	20.50						6.6	
GTTG	114.67	PP	17:44:27.697	0.5	60.9	7.18	TAS	a_e										
HLG	114.34	PP	17:44:24.497	-0.7	60.9	7.18	TAS	a_e										
IBBN	115.44	PP	17:44:32.347	-0.5	60.9	7.18	TAS	a_e										
KAST	115.68	PP	17:44:34.997	0.6	60.9	7.18	TAS	a_e										
MANZ	114.25	PP	17:44:24.247	0.1	60.9	7.18	TAS	a_e										
MOX	114.22	PP	17:44:24.147	0.3	60.9	7.18	TAS	a_e										
MOX	114.22	L	18:35:37.287				T__	a_e	Ms	23094.7	20.70						6.8	
NEUB	113.86	PP	17:44:21.347	0.0	60.9	7.18	TAS	a_e										
NRDL	114.11	PP	17:44:23.247	0.0	60.9	7.18	TAS	a_e										
RETH	114.38	PP	17:44:24.847	-0.3	60.9	7.18	TAS	a_e										
RGN	111.43	PP	17:44:03.997	-0.1	60.9	7.18	TAS	a_e										
RJOB	114.88	PP	17:44:28.797	-0.1	60.9	7.18	TAS	a_e										
ROTZ	114.30	PP	17:44:24.647	0.2	60.9	7.18	TAS	a_e										
RUE	112.16	PP	17:44:08.997	-0.1	60.9	7.18	TAS	a_e										
STU	116.51	PP	17:44:40.147	-0.2	60.9	7.18	TAS	a_e										
TANN	113.85	PP	17:44:21.447	0.2	60.9	7.18	TAS	a_e										
TNS	116.18	PP	17:44:38.497	0.5	60.9	7.18	TAS	a_e										
UBBA	115.02	PP	17:44:29.947	0.3	60.9	7.18	TAS	a_e										
UBR	116.51	PP	17:44:39.747	-0.8	60.9	7.18	TAS	a_e										
WET	114.19	PP	17:44:23.797	-0.0	60.9	7.18	TAS	a_e										
WLF	117.73	PP	17:44:49.697	0.6	60.9	7.18	TAS	a_e										

Event 90619015 Northern Peru

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	23:03:08.96			-3.5100	-73.9200				121.1	2.9		25		86.24	91.34	m i ke	BGR
OrigID 90619021																	

Magnitude Err Nsta Author OrigID
mb 4.7 BGR 90619021

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	89.42	P		23:15:51.834	0.5	264.0		4.71		TAS		7.8	1.18	m_e mb	4.8
ASSE	89.42	pP		23:16:22.421	-0.3	265.8		4.65		TAS				m_e	
BFO	87.45	P		23:15:42.923	0.2	264.0		4.71		TAS		3.0	0.92	m_e mb	4.4
BRG	91.34	P		23:16:00.633		264.0		4.71		TAS		3.7	1.01	m_e mb	4.7
BRG	91.34	pP		23:16:31.763		265.8		4.65		TAS				m_e	
BSEG	89.41	P		23:15:51.879	0.3	264.0		4.71		TAS		6.1	1.01	m_e mb	4.8
BSEG	89.41	pP		23:16:22.392	0.4	265.8		4.65		TAS				m_e	
BUG	87.23	P		23:15:41.543	-0.1	264.0		4.71		TAS		6.6	0.74	m_e mb	4.9
BUG	87.23	pP		23:16:12.912	0.1	265.8		4.65		TAS				m_e	

CLL	90.79	P	23:15:58.455		264.0		4.71	TAS	2.8	1.22	m_e mb	4.5
CLL	90.79	pP	23:16:29.829		265.8		4.65	TAS			m_e	
CLZ	89.20	P	23:15:51.141	0.1	264.0		4.71	TAS	4.0	0.91	m_e mb	4.7
FLT1	89.79	P	23:15:53.790	-0.2	264.0		4.71	TAS	3.9	0.65	m_e mb	4.8
GEC2	91.05	P	23:15:59.615		264.0		4.71	TAS	3.2	1.18	m_e mb	4.5
GOR1	89.90	P	23:15:54.716	-0.1	264.0		4.71	TAS	9.7	0.61	m_e mb	5.2
GTTG	88.92	P	23:15:49.840	-0.0	264.0		4.71	TAS	5.5	0.80	m_e mb	4.8
IBBN	87.67	P	23:15:43.600	-0.1	264.0		4.71	TAS	6.0	0.64	m_e mb	5.1
IBBN	87.67	pP	23:16:14.728	0.4	265.8		4.65	TAS			m_e	
KAST	87.91	P	23:15:44.214	-0.6	264.0		4.71	TAS	2.8	0.82	m_e mb	4.6
MANZ	90.10	P	23:15:55.132	-0.0	264.0		4.71	TAS	0.7	0.95	m_e mb	3.9
MANZ	90.10	pP	23:16:26.407		265.8		4.65	TAS			m_e	
MOX	89.85	P	23:15:54.287	-0.1	264.0		4.71	TAS	1.5	0.70	m_e mb	4.3
NRDL	89.12	P	23:15:50.489	-0.1	264.0		4.71	TAS	3.3	0.80	m_e mb	4.6
NRDL	89.12	pP	23:16:21.566	-0.3	265.8		4.65	TAS			m_e	
RETH	88.70	P	23:15:48.703	-0.0	264.0		4.71	TAS	5.0	0.83	m_e mb	4.8
RETH	88.70	pP	23:16:19.700	0.0	265.8		4.65	TAS			m_e	
RJOB	90.36	P	23:15:56.297		264.0		4.71	TAS	4.1	1.02	m_e mb	4.6
RJOB	90.36	pP	23:16:27.588		265.8		4.65	TAS			m_e	
ROTZ	90.15	P	23:15:55.228	-0.4	264.0		4.71	TAS	0.8	0.99	m_e mb	3.9
ROTZ	90.15	pP	23:16:26.382		265.8		4.65	TAS			m_e	
TANN	90.37	P	23:15:56.255		264.0		4.71	TAS	6.4	1.23	m_e mb	4.7
TANN	90.37	pP	23:16:27.987		265.8		4.65	TAS			m_e	
TNS	87.79	P	23:15:44.091	-0.2	264.0		4.71	TAS	7.6	1.02	m_e mb	5.0
UBBA	88.85	pP	23:16:20.534	-0.3	265.8		4.65	TAS			m_e	
UBR	88.55	P	23:15:48.259	0.2	264.0		4.71	TAS	9.6	0.90	m_e mb	5.0
UBR	88.55	pP	23:16:19.880	-0.5	265.8		4.65	TAS			m_e	
WET	90.53	P	23:15:57.122		264.0		4.71	TAS	4.9	1.24	m_e mb	4.7
WET	90.53	pP	23:16:28.511		265.8		4.65	TAS			m_e	
WLF	86.24	P	23:15:36.941	-0.0	264.0		4.71	TAS	20.1	1.35	m_e mb	5.1
WLF	86.24	pP	23:16:08.095	-0.3	265.8		4.65	TAS			m_e	

Event 90619016 Vanuatu Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	23:14:58.77			-13.3020	166.1780				33.0			8		135.21	140.53	m i ke	BGR
	90619022																

Magnitude	Err	Nsta	Author	OrigID
Ms	5.7		BGR	90619022

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	136.56		PKPdf	23:34:21.436	-0.3	36.8		1.94		TAS					m_e
BFO	140.53		PKPdf	23:34:29.362		36.8		1.94		TAS					m_e
BFO	140.53		PP	23:37:22.900		38.2		6.21		TAS					m_e
BRG	136.28		PKPdf	23:34:20.990	0.2	36.8		1.94		TAS					m_e

BRG	136.28	SKPab	23:37:53.227	0.3	35.6	4.58	TAS	m_e		
BSEG	135.21	PKPdf	23:34:18.856	-0.1	36.8	1.94	TAS	m_e		
BUG	138.31	PKPdf	23:34:24.699	-0.1	36.8	1.94	TAS	m_e		
BUG	138.31	PP	23:37:11.396		38.2	6.21	TAS	m_e		
CLL	136.33	PKPdf	23:34:20.990	-0.0	36.8	1.94	TAS	m_e		
CLL	136.33	SKPab	23:37:52.622	-0.3	35.6	4.58	TAS	m_e		
CLZ	136.91	PKPdf	23:34:22.412	-0.1	36.8	1.94	TAS	m_e		
CLZ	136.91	PP	23:37:02.417	0.5	38.2	6.21	TAS	m_e		
FLT1	136.19	PKPdf	23:34:20.634	0.0	36.8	1.94	TAS	m_e		
FLT1	136.19	PP	23:36:57.086	-0.2	38.2	6.21	TAS	m_e		
FLT1	136.19	SKPab	23:37:52.807	0.5	35.6	4.58	TAS	m_e		
FUR	139.47	PKPdf	23:34:27.072		36.8	1.94	TAS	m_e		
GEC2	137.90	PKPdf	23:34:24.367	-0.2	36.8	1.94	TAS	m_e		
GEC2	137.90	SKPab	23:38:00.503		35.6	4.58	TAS	m_e		
GOR1	135.64	PKPdf	23:34:19.897	-0.1	36.8	1.94	TAS	m_e		
GRA1	138.30	PKPdf	23:34:24.990	0.1	36.8	1.94	TAS	m_e		
GRA1	138.30	L	00:37:53.144				T__		1490.7	21.20 a_e Ms 5.7
GTTG	137.29	PKPdf	23:34:22.946	0.1	36.8	1.94	TAS	m_e		
GTTG	137.29	SKPab	23:37:57.797		35.6	4.58	TAS	m_e		
IBBN	137.42	PKPdf	23:34:23.295	0.2	36.8	1.94	TAS	m_e		
KAST	138.13	PKPdf	23:34:24.733	-0.0	36.8	1.94	TAS	m_e		
KAST	138.13	PP	23:37:10.374		38.2	6.21	TAS	m_e		
MANZ	137.71	PKPdf	23:34:24.101	0.1	36.8	1.94	TAS	m_e		
MANZ	137.71	PP	23:37:06.345		38.2	6.21	TAS	m_e		
MOX	137.39	PKPdf	23:34:23.298	0.3	36.8	1.94	TAS	m_e		
MOX	137.39	PP	23:37:04.662		38.2	6.21	TAS	m_e		
MOX	137.39	SKPab	23:37:58.235		35.6	4.58	TAS	m_e		
MOX	137.39	L	00:37:24.205				T__		1431.7	20.70 a_e Ms 5.7
NEUB	136.90	PKPdf	23:34:22.104	0.1	36.8	1.94	TAS	m_e		
NRDL	136.47	PKPdf	23:34:21.269	-0.2	36.8	1.94	TAS	m_e		
NRDL	136.47	PP	23:36:59.050	0.9	38.2	6.21	TAS	m_e		
NRDL	136.47	SKPab	23:37:53.846		35.6	4.58	TAS	m_e		
RETH	136.52	PKPdf	23:34:21.434	0.0	36.8	1.94	TAS	m_e		
RETH	136.52	PP	23:36:58.769	-1.2	38.2	6.21	TAS	m_e		
RETH	136.52	SKPab	23:37:52.635		35.6	4.58	TAS	m_e		
RJOB	139.13	PKPdf	23:34:26.494		36.8	1.94	TAS	m_e		
ROTZ	137.84	PKPdf	23:34:23.923	0.1	36.8	1.94	TAS	m_e		
ROTZ	137.84	PP	23:37:07.748		38.2	6.21	TAS	m_e		
TANN	137.24	PKPdf	23:34:23.034	-0.1	36.8	1.94	TAS	m_e		
TNS	138.93	PKPdf	23:34:26.266	-0.0	36.8	1.94	TAS	m_e		
TNS	138.93	PP	23:37:13.079		38.2	6.21	TAS	m_e		
UBBA	137.87	PKPdf	23:34:24.031	0.1	36.8	1.94	TAS	m_e		
UBR	140.34	PP	23:37:23.461		38.2	6.21	TAS	m_e		
WET	138.03	PKPdf	23:34:24.545	-0.2	36.8	1.94	TAS	m_e		
WET	138.03	PP	23:37:08.870		38.2	6.21	TAS	m_e		
WLF	140.20	PKPdf	23:34:28.625	0.1	36.8	1.94	TAS	m_e		
WLF	140.20	PP	23:37:23.180		38.2	6.21	TAS	m_e		

Event 90620002 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/19	23:59:58.90			-15.7640	-174.8430				309.1	4.3		20		141.70	147.91	m i ke	BGR
OrigID 90620008																	

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	147.42		PKPbc	00:19:05.013		10.2		3.03		TAS					m_e
BRG	144.27		PKPbc	00:18:55.256	-0.3	10.2		3.03		TAS					m_e
BSEG	141.70		PKPbc	00:18:47.818	0.0	10.2		3.03		TAS					m_e
BUG	144.37		PKPbc	00:18:55.513	0.3	10.2		3.03		TAS					m_e
CLL	143.99		PKPbc	00:18:54.644	0.5	10.2		3.03		TAS					m_e
CLZ	143.77		PKPbc	00:18:54.477	-0.0	10.2		3.03		TAS					m_e
FUR	147.30		PKPbc	00:19:04.902		10.2		3.03		TAS					m_e
GEC2	146.27		PKPbc	00:19:01.925		10.2		3.03		TAS					m_e
GRA1	145.80		PKPbc	00:19:00.787		10.2		3.03		TAS					m_e
GTTG	144.10		PKPbc	00:18:55.205	-0.1	10.2		3.03		TAS					m_e
KAST	144.55		PKPbc	00:18:56.555	1.0	10.2		3.03		TAS					m_e
MANZ	145.40		PKPbc	00:18:59.049		10.2		3.03		TAS					m_e
MANZ	145.40		pPKPbc	00:20:15.585		7.1		3.37		TAS					m_e
MOX	144.82		PKPbc	00:18:57.084	-0.1	10.2		3.03		TAS					m_e
MOX	144.82		pPKPbc	00:20:13.390		7.1		3.37		TAS					m_e
RJOB	147.50		PKPbc	00:19:05.363		10.2		3.03		TAS					m_e
ROTZ	145.60		PKPbc	00:18:59.576		10.2		3.03		TAS					m_e
ROTZ	145.60		pPKPbc	00:20:16.203		7.1		3.37		TAS					m_e
TANN	144.94		PKPbc	00:18:57.523	-0.9	10.2		3.03		TAS					m_e
TNS	145.53		PKPbc	00:19:00.633		10.2		3.03		TAS					m_e
TNS	145.53		pPKPbc	00:20:15.735		7.1		3.37		TAS					m_e
UBR	147.91		PKPbc	00:19:05.759		10.2		3.03		TAS					m_e
WET	146.12		PKPbc	00:19:02.255		10.2		3.03		TAS					m_e
WLF	146.18		PKPbc	00:19:02.083		10.2		3.03		TAS					m_e
WLF	146.18		pPKPbc	00:20:17.803		7.1		3.37		TAS					m_e

Event 90620004 South of Kermadec Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/20	05:24:44.10			-33.7660	-178.9350				10.0			19		158.80	164.52	m i ke	NEIC
OrigID 90620043																	

Magnitude	Err	Nsta	Author	OrigID
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Ms	4.6		BGR	90620010
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	164.46		PKPab	05:45:39.145		29.0		4.28		TAS				m_e	
BRG	160.48		PKPab	05:45:22.158	-0.1	29.0		4.28		TAS				m_e	
BSEG	158.80		PKPab	05:45:15.538	-0.1	29.0		4.28		TAS				m_e	
BUG	161.77		PKPab	05:45:28.418	0.0	29.0		4.28		TAS				m_e	
CLL	160.43		PKPab	05:45:22.051	0.5	29.0		4.28		TAS				m_e	
CLZ	160.72		PKPab	05:45:23.415	0.3	29.0		4.28		TAS				m_e	
FLT1	160.05		PKPab	05:45:19.897	-0.7	29.0		4.28		TAS				m_e	
FUR	163.70		PKPab	05:45:36.812		29.0		4.28		TAS				m_e	
GOR1	159.43		PKPab	05:45:17.914	-0.5	29.0		4.28		TAS				m_e	
GRA1	162.40		PKPab	05:45:31.435		29.0		4.28		TAS				m_e	
GRA1	162.40		L	07:05:01.104						T__		97.1	18.68	a_e Ms	4.7
GTTG	161.09		PKPab	05:45:25.248	-0.1	29.0		4.28		TAS				m_e	
IBBN	160.85		PKPab	05:45:23.691	-0.2	29.0		4.28		TAS				m_e	
KAST	161.77		PKPab	05:45:26.069	-0.1	29.0		4.28		TAS				m_e	
MANZ	161.86		PKPab	05:45:28.448		29.0		4.28		TAS				m_e	
MOX	161.44		PKPab	05:45:26.505	-0.8	29.0		4.28		TAS				m_e	
MOX	161.44		L	07:04:08.008						T__		76.3	19.48	a_e Ms	4.6
RETH	160.12		PKPab	05:45:20.442	0.2	29.0		4.28		TAS				m_e	
ROTZ	162.01		PKPab	05:45:29.677		29.0		4.28		TAS				m_e	
TANN	161.38		PKPab	05:45:26.653		29.0		4.28		TAS				m_e	
TNS	162.68		PKPab	05:45:31.500		29.0		4.28		TAS				m_e	
UBR	164.52		PKPab	05:45:38.957		29.0		4.28		TAS				m_e	
WET	162.30		PKPab	05:45:30.697		29.0		4.28		TAS				m_e	

Event 90620003 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/20	07:33:06.93			-16.4740	-173.8260				81.0	3.3		29		142.48	148.71	m i ke	BGR
90620009																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	144.25		PKPbc	07:52:30.724	0.1	8.8		2.97		TAS				a_e	
ASSE	144.25		pPKPbc	07:52:52.946		7.1		2.96		TAS				m_e	
BFO	148.18		PKPdf	07:52:37.938		17.5		1.54		TAS				m_e	
BFO	148.18		PKPbc	07:52:41.924		8.8		2.97		TAS				m_e	
BRG	145.12		PKPbc	07:52:33.424	0.6	8.8		2.97		TAS				a_e	
BSEG	142.48		PKPbc	07:52:24.674	-0.7	8.8		2.97		TAS				a_e	
BUG	145.11		PKPbc	07:52:33.224	0.3	8.8		2.97		TAS				a_e	
CLL	144.82		PKPbc	07:52:32.374	0.2	8.8		2.97		TAS				m_e	
CLZ	144.56		PKPbc	07:52:31.924	0.4	8.8		2.97		TAS				a_e	
FLT1	144.00		PKPbc	07:52:29.324	0.1	8.8		2.97		TAS				a_e	
FLT1	144.00		pPKPbc	07:52:52.097		7.1		2.96		TAS				m_e	
FUR	148.12		PKPdf	07:52:37.343		17.5		1.54		TAS				m_e	

FUR	148.12	PKPbc	07:52:41.774	-0.6	8.8	2.97	TAS	a_e
GEC2	147.13	PKPdf	07:52:36.081		17.5	1.54	TAS	m_e
GEC2	147.13	PKPbc	07:52:39.274	-0.5	8.8	2.97	TAS	a_e
GOR1	143.34	PKPbc	07:52:27.724	-0.1	8.8	2.97	TAS	a_e
GRA1	146.62	PKPdf	07:52:35.413		17.5	1.54	TAS	m_e
GRA1	146.62	PKPbc	07:52:38.051	0.0	8.8	2.97	TAS	m_e
GTTG	144.88	PKPbc	07:52:32.924	-0.2	8.8	2.97	TAS	a_e
IBBN	144.23	PKPbc	07:52:30.624	0.4	8.8	2.97	TAS	a_e
KAST	145.31	PKPbc	07:52:34.174	0.4	8.8	2.97	TAS	a_e
MANZ	146.23	PKPdf	07:52:34.583		17.5	1.54	TAS	m_e
MANZ	146.23	PKPbc	07:52:37.024	0.4	8.8	2.97	TAS	a_e
MOX	145.63	PKPdf	07:52:33.089	-0.6	17.5	1.54	TAS	m_e
MOX	145.63	PKPbc	07:52:35.242	0.5	8.8	2.97	TAS	m_e
MOX	145.63	pPKPbc	07:52:57.327		7.1	2.96	TAS	m_e
NEUB	145.07	PKPbc	07:52:33.274	0.2	8.8	2.97	TAS	a_e
NEUB	145.07	pPKPbc	07:52:55.867		7.1	2.96	TAS	m_e
NRDL	143.93	PKPbc	07:52:29.474	-0.1	8.8	2.97	TAS	a_e
RETH	143.73	PKPbc	07:52:28.974	-0.5	8.8	2.97	TAS	a_e
RJOB	148.35	PKPdf	07:52:38.030		17.5	1.54	TAS	m_e
RJOB	148.35	PKPbc	07:52:42.224		8.8	2.97	TAS	m_e
ROTZ	146.43	PKPdf	07:52:34.806		17.5	1.54	TAS	m_e
ROTZ	146.43	PKPbc	07:52:37.380	0.2	8.8	2.97	TAS	m_e
RUE	143.58	PKPbc	07:52:27.924	-0.2	8.8	2.97	TAS	a_e
RUE	143.58	pPKPbc	07:52:51.260		7.1	2.96	TAS	m_e
STU	147.69	PKPdf	07:52:37.551		17.5	1.54	TAS	m_e
STU	147.69	PKPbc	07:52:40.481	-0.6	8.8	2.97	TAS	m_e
TANN	145.77	PKPdf	07:52:33.811		17.5	1.54	TAS	m_e
TANN	145.77	PKPbc	07:52:35.540	0.3	8.8	2.97	TAS	m_e
TNS	146.29	PKPdf	07:52:34.199	-0.6	17.5	1.54	TAS	m_e
TNS	146.29	PKPbc	07:52:37.230	0.4	8.8	2.97	TAS	m_e
UBR	148.71	PKPdf	07:52:38.629		17.5	1.54	TAS	m_e
UBR	148.71	PKPbc	07:52:43.224		8.8	2.97	TAS	a_e
WET	146.96	PKPdf	07:52:36.137		17.5	1.54	TAS	m_e
WET	146.96	PKPbc	07:52:38.913	-0.3	8.8	2.97	TAS	m_e
WET	146.96	pPKPbc	07:53:01.060		7.1	2.96	TAS	m_e
WLF	146.90	PKPdf	07:52:37.179		17.5	1.54	TAS	m_e
WLF	146.90	PKPbc	07:52:39.224	-0.4	8.8	2.97	TAS	a_e

Event 90620005 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/20	21:45:06.90			-30.9810	-177.4010				10.0				10	158.05	161.53	m i ke	NEIC
90620044																	

Magnitude	Err	Nsta	Author	OrigID
Ms	4.7		BGR	90620011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.05		PKPab	22:05:35.769	0.3	20.5		4.47		TAS				m_e	
BRG	158.41		PKPab	22:05:38.149		20.5		4.47		TAS				m_e	
GEC2	160.27		PKPab	22:05:45.483		20.5		4.47		TAS				m_e	
GRA1	160.21		PKPab	22:05:45.817		20.5		4.47		TAS				m_e	
GRA1	160.21		L	23:22:24.559						T__		102.1	19.70	a_e Ms	4.7
MOX	159.24		L	23:40:01.327						T__		105.7	18.20	a_e Ms	4.7
RJOB	161.53		PKPab	22:05:52.111		20.5		4.47		TAS				m_e	
ROTZ	159.89		PKPab	22:05:44.690		20.5		4.47		TAS				m_e	
TANN	159.23		PKPab	22:05:40.025		20.5		4.47		TAS				m_e	
TNS	160.28		PKPab	22:05:44.981		20.5		4.47		TAS				m_e	
WET	160.26		PKPab	22:05:45.810		20.5		4.47		TAS				m_e	
WLF	161.15		PKPab	22:05:50.466		20.5		4.47		TAS				m_e	

Event 90621001 North Atlantic Ocean

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	01:46:32.89			58.1160	-35.6920				10.0					28.37	28.37	m i ke	BGR
OrigID 90621007																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.2		BGR	90621007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	28.37		P	01:52:26.286		302.6		8.72		TAS		5.1	1.18	m_e mb	4.2

Event 90621003 France

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	06:51:01.46	0.52	0.88	47.1360	-0.0010	14.5	5.6	168	10.0				17 329	4.82	7.89	m i ke	BGR
OrigID 90621009																	

Magnitude	Err	Nsta	Author	OrigID
ML	5.0		BGR	90621009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ABH	5.72		Pn	06:52:23.488	-1.0					T__				m_e	
BALST	5.25		Sg	06:53:46.713	-1.1					T__				m_e	
BALST	5.25		Pn	06:52:19.026	0.9					T__				m_e ML	5.3
BERGE	5.59		Sn	06:53:23.114	1.3					T__				m_e	
BERGE	5.59		Sg	06:53:58.276	-0.5					T__				m_e	
BERGE	5.59		Pn	06:52:21.944	-0.8					T__				m_e ML	5.0

BFO	5.75	Pn	06:52:23.675	-1.1	T__	m_e		
BODE	6.17	Pn	06:52:30.870	0.3	T__	m_e		
ECH	4.96	Sn	06:53:08.179	1.3	T__	m_e		
ECH	4.96	Sg	06:53:37.177	-1.5	T__	m_e		
ECH	4.96	Pn	06:52:12.886	-1.3	T__	m_e		
EMING	6.04	Pn	06:52:28.794	-0.0	T__	m_e		
GRA1	7.89	Sg	06:55:13.072	1.4	T__	m_e		
METMA	5.63	Sg	06:54:00.125	0.1	T__	m_e		
METMA	5.63	Pn	06:52:22.949	-0.3	T__	m_e	ML	4.9
MILB	6.74	Pn	06:52:37.669	-0.5	T__	m_e		
PLONS	6.41	Pn	06:52:35.175	1.4	T__	m_e		
SLE	5.80	Pn	06:52:25.095	-0.4	T__	m_e		
SULZ	5.53	Sg	06:53:56.859	-0.0	T__	m_e		
SULZ	5.53	Pn	06:52:22.733	0.8	T__	m_e		
TNS	6.39	Pn	06:52:32.939	-0.6	T__	m_e		
UBR	6.88	Pn	06:52:40.936	0.8	T__	m_e		
WALHA	6.22	Pn	06:52:31.816	0.6	T__	m_e		
WLF	4.82	Sg	06:53:34.613	0.4	T__	m_e		
WLF	4.82	Pn	06:52:12.202	-0.1	T__	m_e	ML	4.9

Event 90621004 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	07:27:38.80			-31.1400	-177.5500				10.0					160.33	160.33	m i ke	EMSC
	90621036																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	160.33		PKP	07:48:18.054		22.9		4.35		TAS					m_e

Event 90621005 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/06/21	08:37:18.85			-31.4000	-178.6500				33.0					29	156.57	162.41	m i ke	BGR
	90621011																	

Magnitude Err Nsta Author OrigID

Ms 6.5 BGR 90621011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	158.19		PKPdf	08:57:15.142	0.6	20.8		1.04		TAS					m_e
BFO	162.28		PKPdf	08:57:18.864		20.8		1.04		TAS					m_e

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WET	160.25	PKPab	08:57:56.557							T__							m_e
WLF	161.40	PKPdf	08:57:17.701	20.8				1.04		TAS							m_e
WLF	161.40	PKPab	08:58:02.374							T__							m_e

Event 90621008 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	22:49:23.20			-30.8600	-177.4300				2.0					160.09	160.09	m i ke	EMSC
OrigID 90621040																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	160.09		PKP	23:10:03.193		22.3		3.96		TAS					m_e
GRA1	160.09		pPKP	23:10:13.737						T__					m_e

Event 90621009 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	23:00:25.70			-30.9000	-177.6000				2.0					160.09	160.09	m i ke	EMSC
OrigID 90621041																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	160.09		PKP	23:21:05.011		22.8		3.79		TAS					m_e
GRA1	160.09		pPKP	23:21:12.377						T__					m_e

Event 90621010 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/21	23:34:41.30			-21.2100	-174.0600				5.0					151.27	151.27	m i ke	EMSC
OrigID 90621042																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.27		PKP	23:54:43.772		10.3		3.66		TAS					m_e

Event 90622002 Kansas, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/22	08:50:23.30			39.2500	-99.3600				2.0					72.43	72.43	m i ke	EMSC
OrigID 90622034																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90622008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	72.43		P	09:01:53.028		310.3		5.85		TAS		5.8	0.89	m_e mb	4.7

Event 90622003 Off coast of Oregon, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/22	12:43:40.66			42.8500	-130.2480				10.0					81.86	81.86	m i ke	BGR
OrigID 90622009																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90622009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	81.86		P	12:55:55.191		339.2		4.71		TAS		12.2	1.31	m_e mb	4.9

Event 90622004 Off coast of Oregon, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/22	12:52:02.29			43.2960	-130.2720				10.0					81.46	81.46	m i ke	BGR
OrigID 90622010																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90622010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	81.46		P	13:04:14.711		342.4		4.71		TAS		12.5	1.37	m_e mb	4.8

Event 90622005 Off coast of Oregon, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
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OrigID
 2019/06/22 13:00:10.67 42.6440 -130.9610 10.0 82.26 82.26 m i ke BGR
 90622011

Magnitude Err Nsta Author OrigID
 mb 4.7 BGR 90622011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	82.26		P	13:12:27.312		339.6		4.68		TAS		6.9	1.18	m_e mb	4.7

Event 90622006 Sichuan, China
 Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err Ndef Nsta Gap mdist Mdist Qual Author
 OrigID
 2019/06/22 14:30:00.72 28.0940 104.5230 26.5 0.8 31 68.29 74.19 m i ke BGR
 90622012

Magnitude Err Nsta Author OrigID
 mb 5.4 BGR 90622012
 Ms 4.8 BGR 90622012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	70.59		P	14:41:11.196	0.1	68.7		6.07		TAS		24.2	1.31	a_e mb	5.2
BFO	73.42		P	14:41:28.296	0.5	68.7		6.07		TAS		28.4	1.12	a_e mb	5.3
BFO	73.42		pP	14:41:35.815						T__				m_e	
BRG	69.10		P	14:41:02.196	-0.1	68.7		6.07		TAS		16.7	0.94	a_e mb	5.2
BRG	69.10		pP	14:41:09.622						T__				m_e	
BSEG	70.16		P	14:41:09.096	0.3	68.7		6.07		TAS		92.7	1.31	a_e mb	5.8
BSEG	70.16		pP	14:41:16.595						T__				m_e	
BUG	72.81		P	14:41:24.846	-0.6	68.7		6.07		TAS		23.7	1.09	a_e mb	5.2
CLL	69.52		P	14:41:04.496	0.1	68.7		6.07		TAS		23.1	1.15	a_e mb	5.2
CLZ	70.87		P	14:41:13.346	0.1	68.7		6.07		TAS		86.0	1.45	a_e mb	5.7
CLZ	70.87		pP	14:41:21.079						T__				m_e	
FLT1	70.20		P	14:41:08.396	-0.3	68.7		6.07		TAS		60.9	1.46	a_e mb	5.5
FUR	71.67		P	14:41:18.646	0.4	68.7		6.07		TAS		59.0	0.97	a_e mb	5.7
FUR	71.67		pP	14:41:26.326						T__				m_e	
GEC2	69.92		P	14:41:07.596	-0.2	68.7		6.07		TAS		16.4	0.96	a_e mb	5.1
GEC2	69.92		pP	14:41:15.054						T__				m_e	
GOR1	69.93		P	14:41:07.696	0.2	68.7		6.07		TAS		116.2	1.41	a_e mb	5.8
GRA1	71.14		P	14:41:15.346	0.2	68.7		6.07		TAS		31.8	1.06	a_e mb	5.4
GRA1	71.14		L	15:14:01.831						T__		557.6	19.50	a_e Ms	4.8
GTTG	71.21		P	14:41:15.346	-0.1	68.7		6.07		TAS		53.3	1.26	a_e mb	5.5
IBBN	72.19		P	14:41:21.146	-0.7	68.7		6.07		TAS		52.6	1.33	a_e mb	5.5
KAST	72.24		P	14:41:21.596	-0.3	68.7		6.07		TAS		31.2	1.54	a_e mb	5.2
MANZ	70.50		P	14:41:11.346	0.3	68.7		6.07		TAS		8.9	1.43	a_e mb	4.7
MOX	70.57		P	14:41:11.346	-0.1	68.7		6.07		TAS		46.7	1.63	a_e mb	5.4
MOX	70.57		L	15:13:53.430						T__		516.6	18.80	a_e Ms	4.8

NEUB	70.28	P	14:41:09.396	-0.3	68.7	6.07	TAS	100.0	1.45	a_e	mb	5.7
NRDL	70.79	P	14:41:13.046	-0.3	68.7	6.07	TAS	84.3	1.37	a_e	mb	5.7
RETH	71.12	P	14:41:14.846	0.4	68.7	6.07	TAS	70.3	1.68	a_e	mb	5.5
RGN	68.29	P	14:40:57.346	0.1	68.7	6.07	TAS	66.7	1.18	a_e	mb	5.8
RJOB	70.87	P	14:41:13.646	-0.4	68.7	6.07	TAS	22.1	1.17	a_e	mb	5.2
ROTZ	70.52	P	14:41:11.496	0.1	68.7	6.07	TAS	15.4	1.36	m_e	mb	5.0
RUE	68.68	P	14:40:59.596	0.0	68.7	6.07	TAS	113.7	1.49	a_e	mb	5.9
STU	72.72	P	14:41:24.346	-0.5	68.7	6.07	TAS	63.7	1.00	a_e	mb	5.7
STU	72.72	pP	14:41:31.964				T__			m_e		
TANN	70.14	P	14:41:08.746	-0.1	68.7	6.07	TAS	45.1	1.59	a_e	mb	5.3
TNS	72.61	P	14:41:23.646	0.3	68.7	6.07	TAS	20.2	1.12	a_e	mb	5.2
UBBA	71.46	P	14:41:16.746	-0.1	68.7	6.07	TAS	53.0	1.80	a_e	mb	5.4
UBR	72.58	P	14:41:23.296		68.7	6.07	TAS	16.8	0.97	a_e	mb	5.1
UBR	72.58	pP	14:41:30.836				T__			m_e		
WET	70.33	P	14:41:10.246	0.1	68.7	6.07	TAS	50.7	1.58	a_e	mb	5.4
WET	70.33	pP	14:41:17.583				T__			m_e		
WLF	74.19	P	14:41:33.546	0.4	68.7	6.07	TAS	49.7	1.05	a_e	mb	5.5
WLF	74.19	pP	14:41:40.858				T__			m_e		

Event 90622008 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/22	16:36:20.20			-21.9300	-179.4400				578.0					151.04	151.04	m i ke	EMSC

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.04		PKP	16:55:08.070		20.8		1.73		TAS					m_e

Event 90622010 Near coast of Chiapas, Mexico

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/22	22:31:41.10			14.4800	-92.7600				60.0					87.88	87.88	m i ke	EMSC

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	87.88		P	22:44:25.359		289.8		5.33		TAS		5.9	1.20	m_e mb	4.8

Event 90623002 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/23	00:21:05.20			-21.1600	-173.8900				2.0					151.24	151.24	m i ke	EMSC
OrigID 90623034																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	151.24		PKP	00:41:09.968		10.0		3.65		TAS				m_e	

Event 90623001 Sichuan, China

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/23	00:28:25.20			28.1600	105.2500				45.0					71.54	71.54	m i ke	EMSC
OrigID 90623033																	

Magnitude Err Nsta Author OrigID
mb 4.5 BGR 90623007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	71.54		P	00:39:36.254		68.2		6.78		TAS		3.2	0.85	m_e mb	4.5

Event 90623004 Near coast of northern California, United States

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/23	03:53:03.80			40.2800	-124.2200				13.0					82.20	82.20	m i ke	EMSC
OrigID 90623036																	

Magnitude Err Nsta Author OrigID
mb 5.1 BGR 90623010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	82.20		P	04:05:24.301		327.2		4.64		TAS		22.2	1.28	m_e mb	5.1

Event 90623006 Iran-Iraq border region

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

./bul1906.txt

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2019/06/23 16:52:03.80 34.3200 45.5800 46.0 29.48 29.48 m i ke EMSC
90623038

Magnitude Err Nsta Author OrigID
mb 4.4 BGR 90623012

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
GRA1 29.48 P 16:58:02.711 108.4 10.34 TAS 6.8 1.08 m_e mb 4.4

Event 90624001 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
2019/06/24 00:11:42.17 35.5900 140.9200 54.4 6.9 30 80.95 86.36 m i ke BGR
90624007

Magnitude Err Nsta Author OrigID
mb 5.2 BGR 90624007

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR Amp Per Qual Magnitude
ASSE 82.44 P 00:24:01.763 0.2 39.0 5.10 TAS 8.1 0.80 a_e mb 4.9
BFO 86.36 P 00:24:21.463 0.2 39.0 5.10 TAS 22.1 1.05 a_e mb 5.2
BRG 82.09 P 00:23:59.963 0.0 39.0 5.10 TAS 10.9 0.88 a_e mb 5.0
BSEG 81.16 P 00:23:55.263 0.1 39.0 5.10 TAS 23.9 1.07 a_e mb 5.2
BUG 84.28 P 00:24:10.963 0.1 39.0 5.10 TAS 18.3 0.98 a_e mb 5.3
BUG 84.28 pP 00:24:26.690 T__ m_e
CLL 82.15 P 00:24:00.013 -0.1 39.0 5.10 TAS 27.5 1.00 a_e mb 5.3
CLZ 82.78 P 00:24:03.913 -0.2 39.0 5.10 TAS 22.7 1.04 a_e mb 5.3
CLZ 82.78 pP 00:24:19.389 T__ m_e
FLT1 82.06 P 00:23:59.313 0.3 39.0 5.10 TAS 18.7 0.94 a_e mb 5.2
FUR 85.28 P 00:24:16.413 -0.5 39.0 5.10 TAS 36.9 0.78 a_e mb 5.7
GEC2 83.73 P 00:24:08.213 -0.4 39.0 5.10 TAS 11.9 0.88 a_e mb 5.1
GOR1 81.53 P 00:23:57.363 0.0 39.0 5.10 TAS 33.2 1.24 a_e mb 5.3
GRA1 84.12 P 00:24:10.913 -0.2 39.0 5.10 TAS 43.0 0.98 a_e mb 5.6
GTTG 83.17 P 00:24:05.713 -0.3 39.0 5.10 TAS 14.5 0.98 a_e mb 5.2
IBBN 83.40 P 00:24:06.663 -0.1 39.0 5.10 TAS 16.2 0.88 a_e mb 5.3
KAST 84.04 P 00:24:10.013 -0.1 39.0 5.10 TAS 12.9 0.92 a_e mb 5.2
KAST 84.04 pP 00:24:25.368 T__ m_e
MANZ 83.53 P 00:24:07.563 0.3 39.0 5.10 TAS 3.6 1.03 a_e mb 4.5
MOX 83.22 P 00:24:05.863 0.2 39.0 5.10 TAS 22.3 1.35 a_e mb 5.2
MOX 83.22 pP 00:24:21.391 T__ m_e
NEUB 82.73 P 00:24:03.213 0.1 39.0 5.10 TAS 24.7 0.95 a_e mb 5.4
NRDL 82.37 P 00:24:01.463 -0.0 39.0 5.10 TAS 12.0 1.07 a_e mb 5.0
RETH 82.46 P 00:24:01.963 -0.2 39.0 5.10 TAS 12.3 0.92 a_e mb 5.0
RETH 82.46 pP 00:24:18.279 T__ m_e
RJOB 84.96 P 00:24:14.963 39.0 5.10 TAS 22.5 0.99 a_e mb 5.3
RJOB 84.96 pP 00:24:29.042 T__ m_e

ROTZ	83.65	P	00:24:08.463	0.5	39.0	5.10	TAS	8.7	1.37	a_e	mb	4.8
ROTZ	83.65	pP	00:24:23.119				T__				m_e	
RUE	80.95	P	00:23:54.063	-0.6	39.0	5.10	TAS	21.5	0.93	a_e	mb	5.2
STU	85.67	P	00:24:18.113	0.1	39.0	5.10	TAS	71.5	0.99	a_e	mb	5.8
TANN	83.05	P	00:24:05.013	0.2	39.0	5.10	TAS	29.3	1.66	a_e	mb	5.2
TNS	84.81	P	00:24:14.063	0.4	39.0	5.10	TAS	18.8	1.17	a_e	mb	5.2
UBBA	83.73	P	00:24:08.463	0.0	39.0	5.10	TAS	45.5	1.88	a_e	mb	5.4
UBR	86.15	P	00:24:20.263		39.0	5.10	TAS	14.6	1.20	a_e	mb	5.0
UBR	86.15	pP	00:24:37.374				T__				m_e	
WET	83.85	P	00:24:09.263	-0.2	39.0	5.10	TAS	15.7	1.05	m_e	mb	5.2
WET	83.85	pP	00:24:24.663				T__				m_e	
WLF	86.13	P	00:24:20.913	0.2	39.0	5.10	TAS	37.6	1.26	a_e	mb	5.4

Event 90624002 Irian Jaya, Indonesia

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	01:05:29.30			-2.7000	138.5500				30.0					114.72	115.40	m i ke	EMSC
OrigID 90624034																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.5		BGR	90624008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
GRA1	115.40		PP	01:25:01.138		61.6		5.59		TAS					m_e	
GRA1	115.40		SP	01:34:47.107		63.3		8.95		TAS					m_e	
GRA1	115.40		L	02:17:07.078						T__	8409.9	19.50		a_e	Ms	6.4
MOX	114.72		L	02:18:05.609						T__	13880.6	18.30		a_e	Ms	6.6

Event 90624003 Banda Sea

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	02:53:40.10			-6.4200	129.1800				214.0				27	110.05	115.87	m i ke	EMSC
OrigID 90624035																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	112.32		SKS	03:18:11.880		74.4		3.98		TAS					m_e
ASSE	112.32		X	03:19:14.822		73.7		7.11		TAS					m_e
ASSE	112.32		Sdiff	03:19:55.205		69.8		8.17		TAS					m_e
ASSE	112.32		Pdiff	03:07:55.291	0.1	72.0		4.38		TAS					m_e
ASSE	112.32		PKiKP	03:11:50.140	-1.0	73.9		1.85		TAS					m_e
ASSE	112.32		SP	03:21:45.674		66.3		9.57		TAS					m_e

BFO	115.01	SKS	03:18:21.053		74.4	3.98	TAS	m_e
BFO	115.01	Pdiff	03:08:06.551		72.0	4.38	TAS	m_e
BFO	115.01	PKiKP	03:11:57.350		73.9	1.85	TAS	m_e
BFO	115.01	SP	03:22:13.734		66.3	9.57	TAS	m_e
BRG	110.76	SKS	03:18:03.740	1.4	74.4	3.98	TAS	m_e
BRG	110.76	X	03:19:02.731	0.4	73.7	7.11	TAS	m_e
BRG	110.76	Sdiff	03:19:43.929	1.5	69.8	8.17	TAS	m_e
BRG	110.76	Pdiff	03:07:48.729	0.4	72.0	4.38	TAS	m_e
BRG	110.76	PKiKP	03:11:48.963	0.6	73.9	1.85	TAS	m_e
BSEG	111.92	SKS	03:18:09.690	0.4	74.4	3.98	TAS	m_e
BSEG	111.92	X	03:19:12.027	1.4	73.7	7.11	TAS	m_e
BSEG	111.92	Sdiff	03:19:53.719	-2.0	69.8	8.17	TAS	m_e
BSEG	111.92	Pdiff	03:07:53.163	-0.4	72.0	4.38	TAS	m_e
BSEG	111.92	PKiKP	03:11:50.850	0.0	73.9	1.85	TAS	m_e
BSEG	111.92	SP	03:21:41.873	0.1	66.3	9.57	TAS	m_e
BUG	114.55	SKS	03:18:19.968		74.4	3.98	TAS	m_e
BUG	114.55	X	03:19:29.040		73.7	7.11	TAS	m_e
BUG	114.55	Sdiff	03:20:15.709		69.8	8.17	TAS	m_e
BUG	114.55	Pdiff	03:08:04.423		72.0	4.38	TAS	m_e
BUG	114.55	PKiKP	03:11:56.776		73.9	1.85	TAS	m_e
BUG	114.55	SP	03:22:07.697		66.3	9.57	TAS	m_e
CLL	111.20	SKS	03:18:05.600	0.5	74.4	3.98	TAS	m_e
CLL	111.20	X	03:19:06.085	-0.2	73.7	7.11	TAS	m_e
CLL	111.20	Sdiff	03:19:46.719	-0.1	69.8	8.17	TAS	m_e
CLL	111.20	Pdiff	03:07:49.793	-0.5	72.0	4.38	TAS	m_e
CLL	111.20	PKiKP	03:11:48.875	-0.4	73.9	1.85	TAS	m_e
CLL	111.20	SP	03:21:34.830	1.9	66.3	9.57	TAS	m_e
CLZ	112.59	SKS	03:18:12.655		74.4	3.98	TAS	m_e
CLZ	112.59	X	03:19:16.835		73.7	7.11	TAS	m_e
CLZ	112.59	Sdiff	03:19:59.390		69.8	8.17	TAS	m_e
CLZ	112.59	Pdiff	03:07:56.621	0.2	72.0	4.38	TAS	m_e
CLZ	112.59	PKiKP	03:11:51.897	1.4	73.9	1.85	TAS	m_e
CLZ	112.59	SP	03:21:48.580		66.3	9.57	TAS	m_e
FLT1	111.93	SKS	03:18:09.167	-0.6	74.4	3.98	TAS	m_e
FLT1	111.93	X	03:19:12.028	-1.1	73.7	7.11	TAS	m_e
FLT1	111.93	Sdiff	03:19:51.974	1.1	69.8	8.17	TAS	m_e
FLT1	111.93	Pdiff	03:07:52.985	-0.5	72.0	4.38	TAS	m_e
FLT1	111.93	PKiKP	03:11:49.392	-1.3	73.9	1.85	TAS	m_e
FLT1	111.93	PP	03:12:33.908		63.4	6.52	TAS	m_e
FLT1	111.93	SP	03:21:40.419	0.8	66.3	9.57	TAS	m_e
FUR	113.20	SKS	03:18:14.697		74.4	3.98	TAS	m_e
FUR	113.20	Sdiff	03:20:05.316		69.8	8.17	TAS	m_e
FUR	113.20	PKiKP	03:11:52.601	-0.6	73.9	1.85	TAS	m_e
FUR	113.20	SP	03:21:58.289		66.3	9.57	TAS	m_e
GEC2	111.46	X	03:19:08.657	-0.4	73.7	7.11	TAS	m_e
GEC2	111.46	Sdiff	03:19:50.880	1.2	69.8	8.17	TAS	m_e
GEC2	111.46	Pdiff	03:07:51.478	0.1	72.0	4.38	TAS	m_e
GEC2	111.46	PKiKP	03:11:49.618	0.0	73.9	1.85	TAS	m_e
GEC2	111.46	PP	03:12:34.489	-1.8	63.4	6.52	TAS	m_e

GOR1	111.68	Pdiff	03:07:52.365	-0.1	72.0	4.38	TAS	m_e
GOR1	111.68	PKiKP	03:11:49.403	-0.9	73.9	1.85	TAS	m_e
GOR1	111.68	SP	03:21:39.637	-0.6	66.3	9.57	TAS	m_e
GRA1	112.77	SKS	03:18:13.275		74.4	3.98	TAS	m_e
GRA1	112.77	X	03:19:18.735		73.7	7.11	TAS	m_e
GRA1	112.77	Pdiff	03:07:57.685	0.6	72.0	4.38	TAS	m_e
GRA1	112.77	PKiKP	03:11:53.480	0.1	73.9	1.85	TAS	m_e
GRA1	112.77	PP	03:12:46.467		63.4	6.52	TAS	m_e
GRA1	112.77	SKPdf	03:15:04.400				T__	m_e
GRA1	112.77	SP	03:21:53.164		66.3	9.57	TAS	m_e
GRA1	112.77	PKKP	03:22:50.864		248.0	5.21	TAS	m_e
GTTG	112.93	SKS	03:18:13.740		74.4	3.98	TAS	m_e
GTTG	112.93	X	03:19:19.071		73.7	7.11	TAS	m_e
GTTG	112.93	Sdiff	03:20:01.599		69.8	8.17	TAS	m_e
GTTG	112.93	Pdiff	03:07:58.128	0.3	72.0	4.38	TAS	m_e
GTTG	112.93	PKiKP	03:11:52.601	-0.2	73.9	1.85	TAS	m_e
GTTG	112.93	SP	03:21:49.922		66.3	9.57	TAS	m_e
HLG	113.16	SKS	03:18:15.084		74.4	3.98	TAS	m_e
HLG	113.16	X	03:19:21.307		73.7	7.11	TAS	m_e
HLG	113.16	SP	03:21:53.499		66.3	9.57	TAS	m_e
IBBN	113.94	SKS	03:18:17.487		74.4	3.98	TAS	m_e
IBBN	113.94	X	03:19:27.343		73.7	7.11	TAS	m_e
IBBN	113.94	Sdiff	03:20:09.197		69.8	8.17	TAS	m_e
IBBN	113.94	Pdiff	03:08:02.561	0.0	72.0	4.38	TAS	m_e
IBBN	113.94	PKiKP	03:11:54.039	-0.1	73.9	1.85	TAS	m_e
IBBN	113.94	SP	03:22:01.101		66.3	9.57	TAS	m_e
KAST	113.96	SKS	03:18:18.185		74.4	3.98	TAS	m_e
KAST	113.96	X	03:19:27.903		73.7	7.11	TAS	m_e
KAST	113.96	Sdiff	03:20:09.895		69.8	8.17	TAS	m_e
KAST	113.96	Pdiff	03:08:02.561	0.0	72.0	4.38	TAS	m_e
KAST	113.96	PKiKP	03:11:54.127	0.3	73.9	1.85	TAS	m_e
KAST	113.96	SP	03:22:02.219		66.3	9.57	TAS	m_e
MANZ	112.14	SKS	03:18:11.492		74.4	3.98	TAS	m_e
MANZ	112.14	X	03:19:14.263		73.7	7.11	TAS	m_e
MANZ	112.14	Sdiff	03:19:56.486		69.8	8.17	TAS	m_e
MANZ	112.14	Pdiff	03:07:54.227	-0.1	72.0	4.38	TAS	m_e
MANZ	112.14	PKiKP	03:11:50.634	-0.3	73.9	1.85	TAS	m_e
MANZ	112.14	SP	03:21:48.021		66.3	9.57	TAS	m_e
MOX	112.24	SKS	03:18:10.639		74.4	3.98	TAS	m_e
MOX	112.24	X	03:19:13.593		73.7	7.11	TAS	m_e
MOX	112.24	Sdiff	03:19:57.328		69.8	8.17	TAS	m_e
MOX	112.24	Pdiff	03:07:54.936	0.1	72.0	4.38	TAS	m_e
MOX	112.24	PKiKP	03:11:49.962	-1.3	73.9	1.85	TAS	m_e
NEUB	111.97	SKS	03:18:09.380	-0.3	74.4	3.98	TAS	m_e
NEUB	111.97	X	03:19:12.027		73.7	7.11	TAS	m_e
NEUB	111.97	Sdiff	03:19:53.719		69.8	8.17	TAS	m_e
NEUB	111.97	Pdiff	03:07:53.872	0.2	72.0	4.38	TAS	m_e
NEUB	111.97	PKiKP	03:11:49.794	-0.9	73.9	1.85	TAS	m_e
NEUB	111.97	SP	03:21:43.102		66.3	9.57	TAS	m_e

NRDL	112.53	SKS	03:18:12.965		74.4	3.98	TAS	m_e
NRDL	112.53	X	03:19:17.058		73.7	7.11	TAS	m_e
NRDL	112.53	Sdiff	03:19:59.739		69.8	8.17	TAS	m_e
NRDL	112.53	Pdiff	03:07:56.709	0.6	72.0	4.38	TAS	m_e
NRDL	112.53	PKiKP	03:11:51.721	0.0	73.9	1.85	TAS	m_e
NRDL	112.53	SP	03:21:48.245		66.3	9.57	TAS	m_e
RETH	112.87	Pdiff	03:07:58.128	0.4	72.0	4.38	TAS	m_e
RETH	112.87	SP	03:21:49.810		66.3	9.57	TAS	m_e
RGN	110.05	SKS	03:18:03.723	0.9	74.4	3.98	TAS	m_e
RGN	110.05	X	03:19:00.495	1.0	73.7	7.11	TAS	m_e
RGN	110.05	Sdiff	03:19:35.927	-1.7	69.8	8.17	TAS	m_e
RGN	110.05	Pdiff	03:07:44.917	-0.5	72.0	4.38	TAS	m_e
RGN	110.05	PKiKP	03:11:49.354	2.0	73.9	1.85	TAS	m_e
RGN	110.05	SP	03:21:22.756	-0.0	66.3	9.57	TAS	m_e
RJOB	112.34	SKS	03:18:09.322		74.4	3.98	TAS	m_e
RJOB	112.34	X	03:19:12.139		73.7	7.11	TAS	m_e
RJOB	112.34	Sdiff	03:19:56.949		69.8	8.17	TAS	m_e
RJOB	112.34	Pdiff	03:07:54.936	-0.4	72.0	4.38	TAS	m_e
RJOB	112.34	PKiKP	03:11:50.179	-0.1	73.9	1.85	TAS	m_e
RJOB	112.34	SP	03:21:51.040		66.3	9.57	TAS	m_e
ROTZ	112.14	SKS	03:18:12.035		74.4	3.98	TAS	m_e
ROTZ	112.14	X	03:19:13.593		73.7	7.11	TAS	m_e
ROTZ	112.14	Sdiff	03:19:56.600		69.8	8.17	TAS	m_e
ROTZ	112.14	Pdiff	03:07:54.315	-0.0	72.0	4.38	TAS	m_e
RUE	110.40	SKS	03:18:03.103	-1.1	74.4	3.98	TAS	m_e
RUE	110.40	X	03:19:01.390	-0.6	73.7	7.11	TAS	m_e
RUE	110.40	Sdiff	03:19:40.462	-0.8	69.8	8.17	TAS	m_e
RUE	110.40	Pdiff	03:07:47.311	0.5	72.0	4.38	TAS	m_e
RUE	110.40	PKiKP	03:11:47.683	-0.1	73.9	1.85	TAS	m_e
RUE	110.40	SP	03:21:26.445	0.5	66.3	9.57	TAS	m_e
STU	114.33	SKS	03:18:17.720		74.4	3.98	TAS	m_e
STU	114.33	X	03:19:27.455		73.7	7.11	TAS	m_e
STU	114.33	Sdiff	03:20:12.686		69.8	8.17	TAS	m_e
STU	114.33	Pdiff	03:08:04.246	-0.4	72.0	4.38	TAS	m_e
STU	114.33	PKiKP	03:11:55.183	0.0	73.9	1.85	TAS	m_e
STU	114.33	PP	03:12:53.805		63.4	6.52	TAS	m_e
STU	114.33	SP	03:22:07.586		66.3	9.57	TAS	m_e
TANN	111.79	SKS	03:18:08.605	0.6	74.4	3.98	TAS	m_e
TANN	111.79	X	03:19:10.239	-0.0	73.7	7.11	TAS	m_e
TANN	111.79	Sdiff	03:19:53.951	0.7	69.8	8.17	TAS	m_e
TANN	111.79	Pdiff	03:07:52.542	-0.3	72.0	4.38	TAS	m_e
TANN	111.79	PKiKP	03:11:51.818	1.5	73.9	1.85	TAS	m_e
TANN	111.79	SP	03:21:42.879	-2.0	66.3	9.57	TAS	m_e
TNS	114.29	SKS	03:18:19.968		74.4	3.98	TAS	m_e
TNS	114.29	X	03:19:30.177		73.7	7.11	TAS	m_e
TNS	114.29	Sdiff	03:20:12.782		69.8	8.17	TAS	m_e
TNS	114.29	Pdiff	03:08:03.802	-0.5	72.0	4.38	TAS	m_e
TNS	114.29	PKiKP	03:11:54.799	1.2	73.9	1.85	TAS	m_e
TNS	114.29	SP	03:22:05.238		66.3	9.57	TAS	m_e

UBBA	113.16	SKS	03:18:14.593	74.4	3.98	TAS	m_e
UBBA	113.16	X	03:19:19.965	73.7	7.11	TAS	m_e
UBBA	113.16	Sdiff	03:20:02.064	69.8	8.17	TAS	m_e
UBBA	113.16	Pdiff	03:07:58.483	-0.3 72.0	4.38	TAS	m_e
UBBA	113.16	PKiKP	03:11:52.689	-0.4 73.9	1.85	TAS	m_e
UBBA	113.16	SP	03:21:53.276	66.3	9.57	TAS	m_e
UBR	114.09	SKS	03:18:17.255	74.4	3.98	TAS	m_e
UBR	114.09	X	03:19:27.567	73.7	7.11	TAS	m_e
UBR	114.09	Sdiff	03:20:10.108	69.8	8.17	TAS	m_e
UBR	114.09	Pdiff	03:08:03.004	0.3 72.0	4.38	TAS	m_e
UBR	114.09	PKiKP	03:11:53.832	1.2 73.9	1.85	TAS	m_e
UBR	114.09	PP	03:12:51.699	63.4	6.52	TAS	m_e
UBR	114.09	SP	03:22:06.691	66.3	9.57	TAS	m_e
WET	111.90	SKS	03:18:09.709	-0.1 74.4	3.98	TAS	m_e
WET	111.90	X	03:19:11.580	-0.6 73.7	7.11	TAS	m_e
WET	111.90	Sdiff	03:19:55.438	0.6 69.8	8.17	TAS	m_e
WET	111.90	Pdiff	03:07:53.163	-0.1 72.0	4.38	TAS	m_e
WET	111.90	PKiKP	03:11:51.250	0.8 73.9	1.85	TAS	m_e
WET	111.90	PP	03:12:39.722	63.4	6.52	TAS	m_e
WET	111.90	SP	03:21:45.227	0.5 66.3	9.57	TAS	m_e
WLF	115.87	SKS	03:18:25.937	74.4	3.98	TAS	m_e
WLF	115.87	PKiKP	03:11:57.910	73.9	1.85	TAS	m_e
WLF	115.87	SP	03:22:19.548	66.3	9.57	TAS	m_e

Event 90624005 Kermadec Islands, New Zealand

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	11:34:07.05			-30.3900	-178.5100				10.0			28		155.62	161.50	m i ke	EMSC
90624037																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.4		BGR	90624011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	157.25		PKPdf	11:54:03.810	-0.1	22.2		1.09		TAS					m_e
ASSE	157.25		PKPab	11:54:36.617	-0.3	19.0		4.19		TAS					m_e
ASSE	157.25		PP	11:58:13.001	0.6					T__					m_e
BFO	161.33		PKPdf	11:54:07.553		22.2		1.09		TAS					m_e
BFO	161.33		PKPab	11:54:54.533		19.0		4.19		TAS					m_e
BFO	161.33		PP	11:58:33.709						T__					m_e
BRG	157.52		PKPdf	11:54:03.810	0.5	22.2		1.09		TAS					m_e
BRG	157.52		PKPab	11:54:38.478	-0.5	19.0		4.19		TAS					m_e
BRG	157.52		PP	11:58:15.095	-1.7					T__					m_e
BSEG	155.62		PKPdf	11:54:01.484	-0.6	22.2		1.09		TAS					m_e
BSEG	155.62		PKPab	11:54:30.335	0.2	19.0		4.19		TAS					m_e
BSEG	155.62		PP	11:58:05.544	1.0					T__					m_e

BUG	158.53	PKPdf	11:54:05.439	0.2	22.2	1.09	TAS		m_e
BUG	158.53	PKPab	11:54:41.503	0.6	19.0	4.19	TAS		m_e
BUG	158.53	PP	11:58:20.214	0.1			T__		m_e
CLL	157.41	PKPdf	11:54:04.043	0.9	22.2	1.09	TAS		m_e
CLL	157.41	PKPab	11:54:38.478	0.5	19.0	4.19	TAS		m_e
CLL	157.41	PP	11:58:12.303	0.3			T__		m_e
CLZ	157.58	PKPdf	11:54:04.508	0.2	22.2	1.09	TAS		m_e
CLZ	157.58	PKPab	11:54:38.944	-0.6	19.0	4.19	TAS		m_e
CLZ	157.58	PP	11:58:15.328	0.7			T__		m_e
FLT1	156.93	PKPdf	11:54:02.880	0.3	22.2	1.09	TAS		m_e
FLT1	156.93	PKPab	11:54:35.454	-0.4	19.0	4.19	TAS		m_e
FLT1	156.93	PP	11:58:11.605	-1.6			T__		m_e
GEC2	159.35	PKPdf	11:54:06.370	-0.3	22.2	1.09	TAS		m_e
GEC2	159.35	PKPab	11:54:47.553	0.2	19.0	4.19	TAS		m_e
GEC2	159.35	PP	11:58:24.402				T__		m_e
GOR1	156.30	PKPdf	11:54:02.414	-0.2	22.2	1.09	TAS		m_e
GOR1	156.30	PKPab	11:54:33.592	-0.3	19.0	4.19	TAS		m_e
GOR1	156.30	PP	11:58:08.813	-0.2			T__		m_e
GRA1	159.37	PKPdf	11:54:06.370	-1.7	22.2	1.09	TAS		m_e
GRA1	159.37	PKPab	11:54:45.924	0.4	19.0	4.19	TAS		m_e
GRA1	159.37	L	13:24:03.702				T__	5063.6 18.60	a_e Ms 6.4
GTTG	157.95	PKPdf	11:54:04.508	-0.1	22.2	1.09	TAS		m_e
GTTG	157.95	PKPab	11:54:39.409	0.1	19.0	4.19	TAS		m_e
GTTG	157.95	PP	11:58:17.422	-0.3			T__		m_e
IBBN	157.62	PKPdf	11:54:04.741	-0.0	22.2	1.09	TAS		m_e
IBBN	157.62	PKPab	11:54:38.246	-0.6	19.0	4.19	TAS		m_e
IBBN	157.62	PP	11:58:13.466	0.3			T__		m_e
KAST	158.58	PKPdf	11:54:05.439	-0.5	22.2	1.09	TAS		m_e
KAST	158.58	PKPab	11:54:42.434	-0.2	19.0	4.19	TAS		m_e
KAST	158.58	PP	11:58:20.679	-0.2			T__		m_e
MANZ	158.85	PKPdf	11:54:06.137	0.7	22.2	1.09	TAS		m_e
MANZ	158.85	PKPab	11:54:44.062	-0.3	19.0	4.19	TAS		m_e
MANZ	158.85	PP	11:58:21.843	0.9			T__		m_e
MOX	158.39	PKPdf	11:54:05.672	0.3	22.2	1.09	TAS		m_e
MOX	158.39	PKPab	11:54:42.201	-0.1	19.0	4.19	TAS		m_e
MOX	158.39	PP	11:58:19.516	1.9			T__		m_e
MOX	158.39	L	13:20:56.700				T__	5528.6 18.40	a_e Ms 6.4
NEUB	157.85	PKPdf	11:54:05.439	-0.1	22.2	1.09	TAS		m_e
NEUB	157.85	PKPab	11:54:39.176	0.4	19.0	4.19	TAS		m_e
NEUB	157.85	PP	11:58:16.491	0.4			T__		m_e
NRDL	157.02	PKPdf	11:54:03.345	0.5	22.2	1.09	TAS		m_e
NRDL	157.02	PKPab	11:54:36.384	0.2	19.0	4.19	TAS		m_e
NRDL	157.02	PP	11:58:11.605	-2.0			T__		m_e
RETH	156.94	PKPdf	11:54:02.880	0.6	22.2	1.09	TAS		m_e
RETH	156.94	PKPab	11:54:35.686	0.4	19.0	4.19	TAS		m_e
RETH	156.94	PP	11:58:09.976	0.1			T__		m_e
RJOB	160.62	PKPdf	11:54:07.533		22.2	1.09	TAS		m_e
RJOB	160.62	PKPab	11:54:52.206		19.0	4.19	TAS		m_e
ROTZ	159.02	PKPdf	11:54:05.904	0.1	22.2	1.09	TAS		m_e

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ROTZ	159.02	PKPab	11:54:44.993	0.3	19.0	4.19	TAS	m_e
ROTZ	159.02	PP	11:58:22.541	-1.4			T__	m_e
RUE	156.15	PKPdf	11:54:03.345	-0.6	22.2	1.09	TAS	m_e
RUE	156.15	PKPab	11:54:33.127	0.1	19.0	4.19	TAS	m_e
STU	160.73	PP	11:58:32.654				T__	m_e
TANN	158.37	PKPdf	11:54:05.439	0.4	22.2	1.09	TAS	m_e
TANN	158.37	PKPab	11:54:42.666	-0.9	19.0	4.19	TAS	m_e
TANN	158.37	PP	11:58:17.422	0.3			T__	m_e
TNS	159.51	PKPdf	11:54:06.602	0.0	22.2	1.09	TAS	m_e
TNS	159.51	PKPab	11:54:46.855	-0.3	19.0	4.19	TAS	m_e
UBBA	158.62	PKPdf	11:54:05.206	0.3	22.2	1.09	TAS	m_e
UBBA	158.62	PKPab	11:54:43.364	-0.1	19.0	4.19	TAS	m_e
UBBA	158.62	PP	11:58:22.308	-0.7			T__	m_e
UBR	161.50	PKPdf	11:54:08.929		22.2	1.09	TAS	m_e
UBR	161.50	PKPab	11:54:54.840		19.0	4.19	TAS	m_e
UBR	161.50	PP	11:58:37.432				T__	m_e
WLF	160.43	PKPdf	11:54:07.998	-0.1	22.2	1.09	TAS	m_e
WLF	160.43	PKPab	11:54:50.577	0.4	19.0	4.19	TAS	m_e

Event 90624006 Iceland

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	13:09:09.90			64.6500	-17.7600				10.0					21.42	21.42	m i ke	EMSC
	90624038																

Magnitude	Err	Nsta	Author	OrigID
mb	4.1		BGR	90624012

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	21.42		P	13:13:58.760		325.2		9.32		TAS		12.2	1.16	m_e mb	4.1

Event 90624007 Iceland

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	13:55:59.60			64.6300	-17.6800				10.0					21.38	21.38	m i ke	EMSC
	90624039																

Magnitude	Err	Nsta	Author	OrigID
mb	4.4		BGR	90624013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	21.38		P	14:00:47.114		325.2		10.64		TAS		36.5	1.77	m_e mb	4.4

Event 90624008 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/24	16:14:42.51			-21.4100	-179.2400				653.6	10.8		29		146.72	152.73	m i ke	BGR
	90624014																

Magnitude	Err	Nsta	Author	OrigID
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Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	148.39		PKPdf	16:33:12.523	0.5	13.8		1.82		TAS					m_e
ASSE	148.39		PKPbc	16:33:16.997	-0.0	18.8		2.31		TAS					a_e
ASSE	148.39		pPKPbc	16:35:44.806						T__					m_e
BFO	152.46		PKPbc	16:33:26.197		18.8		2.31		TAS					a_e
BFO	152.46		PKPab	16:33:39.242		17.5		4.31		TAS					m_e
BFO	152.46		pPKPbc	16:35:56.038						T__					m_e
BRG	148.83		PKPbc	16:33:18.297	0.2	18.8		2.31		TAS					m_e
BRG	148.83		PKPab	16:33:24.225	0.1	17.5		4.31		TAS					m_e
BSEG	146.72		PKPbc	16:33:12.547	-0.3	18.8		2.31		TAS					a_e
BUG	149.60		PKPbc	16:33:19.647	0.1	18.8		2.31		TAS					a_e
CLL	148.66		PKPbc	16:33:17.597	0.2	18.8		2.31		TAS					a_e
CLL	148.66		PKPab	16:33:23.343	0.3	17.5		4.31		TAS					m_e
CLL	148.66		pPKPbc	16:35:45.524						T__					m_e
CLZ	148.72		PKPdf	16:33:13.605	-0.5	13.8		1.82		TAS					m_e
CLZ	148.72		PKPbc	16:33:18.047	0.3	18.8		2.31		TAS					a_e
CLZ	148.72		pPKPbc	16:35:45.576						T__					m_e
FLT1	148.09		PKPdf	16:33:11.962	0.7	13.8		1.82		TAS					m_e
FLT1	148.09		PKPbc	16:33:15.947	0.1	18.8		2.31		TAS					a_e
FLT1	148.09		PKPab	16:33:20.738	-0.1	17.5		4.31		TAS					m_e
FLT1	148.09		pPKPbc	16:35:42.885						T__					m_e
FUR	152.00		PKPbc	16:33:24.931	-0.2	18.8		2.31		TAS					m_e
FUR	152.00		PKPab	16:33:38.011		17.5		4.31		TAS					m_e
GEC2	150.74		PKPbc	16:33:22.597	0.1	18.8		2.31		TAS					a_e
GEC2	150.74		pPKPbc	16:35:49.571						T__					m_e
GOR1	147.45		PKPdf	16:33:10.319	0.1	13.8		1.82		TAS					m_e
GOR1	147.45		PKPbc	16:33:14.747	-0.3	18.8		2.31		TAS					a_e
GOR1	147.45		PKPab	16:33:18.133	-0.2	17.5		4.31		TAS					m_e
GRA1	150.58		PKPbc	16:33:22.061	0.3	18.8		2.31		TAS					m_e
GRA1	150.58		PKPab	16:33:31.959		17.5		4.31		TAS					m_e
GRA1	150.58		pPKPbc	16:35:50.392						T__					m_e
GTTG	149.07		PKPbc	16:33:18.797	-0.2	18.8		2.31		TAS					a_e
GTTG	149.07		PKPab	16:33:25.026	-0.4	17.5		4.31		TAS					m_e
IBBN	148.69		PKPdf	16:33:12.843	0.4	13.8		1.82		TAS					m_e
IBBN	148.69		PKPbc	16:33:17.647	0.3	18.8		2.31		TAS					a_e
KAST	149.67		PKPdf	16:33:15.088		13.8		1.82		TAS					m_e
KAST	149.67		PKPbc	16:33:20.047	0.1	18.8		2.31		TAS					a_e
KAST	149.67		PKPab	16:33:27.631	0.1	17.5		4.31		TAS					m_e

KAST	149.67	pPKPbc	16:35:47.414							T__	m_e
MANZ	150.10	PKPbc	16:33:21.297	0.1	18.8		2.31			TAS	a_e
MANZ	150.10	pPKPbc	16:35:48.832							T__	m_e
MOX	149.60	PKPdf	16:33:14.647		13.8		1.82			TAS	m_e
MOX	149.60	PKPbc	16:33:19.997	0.3	18.8		2.31			TAS	a_e
MOX	149.60	PKPab	16:33:27.150	0.1	17.5		4.31			TAS	m_e
MOX	149.60	pPKPbc	16:35:47.382							T__	m_e
NEUB	149.05	PKPbc	16:33:18.697	0.2	18.8		2.31			TAS	a_e
NEUB	149.05	PKPab	16:33:25.066	0.3	17.5		4.31			TAS	m_e
NRDL	148.14	PKPdf	16:33:11.841	-0.1	13.8		1.82			TAS	m_e
NRDL	148.14	PKPbc	16:33:16.297	-0.1	18.8		2.31			TAS	a_e
NRDL	148.14	PKPab	16:33:21.299	-0.0	17.5		4.31			TAS	m_e
RETH	148.03	PKPdf	16:33:11.040	0.1	13.8		1.82			TAS	m_e
RETH	148.03	PKPbc	16:33:16.147	-0.1	18.8		2.31			TAS	a_e
RETH	148.03	PKPab	16:33:20.466	-0.3	17.5		4.31			TAS	m_e
RJOB	152.00	PKPbc	16:33:25.140	-0.3	18.8		2.31			TAS	m_e
RJOB	152.00	PKPab	16:33:38.412		17.5		4.31			TAS	m_e
ROTZ	150.28	PKPdf	16:33:15.689		13.8		1.82			TAS	m_e
ROTZ	150.28	PKPbc	16:33:21.597	0.0	18.8		2.31			TAS	a_e
ROTZ	150.28	PKPab	16:33:30.677		17.5		4.31			TAS	m_e
ROTZ	150.28	pPKPbc	16:35:49.021							T__	m_e
RUE	147.40	PKPbc	16:33:14.397	-0.0	18.8		2.31			TAS	a_e
STU	151.88	PKPbc	16:33:25.097	-0.4	18.8		2.31			TAS	a_e
TANN	149.62	PKPdf	16:33:15.328		13.8		1.82			TAS	m_e
TANN	149.62	PKPbc	16:33:20.147	0.3	18.8		2.31			TAS	a_e
TANN	149.62	PKPab	16:33:27.952	-0.4	17.5		4.31			TAS	m_e
TNS	150.61	PKPdf	16:33:15.849		13.8		1.82			TAS	m_e
TNS	150.61	PKPbc	16:33:22.247	-0.0	18.8		2.31			TAS	a_e
TNS	150.61	PKPab	16:33:31.278		17.5		4.31			TAS	m_e
TNS	150.61	pPKPbc	16:35:50.067							T__	m_e
UBBA	149.76	PKPbc	16:33:20.197	0.2	18.8		2.31			TAS	a_e
UBBA	149.76	PKPab	16:33:28.553		17.5		4.31			TAS	m_e
UBR	152.73	PKPbc	16:33:26.647		18.8		2.31			TAS	a_e
UBR	152.73	pPKPbc	16:35:56.346							T__	m_e
WLF	151.48	PKPbc	16:33:24.647	-0.4	18.8		2.31			TAS	a_e
WLF	151.48	PKPab	16:33:35.887		17.5		4.31			TAS	m_e

Event 90625001 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/25	09:05:42.22			56.1400	164.4500				33.0			30		67.18	74.34	m i ke	BGR
90625007																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.0		BGR	90625007
MBB	6.3		BGR	90625007

Ms	6.2	BGR	90625007													
Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	69.95		S	09:25:57.055	3.0					T__				m_e		
ASSE	69.95		P	09:16:50.638	0.0	15.8		6.09		TAS		457.1	1.75	m_e	MBB	6.5
ASSE	69.95		PP	09:26:01.238	3.4	13.6		11.30		TAS				m_e		
BFO	74.00		S	09:26:45.549	3.0					T__				m_e		
BFO	74.00		P	09:17:14.788	-0.5	15.8		6.09		TAS		110.0	1.26	a_e	MBB	6.1
BFO	74.00		PP	09:26:41.343	-2.1	13.6		11.30		TAS				m_e		
BRG	70.59		S	09:26:05.304	3.0					T__				m_e		
BRG	70.59		P	09:16:54.238	-0.1	15.8		6.09		TAS		283.0	1.82	a_e	MBB	6.3
BRG	70.59		PP	09:26:07.922	2.1	13.6		11.30		TAS				m_e		
BSEG	68.26		S	09:25:38.783	3.0					T__				m_e		
BSEG	68.26		P	09:16:40.338	0.0	15.8		6.09		TAS		165.5	1.28	a_e	MBB	6.6
BSEG	68.26		PP	09:25:30.490	-8.0	13.6		11.30		TAS				m_e		
BUG	71.13		S	09:26:13.053	3.0					T__				m_e		
BUG	71.13		P	09:16:57.588	-0.2	15.8		6.09		TAS		123.7	1.05	a_e	MBB	6.3
BUG	71.13		PP	09:26:10.595	0.2	13.6		11.30		TAS				m_e		
CLL	70.34		S	09:26:01.054	3.0					T__				m_e		
CLL	70.34		P	09:16:52.538	-0.4	15.8		6.09		TAS		496.4	1.89	a_e	MBB	6.4
CLL	70.34		PP	09:26:05.248	2.4	13.6		11.30		TAS				m_e		
CLZ	70.27		S	09:26:02.054	3.0					T__				m_e		
CLZ	70.27		P	09:16:52.938	0.3	15.8		6.09		TAS		338.0	1.55	a_e	MBB	6.5
CLZ	70.27		PP	09:26:03.911	2.4	13.6		11.30		TAS				m_e		
FLT1	69.66		S	09:25:55.281	3.0					T__				m_e		
FLT1	69.66		P	09:16:48.288	-0.6	15.8		6.09		TAS		152.5	1.33	a_e	MBB	6.3
FLT1	69.66		PP	09:25:54.553	-0.2	13.6		11.30		TAS				m_e		
FUR	73.67		S	09:26:41.799	3.0					T__				m_e		
FUR	73.67		P	09:17:13.188	-0.1	15.8		6.09		TAS		169.8	1.17	a_e	MBB	6.4
FUR	73.67		PP	09:26:37.332	-3.1	13.6		11.30		TAS				m_e		
GEC2	72.57		S	09:26:31.800	3.0					T__				m_e		
GEC2	72.57		P	09:17:06.738	0.3	15.8		6.09		TAS		140.1	1.45	a_e	MBB	6.3
GEC2	72.57		PP	09:26:26.638	-1.8	13.6		11.30		TAS				m_e		
GOR1	69.01		P	09:16:44.827	-0.1	15.8		6.09		TAS		389.8	1.43	m_e	MBB	6.7
GOR1	69.01		PP	09:25:50.543	3.2	13.6		11.30		TAS				m_e		
GRA1	72.21		S	09:26:25.551	3.0					T__				m_e		
GRA1	72.21		P	09:17:04.788	0.4	15.8		6.09		TAS		165.5	1.03	a_e	MBB	6.5
GRA1	72.21		PP	09:26:25.301	1.6	13.6		11.30		TAS				m_e		
GRA1	72.21		L	09:50:34.172						T__		13336.3	20.40	a_e	Ms	6.2
GTTG	70.62		S	09:26:05.804	3.0					T__				m_e		
GTTG	70.62		P	09:16:54.938	0.2	15.8		6.09		TAS		172.1	1.45	a_e	MBB	6.3
GTTG	70.62		PP	09:26:06.585	1.2	13.6		11.30		TAS				m_e		
HLG	68.37		S	09:25:40.283	3.0					T__				m_e		
HLG	68.37		P	09:16:41.238	0.3	15.8		6.09		TAS		205.0	1.01	a_e	MBB	6.7
HLG	68.37		PP	09:25:39.848	0.8	13.6		11.30		TAS				m_e		
IBBN	70.22		S	09:25:57.805	3.0					T__				m_e		
IBBN	70.22		P	09:16:52.388	0.1	15.8		6.09		TAS		142.5	0.98	a_e	MBB	6.5
IBBN	70.22		PP	09:26:02.574	2.5	13.6		11.30		TAS				m_e		
KAST	71.20		S	09:26:15.053	3.0					T__				m_e		

KAST	71.20	P	09:16:58.338	0.1	15.8	6.09	TAS	171.2	1.44	a_e	MBB	6.3
KAST	71.20	PP	09:26:10.595	-0.9	13.6	11.30	TAS			m_e		
MANZ	71.77	S	09:26:20.802	3.0			T__			m_e		
MANZ	71.77	P	09:17:01.738	0.1	15.8	6.09	TAS	21.1	1.14	a_e	MBB	5.6
MANZ	71.77	PP	09:26:21.290	2.4	13.6	11.30	TAS			m_e		
MOX	71.22	S	09:26:08.054	3.0			T__			m_e		
MOX	71.22	P	09:16:58.388	0.0	15.8	6.09	TAS	147.5	1.26	a_e	MBB	6.3
MOX	71.22	PP	09:26:10.595	-2.0	13.6	11.30	TAS			m_e		
MOX	71.22	L	09:50:40.346				T__	12108.4	20.20	a_e	Ms	6.2
NEUB	70.66	S	09:26:06.304	3.0			T__			m_e		
NEUB	70.66	P	09:16:54.688	-0.3	15.8	6.09	TAS	573.1	2.04	a_e	MBB	6.4
NEUB	70.66	PP	09:26:09.259	3.0	13.6	11.30	TAS			m_e		
NRDL	69.68	S	09:25:54.555	3.0			T__			m_e		
NRDL	69.68	P	09:16:48.938	-0.1	15.8	6.09	TAS	138.1	1.33	a_e	MBB	6.3
NRDL	69.68	PP	09:25:54.553	-0.1	13.6	11.30	TAS			m_e		
RETH	69.56	P	09:16:48.438	0.2	15.8	6.09	TAS	142.7	1.36	a_e	MBB	6.4
RETH	69.56	PP	09:25:49.206	-3.9	13.6	11.30	TAS			m_e		
RGN	67.18	S	09:25:30.534	3.0			T__			m_e		
RGN	67.18	P	09:16:33.538	-0.2	15.8	6.09	TAS	251.0	0.89	a_e	MBB	6.8
RGN	67.18	PP	09:25:25.143	-1.8	13.6	11.30	TAS			m_e		
RJOB	73.81	S	09:26:47.298	3.0			T__			m_e		
RJOB	73.81	P	09:17:14.288	0.3	15.8	6.09	TAS	118.1	0.85	a_e	MBB	6.2
RJOB	73.81	PP	09:26:41.343	-0.9	13.6	11.30	TAS			m_e		
ROTZ	71.96	S	09:26:23.301	3.0			T__			m_e		
ROTZ	71.96	P	09:17:03.188	0.3	15.8	6.09	TAS	61.5	1.48	a_e	MBB	5.8
ROTZ	71.96	PP	09:26:21.290	0.1	13.6	11.30	TAS			m_e		
RUE	69.08	S	09:25:47.032	3.0			T__			m_e		
RUE	69.08	P	09:16:45.138	-0.1	15.8	6.09	TAS	235.1	1.33	a_e	MBB	6.6
RUE	69.08	PP	09:25:46.532	-2.1	13.6	11.30	TAS			m_e		
STU	73.44	S	09:26:45.049	3.0			T__			m_e		
STU	73.44	P	09:17:11.488	-0.4	15.8	6.09	TAS	273.8	1.31	a_e	MBB	6.6
STU	73.44	PP	09:26:33.322	-3.9	13.6	11.30	TAS			m_e		
TANN	71.29	S	09:26:16.802	3.0			T__			m_e		
TANN	71.29	P	09:16:59.038	0.3	15.8	6.09	TAS	132.7	1.29	a_e	MBB	6.3
TANN	71.29	PP	09:26:15.943	2.3	13.6	11.30	TAS			m_e		
TNS	72.15	S	09:26:25.801	3.0			T__			m_e		
TNS	72.15	P	09:17:04.038	0.0	15.8	6.09	TAS	136.6	1.29	a_e	MBB	6.2
TNS	72.15	PP	09:26:25.301	3.0	13.6	11.30	TAS			m_e		
UBBA	71.32	S	09:26:14.303	3.0			T__			m_e		
UBBA	71.32	P	09:16:58.988	0.0	15.8	6.09	TAS	221.6	1.57	a_e	MBB	6.3
UBBA	71.32	PP	09:26:11.932	-1.4	13.6	11.30	TAS			m_e		
UBR	74.34	S	09:27:01.023	3.0			T__			m_e		
UBR	74.34	P	09:17:17.138	-0.2	15.8	6.09	TAS	443.5	1.75	a_e	MBB	6.3
WLF	73.03	S	09:26:36.300	3.0			T__			m_e		
WLF	73.03	P	09:17:09.488	0.2	15.8	6.09	TAS	386.7	2.03	a_e	MBB	6.3
WLF	73.03	PP	09:26:33.322	1.7	13.6	11.30	TAS			m_e		

Event 90625002 Bering Sea

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/25	15:59:55.31			57.1480	164.0590				33.0					71.18	71.18	m i ke	BGR
OrigID 90625008																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.7		BGR	90625008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	71.18		P	16:11:09.136		14.7		5.28		TAS		5.9	1.01	m_e	mb 4.7

Event 90626003 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	02:18:08.43			55.8200	164.6600				33.0				28	67.52	74.34	m i ke	BGR
OrigID 90626009																	

Magnitude	Err	Nsta	Author	OrigID
mb	6.2		BGR	90626009
Ms	6.5		BGR	90626009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	70.29		S	02:38:30.113	-0.1	15.6		11.74		TAS				m_e	
ASSE	70.29		P	02:29:18.873	0.1	15.6		6.11		TAS		324.2	1.37	a_e	mb 6.3
BFO	74.34		S	02:39:15.798		15.6		11.74		TAS				m_e	
BFO	74.34		P	02:29:43.073		15.6		6.11		TAS		119.1	0.92	a_e	mb 5.9
BRG	70.93		S	02:38:37.475		15.6		11.74		TAS				m_e	
BRG	70.93		P	02:29:22.523		15.6		6.11		TAS		207.9	1.36	m_e	mb 6.1
BSEG	68.60		S	02:38:10.285	0.1	15.6		11.74		TAS				m_e	
BSEG	68.60		P	02:29:08.573	-0.1	15.6		6.11		TAS		323.0	1.39	a_e	mb 6.4
BUG	71.47		S	02:38:43.728		15.6		11.74		TAS				m_e	
BUG	71.47		P	02:29:25.873		15.6		6.11		TAS		182.5	0.96	a_e	mb 6.2
CLL	70.68		S	02:38:33.051	-1.3	15.6		11.74		TAS				m_e	
CLL	70.68		P	02:29:20.823	-0.6	15.6		6.11		TAS		348.0	1.36	a_e	mb 6.3
CLZ	70.61		S	02:38:32.706	-0.5	15.6		11.74		TAS				m_e	
CLZ	70.61		P	02:29:21.223	-0.4	15.6		6.11		TAS		463.8	1.38	a_e	mb 6.4
FLT1	70.00		S	02:38:24.012	-1.6	15.6		11.74		TAS				m_e	
FLT1	70.00		P	02:29:16.523	-0.3	15.6		6.11		TAS		218.3	1.42	a_e	mb 6.1
FUR	74.02		S	02:39:12.900		15.6		11.74		TAS				m_e	
FUR	74.02		P	02:29:41.473		15.6		6.11		TAS		368.0	1.39	a_e	mb 6.2
GEC2	72.92		S	02:39:00.699		15.6		11.74		TAS				m_e	
GEC2	72.92		P	02:29:35.023		15.6		6.11		TAS		245.9	1.36	a_e	mb 6.2
GOR1	69.35		P	02:29:13.423	0.3	15.6		6.11		TAS		604.6	1.40	a_e	mb 6.6
GRA1	72.55		S	02:38:56.581		15.6		11.74		TAS				m_e	

GRA1	72.55	P	02:29:33.073	15.6	6.11	TAS	332.7	1.18	a_e	mb	6.3
GRA1	72.55	PKPPKP	02:57:21.956	183.1	2.65	TAS			m_e		
GRA1	72.55	L	03:03:43.814			T__	21910.2	18.90	a_e	Ms	6.5
GTTG	70.96	S	02:38:38.390	15.6	11.74	TAS			m_e		
GTTG	70.96	P	02:29:23.173	15.6	6.11	TAS	263.6	1.48	a_e	mb	6.2
HLG	68.71	S	02:38:11.810	0.6	15.6	TAS			m_e		
HLG	68.71	P	02:29:09.423	0.0	15.6	TAS	626.3	1.53	a_e	mb	6.6
IBBN	70.56	S	02:38:32.401	0.6	15.6	TAS			m_e		
IBBN	70.56	P	02:29:20.623	0.4	15.6	TAS	359.8	1.08	a_e	mb	6.4
KAST	71.54	S	02:38:44.643	15.6	11.74	TAS			m_e		
KAST	71.54	P	02:29:26.623	15.6	6.11	TAS	276.1	1.45	a_e	mb	6.2
MANZ	72.11	S	02:38:50.744	15.6	11.74	TAS			m_e		
MANZ	72.11	P	02:29:30.023	15.6	6.11	TAS	28.1	1.07	a_e	mb	5.3
MOX	71.56	S	02:38:44.643	15.6	11.74	TAS			m_e		
MOX	71.56	P	02:29:26.673	15.6	6.11	TAS	125.2	0.98	a_e	mb	6.0
MOX	71.56	L	03:03:24.424			T__	26314.5	20.60	a_e	Ms	6.5
NEUB	71.01	S	02:38:36.254	15.6	11.74	TAS			m_e		
NEUB	71.01	P	02:29:22.973	15.6	6.11	TAS	200.6	1.25	a_e	mb	6.1
NRDL	70.02	S	02:38:25.842	0.2	15.6	TAS			m_e		
NRDL	70.02	P	02:29:17.123	0.1	15.6	TAS	196.5	1.39	a_e	mb	6.0
RETH	69.90	P	02:29:16.573	0.1	15.6	TAS	306.7	1.42	a_e	mb	6.2
RGN	67.52	S	02:37:57.321	0.4	15.6	TAS			m_e		
RGN	67.52	P	02:29:01.773	-0.2	15.6	TAS	724.1	1.31	a_e	mb	6.7
RJOB	74.15	S	02:39:15.951	15.6	11.74	TAS			m_e		
RJOB	74.15	P	02:29:42.573	15.6	6.11	TAS	224.5	0.89	a_e	mb	6.2
ROTZ	72.30	S	02:38:54.252	15.6	11.74	TAS			m_e		
ROTZ	72.30	P	02:29:31.473	15.6	6.11	TAS	74.7	1.36	a_e	mb	5.6
RUE	69.42	S	02:38:19.284	-1.0	15.6	TAS			m_e		
RUE	69.42	P	02:29:13.473	-0.4	15.6	TAS	423.1	1.40	a_e	mb	6.5
STU	73.78	S	02:39:10.003	15.6	11.74	TAS			m_e		
STU	73.78	P	02:29:39.773	15.6	6.11	TAS	304.8	1.11	a_e	mb	6.2
TANN	71.64	S	02:38:45.101	15.6	11.74	TAS			m_e		
TANN	71.64	P	02:29:27.323	15.6	6.11	TAS	249.2	1.38	a_e	mb	6.2
TNS	72.49	S	02:38:55.513	15.6	11.74	TAS			m_e		
TNS	72.49	P	02:29:32.273	15.6	6.11	TAS	136.7	1.01	a_e	mb	6.0
UBBA	71.66	S	02:38:43.881	15.6	11.74	TAS			m_e		
UBBA	71.66	P	02:29:27.173	15.6	6.11	TAS	690.1	2.04	a_e	mb	6.4
WLF	73.37	S	02:39:06.342	15.6	11.74	TAS			m_e		
WLF	73.37	P	02:29:37.723	15.6	6.11	TAS	174.6	1.16	a_e	mb	6.1

Event 90626004 Bougainville - Solomon Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	03:18:14.90			-9.4800	157.7000				10.0					131.19	131.19	m i ke	EMSC
90626036																	

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	131.19		PKP	03:37:27.742		46.4		1.12		TAS					m_e

Event 90626005 Bougainville - Solomon Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	03:18:14.90			-9.4800	157.7000				10.0					131.19	131.19	m i ke	EMSC

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	131.19		PKP	03:37:31.594		52.3		1.12		TAS					m_e

Event 90626007 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	04:17:20.70			45.9650	145.3270				33.0				21	73.37	78.86	m i ke	BGR

Magnitude Err Nsta Author OrigID
mb 4.9 BGR 90626013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	74.81		P	04:28:55.961	-0.3	30.9		5.67		TAS		10.6	1.12	m_e mb	4.8
BFO	78.86		P	04:29:17.679		30.9		5.67		TAS		4.6	0.75	m_e mb	4.6
BRG	74.80		P	04:28:55.801	-0.4	30.9		5.67		TAS		5.6	0.88	m_e mb	4.6
BSEG	73.37		P	04:28:47.726	-0.3	30.9		5.67		TAS		18.1	0.97	m_e mb	5.2
BUG	76.46		P	04:29:04.906		30.9		5.67		TAS		12.6	0.70	m_e mb	5.2
CLL	74.75		P	04:28:55.068	0.4	30.9		5.67		TAS		21.0	0.84	m_e mb	5.2
CLZ	75.15		P	04:28:57.992	-0.3	30.9		5.67		TAS		18.4	0.68	m_e mb	5.2
FLT1	74.46		P	04:28:53.451	0.1	30.9		5.67		TAS		16.0	0.77	m_e mb	5.1
FUR	78.02		P	04:29:14.574		30.9		5.67		TAS		16.0	0.61	m_e mb	5.3
GEC2	76.59		P	04:29:05.905		30.9		5.67		TAS		5.8	0.90	m_e mb	4.7
GOR1	73.87		P	04:28:50.285	-0.5	30.9		5.67		TAS		29.2	1.16	m_e mb	5.2
GRA1	76.73		P	04:29:07.199		30.9		5.67		TAS		26.3	0.77	m_e mb	5.4
GTTG	75.54		P	04:29:00.418	0.4	30.9		5.67		TAS		11.2	0.77	m_e mb	5.1
IBBN	75.55		P	04:29:00.520	-0.2	30.9		5.67		TAS		14.9	0.79	m_e mb	5.2
KAST	76.32		P	04:29:04.773	-1.1	30.9		5.67		TAS		9.3	0.78	m_e mb	5.0
MANZ	76.18		P	04:29:01.476	-0.2	30.9		5.67		TAS		1.0	0.70	m_e mb	4.1
MOX	75.78		P	04:29:01.040	0.4	30.9		5.67		TAS		5.6	0.83	m_e mb	4.7

NEUB	75.26	P	04:28:58.179	-0.2	30.9	5.67	TAS	18.9	0.91	m_e	mb	5.1
RETH	74.69	P	04:28:55.131	-0.2	30.9	5.67	TAS	14.6	1.02	m_e	mb	5.0
RJOB	77.85	P	04:29:13.526		30.9	5.67	TAS	7.1	0.82	m_e	mb	4.8
ROTZ	76.33	P	04:29:05.021	0.5	30.9	5.67	TAS	1.5	0.73	m_e	mb	4.2
TANN	75.69	P	04:29:00.543	-0.1	30.9	5.67	TAS	4.2	0.81	m_e	mb	4.6
TNS	77.17	P	04:29:09.220		30.9	5.67	TAS	9.7	0.80	m_e	mb	5.0
UBBA	76.15	P	04:29:03.218	0.4	30.9	5.67	TAS	5.4	0.66	m_e	mb	4.8

Event 90626001 Costa Rica

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	05:23:49.24			9.2900	-83.4700				33.0			30		82.75	87.77	m i ke	BGR
OrigID 90626007																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.7		BGR	90626007
MBB	6.2		BGR	90626007
Ms	6.3		BGR	90626007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	85.28		S	05:46:52.381		278.1		10.24		TAS				m_e	
ASSE	85.28		P	05:36:23.439		279.3		5.06		TAS	118.0	1.51	a_e	MBB	6.4
BFO	84.33		S	05:46:42.241	0.9	278.1		10.24		TAS				m_e	
BFO	84.33		P	05:36:17.889	0.0	279.3		5.06		TAS	74.3	1.74	a_e	MBB	6.0
BRG	87.51		S	05:47:13.464		278.1		10.24		TAS				m_e	
BRG	87.51		P	05:36:34.289		279.3		5.06		TAS	31.6	1.09	a_e	MBB	6.3
BRG	87.51		PP	05:39:57.716		278.2		6.94		TAS				m_e	
BSEG	84.79		S	05:46:48.196	1.6	278.1		10.24		TAS				m_e	
BSEG	84.79		P	05:36:20.689	0.3	279.3		5.06		TAS	242.2	2.04	a_e	MBB	6.3
BUG	83.27		S	05:46:31.619	-1.0	278.1		10.24		TAS				m_e	
BUG	83.27		P	05:36:12.689	-0.2	279.3		5.06		TAS	36.7	1.02	a_e	MBB	6.2
CLL	86.85		S	05:47:07.380		278.1		10.24		TAS				m_e	
CLL	86.85		P	05:36:30.889		279.3		5.06		TAS	43.3	1.10	a_e	MBB	6.1
CLL	86.85		PP	05:39:52.872		278.2		6.94		TAS				m_e	
CLZ	85.14		S	05:46:50.932		278.1		10.24		TAS				m_e	
CLZ	85.14		P	05:36:22.739		279.3		5.06		TAS	85.3	1.33	a_e	MBB	6.3
FLT1	85.59		S	05:46:55.278		278.1		10.24		TAS				m_e	
FLT1	85.59		P	05:36:24.289		279.3		5.06		TAS	115.9	1.50	a_e	MBB	6.1
FUR	86.30		S	05:47:02.842		278.1		10.24		TAS				m_e	
FUR	86.30		P	05:36:28.289		279.3		5.06		TAS	44.0	1.12	a_e	MBB	6.3
FUR	86.30		PP	05:39:49.660		278.2		6.94		TAS				m_e	
GEC2	87.77		S	05:47:18.293		278.1		10.24		TAS				m_e	
GEC2	87.77		P	05:36:35.439		279.3		5.06		TAS	51.0	1.29	a_e	MBB	6.2
GOR1	85.52		P	05:36:24.489	0.1	279.3		5.06		TAS	495.4	2.48	a_e	MBB	6.3
GRA1	86.01		S	05:46:59.623		278.1		10.24		TAS				m_e	
GRA1	86.01		P	05:36:27.039		279.3		5.06		TAS	57.5	1.22	a_e	MBB	6.1

GRA1	86.01	PP	05:39:43.466		278.2	6.94	TAS										m_e	
GRA1	86.01	L	06:09:05.714				T__	14344.7	21.80	a_e	Ms						6.3	
GTTG	84.93	S	05:46:47.741		278.1	10.24	TAS										m_e	
GTTG	84.93	P	05:36:21.539		279.3	5.06	TAS	75.5	1.30	a_e	MBB						6.3	
HLG	83.34	S	05:46:32.424	0.6	278.1	10.24	TAS										m_e	
HLG	83.34	P	05:36:13.289	-0.4	279.3	5.06	TAS	159.2	1.18	a_e	MBB						6.4	
IBBN	83.48	S	05:46:32.906	0.1	278.1	10.24	TAS										m_e	
IBBN	83.48	P	05:36:13.789	0.2	279.3	5.06	TAS	83.3	1.48	a_e	MBB						6.4	
KAST	84.02	S	05:46:37.896	0.0	278.1	10.24	TAS										m_e	
KAST	84.02	P	05:36:16.539	0.3	279.3	5.06	TAS	255.7	2.70	a_e	MBB						6.2	
MANZ	86.53	S	05:47:07.509		278.1	10.24	TAS										m_e	
MANZ	86.53	P	05:36:29.689		279.3	5.06	TAS	9.6	1.36	a_e	MBB						5.5	
MOX	86.10	S	05:47:01.715		278.1	10.24	TAS										m_e	
MOX	86.10	P	05:36:27.289		279.3	5.06	TAS	197.0	2.37	a_e	MBB						6.0	
MOX	86.10	PP	05:39:46.948		278.2	6.94	TAS										m_e	
MOX	86.10	L	06:09:53.796				T__	11234.8	20.40	a_e	Ms						6.2	
NEUB	86.11	S	05:47:01.072		278.1	10.24	TAS										m_e	
NEUB	86.11	P	05:36:27.389		279.3	5.06	TAS	41.1	1.06	a_e	MBB						6.2	
NEUB	86.11	PP	05:39:47.991		278.2	6.94	TAS										m_e	
NRDL	84.88	S	05:46:48.518	1.2	278.1	10.24	TAS										m_e	
NRDL	84.88	P	05:36:21.339	-0.2	279.3	5.06	TAS	92.2	1.36	a_e	MBB						6.3	
RETH	84.39	P	05:36:18.989	0.3	279.3	5.06	TAS	129.3	1.46	m_e	MBB						6.3	
RGN	86.43	S	05:47:05.739		278.1	10.24	TAS										m_e	
RGN	86.43	P	05:36:28.939		279.3	5.06	TAS	170.5	1.30	a_e	MBB						6.5	
RJOB	87.39	S	05:47:08.958		278.1	10.24	TAS										m_e	
RJOB	87.39	P	05:36:33.639		279.3	5.06	TAS	52.3	1.37	a_e	MBB						6.0	
RJOB	87.39	PP	05:39:55.284		278.2	6.94	TAS										m_e	
ROTZ	86.63	S	05:47:07.348		278.1	10.24	TAS										m_e	
ROTZ	86.63	P	05:36:30.289		279.3	5.06	TAS	27.5	1.94	a_e	MBB						5.5	
ROTZ	86.63	PP	05:39:49.930		278.2	6.94	TAS										m_e	
RUE	87.10	S	05:47:10.567		278.1	10.24	TAS										m_e	
RUE	87.10	P	05:36:31.839		279.3	5.06	TAS	48.2	0.93	a_e	MBB						6.2	
STU	84.84	S	05:46:46.748	-0.6	278.1	10.24	TAS										m_e	
STU	84.84	P	05:36:20.789	-0.5	279.3	5.06	TAS	117.9	1.11	a_e	MBB						6.8	
STU	84.84	PP	05:39:38.888		278.2	6.94	TAS										m_e	
TANN	86.67	S	05:47:06.544		278.1	10.24	TAS										m_e	
TANN	86.67	P	05:36:30.339		279.3	5.06	TAS	52.7	1.17	a_e	MBB						6.1	
TNS	84.16	S	05:46:40.014	0.3	278.1	10.24	TAS										m_e	
TNS	84.16	P	05:36:17.589	0.2	279.3	5.06	TAS	89.8	1.55	a_e	MBB						6.2	
UBBA	85.06	S	05:46:49.806		278.1	10.24	TAS										m_e	
UBBA	85.06	P	05:36:22.089		279.3	5.06	TAS	270.9	2.54	a_e	MBB						6.2	
WLF	82.75	S	05:46:26.952	1.1	278.1	10.24	TAS										m_e	
WLF	82.75	P	05:36:10.439	0.1	279.3	5.06	TAS	53.9	1.17	a_e	MBB						6.2	

OrigID
 2019/06/26 18:06:29.30 -31.0300 -177.3500 10.0 159.29 160.27 m i ke EMSC
 90626041

Magnitude Err Nsta Author OrigID
 Ms 5.5 BGR 90626015

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	160.27		PKP	18:27:09.162		22.3		4.03		TAS				m_e	
GRA1	160.27		L	19:43:42.925						T__		744.8	19.50	a_e Ms	5.5
MOX	159.29		L	19:48:19.176						T__		634.9	18.30	a_e Ms	5.5

Event 90626011 North of Severnaya Zemlya

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/26	22:12:58.00			84.4800	106.0700				10.0				24	37.16	42.90	m i ke	EMSC
OrigID 90626043																	

Magnitude Err Nsta Author OrigID
 mb 4.7 BGR 90626017

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	38.92		P	22:20:32.895	0.3	9.7		8.44		TAS		28.4	1.11	m_e mb	4.8
BFO	42.90		P	22:21:05.934		9.7		8.44		TAS		14.8	1.18	m_e mb	4.6
BRG	39.85		P	22:20:40.044		9.7		8.44		TAS		18.0	1.31	m_e mb	4.5
BSEG	37.16		P	22:20:18.004	-0.0	9.7		8.44		TAS		23.2	0.98	m_e mb	4.9
BUG	39.92		P	22:20:41.271		9.7		8.44		TAS		37.9	1.07	m_e mb	5.0
CLL	39.51		P	22:20:37.259		9.7		8.44		TAS		15.5	1.15	m_e mb	4.5
CLZ	39.23		P	22:20:35.222		9.7		8.44		TAS		26.1	1.04	m_e mb	4.8
FLT1	38.66		P	22:20:30.568	0.2	9.7		8.44		TAS		14.9	0.98	m_e mb	4.6
GEC2	41.88		P	22:20:57.558		9.7		8.44		TAS		17.8	1.27	m_e mb	4.7
GOR1	38.00		P	22:20:25.568	0.2	9.7		8.44		TAS		25.5	1.23	m_e mb	4.8
GRA1	41.28		P	22:20:52.895		9.7		8.44		TAS		34.0	1.08	m_e mb	5.0
GTTG	39.56		P	22:20:38.820		9.7		8.44		TAS		32.2	1.20	m_e mb	4.8
IBBN	39.01		P	22:20:33.963	-0.6	9.7		8.44		TAS		14.5	0.99	m_e mb	4.6
KAST	40.05		P	22:20:42.409		9.7		8.44		TAS		22.3	1.02	m_e mb	4.7
MANZ	40.90		P	22:20:49.452		9.7		8.44		TAS		4.2	1.27	m_e mb	4.0
MOX	40.30		P	22:20:44.255		9.7		8.44		TAS		33.4	1.21	m_e mb	4.8
NRDL	38.61		P	22:20:30.338	-0.2	9.7		8.44		TAS		19.0	1.13	m_e mb	4.6
RETH	38.44		P	22:20:28.707	-0.1	9.7		8.44		TAS		13.5	1.07	m_e mb	4.6
ROTZ	41.11		P	22:20:51.276		9.7		8.44		TAS		6.7	1.18	m_e mb	4.2
STU	42.38		P	22:21:02.178		9.7		8.44		TAS		45.3	0.80	m_e mb	5.2
TANN	40.44		P	22:20:45.559		9.7		8.44		TAS		20.5	1.35	m_e mb	4.6
TNS	41.01		P	22:20:50.811		9.7		8.44		TAS		14.0	1.02	m_e mb	4.6
UBBA	40.28		P	22:20:43.959		9.7		8.44		TAS		15.0	1.36	m_e mb	4.4
WET	41.66		P	22:20:55.929		9.7		8.44		TAS		7.6	1.01	m_e mb	4.4

Event 90627002 Komandorsky Islands, Russia, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/27	04:20:54.50			56.7700	164.2900				38.0	1.8		29		67.62	73.37	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90627008
Ms	5.3		BGR	90627008

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	69.32		P	04:31:59.314	0.4	15.4		6.09		TAS		20.6	1.12	a_e mb	5.3
ASSE	69.32		pP	04:32:10.352						T__				m_e	
BFO	73.37		P	04:32:23.414		15.4		6.09		TAS		14.6	0.93	a_e mb	5.1
BRG	69.96		P	04:32:02.964	-0.3	15.4		6.09		TAS		24.3	1.26	a_e mb	5.3
BRG	69.96		pP	04:32:13.908						T__				m_e	
BSEG	67.62		P	04:31:48.964	0.3	15.4		6.09		TAS		19.1	0.89	a_e mb	5.3
BUG	70.50		P	04:32:06.314	-0.0	15.4		6.09		TAS		31.3	1.21	a_e mb	5.3
CLL	69.71		P	04:32:01.264	0.1	15.4		6.09		TAS		43.3	1.31	a_e mb	5.5
CLL	69.71		pP	04:32:12.388						T__				m_e	
CLZ	69.64		P	04:32:01.664	-0.2	15.4		6.09		TAS		37.9	1.16	a_e mb	5.5
CLZ	69.64		pP	04:32:12.505						T__				m_e	
FLT1	69.03		P	04:31:57.014	0.0	15.4		6.09		TAS		16.8	1.15	a_e mb	5.2
FUR	73.05		P	04:32:21.914	-0.6	15.4		6.09		TAS		20.5	1.01	a_e mb	5.2
GEC2	71.95		P	04:32:15.364	-0.3	15.4		6.09		TAS		19.5	1.11	a_e mb	5.2
GEC2	71.95		pP	04:32:26.118						T__				m_e	
GOR1	68.38		P	04:31:53.864	0.1	15.4		6.09		TAS		69.7	1.46	a_e mb	5.7
GOR1	68.38		pP	04:32:04.773						T__				m_e	
GRA1	71.58		P	04:32:13.514	0.1	15.4		6.09		TAS		31.7	0.96	a_e mb	5.4
GRA1	71.58		pP	04:32:23.785						T__				m_e	
GRA1	71.58		L	05:05:50.006						T__		1640.7	20.10	a_e Ms	5.3
GTTG	69.99		P	04:32:03.464	-0.1	15.4		6.09		TAS		27.0	1.38	a_e mb	5.3
IBBN	69.59		P	04:32:01.064	-0.4	15.4		6.09		TAS		34.0	0.95	a_e mb	5.6
IBBN	69.59		pP	04:32:12.184						T__				m_e	
KAST	70.57		P	04:32:07.014	0.2	15.4		6.09		TAS		31.9	1.37	a_e mb	5.3
KAST	70.57		pP	04:32:17.921						T__				m_e	
MANZ	71.14		P	04:32:10.414	0.0	15.4		6.09		TAS		4.9	1.11	a_e mb	4.5
MANZ	71.14		pP	04:32:21.026						T__				m_e	
MOX	70.59		P	04:32:07.064	-0.0	15.4		6.09		TAS		22.2	1.07	a_e mb	5.2
MOX	70.59		pP	04:32:17.677						T__				m_e	
MOX	70.59		L	05:05:44.582						T__		1539.2	21.00	a_e Ms	5.2
NEUB	70.04		P	04:32:03.364	0.2	15.4		6.09		TAS		15.3	0.92	a_e mb	5.1
NRDL	69.05		P	04:31:57.564	0.2	15.4		6.09		TAS		9.8	0.93	a_e mb	5.0
NRDL	69.05		pP	04:32:08.811						T__				m_e	
RETH	68.93		P	04:31:57.014	-0.1	15.4		6.09		TAS		34.1	1.26	a_e mb	5.4

RJOB	73.18	P	04:32:22.914		15.4	6.09	TAS	16.7	0.99	a_e mb	5.1
ROTZ	71.34	P	04:32:11.864	0.4	15.4	6.09	TAS	7.5	1.26	a_e mb	4.7
ROTZ	71.34	pP	04:32:22.151				T__			m_e	
RUE	68.45	P	04:31:53.864	-0.5	15.4	6.09	TAS	22.5	0.79	a_e mb	5.5
STU	72.81	P	04:32:20.214	0.1	15.4	6.09	TAS	40.8	0.85	a_e mb	5.6
TANN	70.67	P	04:32:07.714	0.0	15.4	6.09	TAS	30.5	1.38	m_e mb	5.2
TANN	70.67	pP	04:32:18.372				T__			m_e	
TNS	71.51	P	04:32:12.664	0.4	15.4	6.09	TAS	10.9	0.87	a_e mb	5.0
TNS	71.51	pP	04:32:23.212				T__			m_e	
UBBA	70.69	P	04:32:07.664	0.3	15.4	6.09	TAS	12.6	1.12	a_e mb	5.0
UBBA	70.69	pP	04:32:18.197				T__			m_e	
WET	71.82	P	04:32:14.914	0.2	15.4	6.09	TAS	35.4	1.22	a_e mb	5.4
WET	71.82	pP	04:32:25.249				T__			m_e	
WLF	72.39	P	04:32:18.114	-0.1	15.4	6.09	TAS	19.5	1.14	a_e mb	5.1
WLF	72.39	pP	04:32:29.416				T__			m_e	

Event 90627003 Kermadec Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/27	11:04:56.90			-30.3200	-179.2400				10.0					158.13	159.10	m i ke	EMSC
OrigID 90627035																	

Magnitude	Err	Nsta	Author	OrigID
Ms	6.3		BGR	90627009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	159.10		PKP	11:25:32.756						T__				m_e	
GRA1	159.10		PP	11:29:14.386		41.7		5.50		TAS				m_e	
GRA1	159.10		L	12:41:08.533						T__		5307.0	21.30	a_e Ms	6.3
MOX	158.13		L	12:32:34.910						T__		3775.0	21.14	a_e Ms	6.2

Event 90627005 Fiji Islands region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/27	14:14:09.03			-20.7300	-178.1300				568.9	12.1		29		146.23	151.98	m i ke	BGR
OrigID 90627011																	

Magnitude	Err	Nsta	Author	OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	147.92		PKPbc	14:32:50.252	0.1	19.0		2.41		TAS				a_e	
BFO	151.98		PKPbc	14:32:59.602		19.0		2.41		TAS				a_e	
BFO	151.98		PKPab	14:33:10.761		14.5		4.25		TAS				m_e	

BRG	148.45	PKPpdf	14:32:47.674	0.0	14.8	1.13	TAS	m_e
BRG	148.45	PKPbc	14:32:51.652	0.2	19.0	2.41	TAS	a_e
BRG	148.45	PKPab	14:32:56.633	0.2	14.5	4.25	TAS	m_e
BRG	148.45	pPKPbc	14:35:02.863	-21.3			T__	m_e
BSEG	146.23	PKPbc	14:32:45.652	-0.2	19.0	2.41	TAS	a_e
BUG	149.06	PKPpdf	14:32:48.019		14.8	1.13	TAS	m_e
BUG	149.06	PKPbc	14:32:52.902	-0.0	19.0	2.41	TAS	a_e
BUG	149.06	PKPab	14:32:58.494	0.1	14.5	4.25	TAS	m_e
CLL	148.26	PKPbc	14:32:50.952	0.3	19.0	2.41	TAS	a_e
CLL	148.26	PKPab	14:32:55.462	0.2	14.5	4.25	TAS	m_e
CLZ	148.25	PKPpdf	14:32:47.536	0.4	14.8	1.13	TAS	m_e
CLZ	148.25	PKPbc	14:32:51.352	0.2	19.0	2.41	TAS	a_e
CLZ	148.25	PKPab	14:32:56.013	0.2	14.5	4.25	TAS	m_e
CLZ	148.25	pPKPbc	14:35:02.416	-21.3			T__	m_e
FLT1	147.63	PKPbc	14:32:49.202	0.1	19.0	2.41	TAS	a_e
FLT1	147.63	PKPab	14:32:53.119	-0.3	14.5	4.25	TAS	m_e
FUR	151.60	PKPbc	14:32:58.716	-0.4	19.0	2.41	TAS	m_e
FUR	151.60	PKPab	14:33:10.348		14.5	4.25	TAS	m_e
GEC2	150.39	PKPbc	14:32:56.152	-0.0	19.0	2.41	TAS	a_e
GOR1	146.98	PKPbc	14:32:48.002	-0.3	19.0	2.41	TAS	a_e
GRA1	150.16	PKPbc	14:32:55.691	0.1	19.0	2.41	TAS	m_e
GRA1	150.16	PKPab	14:33:04.008		14.5	4.25	TAS	m_e
GRA1	150.16	pPKPbc	14:35:06.659	-21.3			T__	m_e
GTTG	148.60	PKPpdf	14:32:48.088		14.8	1.13	TAS	m_e
GTTG	148.60	PKPbc	14:32:52.102	0.3	19.0	2.41	TAS	a_e
GTTG	148.60	PKPab	14:32:57.460	-0.1	14.5	4.25	TAS	m_e
IBBN	148.15	PKPpdf	14:32:47.330	0.1	14.8	1.13	TAS	m_e
IBBN	148.15	PKPbc	14:32:49.874	0.4	19.0	2.41	TAS	m_e
IBBN	148.15	PKPab	14:32:55.117	-0.6	14.5	4.25	TAS	m_e
IBBN	148.15	pPKPbc	14:35:03.336	-21.3			T__	m_e
KAST	149.16	PKPpdf	14:32:48.432		14.8	1.13	TAS	m_e
KAST	149.16	PKPbc	14:32:53.302	0.1	19.0	2.41	TAS	a_e
KAST	149.16	PKPab	14:32:59.597	0.3	14.5	4.25	TAS	m_e
MANZ	149.70	PKPpdf	14:32:49.397		14.8	1.13	TAS	m_e
MANZ	149.70	PKPbc	14:32:54.802	1.9	19.0	2.41	TAS	a_e
MANZ	149.70	PKPab	14:33:02.285	0.2	14.5	4.25	TAS	m_e
MOX	149.17	PKPpdf	14:32:48.432		14.8	1.13	TAS	m_e
MOX	149.17	PKPbc	14:32:53.402	0.4	19.0	2.41	TAS	m_e
MOX	149.17	PKPab	14:32:59.114	0.2	14.5	4.25	TAS	m_e
MOX	149.17	pPKPbc	14:35:05.023	-21.3			T__	m_e
NEUB	148.62	PKPbc	14:32:51.952	-0.4	19.0	2.41	TAS	a_e
NEUB	148.62	PKPab	14:32:57.047	0.2	14.5	4.25	TAS	m_e
NRDL	147.66	PKPpdf	14:32:47.261	-0.1	14.8	1.13	TAS	m_e
NRDL	147.66	PKPbc	14:32:49.552	-1.2	19.0	2.41	TAS	a_e
NRDL	147.66	PKPab	14:32:53.463	0.4	14.5	4.25	TAS	m_e
RETH	147.53	PKPbc	14:32:49.252	-0.1	19.0	2.41	TAS	a_e
RJOB	151.64	PKPbc	14:32:57.553		19.0	2.41	TAS	m_e
RJOB	151.64	PKPab	14:33:10.968		14.5	4.25	TAS	m_e
ROTZ	149.88	PKPpdf	14:32:49.466		14.8	1.13	TAS	m_e

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ROTZ	149.88	PKPbc	14:32:55.152	0.2	19.0	2.41	TAS	a_e
ROTZ	149.88	PKPab	14:33:03.043	-0.6	14.5	4.25	TAS	m_e
RUE	146.99	PKPbc	14:32:47.652	-0.1	19.0	2.41	TAS	a_e
STU	151.41	PKPbc	14:32:58.552	-1.5	19.0	2.41	TAS	a_e
STU	151.41	PKPab	14:33:09.038		14.5	4.25	TAS	m_e
TANN	149.22	PKPdf	14:32:48.639		14.8	1.13	TAS	m_e
TANN	149.22	PKPbc	14:32:53.602	0.5	19.0	2.41	TAS	a_e
TANN	149.22	PKPab	14:33:00.217	0.0	14.5	4.25	TAS	m_e
TNS	150.11	PKPdf	14:32:50.017		14.8	1.13	TAS	m_e
TNS	150.11	PKPbc	14:32:57.452	-0.2	19.0	2.41	TAS	a_e
TNS	150.11	PKPab	14:33:03.318		14.5	4.25	TAS	m_e
TNS	150.11	pPKPbc	14:35:06.356	-21.3			T__	m_e
UBBA	149.30	PKPbc	14:32:53.652	0.3	19.0	2.41	TAS	a_e
UBBA	149.30	pPKPbc	14:35:03.722	-21.3			T__	m_e
WET	150.31	PKPdf	14:32:50.017		14.8	1.13	TAS	m_e
WET	150.31	PKPbc	14:32:55.691	0.2	19.0	2.41	TAS	m_e
WET	150.31	PKPab	14:33:05.110		14.5	4.25	TAS	m_e
WLF	150.93	PKPbc	14:32:58.052	-0.2	19.0	2.41	TAS	a_e
WLF	150.93	PKPab	14:33:07.384		14.5	4.25	TAS	m_e
WLF	150.93	pPKPbc	14:35:11.000	-21.3			T__	m_e

Event 90627006 Loyalty Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/27	15:39:30.10			-21.8300	168.7600				10.0					147.01	147.01	m i ke	NEIC
	90627045																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	147.01		PKP	15:59:12.276		40.7		1.83		TAS				m_e	
GRA1	147.01		pPKP	15:59:22.930						T__				m_e	

Event 90627007 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/27	20:58:29.20			-20.7900	-174.1500				40.0					150.85	150.85	m i ke	EMSC
	90627039																

Magnitude Err Nsta Author OrigID

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
GRA1	150.85		PKP	21:18:17.018		10.4		1.44		TAS				m_e	

Event 90628009 Mariana Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/28	15:50:50.89		19.3750	144.6640					33.0			22		97.14	102.13	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	98.31		PP	16:08:24.128	-0.2					T__					m_e
BFO	102.13		PP	16:08:52.266						T__					m_e
BRG	97.76		PP	16:08:20.132	-0.0					T__					m_e
BSEG	97.14		PP	16:08:14.637	-0.0					T__					m_e
CLL	97.89		PP	16:08:20.881	-0.5					T__					m_e
CLZ	98.65		PP	16:08:26.723	-0.5					T__					m_e
FLT1	97.93		PP	16:08:20.382	0.0					T__					m_e
FUR	100.91		PP	16:08:44.774						T__					m_e
GEC2	99.28		PP	16:08:31.774						T__					m_e
IBBN	99.38		PP	16:08:31.620	-0.1					T__					m_e
MANZ	99.22		PP	16:08:31.766	-0.1					T__					m_e
MOX	98.98		PP	16:08:29.206	1.4					T__					m_e
NEUB	98.51		PP	16:08:25.671	0.2					T__					m_e
NRDL	98.28		PP	16:08:23.462	0.3					T__					m_e
RETH	98.41		PP	16:08:24.461	-0.5					T__					m_e
RJOB	100.49		PP	16:08:41.444						T__					m_e
ROTZ	99.33		PP	16:08:32.464						T__					m_e
STU	101.42		PP	16:08:49.353						T__					m_e
TANN	98.76		PP	16:08:28.207	-1.0					T__					m_e
TNS	100.67		PP	16:08:41.361	0.3					T__					m_e
UBBA	99.56		PP	16:08:32.929	-0.5					T__					m_e
WET	99.46		PP	16:08:33.452						T__					m_e

Event 90629001 Greece-Albania border region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/29	13:01:16.65	3.66	0.47	39.9220	20.3990	67.8	44.5	140	10.0			6	344	9.55	12.37	m i ke	BGR

Magnitude	Err	Nsta	Author	OrigID
ML	4.1		BGR	90629007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
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BFO	12.06	Pn	13:04:04.247	-0.8	T__	m_e
GEC2	10.12	Pn	13:03:38.736	-0.2	T__	m_e
MOX	12.37	Pn	13:04:09.349	0.3	T__	m_e
OBER	10.46	Pn	13:03:44.192	0.7	T__	m_e
RJOB	9.55	Pn	13:03:31.385	0.2	T__	m_e
WET	10.66	Pn	13:03:45.902	-0.3	T__	m_e ML 4.1

Event 90629003 Mindanao, Philippine Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/29	19:00:07.20			9.7200	125.1200				51.0			17		95.50	100.53	m i ke	EMSC
OrigID 90629035																	

Magnitude	Err	Nsta	Author	OrigID
mb	5.2		BGR	90629009

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
ASSE	96.86		P	19:13:33.159	0.1	65.4		4.67		TAS		13.6	1.42	m_e mb	5.4
BRG	95.50		P	19:13:26.984	0.1	65.4		4.67		TAS		8.0	0.97	m_e mb	5.2
CLL	95.88		P	19:13:28.310	-0.3	65.4		4.67		TAS		10.8	1.38	m_e mb	5.2
CLZ	97.15		P	19:13:34.787	0.3	65.4		4.67		TAS		8.2	0.88	m_e mb	5.4
FLT1	96.46		P	19:13:30.718	-0.5	65.4		4.67		TAS		6.7	1.06	m_e mb	5.1
GEC2	96.42		P	19:13:31.388	0.0	65.4		4.67		TAS		11.2	0.89	m_e mb	5.4
GOR1	96.14		P	19:13:30.035	0.3	65.4		4.67		TAS		20.8	1.23	m_e mb	5.5
IBBN	98.39		P	19:13:40.082	-0.1	65.4		4.67		TAS		10.3	0.81	m_e mb	5.6
KAST	98.53		P	19:13:40.772	-0.2	65.4		4.67		TAS		5.5	0.88	m_e mb	5.3
MANZ	96.93		P	19:13:33.782	0.2	65.4		4.67		TAS		0.9	1.07	m_e mb	4.3
MOX	96.95		P	19:13:33.493	-0.1	65.4		4.67		TAS		5.6	0.98	m_e mb	5.2
NRDL	97.02		P	19:13:34.004	0.2	65.4		4.67		TAS		7.8	0.97	m_e mb	5.3
ROTZ	96.96		P	19:13:33.974	0.2	65.4		4.67		TAS		2.0	0.98	m_e mb	4.7
TANN	96.55		P	19:13:31.741	-0.1	65.4		4.67		TAS		4.9	0.92	m_e mb	5.1
TNS	98.96		P	19:13:42.801	-0.2	65.4		4.67		TAS		10.0	1.22	m_e mb	5.4
WET	96.81		P	19:13:33.098	-0.0	65.4		4.67		TAS		10.4	1.41	m_e mb	5.3
WLF	100.53		P	19:13:50.452	0.1	65.4		4.67		TAS		11.3	0.84	m_e mb	5.4

Event 90629004 North of Ascension Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/29	19:51:22.80			-1.7100	-12.8800				10.0			12		53.15	58.71	m i ke	GFZ
OrigID 90629056																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.8		BGR	90629010

Ms 4.9 BGR 90629010

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	53.15		P	20:00:39.487		209.8		6.97		TAS		10.4	1.25	m_e	mb 4.6
BSEG	58.71		P	20:01:19.294	-1.1	209.8		6.97		TAS		6.6	0.93	m_e	mb 4.7
CLZ	56.87		P	20:01:09.089	0.2	209.8		6.97		TAS		19.1	1.86	m_e	mb 4.8
FUR	53.94		P	20:00:45.373		209.8		6.97		TAS		12.8	0.68	m_e	mb 5.1
GEC2	55.37		P	20:00:55.895		209.8		6.97		TAS		12.6	0.93	m_e	mb 4.9
GOR1	58.16		P	20:01:14.643	-1.6	209.8		6.97		TAS		22.4	1.16	m_e	mb 5.1
GRA1	55.25		L	20:24:50.035						T__		897.4	19.40	a_e	Ms 4.9
KAST	55.75		P	20:01:01.056	-0.2	209.8		6.97		TAS		11.8	1.46	m_e	mb 4.7
MANZ	55.79		P	20:00:58.760		209.8		6.97		TAS		1.3	0.77	m_e	mb 4.0
MOX	56.20		L	20:24:11.092						T__		998.1	21.50	a_e	Ms 4.9
RJOB	54.11		P	20:00:46.201		209.8		6.97		TAS		8.9	0.84	m_e	mb 4.8
TANN	56.28		P	20:01:02.058		209.8		6.97		TAS		5.8	0.91	m_e	mb 4.6
UBBA	55.86		P	20:01:01.668		209.8		6.97		TAS		18.7	1.51	m_e	mb 4.9
WET	55.33		P	20:00:55.485		209.8		6.97		TAS		7.1	0.86	m_e	mb 4.7

Event 90629005 North of Ascension Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/29	19:59:27.94			-0.6600	-12.7660				10.0				9	52.12	55.26	m i ke	BGR
OrigID 90629011																	

Magnitude 4.7 Err Nsta Author BGR OrigID 90629011

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	52.12		P	20:08:39.505		210.0		7.28		TAS		58.2	2.18	m_e	mb 5.1
GEC2	54.36		P	20:08:56.068		210.0		7.28		TAS		21.9	1.09	m_e	mb 5.1
MANZ	54.77		P	20:08:58.712		210.0		7.28		TAS		2.8	1.22	m_e	mb 4.2
MOX	55.18		P	20:09:01.745		210.0		7.28		TAS		14.1	1.38	m_e	mb 4.8
RJOB	53.10		P	20:08:46.270		210.0		7.28		TAS		7.0	0.85	m_e	mb 4.6
ROTZ	54.62		P	20:08:57.546		210.0		7.28		TAS		1.1	1.11	m_e	mb 3.8
TANN	55.26		P	20:09:02.134		210.0		7.28		TAS		12.5	1.16	m_e	mb 4.8
UBBA	54.83		P	20:08:59.490	-0.2	210.0		7.28		TAS		16.4	1.75	m_e	mb 4.8
WET	54.31		P	20:08:55.679		210.0		7.28		TAS		14.3	1.12	m_e	mb 4.9

Event 90629006 Tonga Islands

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/29	22:26:12.31			-17.5360	-173.3710				33.0				14	144.43	148.25	m i ke	BGR
OrigID 90629012																	

Magnitude	Err	Nsta	Author	OrigID												
Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	
ASSE	145.34		PKPbc	22:45:46.172	0.3	8.2		2.83		TAS				m_e		
BRG	146.23		PKPbc	22:45:48.939	0.2	8.2		2.83		TAS				m_e		
CLL	145.93		PKPbc	22:45:47.849	0.1	8.2		2.83		TAS				m_e		
CLZ	145.64		PKPbc	22:45:47.429	-0.0	8.2		2.83		TAS				m_e		
FLT1	145.09		PKPbc	22:45:45.249	-0.0	8.2		2.83		TAS				m_e		
GEC2	148.25		PKPbc	22:45:54.138		8.2		2.83		TAS				m_e		
GOR1	144.43		PKPbc	22:45:43.656	-0.1	8.2		2.83		TAS				m_e		
MANZ	147.33		PKPbc	22:45:52.005		8.2		2.83		TAS				m_e		
MOX	146.73		PKPbc	22:45:50.197	0.0	8.2		2.83		TAS				m_e		
NRDL	145.01		PKPbc	22:45:45.165	-0.2	8.2		2.83		TAS				m_e		
RETH	144.81		PKPbc	22:45:44.662	-0.1	8.2		2.83		TAS				m_e		
ROTZ	147.53		PKPbc	22:45:52.431		8.2		2.83		TAS				m_e		
TANN	146.87		PKPbc	22:45:50.784	-0.0	8.2		2.83		TAS				m_e		
WLF	147.95		PKPbc	22:45:53.970		8.2		2.83		TAS				m_e		

Event 90629007 North of Ascension Island

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	
2019/06/29	23:03:17.53			-0.3040	-12.3030				33.0			10		51.64	56.65	m i ke	BGR
90629013																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.9		BGR	90629013
Ms	4.0		BGR	90629013

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BFO	51.64		P	23:12:22.528		209.6		7.31		TAS		16.4	1.31	m_e mb	4.8
GEC2	53.86		P	23:12:38.844		209.6		7.31		TAS		42.0	1.41	m_e mb	5.3
GOR1	56.65		P	23:12:59.244	-0.2	209.6		7.31		TAS		49.7	1.34	m_e mb	5.4
GRA1	53.74		L	23:37:39.938						T__		110.6	19.50	a_e Ms	3.9
MANZ	54.28		P	23:12:41.649		209.6		7.31		TAS		3.1	1.30	m_e mb	4.2
MOX	54.69		P	23:12:44.544		209.6		7.31		TAS		16.5	1.41	m_e mb	4.9
MOX	54.69		L	23:36:03.866						T__		121.1	20.10	a_e Ms	4.0
NRDL	55.87		P	23:12:53.191	-0.1	209.6		7.31		TAS		26.8	1.72	m_e mb	5.0
RJOB	52.60		P	23:12:29.199		209.6		7.31		TAS		7.6	1.06	m_e mb	4.6
TANN	54.77		P	23:12:45.139		209.6		7.31		TAS		15.8	1.28	m_e mb	4.9
TNS	53.37		P	23:12:35.065		209.6		7.31		TAS		9.3	1.08	m_e mb	4.6
WET	53.82		P	23:12:38.472		209.6		7.31		TAS		20.7	1.33	m_e mb	5.0

Event 90630001 Hokkaido, Japan, region

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/06/30	06:53:46.10			43.3300	142.3400				165.0				9	74.78	79.00	m i ke	EMSC
OrigID 90630033																	

Magnitude	Err	Nsta	Author	OrigID
mb	4.6		BGR	90630007

Sta	Dist	EvAz	Phase	Time	TRes	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude
BSEG	74.78		P	07:05:08.234	0.2	34.2		4.71		TAS		4.9	0.79	m_e mb	4.6
CLL	76.00		P	07:05:14.779	0.1	34.2		4.71		TAS		7.2	0.88	m_e mb	4.8
CLZ	76.50		P	07:05:18.207	0.0	34.2		4.71		TAS		7.7	0.72	m_e mb	4.9
FLT1	75.79		P	07:05:13.455	-0.4	34.2		4.71		TAS		7.9	0.78	m_e mb	4.9
GRA1	77.98		P	07:05:26.447	0.0	34.2		4.71		TAS		10.8	0.72	m_e mb	5.1
MANZ	77.41		P	07:05:23.015	-0.1	34.2		4.71		TAS		0.5	0.63	m_e mb	3.8
RJOB	79.00		P	07:05:32.268		34.2		4.71		TAS		4.1	0.78	m_e mb	4.5
ROTZ	77.55		P	07:05:24.119	0.1	34.2		4.71		TAS		1.1	0.99	m_e mb	4.0
WET	77.81		P	07:05:25.362	0.0	34.2		4.71		TAS		4.0	0.83	m_e mb	4.6