

Table 1 Supplementary Material - SKS no null measurements

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016153	23:16	-2.10	100.67	50.00	47.03	7.89	93.42	316.81	89.40	43.00	17.50	1.42	0.23	91.04	0.54	A060A
2016211	21:38	18.54	145.51	196.00	47.03	7.89	104.41	331.57	41.32	45.00	4.25	2.12	0.31	208.10	0.67	A060A
2015328	23:05	-10.54	-70.94	606.00	47.10	8.93	90.83	42.27	255.49	52.00	4.50	1.45	0.14	77.49	0.91	A061A
2015330	06:05	-9.18	-71.26	602.00	47.10	8.93	90.04	42.31	256.63	66.00	4.25	2.20	0.33	80.43	0.34	A061A
2015351	20:09	15.80	-93.63	85.00	47.10	8.93	86.87	41.90	289.77	64.00	19.75	0.90	0.36	111.54	0.38	A061A
2016139	08:17	0.43	-79.79	16.00	47.10	8.93	88.81	43.09	269.35	41.00	17.75	0.80	0.24	90.19	1.11	A061A
2016153	23:16	-2.10	100.67	50.00	47.10	8.93	92.71	316.87	90.15	62.00	2.50	1.57	0.05	94.41	0.15	A061A
2016159	19:35	1.28	126.37	31.00	47.10	8.93	107.37	320.56	68.38	49.00	3.50	1.65	0.16	70.30	0.76	A061A
2016211	21:38	18.54	145.51	196.00	47.10	8.93	103.89	331.07	42.20	57.00	7.75	1.60	0.40	220.40	0.56	A061A
2016217	14:35	-22.33	-66.01	270.00	47.10	8.93	96.40	41.59	244.12	56.00	3.00	2.90	0.22	70.85	0.66	A061A
2016217	16:44	24.94	142.01	510.00	47.10	8.93	96.74	329.84	41.89	55.00	11.00	1.52	0.43	217.60	2.00	A061A
2016283	15:06	1.77	127.45	128.00	47.10	8.93	107.68	320.95	67.18	51.00	24.50	2.40	0.63	64.02	2.74	A061A
2016293	00:46	-4.86	108.16	614.00	47.10	8.93	99.83	316.81	86.55	27.00	22.25	1.45	0.44	77.68	2.45	A061A
2016329	19:03	11.91	-88.90	10.00	47.10	8.93	86.64	42.69	283.76	26.00	17.00	1.88	0.64	95.85	1.53	A061A
2017010	06:33	4.48	122.62	627.00	47.10	8.93	102.54	320.14	69.27	48.00	22.00	1.77	0.61	67.65	0.48	A061A
2017130	23:43	-56.41	-25.74	15.00	47.10	8.93	107.14	23.99	199.32	80.00	13.50	1.05	0.21	206.30	0.64	A061A
2017196	12:32	0.41	121.98	113.00	47.10	8.93	105.21	319.35	72.46	50.00	8.75	1.57	0.24	75.94	1.14	A061A
2017223	05:48	14.01	120.74	172.00	47.10	8.93	94.06	320.52	64.61	56.00	5.50	1.92	0.34	72.51	0.32	A061A
2017283	06:52	-18.57	-69.75	85.00	47.10	8.93	95.96	42.34	249.26	52.00	9.00	1.40	0.39	70.63	0.91	A061A
2018014	09:38	-15.77	-74.71	39.00	47.10	8.93	97.14	43.18	254.66	47.00	6.50	1.12	0.14	75.80	0.19	A061A
2018084	20:34	-6.63	129.82	169.00	47.10	8.93	115.61	319.45	70.96	58.00	5.00	1.90	0.17	80.61	0.65	A061A
2018092	14:00	-20.66	-63.01	559.00	47.10	8.93	93.31	40.59	243.10	46.00	4.25	1.52	0.23	63.66	0.94	A061A
2018181	04:16	19.02	-105.12	15.00	47.10	8.93	91.54	38.62	300.20	46.00	8.50	1.07	0.25	115.89	0.42	A061A
2018217	12:06	-8.26	116.44	34.00	47.10	8.93	107.92	316.78	82.75	65.00	20.25	1.27	0.59	84.16	3.67	A061A
2018231	15:16	-8.32	116.63	21.00	47.10	8.93	108.09	316.79	82.65	66.00	5.00	3.17	0.55	81.73	1.32	A061A
2018236	09:24	-11.04	-70.83	630.00	47.10	8.93	91.13	42.25	255.08	49.00	9.25	1.57	0.24	77.03	0.40	A061A
2018250	02:32	-2.35	-78.90	93.00	47.10	8.93	90.22	43.06	266.82	44.00	5.75	1.23	0.06	88.27	0.16	A061A
2018251	07:36	7.24	126.48	10.00	47.10	8.93	102.83	321.59	64.44	60.00	4.75	2.42	0.27	75.84	0.47	A061A
2018271	10:22	-0.18	119.84	10.00	47.10	8.93	104.25	318.82	74.53	54.00	4.50	1.97	0.19	78.48	0.39	A061A
2016157	16:45	-4.59	125.63	429.00	46.18	9.11	111.49	318.07	73.46	53.00	28.75	1.57	0.77	66.24	2.49	A062A
2017243	17:26	-1.16	99.69	43.00	46.18	9.11	91.23	315.98	90.39	63.00	20.25	2.42	0.59	87.30	3.43	A062A
2018240	22:55	16.80	146.84	55.00	46.18	9.11	106.61	330.81	42.25	74.00	6.25	0.95	0.07	215.47	0.82	A062A
2015259	08:00	1.88	126.43	41.00	45.62	8.36	107.87	319.41	67.91	44.00	3.50	3.30	0.19	59.44	1.31	A287A
2016153	23:16	-2.10	100.67	50.00	45.62	8.36	93.11	315.39	89.82	65.00	16.25	1.32	0.36	93.27	2.27	A287A
2016217	16:44	24.94	142.01	510.00	45.62	8.36	98.11	329.14	41.57	63.00	23.00	0.40	0.32	217.37	1.32	A287A
2016238	17:24	30.61	137.85	456.00	45.62	8.36	91.36	327.20	41.72	52.00	18.50	0.62	0.26	213.21	1.00	A287A
2016211	21:38	18.54	145.51	196.00	46.01	8.48	104.90	330.55	42.01	45.00	2.50	3.20	0.37	215.74	0.49	A288A
2016217	16:44	24.94	142.01	510.00	46.01	8.48	97.76	329.34	41.63	49.00	4.50	2.47	0.28	214.11	1.31	A288A
2017132	11:01	12.92	-90.06	16.00	46.01	8.48	86.65	43.66	285.02	-81.00	6.25	2.35	0.61	294.53	1.44	A288A
2018181	04:16	19.02	-105.12	15.00	46.01	8.48	91.82	39.72	299.85	-68.00	5.00	1.92	0.39	306.84	1.48	A288A
2018250	02:32	-2.35	-78.90	93.00	46.01	8.48	89.85	44.13	266.50	63.00	7.50	1.07	0.16	90.56	0.27	A288A
2016139	08:17	0.43	-79.79	16.00	46.05	9.76	89.38	44.15	269.98	75.00	3.50	1.70	0.29	85.12	0.65	A289A
2016153	23:16	-2.10	100.67	50.00	46.05	9.76	92.13	315.82	90.80	58.00	7.00	2.40	0.21	89.23	1.97	A289A
2016211	21:38	18.54	145.51	196.00	46.05	9.76	104.27	329.90	43.09	80.00	20.25	0.75	0.41	221.43	0.87	A289A
2016217	14:35	-22.33	-66.01	270.00	46.05	9.76	96.46	42.80	244.59	72.00	22.25	1.02	0.66	235.66	0.74	A289A
2016217	16:44	24.94	142.01	510.00	46.05	9.76	97.13	328.70	42.63	76.00	8.50	0.97	0.10	217.86	0.59	A289A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016238	17:24	30.61	137.85	456.00	46.05	9.76	90.39	326.76	42.73	89.00	11.00	0.97	0.12	223.08	1.03	A289A
2016309	16:40	-35.09	-71.05	90.00	46.05	9.76	108.63	46.52	238.68	-39.00	25.75	2.15	0.77	63.65	2.13	A289A
2017243	17:26	-1.16	99.69	43.00	46.05	9.76	90.78	315.85	90.85	58.00	9.00	1.85	0.26	85.88	0.78	A289A
2018092	14:00	-20.66	-63.01	559.00	46.05	9.76	93.35	41.79	243.63	89.00	17.00	0.80	0.26	234.79	1.58	A289A
2016113	03:40	-0.28	-80.50	10.00	46.51	10.90	91.17	43.68	270.82	72.00	6.50	2.42	0.66	88.22	1.49	A290A
2016139	08:17	0.43	-79.79	16.00	46.51	10.90	90.17	43.68	270.80	56.00	6.25	1.38	0.23	79.24	1.35	A290A
2016139	17:06	0.49	-79.62	29.00	46.51	10.90	90.01	43.68	270.71	62.00	10.00	1.25	0.39	79.77	0.88	A290A
2016153	23:16	-2.10	100.67	50.00	46.51	10.90	91.35	316.30	91.61	43.00	8.25	1.97	0.21	96.29	0.45	A290A
2016159	19:35	1.28	126.37	31.00	46.51	10.90	106.31	319.48	70.13	22.00	11.00	1.70	0.23	70.20	1.26	A290A
2016217	14:35	-22.33	-66.01	270.00	46.51	10.90	97.38	42.72	245.42	47.00	16.50	2.27	0.92	57.09	1.64	A290A
2017049	12:30	-23.86	-66.66	222.00	46.51	10.90	98.90	43.06	244.82	43.00	6.25	1.57	0.29	61.87	1.05	A290A
2017181	22:49	-0.28	-80.49	13.00	46.51	10.90	91.16	43.68	270.82	64.00	19.25	1.12	0.57	78.01	0.84	A290A
2015135	20:46	-2.54	102.22	151.00	46.73	11.32	92.45	316.49	91.08	61.00	9.75	1.35	0.11	104.40	1.88	ABSI
2015150	19:09	30.79	142.97	6.00	46.73	11.32	91.36	329.06	40.03	54.00	4.00	2.10	0.25	214.94	0.69	ABSI
2015155	23:35	5.99	116.54	10.00	46.73	11.32	95.99	318.13	74.80	49.00	3.75	1.90	0.12	79.10	0.43	ABSI
2015174	12:38	27.74	139.73	460.00	46.73	11.32	92.45	327.35	44.04	66.00	6.75	2.12	0.56	231.05	1.76	ABSI
2015184	07:03	10.17	125.89	32.00	46.73	11.32	98.87	320.71	64.99	45.00	7.25	1.62	0.34	61.52	0.64	ABSI
2015232	11:20	0.49	126.59	46.00	46.73	11.32	106.71	319.50	70.76	39.00	6.50	1.23	0.16	64.72	1.37	ABSI
2015244	15:45	31.18	141.60	8.00	46.73	11.32	90.42	328.34	40.83	68.00	4.00	2.02	0.16	221.02	0.33	ABSI
2015259	08:00	1.88	126.43	41.00	46.73	11.32	105.55	319.72	69.95	41.00	11.50	1.25	0.25	69.08	0.94	ABSI
2015351	20:09	15.80	-93.63	85.00	46.73	11.32	88.54	41.67	291.50	67.00	23.75	1.05	0.54	97.91	2.01	ABSI
2016139	08:17	0.43	-79.79	16.00	46.73	11.32	90.45	43.46	271.10	66.00	2.50	1.85	0.14	82.25	0.37	ABSI
2016153	23:16	-2.10	100.67	50.00	46.73	11.32	91.07	316.53	91.91	56.00	4.50	1.55	0.07	94.98	0.94	ABSI
2016159	19:35	1.28	126.37	31.00	46.73	11.32	105.97	319.59	70.40	41.00	5.50	1.40	0.17	67.41	0.81	ABSI
2016139	08:17	0.43	-79.79	16.00	46.50	11.32	90.46	43.69	271.10	73.00	25.25	1.35	0.70	91.45	2.02	BOSI
2016153	23:16	-2.10	100.67	50.00	46.50	11.32	91.06	316.30	91.91	48.00	4.00	1.40	0.06	98.91	0.57	BOSI
2017010	06:33	4.48	122.62	627.00	46.50	11.32	101.19	318.99	71.24	52.00	11.75	1.38	0.33	81.10	4.42	BOSI
2018250	02:32	-2.35	-78.90	93.00	46.50	11.32	91.84	43.72	268.54	69.00	2.75	1.30	0.14	86.86	0.20	BOSI
2015155	23:35	5.99	116.54	10.00	46.46	11.38	96.02	317.86	74.87	55.00	9.00	1.65	0.39	76.71	2.60	KOSI
2015232	11:20	0.49	126.59	46.00	46.46	11.38	106.76	319.22	70.88	50.00	6.00	1.52	0.15	75.92	1.94	KOSI
2016139	08:17	0.43	-79.79	16.00	46.46	11.38	90.50	43.72	271.14	75.00	7.00	1.82	0.42	92.52	0.26	KOSI
2016153	23:16	-2.10	100.67	50.00	46.46	11.38	91.02	316.27	91.95	65.00	10.75	1.32	0.16	101.17	1.56	KOSI
2016217	16:44	24.94	142.01	510.00	46.46	11.38	96.06	328.16	43.85	58.00	5.00	2.17	0.24	221.72	1.16	KOSI
2016293	00:46	-4.86	108.16	614.00	46.46	11.38	98.17	316.10	88.45	47.00	12.00	1.97	0.24	83.27	4.86	KOSI
2017010	06:33	4.48	122.62	627.00	46.46	11.38	101.16	318.95	71.29	37.00	5.25	1.62	0.15	69.43	1.17	KOSI
2018250	02:32	-2.35	-78.90	93.00	46.46	11.38	91.88	43.76	268.59	70.00	7.00	1.40	0.29	89.77	0.40	KOSI
2018271	10:22	-0.18	119.84	10.00	46.46	11.38	102.78	317.75	76.56	39.00	15.75	1.55	0.27	78.42	0.66	KOSI
2015244	15:45	31.18	141.60	8.00	45.96	10.94	91.17	328.04	40.57	60.00	7.25	2.20	0.37	214.13	1.62	LUSI
2015259	08:00	1.88	126.43	41.00	45.96	10.94	106.06	319.06	69.86	61.00	3.75	2.62	0.41	71.90	0.95	LUSI
2015351	20:08	15.80	-93.63	85.00	45.96	10.94	88.57	42.48	291.25	-80.00	20.50	1.55	0.54	302.16	0.98	LUSI
2016139	08:17	0.43	-79.79	16.00	45.96	10.94	90.21	44.23	270.82	54.00	9.50	1.15	0.14	100.70	1.20	LUSI
2016153	23:16	-2.10	100.67	50.00	45.96	10.94	91.30	315.75	91.65	66.00	1.75	1.60	0.04	96.20	0.25	LUSI
2016159	11:11	18.36	-105.17	10.00	45.96	10.94	93.86	38.89	301.27	-72.00	9.50	1.15	0.25	311.82	0.43	LUSI
2016211	21:38	18.54	145.51	196.00	45.96	10.94	103.77	329.22	44.10	61.00	5.00	1.88	0.22	217.43	0.85	LUSI
2016217	16:44	24.94	142.01	510.00	45.96	10.94	96.64	328.03	43.56	67.00	13.00	1.55	0.30	217.57	1.49	LUSI
2016238	17:24	30.61	137.85	456.00	45.96	10.94	89.89	326.10	43.58	69.00	5.50	1.67	0.16	221.91	1.03	LUSI
2016329	19:03	11.91	-88.90	10.00	45.96	10.94	88.27	43.44	285.25	74.00	13.00	0.97	0.19	112.22	0.20	LUSI

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2017010	06:33	4.48	122.62	627.00	45.96	10.94	101.61	318.56	71.06	50.00	7.25	1.67	0.39	69.24	1.02	LUSI
2017243	17:26	-1.16	99.69	43.00	45.96	10.94	89.95	315.78	91.70	56.00	14.50	1.55	0.27	91.24	0.85	LUSI
2018200	13:51	17.93	-97.72	48.00	45.96	10.94	89.62	41.37	295.58	-72.00	6.75	1.25	0.26	307.35	0.64	LUSI
2018229	15:55	-7.37	119.80	529.00	45.96	10.94	108.36	315.93	81.47	66.00	8.00	1.52	0.26	91.53	0.93	LUSI
2018240	22:55	16.80	146.84	55.00	45.96	10.94	105.90	329.68	43.88	66.00	6.00	1.72	0.19	220.47	1.27	LUSI
2018250	02:32	-2.35	-78.90	93.00	45.96	10.94	91.56	44.25	268.26	53.00	7.25	0.90	0.06	95.34	0.33	LUSI
2016153	23:16	-2.10	100.67	50.00	45.77	9.72	92.16	315.55	90.78	53.00	4.50	2.02	0.09	91.82	1.12	MDI
2016217	16:44	24.94	142.01	510.00	45.77	9.72	97.36	328.53	42.62	63.00	11.00	1.23	0.26	214.69	0.97	MDI
2017283	06:52	-18.57	-69.75	85.00	45.77	9.72	96.01	43.78	249.68	82.00	13.75	1.38	0.53	246.18	1.14	MDI
2018092	14:00	-20.66	-63.01	559.00	45.77	9.72	93.20	42.02	243.59	74.00	2.75	1.77	0.36	246.80	0.44	MDI
2018181	04:16	19.02	-105.12	15.00	45.77	9.72	92.68	39.49	300.74	60.00	22.00	0.45	0.34	116.94	1.03	MDI
2015135	20:46	-2.54	102.22	151.00	46.62	10.55	92.98	316.37	90.53	48.00	19.00	1.00	0.23	90.17	5.30	MOSI
2016153	23:16	-2.10	100.67	50.00	46.62	10.55	91.59	316.40	91.35	85.00	14.75	1.90	0.59	102.29	1.52	MOSI
2016211	21:38	18.54	145.51	196.00	46.62	10.55	103.48	329.90	43.66	54.00	2.00	1.62	0.14	219.24	0.27	MOSI
2016217	16:44	24.94	142.01	510.00	46.62	10.55	96.35	328.68	43.20	62.00	5.00	1.25	0.14	219.15	0.52	MOSI
2016238	17:24	30.61	137.85	456.00	46.62	10.55	89.60	326.75	43.30	50.00	24.75	1.35	0.40	214.56	1.31	MOSI
2015232	11:20	0.49	126.59	46.00	46.93	11.41	106.58	319.67	70.77	49.00	4.50	1.82	0.15	67.52	1.99	ROSI
2015259	08:00	1.88	126.43	41.00	46.93	11.41	105.42	319.89	69.97	52.00	4.00	1.88	0.17	71.09	0.98	ROSI
2015351	20:09	15.80	-93.63	85.00	46.93	11.41	88.52	41.46	291.56	83.00	7.75	1.20	0.24	105.54	0.73	ROSI
2016139	08:17	0.43	-79.79	16.00	46.93	11.41	90.51	43.25	271.17	72.00	3.50	1.77	0.19	88.01	0.86	ROSI
2016139	17:06	0.49	-79.62	29.00	46.93	11.41	90.35	43.26	271.08	81.00	2.00	2.27	0.19	94.01	0.33	ROSI
2016153	23:16	-2.10	100.67	50.00	46.93	11.41	91.01	316.73	91.97	64.00	6.75	1.97	0.13	100.06	1.37	ROSI
2016159	11:11	18.36	-105.17	10.00	46.93	11.41	93.63	37.89	301.67	77.00	24.50	0.65	0.54	117.63	0.84	ROSI
2016193	02:31	0.58	-79.64	21.00	46.93	11.41	90.30	43.26	271.16	74.00	8.50	1.30	0.29	93.43	0.18	ROSI
2016211	21:38	18.54	145.51	196.00	46.93	11.41	102.85	329.68	44.33	55.00	3.00	2.27	0.25	221.25	0.75	ROSI
2016238	17:24	30.61	137.85	456.00	46.93	11.41	88.97	326.53	43.92	58.00	3.75	2.22	0.09	216.77	0.64	ROSI
2016293	00:46	-4.86	108.16	614.00	46.93	11.41	98.14	316.56	88.40	46.00	12.50	1.55	0.34	77.94	6.67	ROSI
2017010	06:33	4.48	122.62	627.00	46.93	11.41	100.99	319.39	71.23	49.00	6.25	1.52	0.21	77.01	2.43	ROSI
2017196	12:32	0.41	121.98	113.00	46.93	11.41	103.63	318.68	74.44	53.00	4.50	2.05	0.11	76.36	1.80	ROSI
2017243	17:26	-1.16	99.69	43.00	46.93	11.41	89.66	316.76	92.04	57.00	10.25	2.00	0.21	94.05	1.40	ROSI
2018229	15:55	-7.37	119.80	529.00	46.93	11.41	107.89	316.89	81.51	68.00	5.75	2.25	0.20	96.68	2.21	ROSI
2018250	02:32	-2.35	-78.90	93.00	46.93	11.41	91.91	43.29	268.63	74.00	5.00	1.92	0.48	83.57	0.57	ROSI
2015155	23:35	5.99	116.54	10.00	46.21	7.60	98.61	318.37	72.07	24.00	12.00	1.48	0.26	80.26	1.70	VANNI
2015161	14:12	-22.40	-68.43	124.00	46.21	7.60	96.74	42.73	244.73	39.00	18.25	1.08	0.43	67.66	1.02	VANNI
2016153	23:16	-2.10	100.67	50.00	46.21	7.60	93.63	315.99	89.24	36.00	20.00	1.53	0.33	91.94	1.17	VANNI
2016159	19:35	1.28	126.37	31.00	46.21	7.60	108.55	320.05	67.57	35.00	22.00	1.28	0.40	76.59	1.88	VANNI
2016217	14:35	-22.33	-66.01	270.00	46.21	7.60	95.18	41.99	243.11	38.00	20.00	1.15	0.60	67.25	2.90	VANNI
2016293	00:46	-4.86	108.16	614.00	46.21	7.60	100.80	315.97	85.74	16.00	11.75	1.63	0.39	80.21	2.53	VANNI
2017010	06:33	4.48	122.62	627.00	46.21	7.60	103.71	319.63	68.42	35.00	9.75	1.68	0.19	78.04	2.20	VANNI
2017105	08:39	-23.27	-67.72	155.00	46.21	7.60	96.94	42.59	243.66	54.00	14.75	1.75	0.62	69.33	0.75	VANNI
2017132	11:01	12.92	-90.06	16.00	46.21	7.60	86.01	43.62	284.38	31.00	4.75	1.75	0.43	109.61	0.57	VANNI
2017196	12:32	0.41	121.98	113.00	46.21	7.60	106.35	318.76	71.66	39.00	14.00	1.85	0.27	79.82	3.67	VANNI
2017243	17:26	-1.16	99.69	43.00	46.21	7.60	92.28	316.01	89.29	45.00	20.75	1.43	0.38	100.15	1.48	VANNI
2017283	06:52	-18.57	-69.75	85.00	46.21	7.60	94.79	42.84	248.25	7.00	15.50	1.10	0.35	65.41	1.17	VANNI
2018092	14:00	-20.66	-63.01	559.00	46.21	7.60	92.09	40.96	242.12	13.00	22.50	0.98	0.51	68.43	2.23	VANNI
2018250	02:32	-2.35	-78.90	93.00	46.21	7.60	89.25	43.88	265.86	13.00	3.00	1.15	0.18	90.24	0.06	VANNI
2018271	10:22	-0.18	119.84	10.00	46.21	7.60	105.37	318.19	73.73	18.00	13.75	1.85	0.41	78.77	1.01	VANNI

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016139	08:17	0.43	-79.79	16.00	47.30	7.09	87.56	42.86	268.00	68.00	21.00	0.80	0.35	84.88	1.13	SAIRA
2016153	23:16	-2.10	100.67	50.00	47.30	7.09	93.97	317.09	88.79	55.00	10.25	1.45	0.21	87.79	1.58	SAIRA
2016211	21:38	18.54	145.51	196.00	47.30	7.09	104.56	332.18	40.58	68.00	10.50	0.65	0.08	208.89	0.41	SAIRA
2017243	17:26	-1.16	99.69	43.00	47.30	7.09	92.62	317.11	88.88	25.00	11.00	1.75	0.31	83.93	2.93	SAIRA
2018092	14:00	-20.66	-63.01	559.00	47.30	7.09	92.29	39.82	241.79	39.00	7.75	1.12	0.45	52.56	1.40	SAIRA
2016153	23:16	-2.10	100.67	50.00	47.38	7.17	93.91	317.16	88.85	75.00	5.00	1.80	0.12	111.52	0.95	MTI02
2016153	23:16	-2.10	100.67	50.00	47.44	8.01	93.33	317.21	89.47	53.00	5.25	1.60	0.07	96.25	0.88	EMMET
2016211	21:38	18.54	145.51	196.00	47.44	8.01	104.05	331.78	41.36	53.00	10.00	1.23	0.43	217.56	0.47	EMMET
2017196	12:32	0.41	121.98	113.00	47.44	8.01	105.70	319.88	71.65	38.00	3.50	1.32	0.10	63.18	0.28	EMMET
2015161	14:12	-22.40	-68.43	124.00	47.23	8.01	97.44	41.92	245.13	60.00	22.75	1.02	0.49	69.06	1.47	DAGMA
2016153	23:16	-2.10	100.67	50.00	47.23	8.01	93.34	317.01	89.48	37.00	5.00	1.62	0.07	84.76	0.41	DAGMA
2016159	19:35	1.28	126.37	31.00	47.23	8.01	107.90	320.93	67.60	63.00	5.50	1.70	0.44	74.50	2.14	DAGMA
2016211	21:38	18.54	145.51	196.00	47.23	8.01	104.20	331.64	41.39	60.00	22.50	1.60	0.74	224.45	1.11	DAGMA
2016238	17:24	30.61	137.85	456.00	47.23	8.01	90.32	328.45	41.45	55.00	2.50	1.75	0.13	219.28	0.31	DAGMA
2017243	17:26	-1.16	99.69	43.00	47.23	8.01	91.99	317.03	89.56	53.00	23.75	1.17	0.36	99.96	2.75	DAGMA
2017283	06:52	-18.57	-69.75	85.00	47.23	8.01	95.43	41.99	248.62	63.00	1.75	1.48	0.17	73.06	0.22	DAGMA
2018217	12:06	-8.26	116.44	34.00	47.23	8.01	108.52	317.01	82.02	34.00	11.75	1.27	0.22	85.37	2.51	DAGMA
2018236	09:24	-11.04	-70.83	630.00	47.23	8.01	90.56	41.96	254.41	62.00	6.00	1.32	0.21	82.14	0.33	DAGMA
2018250	02:32	-2.35	-78.90	93.00	47.23	8.01	89.61	42.88	266.15	79.00	9.25	1.62	0.37	100.28	1.25	DAGMA
2016153	23:16	-2.10	100.67	50.00	47.37	8.58	92.95	317.14	89.89	40.00	2.50	1.67	0.04	82.34	0.27	ZUR
2016211	21:38	18.54	145.51	196.00	47.37	8.58	103.84	331.44	41.86	61.00	4.00	1.38	0.26	225.69	0.44	ZUR
2016238	17:24	30.61	137.85	456.00	47.37	8.58	89.96	328.25	41.87	52.00	5.75	1.67	0.26	215.77	1.27	ZUR
2017196	12:32	0.41	121.98	113.00	47.37	8.58	105.35	319.69	72.12	39.00	4.25	1.62	0.12	63.86	0.61	ZUR
2017243	17:26	-1.16	99.69	43.00	47.37	8.58	91.60	317.17	89.97	49.00	18.00	1.82	0.29	94.54	1.40	ZUR
2017283	06:52	-18.57	-69.75	85.00	47.37	8.58	95.84	42.00	249.04	59.00	3.50	1.35	0.34	67.47	0.51	ZUR
2018236	09:24	-11.04	-70.83	630.00	47.37	8.58	90.97	41.93	254.83	57.00	4.00	1.05	0.12	77.05	0.31	ZUR
2018250	02:32	-2.35	-78.90	93.00	47.37	8.58	90.00	42.77	266.57	58.00	5.50	1.00	0.14	81.46	0.24	ZUR
2015260	04:15	-31.42	-71.69	27.00	47.59	8.25	106.31	43.98	241.29	36.00	14.75	2.65	0.22	69.02	4.24	ACB
2016153	23:16	-2.10	100.67	50.00	47.59	8.25	93.17	317.36	89.63	43.00	15.50	1.75	0.24	81.58	1.85	ACB
2017243	17:26	-1.16	99.69	43.00	47.59	8.25	91.82	317.39	89.72	47.00	13.25	1.67	0.24	86.40	1.59	ACB
2015135	20:46	-2.54	102.22	151.00	46.87	8.43	94.44	316.63	88.97	47.00	12.75	1.53	0.29	78.33	2.59	BNALP
2015150	11:43	27.84	140.49	664.00	46.87	8.43	93.96	329.30	41.22	56.00	6.00	1.48	0.35	220.62	0.44	BNALP
2015155	23:35	5.99	116.54	10.00	46.87	8.43	97.86	318.83	72.61	58.00	10.75	2.33	0.62	79.90	2.60	BNALP
2015232	11:20	0.49	126.59	46.00	46.87	8.43	108.52	320.37	68.39	51.00	23.00	1.90	0.64	65.16	2.11	BNALP
2015271	15:48	-23.80	-66.61	219.00	46.87	8.43	97.45	41.95	243.18	28.00	12.25	1.43	0.37	60.73	4.37	BNALP
2015351	20:09	15.80	-93.63	85.00	46.87	8.43	86.62	42.23	289.42	43.00	11.50	1.75	0.55	115.37	1.34	BNALP
2016139	08:17	0.43	-79.79	16.00	46.87	8.43	88.46	43.31	268.99	36.00	11.50	1.38	0.28	90.57	2.33	BNALP
2016149	10:06	-56.24	-26.94	78.00	46.87	8.43	106.93	24.52	199.74	47.00	17.75	1.03	0.34	199.83	0.57	BNALP
2016153	23:16	-2.10	100.67	50.00	46.87	8.43	93.06	316.64	89.80	59.00	11.25	1.58	0.27	88.63	1.18	BNALP
2016157	16:45	-4.59	125.63	429.00	46.87	8.43	111.75	318.93	72.65	61.00	5.00	1.70	0.18	85.56	1.45	BNALP
2016159	19:35	1.28	126.37	31.00	46.87	8.43	107.78	320.47	68.04	49.00	19.25	1.45	0.73	66.09	1.07	BNALP
2016201	05:38	-30.25	-71.97	8.00	46.87	8.43	105.40	44.56	242.25	61.00	6.00	2.53	0.54	73.50	2.16	BNALP
2016207	17:46	-26.11	-70.51	72.00	46.87	8.43	101.54	43.41	244.24	45.00	16.75	1.48	0.65	66.33	2.47	BNALP
2016211	21:38	18.54	145.51	196.00	46.87	8.43	104.29	331.18	41.81	62.00	4.25	1.33	0.21	224.73	0.39	BNALP
2016217	14:35	-22.33	-66.01	270.00	46.87	8.43	95.99	41.65	243.75	47.00	15.50	1.23	0.46	66.17	3.16	BNALP
2016217	16:44	24.94	142.01	510.00	46.87	8.43	97.14	329.94	41.51	50.00	2.25	2.12	0.11	213.46	0.46	BNALP
2016232	07:52	-55.29	-31.88	10.00	46.87	8.43	107.30	27.70	202.80	38.00	7.00	1.35	0.28	196.73	0.22	BNALP

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016238	17:24	30.61	137.85	456.00	46.87	8.43	90.40	328.00	41.76	52.00	4.75	1.98	0.26	216.66	0.56	BNALP
2016293	00:46	-4.86	108.16	614.00	46.87	8.43	100.19	316.60	86.22	54.00	37.75	1.45	0.85	81.74	4.13	BNALP
2017010	06:33	4.48	122.62	627.00	46.87	8.43	102.94	320.05	68.92	45.00	2.50	1.83	0.12	66.87	0.42	BNALP
2017140	01:26	9.38	123.95	533.00	46.87	8.43	100.02	321.04	64.73	54.00	19.50	1.33	0.94	67.55	1.28	BNALP
2017181	22:49	-0.28	-80.49	13.00	46.87	8.43	89.46	43.31	269.02	56.00	17.25	1.15	0.38	97.87	3.16	BNALP
2017196	12:32	0.41	121.98	113.00	46.87	8.43	105.61	319.23	72.13	52.00	7.00	2.08	0.28	73.74	1.82	BNALP
2017223	05:48	14.01	120.74	172.00	46.87	8.43	94.46	320.46	64.25	51.00	6.00	2.00	0.36	67.02	2.57	BNALP
2017243	17:26	-1.16	99.69	43.00	46.87	8.43	91.71	316.67	89.87	61.00	7.50	1.88	0.21	91.29	0.81	BNALP
2017283	06:52	-18.57	-69.75	85.00	46.87	8.43	95.56	42.43	248.88	39.00	8.75	1.40	0.24	70.67	1.28	BNALP
2018229	15:55	-7.37	119.80	529.00	46.87	8.43	109.92	317.19	79.24	67.00	6.50	2.52	0.37	86.11	0.85	BNALP
2018236	09:24	-11.04	-70.83	630.00	46.87	8.43	90.74	42.39	254.71	38.00	14.00	1.40	0.25	76.79	1.91	BNALP
2018250	02:32	-2.35	-78.90	93.00	46.87	8.43	89.86	43.26	266.45	33.00	3.25	1.48	0.06	88.13	0.22	BNALP
2018271	10:22	-0.18	119.84	10.00	46.87	8.43	104.64	318.69	74.20	62.00	3.75	2.52	0.20	84.45	0.43	BNALP
2015135	20:46	-2.54	102.22	151.00	46.60	8.75	94.22	316.35	89.23	36.00	9.00	1.50	0.16	84.44	2.13	NALPS
2015155	23:35	5.99	116.54	10.00	46.60	8.75	97.73	318.50	72.89	47.00	11.00	1.02	0.19	79.44	1.57	NALPS
2015232	11:20	0.49	126.59	46.00	46.60	8.75	108.41	320.01	68.74	50.00	4.50	1.72	0.11	79.16	0.84	NALPS
2015259	08:00	1.88	126.43	41.00	46.60	8.75	107.25	320.25	67.94	49.00	10.25	1.42	0.25	75.87	0.63	NALPS
2016139	08:17	0.43	-79.79	16.00	46.60	8.75	88.68	43.59	269.24	37.00	8.50	1.15	0.15	92.51	1.55	NALPS
2016153	23:16	-2.10	100.67	50.00	46.60	8.75	92.84	316.37	90.05	49.00	2.25	1.50	0.03	95.24	0.14	NALPS
2016159	19:35	1.28	126.37	31.00	46.60	8.75	107.67	320.11	68.39	52.00	6.00	1.45	0.17	78.35	1.93	NALPS
2016238	17:24	30.61	137.85	456.00	46.60	8.75	90.46	327.65	42.00	53.00	5.00	2.67	0.62	222.65	0.80	NALPS
2017010	06:33	4.48	122.62	627.00	46.60	8.75	102.83	319.70	69.23	52.00	4.75	1.57	0.21	74.40	1.11	NALPS
2017196	12:32	0.41	121.98	113.00	46.60	8.75	105.48	318.89	72.45	47.00	4.25	1.52	0.08	79.79	0.75	NALPS
2018229	15:55	-7.37	119.80	529.00	46.60	8.75	109.75	316.86	79.58	47.00	10.25	1.35	0.30	72.05	1.29	NALPS
2015135	20:46	-2.54	102.22	151.00	46.58	8.32	94.52	316.34	88.92	59.00	5.25	2.08	0.10	103.97	1.72	GRIMS
2015155	23:35	5.99	116.54	10.00	46.58	8.32	98.02	318.57	72.57	56.00	6.00	1.90	0.21	85.73	1.57	GRIMS
2015259	08:00	1.88	126.43	41.00	46.58	8.32	107.53	320.35	67.60	47.00	9.25	2.35	0.35	73.51	3.84	GRIMS
2016139	08:17	0.43	-79.79	16.00	46.58	8.32	88.39	43.61	268.93	39.00	4.00	1.35	0.10	96.99	0.36	GRIMS
2016153	23:16	-2.10	100.67	50.00	46.58	8.32	93.13	316.35	89.74	48.00	2.75	1.92	0.06	96.58	0.22	GRIMS
2016201	05:38	-30.25	-71.97	8.00	46.58	8.32	105.20	44.79	242.11	46.00	6.25	1.82	0.33	66.96	2.55	GRIMS
2016207	17:46	-26.11	-70.51	72.00	46.58	8.32	101.35	43.65	244.11	45.00	3.50	1.48	0.12	69.56	0.69	GRIMS
2016217	16:44	24.94	142.01	510.00	46.58	8.32	97.41	329.80	41.45	51.00	24.25	1.27	0.89	221.89	0.86	GRIMS
2016293	00:46	-4.86	108.16	614.00	46.58	8.32	100.28	316.31	86.20	53.00	4.00	1.70	0.09	90.89	0.74	GRIMS
2017105	08:39	-23.27	-67.72	155.00	46.58	8.32	97.55	42.48	244.19	55.00	8.75	1.42	0.49	71.62	1.02	GRIMS
2017196	12:32	0.41	121.98	113.00	46.58	8.32	105.76	318.97	72.12	46.00	8.75	2.17	0.22	78.88	2.89	GRIMS
2017283	06:52	-18.57	-69.75	85.00	46.58	8.32	95.39	42.68	248.78	52.00	5.00	1.70	0.28	71.12	1.16	GRIMS
2018209	23:07	-8.24	116.51	14.00	46.58	8.32	108.44	316.31	82.40	72.00	13.75	1.97	0.55	91.99	1.24	GRIMS
2018229	15:55	-7.37	119.80	529.00	46.58	8.32	110.05	316.90	79.26	41.00	3.00	1.57	0.06	75.45	0.21	GRIMS
2018250	02:32	-2.35	-78.90	93.00	46.58	8.32	89.77	43.55	266.38	44.00	12.50	1.30	0.24	96.39	1.18	GRIMS
2018271	10:22	-0.18	119.84	10.00	46.58	8.32	104.79	318.42	74.19	49.00	10.00	1.92	0.32	78.00	0.43	GRIMS
2015135	20:46	-2.54	102.22	151.00	46.36	7.30	95.23	316.14	88.20	25.00	4.25	1.60	0.18	94.60	0.35	SENIN
2015161	14:12	-22.40	-68.43	124.00	46.36	7.30	96.62	42.50	244.54	24.00	12.50	1.10	0.19	71.04	1.07	SENIN
2015271	15:48	-23.80	-66.61	219.00	46.36	7.30	96.53	42.05	242.35	2.00	6.50	1.40	0.23	66.72	0.40	SENIN
2016153	23:16	-2.10	100.67	50.00	46.36	7.30	93.84	316.14	89.01	20.00	11.50	2.08	0.38	82.93	2.05	SENIN
2016159	19:35	1.28	126.37	31.00	46.36	7.30	108.69	320.29	67.28	31.00	25.00	1.00	0.52	76.90	1.11	SENIN
2016207	17:46	-26.11	-70.51	72.00	46.36	7.30	100.62	43.53	243.40	11.00	18.00	1.10	0.44	66.46	1.02	SENIN
2016293	00:46	-4.86	108.16	614.00	46.36	7.30	101.00	316.15	85.49	20.00	10.75	1.40	0.29	83.00	1.26	SENIN

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2017010	06:33	4.48	122.62	627.00	46.36	7.30	103.85	319.86	68.15	16.00	12.25	1.70	0.32	72.53	1.03	SENIN
2017049	12:30	-23.86	-66.66	222.00	46.36	7.30	96.60	42.07	242.35	12.00	8.75	1.42	0.24	70.37	1.75	SENIN
2017105	08:39	-23.27	-67.72	155.00	46.36	7.30	96.82	42.36	243.47	16.00	6.25	1.00	0.09	70.99	0.35	SENIN
2017196	12:32	0.41	121.98	113.00	46.36	7.30	106.50	318.98	71.38	36.00	10.75	1.80	0.23	86.13	2.80	SENIN
2017243	17:26	-1.16	99.69	43.00	46.36	7.30	92.49	316.17	89.07	23.00	8.50	2.20	0.30	85.39	1.76	SENIN
2018084	20:34	-6.63	129.82	169.00	46.36	7.30	116.91	319.09	69.94	16.00	11.25	1.92	0.28	73.38	1.91	SENIN
2018229	15:55	-7.37	119.80	529.00	46.36	7.30	110.78	316.82	78.55	13.00	18.75	1.77	0.58	75.31	1.86	SENIN
2018236	09:24	-11.04	-70.83	630.00	46.36	7.30	89.85	42.66	253.89	3.00	5.50	1.40	0.26	75.93	0.45	SENIN
2018250	02:32	-2.35	-78.90	93.00	46.36	7.30	89.06	43.72	265.64	77.00	12.00	0.92	0.27	95.00	0.26	SENIN
2016153	23:16	-2.10	100.67	50.00	46.37	7.64	93.60	316.15	89.26	28.00	8.75	1.65	0.19	85.80	0.81	LKBD2
2016159	19:35	1.28	126.37	31.00	46.37	7.64	108.46	320.20	67.56	25.00	14.00	1.40	0.23	69.14	0.92	LKBD2
2016207	17:46	-26.11	-70.51	72.00	46.37	7.64	100.84	43.62	243.63	7.00	25.50	1.38	0.86	70.64	2.46	LKBD2
2016293	00:46	-4.86	108.16	614.00	46.37	7.64	100.76	316.14	85.74	22.00	9.50	1.62	0.21	71.47	1.41	LKBD2
2017010	06:33	4.48	122.62	627.00	46.37	7.64	103.62	319.78	68.42	61.00	7.00	2.65	0.43	83.18	1.01	LKBD2
2017196	12:32	0.41	121.98	113.00	46.37	7.64	106.27	318.92	71.65	26.00	8.25	1.62	0.12	68.67	0.75	LKBD2
2018250	02:32	-2.35	-78.90	93.00	46.37	7.64	89.29	43.72	265.89	10.00	25.50	1.70	0.81	86.65	0.15	LKBD2
2018271	10:22	-0.18	119.84	10.00	46.37	7.64	105.30	318.35	73.72	39.00	19.25	1.72	0.48	73.20	0.73	LKBD2
2015135	20:46	-2.54	102.22	151.00	46.24	8.02	94.73	316.01	88.73	50.00	11.25	1.10	0.14	100.55	1.59	SIMPL
2015155	23:35	5.99	116.54	10.00	46.24	8.02	98.32	318.31	72.39	18.00	4.25	1.23	0.11	79.47	0.56	SIMPL
2015184	07:03	10.17	125.89	32.00	46.24	8.02	101.14	321.29	62.50	47.00	23.25	0.73	0.61	74.70	1.16	SIMPL
2015232	11:20	0.49	126.59	46.00	46.24	8.02	109.01	319.85	68.26	33.00	21.00	0.98	0.28	76.14	1.07	SIMPL
2015264	18:00	-31.73	-71.38	35.00	46.24	8.02	105.54	45.08	240.38	11.00	25.50	0.88	0.88	70.42	1.19	SIMPL
2016157	16:45	-4.59	125.63	429.00	46.24	8.02	112.20	318.37	72.56	16.00	17.50	0.78	0.24	72.77	1.50	SIMPL
2016159	19:35	1.28	126.37	31.00	46.24	8.02	108.27	319.97	67.91	26.00	21.00	0.85	0.36	74.43	2.25	SIMPL
2016201	05:38	-30.25	-71.97	8.00	46.24	8.02	104.86	45.00	241.84	36.00	21.00	1.05	0.55	74.17	2.92	SIMPL
2016211	21:38	18.54	145.51	196.00	46.24	8.02	104.94	330.96	41.57	69.00	5.00	1.90	0.42	236.00	0.90	SIMPL
2016217	16:44	24.94	142.01	510.00	46.24	8.02	97.80	329.73	41.24	67.00	13.50	2.20	0.77	228.85	2.74	SIMPL
2016236	19:59	-7.29	122.43	533.00	46.24	8.02	112.04	317.01	77.05	34.00	25.25	0.80	0.31	92.28	3.41	SIMPL
2017010	06:33	4.48	122.62	627.00	46.24	8.02	103.43	319.55	68.74	39.00	6.00	0.95	0.05	78.88	0.39	SIMPL
2017140	01:26	9.38	123.95	533.00	46.24	8.02	100.54	320.59	64.51	15.00	17.25	1.05	0.18	61.79	3.32	SIMPL
2017196	12:32	0.41	121.98	113.00	46.24	8.02	106.07	318.70	71.98	55.00	7.25	1.10	0.12	87.30	0.75	SIMPL
2018250	02:32	-2.35	-78.90	93.00	46.24	8.02	89.54	43.87	266.16	31.00	20.25	1.08	0.51	105.97	1.13	SIMPL
2015155	23:35	5.99	116.54	10.00	46.44	8.11	98.20	318.48	72.43	48.00	5.25	1.93	0.17	78.18	2.49	FIESA
2015188	05:30	43.91	147.97	49.00	46.44	8.11	83.28	333.32	27.98	77.00	10.75	1.93	0.07	202.56	0.96	FIESA
2016153	23:16	-2.10	100.67	50.00	46.44	8.11	93.28	316.21	89.59	41.00	9.00	1.80	0.21	93.05	1.47	FIESA
2016207	17:46	-26.11	-70.51	72.00	46.44	8.11	101.15	43.71	243.95	32.00	3.75	1.38	0.09	64.15	0.75	FIESA
2016217	14:35	-22.33	-66.01	270.00	46.44	8.11	95.60	41.94	243.49	43.00	6.50	2.18	0.41	66.59	2.81	FIESA
2016217	16:44	24.94	142.01	510.00	46.44	8.11	97.61	329.82	41.30	53.00	9.25	1.15	0.44	222.32	0.53	FIESA
2016293	00:46	-4.86	108.16	614.00	46.44	8.11	100.43	316.18	86.07	45.00	6.00	1.85	0.16	86.83	1.86	FIESA
2017010	06:33	4.48	122.62	627.00	46.44	8.11	103.30	319.71	68.77	38.00	7.75	1.42	0.17	72.86	0.91	FIESA
2017243	17:26	-1.16	99.69	43.00	46.44	8.11	91.92	316.23	89.66	39.00	7.50	1.62	0.14	90.39	1.28	FIESA
2018250	02:32	-2.35	-78.90	93.00	46.44	8.11	89.62	43.68	266.23	25.00	2.50	1.23	0.06	88.32	0.23	FIESA
2018271	10:22	-0.18	119.84	10.00	46.44	8.11	104.97	318.32	74.06	44.00	21.75	1.55	0.57	76.60	0.66	FIESA
2015135	20:46	-2.54	102.22	151.00	46.83	9.11	93.97	316.58	89.47	38.00	7.00	1.65	0.14	89.50	1.63	PANIX
2015155	23:35	5.99	116.54	10.00	46.83	9.11	97.42	318.65	73.13	42.00	9.25	1.43	0.23	74.98	2.59	PANIX
2015184	07:03	10.17	125.89	32.00	46.83	9.11	100.20	321.47	63.26	38.00	13.00	1.30	0.38	59.29	0.86	PANIX
2015232	11:20	0.49	126.59	46.00	46.83	9.11	108.10	320.14	68.96	48.00	3.75	1.38	0.11	74.48	0.61	PANIX

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2015259	08:00	1.88	126.43	41.00	46.83	9.11	106.93	320.38	68.16	33.00	7.25	1.20	0.14	65.09	0.91	PANIX
2015351	20:09	15.80	-93.63	85.00	46.83	9.11	87.08	42.12	289.91	62.00	9.50	1.08	0.13	111.94	0.59	PANIX
2016139	08:17	0.43	-79.79	16.00	46.83	9.11	88.94	43.37	269.49	56.00	5.75	1.00	0.08	95.96	0.24	PANIX
2016153	23:16	-2.10	100.67	50.00	46.83	9.11	92.59	316.60	90.30	50.00	2.25	1.75	0.03	94.31	0.21	PANIX
2016159	19:35	1.28	126.37	31.00	46.83	9.11	107.35	320.24	68.61	49.00	6.75	1.35	0.24	73.76	1.27	PANIX
2016213	11:53	-56.26	-27.54	99.00	46.83	9.11	107.21	25.41	200.41	60.00	7.25	1.18	0.12	204.00	1.58	PANIX
2016234	04:05	-55.31	-31.75	12.00	46.83	9.11	107.43	28.09	203.08	49.00	8.75	1.32	0.21	200.29	0.99	PANIX
2016293	00:46	-4.86	108.16	614.00	46.83	9.11	99.72	316.53	86.74	51.00	7.25	1.32	0.12	91.11	0.86	PANIX
2016329	19:03	11.91	-88.90	10.00	46.83	9.11	86.82	42.92	283.91	52.00	8.50	1.20	0.16	107.61	0.12	PANIX
2017010	06:33	4.48	122.62	627.00	46.83	9.11	102.51	319.84	69.47	31.00	4.75	1.23	0.07	68.25	0.23	PANIX
2017196	12:32	0.41	121.98	113.00	46.83	9.11	105.17	319.04	72.68	49.00	6.00	1.62	0.13	80.53	0.51	PANIX
2017223	05:48	14.01	120.74	172.00	46.83	9.11	94.06	320.21	64.76	44.00	12.50	1.82	0.46	67.07	1.36	PANIX
2018229	15:55	-7.37	119.80	529.00	46.83	9.11	109.47	317.05	79.78	68.00	14.50	1.60	0.40	93.52	1.50	PANIX
2018250	02:32	-2.35	-78.90	93.00	46.83	9.11	90.33	43.33	266.95	61.00	5.25	1.50	0.11	96.24	0.25	PANIX
2018271	10:22	-0.18	119.84	10.00	46.83	9.11	104.20	318.51	74.74	51.00	5.75	1.75	0.17	80.33	0.28	PANIX
2016139	08:17	0.43	-79.79	16.00	46.62	10.26	89.73	43.57	270.33	73.00	26.25	1.38	0.97	88.83	3.21	FUORN
2016153	23:16	-2.10	100.67	50.00	46.62	10.26	91.79	316.40	91.14	78.00	10.50	2.33	0.63	93.71	0.72	FUORN
2016217	16:44	24.94	142.01	510.00	46.62	10.26	96.48	328.83	42.98	71.00	9.50	0.90	0.14	218.13	0.85	FUORN
2016238	17:24	30.61	137.85	456.00	46.62	10.26	89.74	326.89	43.09	-85.00	6.75	0.80	0.05	43.61	0.28	FUORN
2017010	06:33	4.48	122.62	627.00	46.62	10.26	101.84	319.36	70.41	53.00	6.75	0.88	0.34	63.31	0.41	FUORN
2017140	01:26	9.38	123.95	533.00	46.62	10.26	98.97	320.28	66.19	45.00	11.00	0.88	0.23	63.55	0.84	FUORN
2017196	12:32	0.41	121.98	113.00	46.62	10.26	104.47	318.60	73.63	49.00	5.50	1.02	0.23	63.42	0.28	FUORN
2018240	22:55	16.80	146.84	55.00	46.62	10.26	105.75	330.51	43.16	81.00	8.00	0.80	0.09	224.55	0.45	FUORN
2015135	20:46	-2.54	102.22	151.00	47.71	8.25	94.54	317.48	88.78	56.00	5.25	1.50	0.11	88.72	0.29	METMA
2015184	07:03	10.17	125.89	32.00	47.71	8.25	100.31	322.55	62.43	56.00	3.50	2.67	0.22	75.07	0.38	METMA
2016211	21:38	18.54	145.51	196.00	47.71	8.25	103.74	331.85	41.52	50.00	1.00	2.10	0.17	221.02	0.11	METMA
2016217	14:35	-22.33	-66.01	270.00	47.71	8.25	96.26	40.84	243.71	47.00	27.00	2.00	0.97	57.15	2.67	METMA
2016217	16:44	24.94	142.01	510.00	47.71	8.25	96.59	330.59	41.30	61.00	21.25	0.95	0.38	218.67	1.31	METMA
2016238	17:24	30.61	137.85	456.00	47.71	8.25	89.85	328.64	41.63	52.00	3.50	2.05	0.36	222.88	0.58	METMA
2016293	00:46	-4.86	108.16	614.00	47.71	8.25	100.24	317.47	85.94	49.00	14.25	1.48	0.34	81.64	1.42	METMA
2017010	06:33	4.48	122.62	627.00	47.71	8.25	102.74	320.90	68.61	47.00	4.75	2.12	0.28	68.10	0.77	METMA
2017140	01:26	9.38	123.95	533.00	47.71	8.25	99.76	321.87	64.46	29.00	17.00	1.07	0.22	76.74	3.74	METMA
2017196	12:32	0.41	121.98	113.00	47.71	8.25	105.46	320.10	71.77	22.00	27.00	1.05	0.55	64.45	1.85	METMA
2015155	23:35	5.99	116.54	10.00	47.87	8.18	97.72	319.85	72.29	39.00	20.25	1.40	0.49	70.84	3.53	BERGE
2015174	12:38	27.74	139.73	460.00	47.87	8.18	93.07	329.70	41.63	-24.00	4.00	2.35	0.22	50.97	0.97	BERGE
2015184	07:03	10.17	125.89	32.00	47.87	8.18	100.28	322.72	62.35	44.00	6.50	1.30	0.21	65.89	0.96	BERGE
2015271	15:48	-23.80	-66.61	219.00	47.87	8.18	97.75	40.97	243.13	48.00	24.75	1.70	0.71	58.21	0.62	BERGE
2015330	06:05	-9.18	-71.26	602.00	47.87	8.18	89.73	41.44	256.08	-33.00	3.50	2.27	0.38	68.29	0.31	BERGE
2016153	23:16	-2.10	100.67	50.00	47.87	8.18	93.22	317.65	89.56	51.00	9.00	1.23	0.15	86.04	0.16	BERGE
2016211	21:38	18.54	145.51	196.00	47.87	8.18	103.65	331.99	41.43	49.00	3.50	1.75	0.30	215.38	0.24	BERGE
2016238	17:24	30.61	137.85	456.00	47.87	8.18	89.77	328.79	41.58	63.00	7.75	0.92	0.22	226.50	0.22	BERGE
2017196	12:32	0.41	121.98	113.00	47.87	8.18	105.45	320.27	71.67	23.00	17.50	0.80	0.20	63.33	0.62	BERGE
2017243	17:26	-1.16	99.69	43.00	47.87	8.18	91.87	317.67	89.66	67.00	7.75	1.82	0.22	98.02	1.13	BERGE
2018240	22:55	16.80	146.84	55.00	47.87	8.18	105.77	332.48	41.10	61.00	11.00	1.07	0.32	223.53	0.55	BERGE
2018271	10:22	-0.18	119.84	10.00	47.87	8.18	104.53	319.73	73.75	47.00	4.50	1.62	0.14	75.01	0.10	BERGE
2015232	11:20	0.49	126.59	46.00	47.90	8.85	107.88	321.26	68.42	-3.00	22.75	0.85	0.54	58.64	2.14	EMING
2015259	08:00	1.88	126.43	41.00	47.90	8.85	106.70	321.48	67.65	0.00	17.75	0.92	0.30	64.89	1.37	EMING

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016201	05:38	-30.25	-71.97	8.00	47.90	8.85	106.13	43.75	242.78	54.00	15.00	2.20	0.87	68.49	2.78	EMING
2016207	17:46	-26.11	-70.51	72.00	47.90	8.85	102.24	42.59	244.72	55.00	7.00	2.05	0.41	73.21	1.87	EMING
2016211	21:38	18.54	145.51	196.00	47.90	8.85	103.33	331.66	42.00	65.00	2.00	2.00	0.17	229.36	0.27	EMING
2016217	14:35	-22.33	-66.01	270.00	47.90	8.85	96.70	40.85	244.14	61.00	26.75	2.58	0.84	72.37	1.79	EMING
2016244	03:31	-3.68	152.79	476.00	47.90	8.85	126.16	330.62	46.68	56.00	6.50	2.10	0.71	228.93	1.42	EMING
2017283	06:52	-18.57	-69.75	85.00	47.90	8.85	96.20	41.57	249.28	60.00	3.25	1.70	0.24	73.87	0.77	EMING
2017349	17:07	-7.49	108.17	90.00	47.90	8.85	101.76	317.29	88.15	47.00	3.25	1.27	0.04	93.80	0.69	EMING
2018221	05:45	-8.31	116.23	15.00	47.90	8.85	107.77	317.59	82.64	24.00	3.50	0.95	0.04	77.21	0.20	EMING
2018236	09:24	-11.04	-70.83	630.00	47.90	8.85	91.28	41.47	255.03	62.00	7.00	1.45	0.22	84.52	0.71	EMING
2018240	22:55	16.80	146.84	55.00	47.90	8.85	105.46	332.14	41.69	68.00	3.25	1.85	0.14	230.23	0.67	EMING
2018251	07:36	7.24	126.48	10.00	47.90	8.85	102.54	322.36	64.22	64.00	4.25	1.50	0.82	73.69	0.76	EMING
2018271	10:22	-0.18	119.84	10.00	47.90	8.85	104.09	319.63	74.27	67.00	2.75	1.92	0.18	85.41	0.25	EMING
2016153	23:16	-2.10	100.67	50.00	47.75	9.12	92.58	317.53	90.27	43.00	2.25	2.02	0.04	95.95	0.11	WALHA
2016207	17:46	-26.11	-70.51	72.00	47.75	9.12	102.35	42.81	244.87	53.00	5.75	3.30	0.35	71.58	1.64	WALHA
2016211	21:38	18.54	145.51	196.00	47.75	9.12	103.31	331.42	42.26	51.00	2.50	2.75	0.17	212.85	0.31	WALHA
2016238	17:24	30.61	137.85	456.00	47.75	9.12	89.43	328.23	42.27	71.00	4.75	1.70	0.17	231.73	0.81	WALHA
2017105	08:39	-23.27	-67.72	155.00	47.75	9.12	98.55	41.64	244.90	53.00	4.50	3.30	0.34	67.67	1.48	WALHA
2017196	12:32	0.41	121.98	113.00	47.75	9.12	104.88	319.95	72.45	44.00	3.75	1.97	0.07	75.12	0.75	WALHA
2017263	16:57	37.98	144.66	11.00	47.75	9.12	85.89	331.71	33.71	66.00	7.00	1.82	0.26	220.61	1.33	WALHA
2018236	09:24	-11.04	-70.83	630.00	47.75	9.12	91.42	41.66	255.23	54.00	11.25	2.35	0.40	77.48	1.42	WALHA
2018250	02:32	-2.35	-78.90	93.00	47.75	9.12	90.39	42.41	266.97	58.00	5.25	1.82	0.21	82.69	0.49	WALHA
2016211	21:38	18.54	145.51	196.00	49.85	10.21	101.28	332.33	42.88	72.00	8.00	1.00	0.12	218.93	0.40	A111A
2016217	16:44	24.94	142.01	510.00	49.85	10.21	94.13	331.06	42.73	84.00	3.25	0.90	0.02	226.36	0.17	A111A
2016238	17:24	30.61	137.85	456.00	49.85	10.21	87.40	329.13	43.11	-83.00	12.50	0.70	0.11	54.60	0.73	A111A
2017010	06:33	4.48	122.62	627.00	49.85	10.21	100.77	322.47	69.76	65.00	4.25	3.12	0.64	236.11	0.32	A111A
2017049	12:30	-23.86	-66.66	222.00	49.85	10.21	99.90	39.79	244.84	70.00	3.50	1.80	0.52	243.88	0.27	A111A
2015351	20:09	15.80	-93.63	85.00	49.65	7.91	85.38	39.71	288.86	-82.00	15.25	1.10	0.36	301.00	0.45	A112A
2016153	23:16	-2.10	100.67	50.00	49.65	7.91	93.38	319.43	89.26	64.00	3.00	1.82	0.06	101.02	0.26	A112A
2016159	11:11	18.36	-105.17	10.00	49.65	7.91	90.23	36.72	299.11	36.00	6.00	3.00	0.57	109.52	0.59	A112A
2016211	21:38	18.54	145.51	196.00	49.65	7.91	102.43	333.33	40.93	65.00	2.00	1.70	0.09	222.57	0.17	A112A
2016217	16:44	24.94	142.01	510.00	49.65	7.91	95.28	332.05	40.90	68.00	4.00	1.82	0.16	229.93	0.26	A112A
2016238	17:24	30.61	137.85	456.00	49.65	7.91	88.55	330.10	41.39	68.00	3.75	1.70	0.12	226.32	0.32	A112A
2016211	21:38	18.54	145.51	196.00	49.55	8.73	102.15	332.85	41.65	63.00	3.50	1.25	0.13	221.83	0.10	A113A
2016217	16:44	24.94	142.01	510.00	49.55	8.73	95.00	331.58	41.56	63.00	2.75	1.45	0.11	222.95	0.29	A113A
2016238	17:24	30.61	137.85	456.00	49.55	8.73	88.27	329.63	42.00	64.00	3.50	1.57	0.16	225.44	0.46	A113A
2016293	00:46	-4.86	108.16	614.00	49.55	8.73	99.80	319.30	85.98	35.00	9.50	1.40	0.18	83.71	1.00	A113A
2017196	12:32	0.41	121.98	113.00	49.55	8.73	104.58	321.80	71.68	-10.00	12.50	0.97	0.33	61.31	0.84	A113A
2016153	23:16	-2.10	100.67	50.00	49.59	9.18	92.55	319.37	90.23	52.00	3.00	1.52	0.06	86.56	0.31	A114A
2016217	16:44	24.94	142.01	510.00	49.59	9.18	94.77	331.38	41.92	58.00	1.25	1.02	0.04	219.32	0.06	A114A
2016238	17:24	30.61	137.85	456.00	49.59	9.18	88.04	329.44	42.34	52.00	4.50	1.25	0.19	214.16	0.42	A114A
2017196	12:32	0.41	121.98	113.00	49.59	9.18	104.29	321.75	72.04	59.00	4.00	1.90	0.19	78.69	0.22	A114A
2016153	23:16	-2.10	100.67	50.00	49.27	9.05	92.64	319.05	90.14	49.00	20.75	1.52	0.35	84.14	1.03	A115A
2016211	21:38	18.54	145.51	196.00	49.27	9.05	102.22	332.51	41.97	61.00	1.25	1.77	0.04	216.73	0.11	A115A
2016217	16:44	24.94	142.01	510.00	49.27	9.05	95.07	331.24	41.84	58.00	3.50	1.88	0.15	219.49	0.30	A115A
2016238	17:24	30.61	137.85	456.00	49.27	9.05	88.33	329.29	42.24	64.00	5.50	1.77	0.24	226.56	1.13	A115A
2016293	00:46	-4.86	108.16	614.00	49.27	9.05	99.61	319.01	86.27	45.00	16.50	1.57	0.37	78.06	1.98	A115A
2018014	09:38	-15.77	-74.71	39.00	49.27	9.05	97.79	41.08	255.03	55.00	8.75	1.70	0.54	73.09	0.46	A115A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016211	21:38	18.54	145.51	196.00	49.40	9.48	101.93	332.38	42.32	60.00	11.25	1.20	0.31	217.00	0.53	A116A
2016217	16:44	24.94	142.01	510.00	49.40	9.48	94.79	331.11	42.17	56.00	4.50	1.48	0.19	218.75	0.34	A116A
2016238	17:24	30.61	137.85	456.00	49.40	9.48	88.05	329.17	42.56	56.00	6.25	1.65	0.28	219.25	0.49	A116A
2017010	06:33	4.48	122.62	627.00	49.40	9.48	101.37	322.21	69.25	59.00	3.75	2.72	0.59	67.96	0.83	A116A
2017052	14:29	-19.28	-63.90	595.00	49.40	9.48	94.13	38.88	245.16	5.00	21.00	0.85	0.34	56.36	1.40	A116A
2017196	12:32	0.41	121.98	113.00	49.40	9.48	104.16	321.50	72.33	45.00	21.25	0.70	0.33	80.90	1.98	A116A
2018014	09:38	-15.77	-74.71	39.00	49.40	9.48	98.10	41.03	255.36	61.00	21.50	1.25	0.67	85.64	1.41	A116A
2015351	20:09	15.80	-93.63	85.00	49.04	9.57	86.61	39.92	290.13	33.00	4.75	1.62	0.28	104.68	0.51	A117A
2016153	23:16	-2.10	100.67	50.00	49.04	9.57	92.30	318.82	90.54	49.00	4.50	1.17	0.06	85.39	0.20	A117A
2016159	11:11	18.36	-105.17	10.00	49.04	9.57	91.48	36.71	300.36	41.00	3.75	1.42	0.21	114.42	0.17	A117A
2016211	21:38	18.54	145.51	196.00	49.04	9.57	102.16	332.09	42.45	64.00	2.50	1.55	0.07	216.51	0.11	A117A
2016217	16:44	24.94	142.01	510.00	49.04	9.57	95.01	330.83	42.26	69.00	2.50	1.52	0.07	222.51	0.48	A117A
2016238	17:24	30.61	137.85	456.00	49.04	9.57	88.28	328.89	42.62	74.00	7.00	1.40	0.19	230.73	0.62	A117A
2016293	00:46	-4.86	108.16	614.00	49.04	9.57	99.28	318.76	86.71	56.00	23.25	1.35	0.48	84.16	1.42	A117A
2017140	01:26	9.38	123.95	533.00	49.04	9.57	98.40	322.71	65.31	69.00	23.25	1.45	0.57	72.11	0.69	A117A
2017243	17:26	-1.16	99.69	43.00	49.04	9.57	90.95	318.85	90.67	79.00	4.50	2.50	0.22	101.83	1.14	A117A
2017297	11:07	-7.22	123.07	553.00	49.04	9.57	110.75	319.81	76.66	45.00	9.50	0.80	0.13	77.86	0.83	A117A
2015351	20:09	15.80	-93.63	85.00	48.73	10.30	87.17	40.05	290.69	50.00	6.75	1.17	0.13	107.64	0.22	A360A
2016153	23:16	-2.10	100.67	50.00	48.73	10.30	91.81	318.51	91.10	73.00	19.00	1.62	0.49	96.09	0.58	A360A
2016211	21:38	18.54	145.51	196.00	48.73	10.30	102.06	331.51	43.11	-79.00	5.00	1.15	0.07	47.75	0.55	A360A
2016217	16:44	24.94	142.01	510.00	48.73	10.30	94.92	330.26	42.86	73.00	5.75	1.38	0.10	212.28	0.95	A360A
2016238	17:24	30.61	137.85	456.00	48.73	10.30	88.18	328.32	43.14	69.00	3.00	1.07	0.06	220.29	0.15	A360A
2017243	17:26	-1.16	99.69	43.00	48.73	10.30	90.46	318.54	91.22	65.00	16.25	1.30	0.38	89.37	1.22	A360A
2016153	23:16	-2.10	100.67	50.00	48.36	10.40	91.73	318.15	91.19	33.00	7.75	0.97	0.10	85.26	0.35	A362A
2016211	21:38	18.54	145.51	196.00	48.36	10.40	102.28	331.20	43.26	46.00	2.75	1.75	0.17	208.94	0.27	A362A
2016238	17:24	30.61	137.85	456.00	48.36	10.40	88.40	328.02	43.21	50.00	10.25	1.10	0.32	213.19	1.27	A362A
2015351	20:09	15.80	-93.63	85.00	48.52	10.93	87.64	40.09	291.16	-87.00	15.50	1.45	0.44	289.59	0.26	A363A
2016153	23:16	-2.10	100.67	50.00	48.52	10.93	91.38	318.32	91.58	67.00	3.00	1.32	0.07	96.32	0.23	A363A
2016211	21:38	18.54	145.51	196.00	48.52	10.93	101.92	331.05	43.69	-82.00	7.00	1.17	0.09	48.14	0.68	A363A
2016217	16:44	24.94	142.01	510.00	48.52	10.93	94.78	329.81	43.37	-84.00	14.25	0.97	0.16	53.82	1.40	A363A
2016238	17:24	30.61	137.85	456.00	48.52	10.93	88.04	327.87	43.61	-84.00	7.50	1.02	0.08	48.20	1.13	A363A
2017049	12:30	-23.86	-66.66	222.00	48.52	10.93	99.77	41.21	245.14	51.00	9.25	0.77	0.24	66.81	0.29	A363A
2017140	01:26	9.38	123.95	533.00	48.52	10.93	97.79	321.86	66.45	76.00	2.75	1.23	0.17	245.55	0.12	A363A
2017223	05:48	14.01	120.74	172.00	48.52	10.93	92.23	321.25	66.05	79.00	23.25	0.38	0.99	246.40	0.69	A363A
2017283	06:52	-18.57	-69.75	85.00	48.52	10.93	97.72	41.46	250.84	43.00	16.75	0.50	0.20	73.38	0.50	A363A
2015351	20:09	15.80	-93.63	85.00	48.50	11.45	87.97	39.98	291.55	60.00	13.75	0.77	0.12	104.14	0.33	A364A
2017196	12:32	0.41	121.98	113.00	48.50	11.45	103.17	320.23	74.11	66.00	17.50	0.80	0.28	78.96	0.14	A364A
2016139	08:17	0.43	-79.79	16.00	48.17	10.73	90.03	42.02	270.67	21.00	12.75	0.82	0.23	85.89	0.79	A365A
2016153	23:16	-2.10	100.67	50.00	48.17	10.73	91.51	317.96	91.44	36.00	2.50	1.35	0.03	83.85	0.19	A365A
2016207	17:46	-26.11	-70.51	72.00	48.17	10.73	103.50	42.88	246.05	-12.00	11.75	0.97	0.24	53.43	0.25	A365A
2016211	21:38	18.54	145.51	196.00	48.17	10.73	102.27	330.90	43.57	53.00	5.25	1.62	0.25	213.43	0.43	A365A
2016238	17:24	30.61	137.85	456.00	48.17	10.73	88.39	327.72	43.45	53.00	8.50	1.65	0.25	209.49	1.14	A365A
2016293	00:46	-4.86	108.16	614.00	48.17	10.73	98.55	317.83	87.72	50.00	12.75	0.88	0.17	86.14	0.97	A365A
2017010	06:33	4.48	122.62	627.00	48.17	10.73	101.02	320.74	70.48	13.00	7.25	1.15	0.11	57.44	1.14	A365A
2016159	11:11	18.36	-105.17	10.00	47.83	10.62	92.70	37.40	301.12	53.00	7.00	1.17	0.40	133.87	0.28	A366A
2016217	14:35	-22.33	-66.01	270.00	47.83	10.62	97.75	41.42	245.39	4.00	10.00	1.72	0.49	75.27	2.13	A366A
2016217	16:44	24.94	142.01	510.00	47.83	10.62	95.42	329.48	43.17	82.00	8.50	1.00	0.19	236.31	0.74	A366A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016238	17:24	30.61	137.85	456.00	47.83	10.62	88.68	327.55	43.37	78.00	9.00	1.48	0.79	238.46	2.25	A366A
2017010	06:33	4.48	122.62	627.00	47.83	10.62	101.20	320.44	70.45	-7.00	24.00	3.05	0.91	70.65	2.17	A366A
2017049	12:30	-23.86	-66.66	222.00	47.83	10.62	99.29	41.76	244.82	61.00	9.75	1.77	0.59	78.65	1.67	A366A
2017196	12:32	0.41	121.98	113.00	47.83	10.62	103.89	319.73	73.61	55.00	10.00	1.25	0.18	86.61	0.84	A366A
2016153	23:16	-2.10	100.67	50.00	48.31	11.92	90.72	318.12	92.33	73.00	8.25	1.05	0.19	97.16	0.19	A367A
2016207	17:46	-26.11	-70.51	72.00	48.31	11.92	104.29	43.07	246.89	70.00	0.50	1.82	0.66	72.01	0.05	A367A
2016211	21:38	18.54	145.51	196.00	48.31	11.92	101.62	330.42	44.55	77.00	1.75	1.50	0.04	227.83	0.07	A367A
2016238	17:24	30.61	137.85	456.00	48.31	11.92	87.74	327.24	44.32	77.00	4.50	1.55	0.06	224.13	0.43	A367A
2016153	23:16	-2.10	100.67	50.00	49.13	10.55	91.65	318.91	91.28	51.00	7.25	0.77	0.08	83.84	0.12	A368A
2016159	11:11	18.36	-105.17	10.00	49.13	10.55	91.99	36.31	301.11	33.00	3.00	1.20	0.16	106.75	0.05	A368A
2016211	21:38	18.54	145.51	196.00	49.13	10.55	101.66	331.67	43.27	66.00	11.50	1.35	0.25	212.34	0.91	A368A
2016217	16:44	24.94	142.01	510.00	49.13	10.55	94.51	330.41	43.03	71.00	7.25	1.15	0.14	218.19	0.66	A368A
2016238	17:24	30.61	137.85	456.00	49.13	10.55	87.78	328.47	43.34	66.00	4.25	1.45	0.09	210.52	0.61	A368A
2016293	00:46	-4.86	108.16	614.00	49.13	10.55	98.64	318.81	87.43	48.00	14.50	0.95	0.29	75.43	1.34	A368A
2016153	23:16	-2.10	100.67	50.00	49.12	11.02	91.34	318.91	91.64	84.00	3.50	1.70	0.21	100.00	0.15	A369A
2016159	11:11	18.36	-105.17	10.00	49.12	11.02	92.26	36.16	301.47	43.00	17.50	0.92	0.29	118.36	0.18	A369A
2016211	21:38	18.54	145.51	196.00	49.12	11.02	101.45	331.43	43.68	87.00	12.25	1.38	0.17	221.88	0.54	A369A
2016238	17:24	30.61	137.85	456.00	49.12	11.02	87.57	328.24	43.69	75.00	13.25	1.25	0.21	214.48	1.27	A369A
2016264	16:41	30.50	142.05	9.00	49.12	11.02	89.52	330.29	40.63	83.00	6.00	1.52	0.11	227.92	1.34	A369A
2017049	12:30	-23.86	-66.66	222.00	49.12	11.02	100.07	40.69	245.29	70.00	2.00	1.85	0.17	237.27	0.12	A369A
2017105	08:39	-23.27	-67.72	155.00	49.12	11.02	100.26	40.91	246.43	72.00	3.00	1.52	0.39	244.93	0.13	A369A
2017243	17:26	-1.16	99.69	43.00	49.12	11.02	89.99	318.94	91.76	81.00	13.00	1.55	0.54	93.79	0.95	A369A
2015135	20:46	-2.54	102.22	151.00	48.33	8.33	94.47	318.10	88.79	33.00	18.50	1.80	0.44	89.03	1.38	BFO
2016153	23:16	-2.10	100.67	50.00	48.33	8.33	93.11	318.11	89.65	27.00	2.00	1.55	0.06	90.32	0.18	BFO
2016211	21:38	18.54	145.51	196.00	48.33	8.33	103.24	332.23	41.49	62.00	4.50	2.02	0.34	223.81	0.43	BFO
2016238	17:24	30.61	137.85	456.00	48.33	8.33	89.36	329.02	41.69	70.00	2.25	1.23	0.09	235.06	0.09	BFO
2017140	01:26	9.38	123.95	533.00	48.33	8.33	99.45	322.41	64.42	40.00	25.50	0.82	0.93	64.47	1.35	BFO
2017196	12:32	0.41	121.98	113.00	48.33	8.33	105.21	320.69	71.67	39.00	15.50	0.82	0.19	86.37	1.41	BFO
2017243	17:26	-1.16	99.69	43.00	48.33	8.33	91.77	318.13	89.76	59.00	12.50	1.00	0.14	102.61	0.41	BFO
2015135	20:46	-2.54	102.22	151.00	47.68	10.11	93.29	317.44	90.15	65.00	22.75	0.82	0.26	103.46	1.10	UBR
2015155	23:35	5.99	116.54	10.00	47.68	10.11	96.53	319.28	73.78	30.00	9.00	1.42	0.12	76.23	0.79	UBR
2015232	11:20	0.49	126.59	46.00	47.68	10.11	107.16	320.73	69.51	53.00	1.50	1.30	0.04	79.87	0.11	UBR
2015259	08:00	1.88	126.43	41.00	47.68	10.11	105.99	320.95	68.73	56.00	4.00	2.17	0.13	82.68	0.70	UBR
2015351	20:09	15.80	-93.63	85.00	47.68	10.11	87.42	41.08	290.59	48.00	4.00	1.67	0.18	116.00	0.24	UBR
2016153	23:16	-2.10	100.67	50.00	47.68	10.11	91.92	317.46	91.00	62.00	8.75	1.72	0.14	104.22	0.47	UBR
2016159	19:35	1.28	126.37	31.00	47.68	10.11	106.41	320.82	69.17	22.00	18.00	1.00	0.36	73.99	2.16	UBR
2016207	17:46	-26.11	-70.51	72.00	47.68	10.11	102.92	43.16	245.52	66.00	4.25	3.00	0.39	81.45	1.55	UBR
2016211	21:38	18.54	145.51	196.00	47.68	10.11	102.92	330.87	43.11	65.00	3.00	2.30	0.28	231.81	0.31	UBR
2016217	16:44	24.94	142.01	510.00	47.68	10.11	95.77	329.64	42.77	67.00	5.75	2.55	0.31	231.32	0.98	UBR
2016293	00:46	-4.86	108.16	614.00	47.68	10.11	99.00	317.36	87.33	32.00	10.50	1.32	0.27	93.63	0.87	UBR
2017010	06:33	4.48	122.62	627.00	47.68	10.11	101.58	320.42	70.08	49.00	22.00	1.45	0.61	75.62	3.28	UBR
2017049	12:30	-23.86	-66.66	222.00	47.68	10.11	98.91	41.75	244.44	31.00	18.00	1.30	0.46	64.00	2.88	UBR
2017052	14:29	-19.28	-63.90	595.00	47.68	10.11	93.79	40.62	245.51	-3.00	32.00	1.75	0.86	60.91	2.86	UBR
2017105	08:39	-23.27	-67.72	155.00	47.68	10.11	99.12	41.99	245.57	69.00	3.00	2.67	0.41	80.15	0.64	UBR
2017196	12:32	0.41	121.98	113.00	47.68	10.11	104.27	319.68	73.24	55.00	8.25	1.67	0.16	87.27	0.84	UBR
2017283	06:52	-18.57	-69.75	85.00	47.68	10.11	96.92	42.07	250.15	65.00	10.75	1.75	0.57	83.93	1.17	UBR
2018229	15:55	-7.37	119.80	529.00	47.68	10.11	108.65	317.82	80.26	18.00	11.25	1.67	0.34	83.06	0.40	UBR

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2018240	22:55	16.80	146.84	55.00	47.68	10.11	105.04	331.34	42.83	60.00	27.00	2.00	0.64	228.53	1.59	UBR
2018250	02:32	-2.35	-78.90	93.00	47.68	10.11	91.05	42.51	267.69	52.00	14.25	1.48	0.28	99.38	1.32	UBR
2018271	10:22	-0.18	119.84	10.00	47.68	10.11	103.32	319.18	75.31	59.00	5.50	1.90	0.19	87.44	0.26	UBR
2018231	04:30	-8.34	116.60	16.00	49.22	8.18	108.29	319.07	81.43	70.00	8.50	3.22	0.27	85.49	0.69	TMO22
2018250	02:32	-2.35	-78.90	93.00	49.22	8.18	89.85	40.91	266.27	64.00	19.25	0.70	0.24	93.01	0.93	TMO22
2015232	11:20	0.49	126.59	46.00	49.83	9.29	106.89	323.03	68.23	19.00	14.50	0.52	0.14	73.50	1.04	MILB
2016153	23:16	-2.10	100.67	50.00	49.83	9.29	92.48	319.61	90.30	68.00	16.25	1.35	0.31	100.93	1.00	MILB
2016211	21:38	18.54	145.51	196.00	49.83	9.29	101.70	332.77	42.10	59.00	2.00	1.90	0.13	221.72	0.20	MILB
2016217	16:44	24.94	142.01	510.00	49.83	9.29	94.55	331.49	42.00	60.00	3.50	1.62	0.15	221.32	0.18	MILB
2016238	17:24	30.61	137.85	456.00	49.83	9.29	87.82	329.55	42.43	66.00	3.25	1.42	0.11	224.73	0.21	MILB
2017196	12:32	0.41	121.98	113.00	49.83	9.29	104.14	321.96	72.07	21.00	7.00	0.47	0.04	74.91	0.07	MILB
2018240	22:55	16.80	146.84	55.00	49.83	9.29	103.82	333.25	41.74	62.00	2.00	1.32	0.09	223.75	0.26	MILB
2015135	20:46	-2.54	102.22	151.00	49.69	11.22	92.57	319.46	90.88	83.00	5.25	1.50	0.29	96.63	0.46	GRA1
2015161	14:12	-22.40	-68.43	124.00	49.69	11.22	100.38	40.50	247.75	88.00	5.25	1.17	0.18	248.98	0.29	GRA1
2015262	05:26	-29.64	-72.08	6.00	49.69	11.22	107.95	42.69	245.35	-87.00	11.75	1.25	0.29	64.15	2.36	GRA1
2016201	05:38	-30.25	-71.97	8.00	49.69	11.22	108.33	42.79	244.84	-32.00	7.25	1.75	0.42	74.49	1.78	GRA1
2016207	17:46	-26.11	-70.51	72.00	49.69	11.22	104.41	41.57	246.73	75.00	4.50	2.00	0.40	242.12	0.29	GRA1
2016211	21:38	18.54	145.51	196.00	49.69	11.22	100.95	331.74	43.77	-64.00	11.75	0.95	0.22	50.88	0.66	GRA1
2016217	14:35	-22.33	-66.01	270.00	49.69	11.22	98.88	39.87	246.06	79.00	27.75	1.82	0.75	243.00	1.88	GRA1
2017052	14:29	-19.28	-63.90	595.00	49.69	11.22	95.28	39.07	246.47	71.00	2.50	2.45	0.16	238.26	0.80	GRA1
2017105	08:39	-23.27	-67.72	155.00	49.69	11.22	100.61	40.43	246.67	82.00	4.50	1.40	0.19	242.42	0.28	GRA1
2017283	06:52	-18.57	-69.75	85.00	49.69	11.22	98.28	40.40	251.21	84.00	6.75	1.62	0.52	253.92	0.55	GRA1
2018092	14:00	-20.66	-63.01	559.00	49.69	11.22	95.82	38.92	244.95	78.00	3.75	1.42	0.24	245.21	0.37	GRA1
2018236	09:24	-11.04	-70.83	630.00	49.69	11.22	93.24	40.11	256.87	-89.00	5.75	1.38	0.35	78.80	0.57	GRA1
2015161	14:12	-22.40	-68.43	124.00	49.66	11.36	100.45	40.57	247.84	83.00	6.25	2.17	0.41	246.44	1.19	GRA2
2015271	15:48	-23.80	-66.61	219.00	49.66	11.36	100.42	40.26	245.63	80.00	24.50	1.07	0.64	245.68	0.40	GRA2
2016207	17:46	-26.11	-70.51	72.00	49.66	11.36	104.48	41.64	246.82	83.00	15.25	1.50	0.59	246.18	0.31	GRA2
2016211	21:38	18.54	145.51	196.00	49.66	11.36	100.91	331.65	43.89	-61.00	17.25	0.92	0.40	51.96	0.72	GRA2
2016217	16:44	24.94	142.01	510.00	49.66	11.36	93.76	330.39	43.65	-77.00	12.25	0.68	0.11	50.77	0.36	GRA2
2018092	14:00	-20.66	-63.01	559.00	49.66	11.36	95.89	38.99	245.04	80.00	3.00	1.25	0.18	246.15	0.48	GRA2
2015161	14:12	-22.40	-68.43	124.00	49.76	11.32	100.46	40.46	247.83	78.00	1.50	2.42	0.17	246.84	0.14	GRA3
2016207	17:46	-26.11	-70.51	72.00	49.76	11.32	104.50	41.53	246.82	88.00	14.50	1.20	0.47	249.89	0.51	GRA3
2016211	21:38	18.54	145.51	196.00	49.76	11.32	100.85	331.74	43.84	-58.00	22.25	1.05	0.54	53.00	1.06	GRA3
2017052	14:29	-19.28	-63.90	595.00	49.76	11.32	95.37	39.03	246.54	75.00	20.50	1.57	0.50	243.84	0.98	GRA3
2017196	12:32	0.41	121.98	113.00	49.76	11.32	102.91	321.50	73.72	82.00	26.50	0.92	0.98	251.89	0.78	GRA3
2017243	17:26	-1.16	99.69	43.00	49.76	11.32	89.82	319.59	91.99	85.00	3.50	1.90	0.49	91.82	0.27	GRA3
2017283	06:52	-18.57	-69.75	85.00	49.76	11.32	98.36	40.35	251.29	79.00	1.50	2.70	0.28	249.90	0.36	GRA3
2018021	01:26	-18.88	-69.44	116.00	49.76	11.32	98.41	40.32	250.86	-78.00	19.00	1.57	0.64	75.23	2.67	GRA3
2018092	14:00	-20.66	-63.01	559.00	49.76	11.32	95.91	38.88	245.02	82.00	3.75	1.35	0.16	244.95	0.37	GRA3
2018236	09:24	-11.04	-70.83	630.00	49.76	11.32	93.32	40.05	256.95	-60.00	20.75	0.75	0.34	82.17	0.69	GRA3
2015135	20:46	-2.54	102.22	151.00	49.57	11.44	92.43	319.34	91.05	81.00	2.00	1.70	0.19	91.38	0.25	GRA4
2015271	15:48	-23.80	-66.61	219.00	49.57	11.44	100.43	40.37	245.66	81.00	5.25	1.88	0.37	247.77	1.77	GRA4
2016207	17:46	-26.11	-70.51	72.00	49.57	11.44	104.49	41.75	246.85	82.00	5.00	1.32	0.31	249.80	0.33	GRA4
2016211	21:38	18.54	145.51	196.00	49.57	11.44	100.94	331.55	43.97	-66.00	10.50	0.88	0.20	49.37	0.46	GRA4
2016217	16:44	24.94	142.01	510.00	49.57	11.44	93.79	330.29	43.71	-71.00	9.50	0.85	0.13	50.51	0.42	GRA4
2016293	00:46	-4.86	108.16	614.00	49.57	11.44	98.04	319.23	88.05	82.00	5.25	2.17	0.59	91.88	0.82	GRA4
2017105	08:39	-23.27	-67.72	155.00	49.57	11.44	100.69	40.60	246.80	-23.00	5.00	2.65	0.54	80.11	1.08	GRA4

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2017283	06:52	-18.57	-69.75	85.00	49.57	11.44	98.37	40.57	251.35	80.00	1.75	2.20	0.22	252.39	0.41	GRA4
2018021	01:26	-18.88	-69.44	116.00	49.57	11.44	98.42	40.53	250.92	80.00	5.00	2.17	0.53	249.39	0.48	GRA4
2018092	14:00	-20.66	-63.01	559.00	49.57	11.44	95.90	39.09	245.09	79.00	8.50	1.45	0.41	244.02	0.71	GRA4
2018240	22:55	16.80	146.84	55.00	49.57	11.44	103.07	332.01	43.66	-65.00	12.75	0.85	0.20	53.59	2.24	GRA4
2016106	14:31	13.40	-92.37	22.00	48.93	14.99	91.05	39.01	291.73	30.00	20.75	1.05	0.49	111.50	0.24	A015A
2016113	03:23	-0.29	-80.50	10.00	48.93	14.99	93.84	41.14	273.95	-60.00	22.75	0.55	0.98	94.99	1.53	A015A
2016139	08:17	0.43	-79.79	16.00	48.93	14.99	92.83	41.14	273.88	-87.00	25.75	3.65	0.99	279.52	0.76	A015A
2016207	17:46	-26.11	-70.51	72.00	48.93	14.99	106.41	43.26	249.14	85.00	18.00	1.17	0.50	246.40	1.83	A015A
2016211	21:38	18.54	145.51	196.00	48.93	14.99	99.72	329.43	47.03	78.00	7.50	0.90	0.11	227.70	0.23	A015A
2016217	16:44	24.94	142.01	510.00	48.93	14.99	92.59	328.19	46.52	83.00	5.50	1.00	0.06	225.30	0.12	A015A
2017049	12:30	-23.86	-66.66	222.00	48.93	14.99	102.40	41.92	248.04	-81.00	18.75	1.35	0.57	67.72	4.65	A015A
2017196	12:32	0.41	121.98	113.00	48.93	14.99	100.80	320.06	76.80	84.00	13.75	1.90	0.97	257.63	0.41	A015A
2017279	08:19	37.50	144.02	9.00	48.93	14.99	82.79	328.91	38.52	-87.00	23.50	2.10	0.79	280.06	0.25	A015A
2017283	06:52	-18.57	-69.75	85.00	48.93	14.99	100.41	41.89	253.82	-88.00	23.00	0.90	0.96	77.86	0.30	A015A
2018092	14:00	-20.66	-63.01	559.00	48.93	14.99	97.78	40.62	247.60	-87.00	16.25	0.90	0.30	65.78	1.04	A015A
2016211	21:38	18.54	145.51	196.00	48.12	13.31	101.09	329.62	45.74	83.00	14.50	1.32	0.25	212.30	1.33	A032A
2016217	16:44	24.94	142.01	510.00	48.12	13.31	93.96	328.39	45.25	88.00	5.25	1.75	0.09	215.50	1.19	A032A
2016238	17:24	30.61	137.85	456.00	48.12	13.31	87.22	326.46	45.31	87.00	4.75	1.15	0.05	218.38	0.70	A032A
2017283	06:52	-18.57	-69.75	85.00	48.12	13.31	99.10	42.34	252.48	86.00	15.25	1.02	0.37	243.62	1.52	A032A
2015271	15:48	-23.80	-66.61	219.00	47.48	13.13	100.61	42.77	246.49	-49.00	25.25	0.52	0.98	63.84	1.35	A033A
2015351	20:09	15.80	-93.63	85.00	47.48	13.13	89.39	40.51	292.80	29.00	14.75	0.82	0.32	99.81	0.19	A033A
2016153	23:16	-2.10	100.67	50.00	47.48	13.13	89.87	317.34	93.22	78.00	17.25	1.27	0.51	90.63	1.61	A033A
2016159	11:11	18.36	-105.17	10.00	47.48	13.13	94.32	36.80	303.00	83.00	14.75	0.68	0.16	126.81	0.18	A033A
2016159	19:35	1.28	126.37	31.00	47.48	13.13	104.56	319.91	71.64	-62.00	27.00	0.47	0.97	73.60	1.18	A033A
2016193	02:31	0.58	-79.64	21.00	47.48	13.13	91.45	42.67	272.42	-20.00	24.50	0.95	0.96	80.65	0.42	A033A
2016207	17:46	-26.11	-70.51	72.00	47.48	13.13	104.72	44.19	247.50	-31.00	21.50	0.88	0.52	65.50	0.24	A033A
2016211	21:38	18.54	145.51	196.00	47.48	13.13	101.63	329.23	45.68	-86.00	4.00	1.57	0.09	42.73	0.68	A033A
2016217	16:43	24.94	142.01	510.00	47.48	13.13	94.50	328.02	45.14	-84.00	7.25	1.52	0.13	41.40	0.43	A033A
2016238	17:24	30.61	137.85	456.00	47.48	13.13	87.76	326.09	45.17	89.00	8.75	1.52	0.12	220.26	1.01	A033A
2016244	03:31	-3.68	152.79	476.00	47.48	13.13	124.25	327.91	51.40	49.00	25.25	1.38	0.67	215.95	0.83	A033A
2016283	15:06	1.77	127.45	128.00	47.48	13.13	104.88	320.24	70.46	-51.00	26.00	0.45	0.99	63.06	2.34	A033A
2016329	19:03	11.91	-88.90	10.00	47.48	13.13	89.29	41.57	286.80	14.00	3.50	1.10	0.32	96.02	0.08	A033A
2017049	12:30	-23.86	-66.66	222.00	47.48	13.13	100.69	42.79	246.48	76.00	22.25	0.82	0.56	244.47	0.34	A033A
2017140	01:26	9.38	123.95	533.00	47.48	13.13	96.83	320.32	68.27	-62.00	20.25	0.55	0.19	73.36	2.15	A033A
2017173	12:51	13.72	-90.97	38.00	47.48	13.13	89.28	41.14	289.50	69.00	19.50	0.52	0.29	98.50	0.40	A033A
2015315	02:14	-29.51	-72.01	12.00	46.91	13.08	107.79	45.84	245.80	83.00	22.25	1.80	0.87	247.61	1.94	A034A
2015351	20:09	15.80	-93.63	85.00	46.91	13.08	89.59	41.05	292.77	-86.00	6.50	2.08	0.24	302.25	0.95	A034A
2016106	14:31	13.40	-92.37	22.00	46.91	13.08	90.58	41.37	290.28	-89.00	3.75	2.10	0.09	302.15	0.73	A034A
2016207	17:46	-26.11	-70.51	72.00	46.91	13.08	104.47	44.72	247.33	88.00	23.75	0.97	0.56	244.75	2.79	A034A
2016329	19:03	11.91	-88.90	10.00	46.91	13.08	89.43	42.12	286.77	89.00	4.50	1.97	0.19	113.88	0.68	A034A
2017266	10:58	15.49	-94.43	53.00	46.91	13.08	90.32	40.83	293.15	-87.00	5.50	2.38	0.24	298.23	2.00	A034A
2015330	06:05	-9.18	-71.26	602.00	47.20	12.72	92.60	42.76	259.40	55.00	9.75	1.55	0.44	67.40	0.61	A035A
2016129	07:54	16.41	-97.84	22.00	47.20	12.72	91.40	39.69	295.99	41.00	9.25	0.75	0.16	107.60	0.41	A035A
2016159	11:11	18.36	-105.17	10.00	47.20	12.72	94.24	37.18	302.68	73.00	14.00	1.00	0.15	114.80	0.36	A035A
2016207	17:46	-26.11	-70.51	72.00	47.20	12.72	104.35	44.35	247.16	77.00	23.25	0.42	0.98	242.02	0.33	A035A
2016211	21:38	18.54	145.51	196.00	47.20	12.72	102.02	329.22	45.39	83.00	9.25	1.62	0.21	225.30	0.94	A035A
2016217	16:44	24.94	142.01	510.00	47.20	12.72	94.89	328.01	44.85	83.00	3.50	1.88	0.06	221.47	0.22	A035A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016238	17:24	30.61	137.85	456.00	47.20	12.72	88.15	326.08	44.87	73.00	11.00	1.90	0.11	210.24	0.93	A035A
2016254	10:27	-5.57	-76.95	121.00	47.20	12.72	93.82	43.11	265.98	66.00	6.25	0.97	0.12	89.59	0.49	A035A
2016293	00:46	-4.86	108.16	614.00	47.20	12.72	97.24	316.82	89.32	84.00	23.75	1.23	0.72	98.75	1.58	A035A
2016329	19:03	11.91	-88.90	10.00	47.20	12.72	89.11	41.92	286.50	73.00	20.50	0.88	0.47	97.22	0.45	A035A
2017108	18:09	-2.71	-75.30	14.00	47.20	12.72	90.62	42.97	266.72	3.00	10.50	1.05	0.32	75.69	0.82	A035A
2017181	22:49	-0.28	-80.49	13.00	47.20	12.72	92.39	42.96	272.16	76.00	1.75	1.97	0.19	87.74	0.24	A035A
2017266	10:58	15.49	-94.43	53.00	47.20	12.72	89.99	40.66	292.89	22.00	23.75	1.15	0.54	99.54	0.28	A035A
2017266	13:13	16.63	-95.08	10.00	47.20	12.72	89.53	40.49	294.10	82.00	10.75	1.12	0.29	104.22	0.56	A035A
2017337	11:39	-0.47	-80.31	17.00	47.20	12.72	92.41	42.97	271.90	66.00	7.25	1.52	0.36	85.90	1.09	A035A
2017349	17:07	-7.49	108.17	90.00	47.20	12.72	99.14	316.56	91.13	80.00	11.50	1.12	0.26	105.56	2.56	A035A
2016139	08:17	0.43	-79.79	16.00	47.38	12.31	91.11	42.79	271.83	65.00	10.75	1.45	0.50	78.11	0.64	A036A
2016139	17:06	0.49	-79.62	29.00	47.38	12.31	90.95	42.79	271.75	69.00	22.25	1.05	0.75	82.41	0.30	A036A
2016153	23:16	-2.10	100.67	50.00	47.38	12.31	90.42	317.21	92.62	70.00	23.75	1.12	0.59	88.49	0.43	A036A
2016159	19:35	1.28	126.37	31.00	47.38	12.31	105.11	320.00	71.01	-31.00	25.00	2.05	0.86	64.87	0.62	A036A
2016193	02:21	0.59	-79.64	17.00	47.38	12.31	90.89	42.79	271.83	50.00	4.75	1.07	0.08	82.51	0.55	A036A
2016217	16:43	24.94	142.01	510.00	47.38	12.31	94.96	328.34	44.51	76.00	4.25	1.75	0.09	219.17	0.41	A036A
2016283	15:06	1.77	127.45	128.00	47.38	12.31	105.43	320.34	69.83	70.00	3.50	2.27	0.52	242.93	0.56	A036A
2016329	19:03	11.91	-88.90	10.00	47.38	12.31	88.79	41.82	286.20	71.00	13.25	0.82	0.26	91.12	0.08	A036A
2017108	18:09	-2.71	-75.30	14.00	47.38	12.31	90.35	42.77	266.42	63.00	21.00	1.30	0.56	72.78	0.99	A036A
2017196	12:32	0.41	121.98	113.00	47.38	12.31	102.92	318.96	75.03	68.00	2.50	1.92	0.27	79.12	0.47	A036A
2017243	17:26	-1.16	99.69	43.00	47.38	12.31	89.07	317.24	92.70	22.00	22.25	0.62	0.56	77.88	1.10	A036A
2017262	18:34	18.55	-98.49	48.00	47.38	12.31	89.83	39.44	297.52	-88.00	25.25	1.40	0.93	286.47	0.64	A036A
2017266	10:58	15.49	-94.43	53.00	47.38	12.31	89.66	40.60	292.59	89.00	2.00	2.12	0.16	101.09	0.35	A036A
2017349	17:07	-7.49	108.17	90.00	47.38	12.31	99.43	316.74	90.80	72.00	9.25	1.25	0.31	90.41	1.99	A036A
2018092	14:00	-20.66	-63.01	559.00	47.38	12.31	95.51	41.34	245.52	69.00	22.75	0.68	0.58	238.96	0.40	A036A
2015330	06:05	-9.18	-71.26	602.00	47.07	10.26	90.93	42.55	257.61	34.00	26.25	0.82	0.96	66.38	1.81	A037A
2015351	20:09	15.80	-93.63	85.00	47.07	10.26	87.74	41.61	290.73	36.00	12.50	1.02	0.29	97.73	0.20	A037A
2016106	14:31	13.40	-92.37	22.00	47.07	10.26	88.71	41.85	288.23	-85.00	29.50	2.25	0.74	290.17	1.62	A037A
2016153	23:16	-2.10	100.67	50.00	47.07	10.26	91.80	316.85	91.13	49.00	2.00	1.25	0.02	83.89	0.16	A037A
2016193	02:31	0.58	-79.64	21.00	47.07	10.26	89.51	43.12	270.32	39.00	16.25	0.50	0.19	96.36	0.32	A037A
2016236	20:00	-7.21	122.54	520.00	47.07	10.26	110.37	317.57	78.35	43.00	8.75	1.10	0.24	63.24	1.62	A037A
2016293	00:46	-4.86	108.16	614.00	47.07	10.26	98.92	316.74	87.54	51.00	5.00	1.40	0.11	86.40	0.89	A037A
2017165	07:49	14.91	-92.01	93.00	47.07	10.26	87.36	41.96	288.97	64.00	14.00	1.60	0.38	97.74	1.10	A037A
2017196	12:32	0.41	121.98	113.00	47.07	10.26	104.34	319.04	73.52	42.00	2.75	1.25	0.08	64.37	0.20	A037A
2017243	17:26	-1.16	99.69	43.00	47.07	10.26	90.45	316.88	91.21	50.00	14.75	1.32	0.31	84.24	0.90	A037A
2018084	20:34	-6.63	129.82	169.00	47.07	10.26	114.75	319.10	72.09	56.00	10.75	1.55	0.72	84.76	1.43	A037A
2018092	14:00	-20.66	-63.01	559.00	47.07	10.26	94.12	41.02	244.05	-88.00	25.75	0.60	0.57	50.16	1.21	A037A
2018181	04:16	19.02	-105.12	15.00	47.07	10.26	92.34	38.18	301.19	-80.00	3.50	1.88	0.29	293.25	0.50	A037A
2016139	08:17	0.43	-79.79	16.00	47.46	11.92	90.85	42.71	271.55	51.00	18.50	0.52	0.24	87.61	0.95	A038A
2016148	04:04	26.99	130.14	10.00	47.46	11.92	87.40	323.24	51.91	69.00	21.50	2.12	0.69	233.22	2.07	A038A
2016149	10:06	-56.24	-26.94	78.00	47.46	11.92	108.33	26.64	201.65	31.00	4.25	2.33	0.27	190.03	0.33	A038A
2016153	23:16	-2.10	100.67	50.00	47.46	11.92	90.69	317.28	92.33	72.00	8.75	1.20	0.16	105.33	1.04	A038A
2016364	22:50	-9.03	118.66	79.00	47.46	11.92	107.91	316.93	83.77	68.00	8.00	2.05	0.22	93.84	1.21	A038A
2017052	14:29	-19.28	-63.90	595.00	47.46	11.92	94.82	41.31	246.79	75.00	3.50	2.05	0.83	250.24	0.74	A038A
2017132	11:01	12.92	-90.06	16.00	47.46	11.92	88.52	41.60	287.43	32.00	18.75	1.80	0.63	97.30	1.11	A038A
2018231	04:30	-8.34	116.60	16.00	47.46	11.92	106.02	316.93	84.84	75.00	20.50	1.15	0.45	93.87	1.70	A038A
2018236	09:24	-11.04	-70.83	630.00	47.46	11.92	93.19	42.39	257.26	66.00	1.75	1.27	0.11	79.10	0.08	A038A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2018240	22:55	16.80	146.84	55.00	47.46	11.92	104.35	330.27	44.43	81.00	9.75	1.15	0.19	233.91	1.44	A038A
2018250	02:32	-2.35	-78.90	93.00	47.46	11.92	92.27	42.76	269.02	76.00	5.75	1.15	0.30	89.26	0.10	A038A
2018271	10:22	-0.18	119.84	10.00	47.46	11.92	102.19	318.66	76.76	53.00	14.25	1.17	0.28	80.97	0.58	A038A
2015259	08:00	1.88	126.43	41.00	45.37	8.83	107.65	319.03	68.36	36.00	12.25	0.85	0.10	78.35	0.97	A286A
2016159	19:35	1.28	126.37	31.00	45.37	8.83	108.06	318.89	68.82	7.00	7.50	0.77	0.11	69.06	0.53	A286A
2015328	23:05	-10.54	-70.94	606.00	45.14	9.38	90.65	44.25	255.79	-28.00	3.50	2.52	0.17	78.35	1.51	A284A
2016234	04:05	-55.31	-31.75	12.00	45.14	9.38	105.95	28.96	203.03	33.00	2.50	1.92	0.22	203.75	0.26	A284A
2017196	12:32	0.41	121.98	113.00	45.14	9.38	105.48	317.31	73.33	43.00	7.75	0.92	0.17	65.94	0.50	A284A
2018240	22:55	16.80	146.84	55.00	45.14	9.38	107.25	329.93	42.70	37.00	23.00	0.90	0.39	212.66	0.07	A284A
2016111	08:53	0.64	-80.21	14.00	45.31	10.66	90.17	44.87	271.07	-79.00	9.25	1.60	0.45	85.95	1.46	A313A
2016113	03:23	-0.29	-80.50	10.00	45.31	10.66	91.02	44.88	270.62	-87.00	2.00	3.27	0.11	77.27	0.27	A313A
2016153	23:16	-2.10	100.67	50.00	45.31	10.66	91.48	315.10	91.47	41.00	21.25	1.00	0.33	106.10	0.77	A313A
2016159	11:11	18.36	-105.17	10.00	45.31	10.66	94.02	39.54	301.03	-56.00	3.25	3.38	0.34	110.65	0.78	A313A
2016207	17:46	-26.11	-70.51	72.00	45.31	10.66	102.29	45.53	245.41	87.00	18.75	1.23	0.43	250.75	0.78	A313A
2016211	21:38	18.54	145.51	196.00	45.31	10.66	104.37	328.91	43.98	61.00	2.50	1.23	0.28	235.35	0.28	A313A
2016329	19:03	11.91	-88.90	10.00	45.31	10.66	88.25	44.12	285.07	-56.00	22.75	0.85	0.53	112.50	0.48	A313A
2017010	06:33	4.48	122.62	627.00	45.31	10.66	102.01	318.00	70.97	51.00	21.50	0.52	0.38	83.06	0.69	A313A
2017243	17:26	-1.16	99.69	43.00	45.31	10.66	90.13	315.13	91.50	49.00	12.50	0.90	0.16	104.73	0.59	A313A
2018250	02:32	-2.35	-78.90	93.00	45.31	10.66	91.35	44.89	268.04	-74.00	16.25	1.32	0.37	84.74	0.74	A313A
2016153	23:16	-2.10	100.67	50.00	45.11	10.48	91.61	314.89	91.34	72.00	10.75	1.55	0.57	82.90	0.20	A312A
2017196	12:32	0.41	121.98	113.00	45.11	10.48	104.74	317.05	74.17	13.00	37.25	0.92	0.45	69.92	1.64	A312A
2016111	08:53	0.64	-80.21	14.00	45.63	11.97	91.08	44.53	272.00	66.00	13.50	1.62	0.49	88.72	2.34	A302A
2016157	16:45	-4.59	125.63	429.00	45.63	11.97	109.71	316.95	75.91	56.00	30.25	2.40	0.89	70.39	2.81	A302A
2016159	19:35	1.28	126.37	31.00	45.63	11.97	105.90	318.36	71.21	36.00	4.25	1.30	0.13	61.11	1.23	A302A
2016207	17:46	-26.11	-70.51	72.00	45.63	11.97	103.26	45.62	246.32	55.00	6.00	2.45	0.52	68.29	1.05	A302A
2016211	21:38	18.54	145.51	196.00	45.63	11.97	103.49	328.46	45.01	48.00	2.25	1.57	0.16	213.63	0.16	A302A
2016217	14:35	-22.33	-66.01	270.00	45.63	11.97	97.69	43.83	246.04	57.00	26.00	2.58	0.74	70.71	1.59	A302A
2016217	16:44	24.94	142.01	510.00	45.63	11.97	96.37	327.28	44.38	53.00	5.50	1.57	0.19	211.95	0.43	A302A
2016236	20:00	-7.21	122.54	520.00	45.63	11.97	109.48	315.83	80.17	18.00	6.25	1.30	0.09	64.92	1.80	A302A
2016293	00:46	-4.86	108.16	614.00	45.63	11.97	97.78	315.25	88.99	30.00	19.00	1.15	0.43	77.02	1.96	A302A
2017049	12:30	-23.86	-66.66	222.00	45.63	11.97	99.21	44.17	245.41	39.00	5.25	1.48	0.34	51.50	0.75	A302A
2017052	14:29	-19.28	-63.90	595.00	45.63	11.97	94.13	43.02	246.70	56.00	5.75	2.95	0.42	72.55	1.88	A302A
2017187	08:23	11.13	124.63	9.00	45.63	11.97	97.39	319.24	65.96	49.00	7.25	2.15	0.46	65.27	0.35	A302A
2018125	06:39	14.57	123.92	18.00	45.63	11.97	94.35	319.26	64.25	54.00	15.50	1.23	0.92	63.44	0.37	A302A
2018181	04:16	19.02	-105.12	15.00	45.63	11.97	94.10	38.77	302.39	45.00	5.00	1.30	0.34	124.61	0.36	A302A
2018209	23:07	-8.24	116.51	14.00	45.63	11.97	106.01	315.04	85.40	47.00	10.25	0.97	0.12	87.03	0.32	A302A
2018217	12:06	-8.26	116.44	34.00	45.63	11.97	105.97	315.03	85.46	46.00	16.75	1.10	0.27	90.76	1.80	A302A
2018221	05:45	-8.31	116.23	15.00	45.63	11.97	105.86	315.01	85.65	49.00	7.25	1.17	0.09	95.50	0.85	A302A
2018229	15:55	-7.37	119.80	529.00	45.63	11.97	107.69	315.48	82.34	27.00	17.00	1.23	0.27	76.41	1.54	A302A
2018236	09:24	-11.04	-70.83	630.00	45.63	11.97	92.82	44.18	257.21	-9.00	3.75	1.17	0.21	66.81	0.39	A302A
2018240	22:55	16.80	146.84	55.00	45.63	11.97	105.63	328.91	44.82	64.00	1.75	1.55	0.10	230.65	0.21	A302A
2018271	10:22	-0.18	119.84	10.00	45.63	11.97	102.56	316.83	77.19	24.00	12.00	1.02	0.16	80.24	0.37	A302A
2017010	06:33	4.48	122.62	627.00	45.62	12.62	100.60	317.86	72.39	60.00	25.00	2.02	0.64	69.06	1.39	A301A
2017105	08:39	-23.27	-67.72	155.00	45.62	12.62	99.88	44.61	246.96	58.00	6.00	3.67	0.44	67.96	0.82	A301A
2017196	12:32	0.41	121.98	113.00	45.62	12.62	103.15	317.16	75.66	51.00	12.50	1.57	0.39	74.92	1.18	A301A
2017283	06:52	-18.57	-69.75	85.00	45.62	12.62	97.88	44.61	251.65	-3.00	17.50	0.65	0.27	56.78	1.36	A301A
2018209	23:07	-8.24	116.51	14.00	45.62	12.62	105.56	314.99	85.87	26.00	18.75	1.07	0.34	71.83	2.70	A301A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2018250	02:32	-2.35	-78.90	93.00	45.62	12.62	92.73	44.62	269.44	22.00	16.25	0.68	0.17	73.63	0.47	A301A
2018251	07:36	7.24	126.48	10.00	45.62	12.62	101.10	319.15	67.61	34.00	8.50	1.05	0.16	62.57	0.44	A301A
2016106	14:31	13.40	-92.37	22.00	45.34	12.32	90.62	43.02	289.72	40.00	22.25	0.57	0.39	114.34	0.49	A303A
2016153	23:16	-2.10	100.67	50.00	45.34	12.32	90.32	315.17	92.64	59.00	8.25	1.17	0.16	88.59	0.63	A303A
2018181	04:16	19.02	-105.12	15.00	45.34	12.32	94.46	38.89	302.63	-69.00	23.00	0.62	0.35	307.26	0.39	A303A
2018250	02:32	-2.35	-78.90	93.00	45.34	12.32	92.51	44.89	269.22	6.00	18.00	1.10	0.46	82.29	0.46	A303A
2016153	23:16	-2.10	100.67	50.00	45.25	7.61	93.64	315.03	89.31	35.00	10.25	1.65	0.14	83.92	0.54	A282A
2016159	11:11	18.36	-105.17	10.00	45.25	7.61	92.19	40.67	298.81	17.00	10.00	1.23	0.43	123.78	1.00	A282A
2016217	16:44	24.94	142.01	510.00	45.25	7.61	98.73	329.30	41.02	49.00	17.50	1.38	0.41	215.81	0.49	A282A
2018250	02:32	-2.35	-78.90	93.00	45.25	7.61	89.19	44.84	265.88	75.00	9.25	1.17	0.26	94.12	0.77	A282A
2016062	13:09	-4.95	94.33	24.00	45.23	8.32	90.67	315.17	96.29	21.00	15.00	1.80	0.51	89.58	2.24	A283A
2015351	20:09	15.80	-93.63	85.00	45.82	13.13	90.04	42.04	292.81	56.00	18.25	0.72	0.26	104.15	0.85	A300A
2016153	23:16	-2.10	100.67	50.00	45.82	13.13	89.77	315.68	93.22	17.00	24.75	1.12	0.62	89.77	0.57	A300A
2016159	11:11	18.36	-105.17	10.00	45.82	13.13	95.22	38.19	302.89	42.00	21.75	0.92	0.46	109.87	1.08	A300A
2016159	19:35	1.28	126.37	31.00	45.82	13.13	105.07	318.28	72.05	44.00	4.75	0.77	0.06	73.99	1.03	A300A
2016211	21:38	18.54	145.51	196.00	45.82	13.13	102.79	328.01	45.94	72.00	2.50	1.07	0.04	219.99	0.23	A300A
2016217	16:44	24.94	142.01	510.00	45.82	13.13	95.67	326.83	45.25	73.00	3.50	1.05	0.02	211.97	0.25	A300A
2016238	17:24	30.61	137.85	456.00	45.82	13.13	88.93	324.91	45.13	72.00	3.25	1.32	0.04	212.36	0.37	A300A
2016244	03:31	-3.68	152.79	476.00	45.82	13.13	125.28	326.32	52.31	68.00	21.25	0.70	0.29	232.07	1.25	A300A
2016267	00:34	34.46	141.64	10.00	45.82	13.13	87.55	326.79	40.33	86.00	14.50	1.38	0.29	213.45	2.01	A300A
2016283	15:06	1.77	127.45	128.00	45.82	13.13	105.42	318.62	70.88	26.00	18.50	0.70	0.24	57.86	2.65	A300A
2016293	00:46	-4.86	108.16	614.00	45.82	13.13	96.97	315.43	89.79	25.00	6.75	1.25	0.14	80.11	1.44	A300A
2016329	19:03	11.91	-88.90	10.00	45.82	13.13	89.77	43.16	286.81	68.00	19.75	0.68	0.31	96.83	0.69	A300A
2017010	06:33	4.48	122.62	627.00	45.82	13.13	100.21	317.94	72.74	47.00	8.75	0.88	0.19	71.93	1.34	A300A
2017140	01:26	9.38	123.95	533.00	45.82	13.13	97.44	318.76	68.47	48.00	7.75	1.38	0.11	80.01	0.99	A300A
2017173	12:51	13.72	-90.97	38.00	45.82	13.13	89.83	42.71	289.51	61.00	8.75	0.85	0.10	101.36	0.39	A300A
2017196	12:32	0.41	121.98	113.00	45.82	13.13	102.76	317.27	76.00	21.00	23.50	0.80	0.23	65.15	2.21	A300A
2017266	13:13	16.63	-95.08	10.00	45.82	13.13	90.35	41.63	294.40	62.00	19.75	0.57	0.21	105.59	1.60	A300A
2018084	20:34	-6.63	129.82	169.00	45.82	13.13	113.21	317.17	74.94	60.00	21.50	1.12	0.76	82.90	0.67	A300A
2018092	14:00	-20.66	-63.01	559.00	45.82	13.13	95.38	43.00	245.95	73.00	5.00	0.57	0.16	241.19	0.16	A300A
2018229	15:55	-7.37	119.80	529.00	45.82	13.13	106.86	315.57	83.14	68.00	12.00	1.10	0.29	91.67	0.66	A300A
2018240	22:55	16.80	146.84	55.00	45.82	13.13	104.93	328.46	45.77	67.00	7.50	1.02	0.14	222.44	0.81	A300A
2018271	10:22	-0.18	119.84	10.00	45.82	13.13	101.73	316.84	78.01	46.00	16.50	0.72	0.23	80.69	0.54	A300A
2017049	12:30	-23.86	-66.66	222.00	46.48	10.37	98.55	42.92	244.45	62.00	13.00	1.65	0.60	232.12	0.62	BRMO
2017105	08:39	-23.27	-67.72	155.00	46.48	10.37	98.79	43.18	245.58	66.00	26.00	1.15	0.99	233.73	1.09	BRMO
2017140	01:26	9.38	123.95	533.00	46.48	10.37	98.96	320.12	66.29	51.00	13.75	1.00	0.38	63.45	1.22	BRMO
2017243	17:26	-1.16	99.69	43.00	46.48	10.37	90.36	316.29	91.29	68.00	22.50	1.72	0.81	83.20	1.56	BRMO
2018240	22:55	16.80	146.84	55.00	46.48	10.37	105.80	330.35	43.29	53.00	24.75	0.75	0.98	219.03	0.83	BRMO
2015135	20:46	-2.54	102.22	151.00	45.62	10.52	92.99	315.37	90.56	17.00	16.50	1.42	0.37	81.36	0.98	SALO
2015155	23:35	5.99	116.54	10.00	45.62	10.52	96.82	317.20	74.33	64.00	6.00	2.05	0.45	80.01	1.48	SALO
2015261	09:30	-32.37	-72.23	8.00	45.62	10.52	107.74	46.97	241.81	27.00	10.00	1.12	0.18	76.97	1.30	SALO
2015311	07:51	-30.88	-71.45	46.00	45.62	10.52	106.23	46.37	242.46	72.00	7.25	2.02	0.68	242.69	0.66	SALO
2016153	23:16	-2.10	100.67	50.00	45.62	10.52	91.59	315.40	91.36	23.00	2.75	1.17	0.06	85.43	0.08	SALO
2016211	21:38	18.54	145.51	196.00	45.62	10.52	104.22	329.20	43.81	81.00	17.00	0.85	0.29	230.20	0.71	SALO
2016217	14:35	-22.33	-66.01	270.00	45.62	10.52	96.76	43.42	245.06	83.00	18.50	1.02	0.45	252.72	0.52	SALO
2016217	16:44	24.94	142.01	510.00	45.62	10.52	97.09	328.01	43.26	66.00	13.25	1.42	0.21	212.39	0.70	SALO
2016238	17:24	30.61	137.85	456.00	45.62	10.52	90.34	326.08	43.28	79.00	4.25	1.35	0.07	225.65	0.53	SALO

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2017010	06:33	4.48	122.62	627.00	45.62	10.52	102.00	318.33	70.80	45.00	13.50	1.40	0.39	70.98	2.19	SALO
2017243	17:26	-1.16	99.69	43.00	45.62	10.52	90.24	315.43	91.40	44.00	25.75	0.90	0.49	97.99	0.48	SALO
2016139	08:17	0.43	-79.79	16.00	45.76	10.12	89.63	44.43	270.23	79.00	21.50	0.75	0.41	96.61	0.64	ZONE
2016211	21:38	18.54	145.51	196.00	45.76	10.12	104.31	329.51	43.44	-81.00	16.50	0.80	0.22	46.27	1.07	ZONE
2016217	16:44	24.94	142.01	510.00	45.76	10.12	97.17	328.32	42.93	76.00	5.50	1.07	0.07	218.46	0.40	ZONE
2016325	21:17	-31.62	-68.63	108.00	45.76	10.12	104.84	45.25	239.95	66.00	12.25	2.65	0.86	236.13	1.14	ZONE
2016329	19:03	11.91	-88.90	10.00	45.76	10.12	87.76	43.78	284.67	40.00	22.50	0.55	0.61	106.84	0.28	ZONE
2017196	12:32	0.41	121.98	113.00	45.76	10.12	104.81	317.78	73.73	40.00	11.50	1.52	0.28	86.41	2.51	ZONE
2017243	17:26	-1.16	99.69	43.00	45.76	10.12	90.52	315.57	91.11	50.00	6.75	1.92	0.11	94.11	1.42	ZONE
2018092	14:00	-20.66	-63.01	559.00	45.76	10.12	93.45	42.15	243.87	-48.00	4.00	0.65	0.06	68.17	0.36	ZONE
2018271	10:22	-0.18	119.84	10.00	45.76	10.12	103.80	317.27	75.76	40.00	11.50	1.15	0.17	78.63	0.36	ZONE
2016153	23:16	-2.10	100.67	50.00	45.31	11.17	91.12	315.11	91.83	47.00	5.50	1.27	0.06	96.63	0.35	OPPE
2016207	17:46	-26.11	-70.51	72.00	45.31	11.17	102.61	45.69	245.73	-14.00	2.25	1.62	0.28	69.63	0.23	OPPE
2017243	17:26	-1.16	99.69	43.00	45.31	11.17	89.77	315.13	91.86	49.00	11.25	1.15	0.16	99.45	1.42	OPPE
2018229	15:55	-7.37	119.80	529.00	45.31	11.17	108.29	315.23	81.85	59.00	8.25	1.23	0.20	86.79	1.07	OPPE
2015161	14:12	-22.40	-68.43	124.00	45.87	8.77	97.34	43.39	245.49	70.00	11.50	1.35	0.42	230.13	0.83	VARE
2015184	07:03	10.17	125.89	32.00	45.87	8.77	100.84	320.71	63.15	58.00	2.50	3.42	0.22	70.23	0.33	VARE
2016207	17:46	-26.11	-70.51	72.00	45.87	8.77	101.32	44.44	244.28	-69.00	10.00	0.82	0.11	57.60	0.29	VARE
2016217	16:44	24.94	142.01	510.00	45.87	8.77	97.73	329.09	41.87	65.00	4.50	0.72	0.07	220.95	0.17	VARE
2016234	04:05	-55.31	-31.75	12.00	45.87	8.77	106.46	28.25	202.79	75.00	8.25	1.17	0.13	197.26	1.59	VARE
2016293	00:46	-4.86	108.16	614.00	45.87	8.77	100.01	315.57	86.65	74.00	5.25	2.42	0.45	93.04	3.51	VARE
2017105	08:39	-23.27	-67.72	155.00	45.87	8.77	97.52	43.26	244.41	82.00	16.00	0.68	0.24	233.00	0.62	VARE
2017196	12:32	0.41	121.98	113.00	45.87	8.77	105.68	318.16	72.66	55.00	10.25	1.82	0.36	77.87	1.40	VARE
2018229	15:55	-7.37	119.80	529.00	45.87	8.77	109.87	316.10	79.86	72.00	4.50	2.45	0.59	82.15	1.02	VARE
2018231	15:16	-8.32	116.63	21.00	45.87	8.77	108.36	315.52	82.94	74.00	6.25	1.88	0.60	89.87	0.92	VARE
2018236	09:24	-11.04	-70.83	630.00	45.87	8.77	90.70	43.42	254.95	-62.00	24.75	0.52	0.96	65.57	0.94	VARE
2018240	22:55	16.80	146.84	55.00	45.87	8.77	107.00	330.77	42.01	78.00	23.75	0.32	0.79	220.67	1.91	VARE
2015351	20:09	15.80	-93.63	85.00	48.99	8.49	85.96	40.21	289.34	35.00	17.75	1.60	0.84	109.98	0.59	A126A
2019113	05:57	11.76	125.23	56.00	48.88	6.38	99.20	324.15	60.33	-33.00	5.25	1.60	0.32	72.06	0.87	A151A
2017105	08:39	-23.27	-67.72	155.00	48.00	5.73	96.61	40.40	242.55	-25.00	4.25	1.90	0.58	57.71	0.84	A157A
2016153	23:16	-2.10	100.67	50.00	48.01	6.35	94.45	317.81	88.20	87.00	0.75	2.35	0.09	256.50	0.08	A158A
2016157	16:45	-4.59	125.63	429.00	48.01	6.35	112.72	320.58	70.50	83.00	18.75	1.52	0.93	247.91	1.81	A158A
2016159	11:11	18.36	-105.17	10.00	48.01	6.35	90.11	38.66	297.93	45.00	21.75	1.50	0.68	125.56	0.22	A158A
2016159	19:35	1.28	126.37	31.00	48.01	6.35	108.63	322.15	65.99	80.00	9.50	1.07	0.23	234.94	1.24	A158A
2016211	21:38	18.54	145.51	196.00	48.01	6.35	104.35	333.05	39.82	-73.00	12.50	1.17	0.31	38.74	0.49	A158A
2016238	17:24	30.61	137.85	456.00	48.01	6.35	90.47	329.80	40.22	-62.00	31.25	1.27	0.94	49.57	1.56	A158A
2017196	12:32	0.41	121.98	113.00	48.01	6.35	106.57	320.83	70.16	76.00	26.75	0.97	0.49	241.23	0.68	A158A
2018084	20:34	-6.63	129.82	169.00	48.01	6.35	116.93	321.08	68.35	-70.00	15.75	0.85	0.16	70.15	1.04	A158A
2018229	15:55	-7.37	119.80	529.00	48.01	6.35	111.07	318.69	77.19	-78.00	14.75	1.02	0.30	69.21	2.48	A158A
2018250	02:32	-2.35	-78.90	93.00	48.01	6.35	88.55	42.02	264.91	21.00	14.25	0.72	0.21	88.01	0.14	A158A
2016267	23:13	6.57	126.49	65.00	47.69	5.05	105.44	323.27	61.57	-76.00	25.50	1.85	0.47	69.42	4.36	A160A
2017196	12:32	0.41	121.98	113.00	47.69	5.05	107.50	320.83	69.20	67.00	24.50	2.88	0.62	240.49	3.18	A160A
2017283	06:52	-18.57	-69.75	85.00	47.20	5.20	93.64	41.29	246.62	-1.00	14.75	0.68	0.17	65.39	1.09	A163A
2018092	14:00	-20.66	-63.01	559.00	47.20	5.20	91.12	39.30	240.43	-10.00	27.00	0.90	0.97	64.47	1.12	A163A
2016201	05:38	-30.25	-71.97	8.00	46.33	6.68	104.09	44.46	241.01	41.00	12.25	1.88	0.44	70.52	3.95	A173A
2016207	17:46	-26.11	-70.51	72.00	46.33	6.68	100.22	43.36	242.98	1.00	25.25	1.23	0.90	66.23	0.91	A173A
2016211	21:38	18.54	145.51	196.00	46.33	6.68	105.49	331.75	40.40	-5.00	22.00	0.52	0.47	48.55	0.51	A173A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016213	11:53	-56.26	-27.54	99.00	46.33	6.68	106.18	23.94	199.07	-44.00	2.75	1.38	0.07	18.26	0.53	A173A
2016217	14:35	-22.33	-66.01	270.00	46.33	6.68	94.67	41.59	242.49	44.00	18.00	1.32	0.60	69.51	2.02	A173A
2016217	16:44	24.94	142.01	510.00	46.33	6.68	98.34	330.50	40.17	20.00	8.25	0.95	0.12	52.51	0.98	A173A
2016232	07:52	-55.29	-31.88	10.00	46.33	6.68	106.35	26.75	201.81	-1.00	8.50	1.38	0.28	27.03	0.69	A173A
2016238	17:24	30.61	137.85	456.00	46.33	6.68	91.60	328.55	40.49	26.00	19.75	1.05	0.36	54.36	2.87	A173A
2016293	00:45	-4.86	108.16	614.00	46.33	6.68	101.43	316.15	85.04	1.00	5.00	2.52	0.41	76.80	1.31	A173A
2017010	06:33	4.48	122.62	627.00	46.33	6.68	104.26	319.99	67.67	6.00	11.50	1.67	0.57	79.20	1.27	A173A
2017105	08:39	-23.27	-67.72	155.00	46.33	6.68	96.42	42.19	243.04	55.00	22.50	1.40	0.93	67.11	0.63	A173A
2017130	23:43	-56.41	-25.74	15.00	46.33	6.68	105.92	22.73	198.05	-9.00	3.00	1.85	0.09	26.23	0.48	A173A
2017196	12:32	0.41	121.98	113.00	46.33	6.68	106.92	319.09	70.90	13.00	13.50	1.82	0.57	81.67	4.66	A173A
2017263	16:57	37.98	144.66	11.00	46.33	6.68	87.99	332.35	31.96	-13.00	13.25	1.02	0.14	35.32	0.92	A173A
2018084	20:34	-6.63	129.82	169.00	46.33	6.68	117.32	319.23	69.44	4.00	4.75	2.25	0.41	82.59	0.77	A173A
2018092	14:00	-20.66	-63.01	559.00	46.33	6.68	91.59	40.55	241.47	-11.00	5.25	1.30	0.26	61.38	0.64	A173A
2018229	15:55	-7.37	119.80	529.00	46.33	6.68	111.21	316.88	78.08	6.00	23.00	1.32	0.74	77.28	1.59	A173A
2016159	19:35	1.28	126.37	31.00	48.83	5.92	108.55	323.06	65.38	70.00	3.00	2.47	0.27	235.34	0.71	A210A
2016211	21:38	18.54	145.51	196.00	48.83	5.92	103.90	333.81	39.32	-89.00	8.25	0.90	0.10	38.56	0.25	A210A
2016217	14:35	-22.33	-66.01	270.00	48.83	5.92	95.38	39.13	242.15	78.00	24.25	0.70	0.54	231.59	2.10	A210A
2016217	16:44	24.94	142.01	510.00	48.83	5.92	96.74	332.51	39.35	68.00	11.00	0.75	0.16	220.10	0.53	A210A
2016238	17:24	30.61	137.85	456.00	48.83	5.92	90.02	330.55	39.90	65.00	3.00	0.97	0.04	213.71	0.16	A210A
2016293	00:45	-4.86	108.16	614.00	48.83	5.92	101.70	318.74	83.97	1.00	19.75	1.15	0.39	81.57	0.41	A210A
2017105	08:39	-23.27	-67.72	155.00	48.83	5.92	97.10	39.72	242.77	84.00	12.50	1.07	0.31	239.05	1.58	A210A
2017196	12:32	0.41	121.98	113.00	48.83	5.92	106.56	321.73	69.58	-52.00	17.50	0.60	0.17	70.51	1.93	A210A
2017223	05:48	14.01	120.74	172.00	48.83	5.92	95.09	322.97	62.19	68.00	11.00	1.38	0.88	230.72	2.83	A210A
2018092	14:00	-20.66	-63.01	559.00	48.83	5.92	92.34	38.11	241.00	-57.00	13.75	0.68	0.17	56.58	0.61	A210A
2016153	23:16	-2.10	100.67	50.00	48.41	6.62	94.25	318.20	88.37	86.00	3.50	1.90	0.34	97.25	0.58	A211A
2016217	16:44	24.94	142.01	510.00	48.41	6.62	96.77	331.89	39.94	60.00	5.50	1.02	0.24	225.66	0.34	A211A
2016238	17:24	30.61	137.85	456.00	48.41	6.62	90.05	329.93	40.42	79.00	5.25	1.17	0.07	220.81	0.84	A211A
2017052	14:29	-19.28	-63.90	595.00	48.41	6.62	92.00	38.94	243.01	87.00	16.50	0.62	0.25	247.06	0.64	A211A
2017283	06:52	-18.57	-69.75	85.00	48.41	6.62	95.00	40.54	247.73	68.00	3.75	1.72	0.29	234.56	0.53	A211A
2016211	21:38	18.54	145.51	196.00	47.50	5.48	105.11	333.18	39.15	-69.00	21.75	0.85	0.54	38.30	0.74	A213A
2016238	17:24	30.61	137.85	456.00	47.50	5.48	91.24	329.93	39.58	-73.00	18.25	1.12	0.36	49.51	2.74	A213A
2018092	14:00	-20.66	-63.01	559.00	47.50	5.48	91.43	39.13	240.64	59.00	1.75	1.60	0.09	75.02	0.36	A213A
2018250	02:32	-2.35	-78.90	93.00	47.50	5.48	87.91	42.48	264.28	86.00	4.75	1.75	0.41	96.72	0.50	A213A
2016207	17:46	-26.11	-70.51	72.00	46.36	5.80	99.70	43.05	242.40	69.00	23.25	3.10	0.67	242.83	0.58	A214A
2016211	21:38	18.54	145.51	196.00	46.36	5.80	105.85	332.26	39.63	31.00	3.00	1.42	0.23	43.22	0.14	A214A
2016217	14:35	-22.33	-66.01	270.00	46.36	5.80	94.15	41.27	241.88	69.00	26.50	3.42	0.81	240.56	3.03	A214A
2016217	16:44	24.94	142.01	510.00	46.36	5.80	98.70	331.00	39.46	8.00	13.50	0.52	0.12	38.55	0.18	A214A
2016232	07:52	-55.29	-31.88	10.00	46.36	5.80	106.15	26.15	201.35	-16.00	9.50	1.05	0.16	25.76	0.45	A214A
2016238	17:24	30.61	137.85	456.00	46.36	5.80	91.97	329.03	39.83	34.00	2.25	1.48	0.18	45.61	0.18	A214A
2016293	00:45	-4.86	108.16	614.00	46.36	5.80	102.03	316.24	84.39	52.00	26.00	0.65	0.84	90.70	3.46	A214A
2017049	12:30	-23.86	-66.66	222.00	46.36	5.80	95.69	41.57	241.32	-14.00	7.75	2.15	0.59	62.82	1.24	A214A
2017283	06:52	-18.57	-69.75	85.00	46.36	5.80	93.69	42.22	247.00	79.00	9.50	1.32	0.48	246.56	0.89	A214A
2015150	11:43	27.84	140.49	664.00	46.04	5.57	95.86	330.28	39.08	42.00	20.25	1.57	0.54	50.69	0.42	OG35
2016201	05:38	-30.25	-71.97	8.00	46.04	5.57	103.28	44.33	240.24	83.00	20.75	0.75	0.40	242.63	1.26	OG35
2017052	14:29	-19.28	-63.90	595.00	46.04	5.57	90.27	40.71	242.21	79.00	3.75	2.77	0.59	251.55	0.49	OG35
2017108	18:09	-2.71	-75.30	14.00	46.04	5.57	85.60	43.61	261.56	85.00	8.25	2.02	0.39	246.74	1.80	OG35
2017223	05:48	14.01	120.74	172.00	46.04	5.57	96.60	320.61	62.17	37.00	10.25	1.90	0.30	71.02	3.61	OG35

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2017225	03:28	-3.77	101.62	31.00	46.04	5.57	96.90	315.76	88.27	4.00	12.50	1.75	0.59	81.16	1.32	OG35
2017263	16:57	37.98	144.66	11.00	46.04	5.57	88.64	332.85	31.18	4.00	19.50	0.52	0.33	37.67	0.62	OG35
2018014	09:38	-15.77	-74.71	39.00	46.04	5.57	94.62	43.53	252.20	-27.00	21.50	0.92	0.54	82.10	0.53	OG35
2018363	03:59	5.90	126.92	60.00	46.04	5.57	106.69	321.61	62.49	-11.00	9.00	1.80	0.53	64.71	1.35	OG35
2019005	19:45	-8.14	-71.59	570.00	46.04	5.57	87.00	42.85	255.16	-28.00	25.00	0.92	0.96	81.64	0.51	OG35
2016153	23:16	-2.10	100.67	50.00	45.88	5.89	94.83	315.68	88.03	-63.00	24.50	0.57	0.98	94.63	0.92	OGMY
2016207	17:46	-26.11	-70.51	72.00	45.88	5.89	99.53	43.51	242.39	69.00	2.75	2.55	0.47	240.14	0.54	OGMY
2016211	21:38	18.54	145.51	196.00	45.88	5.89	106.18	331.89	39.79	-30.00	12.75	0.92	0.35	44.73	0.20	OGMY
2016217	16:44	24.94	142.01	510.00	45.88	5.89	99.04	330.64	39.58	-33.00	4.00	1.38	0.18	40.31	0.11	OGMY
2016293	00:45	-4.86	108.16	614.00	45.88	5.89	102.01	315.74	84.56	-84.00	23.75	1.00	0.94	81.80	0.97	OGMY
2017052	14:29	-19.28	-63.90	595.00	45.88	5.89	90.39	40.96	242.43	81.00	23.50	1.15	0.54	247.43	1.14	OGMY
2017223	05:48	14.01	120.74	172.00	45.88	5.89	96.48	320.36	62.43	3.00	20.75	0.55	0.37	73.32	0.70	OGMY
2017283	06:51	-18.57	-69.75	85.00	45.88	5.89	93.56	42.69	247.03	79.00	22.75	1.75	0.64	251.15	0.76	OGMY
2018092	13:59	-20.66	-63.01	559.00	45.88	5.89	90.89	40.68	240.90	73.00	19.50	1.40	0.61	245.60	0.67	OGMY
2019005	19:45	-8.14	-71.59	570.00	45.88	5.89	87.18	43.06	255.40	77.00	8.00	2.38	0.59	242.54	1.05	OGMY
2019060	09:10	-14.71	-70.15	267.00	45.88	5.89	91.00	42.69	249.92	-72.00	20.25	0.75	0.79	73.81	0.49	OGMY
2019113	05:57	11.76	125.23	56.00	45.88	5.89	100.97	321.66	60.41	4.00	17.00	1.07	0.34	64.96	0.81	OGMY
2015082	05:11	-18.35	-69.17	130.00	45.61	5.70	92.80	42.72	246.63	-35.00	7.25	1.07	0.29	68.49	0.22	OGSM
2015150	11:43	27.84	140.49	664.00	45.61	5.70	96.15	329.93	39.20	-20.00	22.50	0.65	0.46	37.61	0.75	OGSM
2015150	19:09	30.79	142.97	6.00	45.61	5.70	94.64	331.46	35.86	19.00	19.75	0.72	0.35	45.77	0.35	OGSM
2015244	15:45	31.18	141.60	8.00	45.61	5.70	93.73	330.69	36.70	18.00	11.50	0.88	0.21	43.01	0.37	OGSM
2015330	06:05	-9.18	-71.26	602.00	45.61	5.70	87.51	43.19	254.32	-45.00	11.25	1.00	0.31	63.81	0.79	OGSM
2016153	23:16	-2.10	100.67	50.00	45.61	5.70	94.98	315.42	87.92	-75.00	15.75	1.50	0.51	91.84	0.28	OGSM
2016211	21:38	18.54	145.51	196.00	45.61	5.70	106.48	331.81	39.68	-22.00	7.75	0.88	0.12	38.24	0.26	OGSM
2016217	16:44	24.94	142.01	510.00	45.61	5.70	99.33	330.57	39.45	1.00	14.00	0.65	0.11	43.84	0.55	OGSM
2016238	17:24	30.61	137.85	456.00	45.61	5.70	92.60	328.61	39.78	14.00	17.75	0.82	0.87	47.82	1.15	OGSM
2017243	17:26	-1.16	99.69	43.00	45.61	5.70	93.62	315.44	87.96	-65.00	22.00	1.30	0.60	90.25	2.68	OGSM
2017283	06:51	-18.57	-69.75	85.00	45.61	5.70	93.33	42.89	246.88	-31.00	25.25	1.45	0.92	68.99	0.78	OGSM
2018236	09:23	-11.04	-70.83	630.00	45.61	5.70	88.56	43.07	252.75	-29.00	24.75	1.92	0.77	71.76	0.55	OGSM
2018305	22:39	-19.58	-69.27	102.00	45.61	5.70	93.76	42.80	245.86	-37.00	20.00	1.10	0.46	65.90	0.24	OGSM
2019006	17:47	2.26	126.76	43.00	45.61	5.70	109.51	320.36	65.24	42.00	16.75	0.85	0.35	61.30	1.32	OGSM
2016217	16:44	24.94	142.01	510.00	46.76	5.92	98.34	331.19	39.52	43.00	4.25	2.60	0.36	53.32	0.83	RIVEL
2017196	12:32	0.41	121.98	113.00	46.76	5.92	107.27	319.70	70.17	1.00	3.75	1.38	0.28	80.34	0.09	RIVEL
2017283	06:52	-18.57	-69.75	85.00	46.76	5.92	93.93	41.89	247.11	76.00	2.75	3.08	0.39	249.79	0.48	RIVEL
2018092	14:00	-20.66	-63.01	559.00	46.76	5.92	91.33	39.92	240.94	-7.00	24.75	0.72	0.99	72.15	0.41	RIVEL
2015042	19:17	-23.11	-66.69	223.00	48.41	7.35	97.03	40.20	243.12	-41.00	19.25	0.57	0.35	74.67	0.20	WLS
2015076	22:32	1.67	126.52	44.00	48.41	7.35	107.64	322.38	66.33	54.00	22.75	0.55	0.96	80.13	1.16	WLS
2015082	05:11	-18.35	-69.17	130.00	48.41	7.35	94.93	40.56	247.98	89.00	3.00	1.80	0.36	259.91	0.15	WLS
2015232	11:20	0.49	126.59	46.00	48.41	7.35	108.61	322.16	67.03	48.00	13.25	0.38	0.11	78.94	0.39	WLS
2016153	23:16	-2.10	100.67	50.00	48.41	7.35	93.76	318.20	88.92	61.00	12.50	1.27	0.19	98.95	0.29	WLS
2016159	11:11	18.36	-105.17	10.00	48.41	7.35	90.51	37.99	298.68	38.00	4.50	2.30	0.54	117.64	0.74	WLS
2016211	21:38	18.54	145.51	196.00	48.41	7.35	103.60	332.79	40.63	65.00	4.75	1.40	0.14	216.90	0.37	WLS
2016217	16:44	24.94	142.01	510.00	48.41	7.35	96.45	331.51	40.53	64.00	2.75	1.48	0.11	223.15	0.24	WLS
2016238	17:24	30.61	137.85	456.00	48.41	7.35	89.72	329.56	40.97	75.00	4.00	1.60	0.09	225.33	0.59	WLS
2016293	00:46	-4.86	108.16	614.00	48.41	7.35	100.79	318.22	85.14	73.00	19.00	0.95	0.49	97.92	1.06	WLS
2017105	08:39	-23.27	-67.72	155.00	48.41	7.35	97.77	40.52	243.74	-51.00	27.75	1.45	0.89	69.10	1.98	WLS
2017243	17:26	-1.16	99.69	43.00	48.41	7.35	92.42	318.22	89.03	65.00	8.50	1.77	0.24	97.26	1.13	WLS

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2018305	22:39	-19.58	-69.27	102.00	48.41	7.35	95.92	40.67	247.25	73.00	3.25	2.15	0.35	241.80	0.63	WLS
2016329	19:03	11.91	-88.90	10.00	48.83	7.36	85.22	41.23	282.50	70.00	19.50	1.30	0.49	113.85	2.03	CIEL
2017010	06:33	4.48	122.62	627.00	48.83	7.36	102.88	322.19	67.66	81.00	2.25	1.98	0.35	254.30	0.46	CIEL
2017243	17:26	-1.16	99.69	43.00	48.83	7.36	92.40	318.64	89.02	42.00	3.25	1.08	0.04	94.24	0.25	CIEL
2017283	06:52	-18.57	-69.75	85.00	48.83	7.36	95.61	40.33	248.30	76.00	24.75	2.03	0.63	248.48	0.58	CIEL
2018092	14:00	-20.66	-63.01	559.00	48.83	7.36	93.18	38.56	242.06	71.00	3.75	2.00	0.56	243.93	0.54	CIEL
2018209	23:07	-8.24	116.51	14.00	48.83	7.36	108.75	318.76	80.91	45.00	15.75	1.02	0.27	88.87	2.24	CIEL
2018231	04:30	-8.34	116.60	16.00	48.83	7.36	108.88	318.75	80.91	65.00	26.00	1.70	0.98	76.60	1.20	CIEL
2018251	07:35	7.24	126.48	10.00	48.83	7.36	103.00	323.67	62.82	21.00	21.50	0.70	0.93	70.43	1.78	CIEL
2018084	20:34	-6.63	129.82	169.00	47.55	11.44	113.84	319.34	72.85	55.00	14.00	1.25	0.29	76.71	1.19	A140A
2018100	10:39	-31.03	-71.53	66.00	47.55	11.44	107.83	44.93	243.50	-4.00	12.50	1.10	0.33	66.05	0.88	A140A
2018200	13:51	17.93	-97.72	48.00	47.55	11.44	89.23	39.79	295.92	-75.00	6.75	0.75	0.26	296.52	0.22	A140A
2018209	23:07	-8.24	116.51	14.00	47.55	11.44	106.21	317.07	84.45	78.00	8.75	2.02	0.87	88.46	1.12	A140A
2018221	05:45	-8.31	116.23	15.00	47.55	11.44	106.07	317.03	84.71	76.00	8.25	1.72	0.43	95.97	1.46	A140A
2018229	15:55	-7.37	119.80	529.00	47.55	11.44	107.78	317.53	81.33	57.00	18.50	1.20	0.47	81.41	2.26	A140A
2018231	15:16	-8.32	116.63	21.00	47.55	11.44	106.35	317.06	84.41	57.00	8.00	1.70	0.27	86.52	1.89	A140A
2018236	09:24	-11.04	-70.83	630.00	47.55	11.44	92.89	42.23	256.92	14.00	15.25	0.32	0.09	72.72	0.14	A140A
2018240	22:55	16.80	146.84	55.00	47.55	11.44	104.52	330.58	44.00	71.00	2.00	1.30	0.08	231.12	0.62	A140A
2018250	02:32	-2.35	-78.90	93.00	47.55	11.44	91.94	42.67	268.67	40.00	18.75	0.52	0.26	85.80	0.18	A140A
2016159	11:11	18.36	-105.17	10.00	48.10	12.08	93.39	36.65	302.24	-82.00	21.50	2.05	0.66	294.66	1.16	A144A
2018231	15:16	-8.32	116.63	21.00	48.10	12.08	105.86	317.58	84.75	68.00	4.00	2.25	0.33	83.44	1.24	A144A
2018236	09:24	-11.04	-70.83	630.00	48.10	12.08	93.44	41.79	257.42	-2.00	18.25	0.80	0.36	75.10	0.18	A144A
2018240	22:55	16.80	146.84	55.00	48.10	12.08	103.82	330.65	44.46	71.00	10.75	1.35	0.28	225.56	4.13	A144A
2016153	23:16	-2.10	100.67	50.00	47.75	11.85	90.74	317.57	92.28	81.00	4.75	1.45	0.19	103.42	0.50	A141A
2016238	17:24	30.61	137.85	456.00	47.75	11.85	88.17	326.89	44.25	-85.00	8.75	1.17	0.14	52.68	1.60	A141A
2016329	19:03	11.91	-88.90	10.00	47.75	11.85	88.39	41.55	285.85	61.00	8.75	0.80	0.06	108.09	0.18	A141A
2017181	22:49	-0.28	-80.49	13.00	47.75	11.85	91.78	42.42	271.54	24.00	9.25	1.57	0.43	93.51	1.80	A141A
2017196	12:32	0.41	121.98	113.00	47.75	11.85	103.12	319.42	74.59	68.00	22.00	0.92	0.47	82.75	0.88	A141A
2017243	17:26	-1.16	99.69	43.00	47.75	11.85	89.39	317.60	92.37	80.00	6.50	1.77	0.25	105.59	1.14	A141A
2018021	01:26	-18.88	-69.44	116.00	47.75	11.85	98.08	42.35	250.97	72.00	24.25	1.40	0.72	86.41	2.81	A141A
2018200	13:51	17.93	-97.72	48.00	47.75	11.85	89.39	39.48	296.22	40.00	16.25	1.67	0.64	113.00	2.71	A141A
2018217	12:06	-8.26	116.44	34.00	47.75	11.85	105.88	317.24	84.77	76.00	5.00	1.70	0.38	90.81	1.03	A141A
2018221	05:45	-8.31	116.23	15.00	47.75	11.85	105.77	317.22	84.96	57.00	25.25	1.35	0.94	77.09	3.05	A141A
2018229	15:55	-7.37	119.80	529.00	47.75	11.85	107.48	317.70	81.58	72.00	23.25	1.85	0.82	82.10	1.54	A141A
2018240	22:55	16.80	146.84	55.00	47.75	11.85	104.18	330.51	44.32	79.00	6.00	1.00	0.14	233.25	0.85	A141A
2018250	02:32	-2.35	-78.90	93.00	47.75	11.85	92.23	42.47	268.98	21.00	22.50	0.65	0.54	84.30	0.47	A141A
2016153	23:16	-2.10	100.67	50.00	47.87	12.40	90.38	317.70	92.68	88.00	2.25	2.40	0.15	100.47	0.23	A145A
2016159	11:11	18.36	-105.17	10.00	47.87	12.40	93.70	36.74	302.47	48.00	14.25	0.77	0.26	106.89	0.30	A145A
2016159	19:35	1.28	126.37	31.00	47.87	12.40	104.90	320.46	70.96	73.00	9.00	0.97	0.33	240.73	0.55	A145A
2018200	13:51	17.93	-97.72	48.00	47.87	12.40	89.67	39.22	296.62	71.00	11.50	1.17	0.17	124.44	0.87	A145A
2018231	15:16	-8.32	116.63	21.00	47.87	12.40	105.67	317.32	85.05	62.00	1.25	1.72	0.07	81.58	0.14	A145A
2016106	14:31	13.40	-92.37	22.00	47.68	11.00	88.99	41.11	288.76	83.00	29.25	1.02	0.52	121.69	0.83	A143A
2016139	08:17	0.43	-79.79	16.00	47.68	11.00	90.22	42.50	270.87	73.00	21.50	1.32	0.66	97.03	1.44	A143A
2016153	23:16	-2.10	100.67	50.00	47.68	11.00	91.31	317.48	91.66	61.00	14.25	1.25	0.23	94.63	0.82	A143A
2016157	16:45	-4.59	125.63	429.00	47.68	11.00	109.83	319.23	74.43	41.00	29.25	1.85	0.52	74.14	2.92	A143A
2016159	11:11	18.36	-105.17	10.00	47.68	11.00	93.00	37.39	301.40	51.00	11.75	1.62	0.59	128.44	0.94	A143A
2016159	19:35	1.28	126.37	31.00	47.68	11.00	105.85	320.61	69.89	58.00	22.50	0.90	0.89	73.67	1.96	A143A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Phi	dPhi	Delay Time	d(Delay Time)	Source Polarization	d(Source Polarization)	Station
2016201	05:38	-30.25	-71.97	8.00	47.68	11.00	107.34	44.63	244.12	10.00	21.00	0.57	0.47	65.14	1.04	A143A
2016207	17:46	-26.11	-70.51	72.00	47.68	11.00	103.47	43.41	246.13	56.00	8.75	1.35	0.46	67.13	0.38	A143A
2016211	21:38	18.54	145.51	196.00	47.68	11.00	102.50	330.42	43.87	79.00	22.00	0.70	0.52	226.76	1.00	A143A
2016238	17:24	30.61	137.85	456.00	47.68	11.00	88.62	327.26	43.64	72.00	16.00	1.25	0.32	223.91	2.31	A143A
2016329	19:03	11.91	-88.90	10.00	47.68	11.00	87.86	41.77	285.24	60.00	18.75	1.00	0.38	109.99	1.95	A143A
2017010	06:33	4.48	122.62	627.00	47.68	11.00	101.01	320.21	70.78	63.00	5.25	2.10	0.34	81.04	0.97	A143A
2017105	08:39	-23.27	-67.72	155.00	47.68	11.00	99.68	42.24	246.19	53.00	25.00	1.15	0.97	66.07	0.73	A143A
2017130	23:42	-56.41	-25.74	15.00	47.68	11.00	108.17	25.18	200.49	-79.00	7.75	1.30	0.22	35.49	0.48	A143A
2017173	12:51	13.72	-90.97	38.00	47.68	11.00	87.85	41.41	287.94	38.00	13.75	1.20	0.37	101.85	0.62	A143A
2017196	12:32	0.41	121.98	113.00	47.68	11.00	103.69	319.51	73.95	41.00	26.75	0.95	0.56	71.30	3.58	A143A
2017223	05:48	14.01	120.74	172.00	47.68	11.00	92.53	320.46	66.14	64.00	5.50	1.38	0.33	78.23	1.00	A143A
2017243	17:26	-1.16	99.69	43.00	47.68	11.00	89.96	317.51	91.75	71.00	8.25	1.42	0.17	106.06	1.68	A143A
2017266	10:58	15.49	-94.43	53.00	47.68	11.00	88.72	40.65	291.63	-74.00	7.75	1.62	0.43	300.71	1.10	A143A
2017283	06:52	-18.57	-69.75	85.00	47.68	11.00	97.49	42.27	250.79	50.00	25.75	0.92	0.98	73.52	2.06	A143A
2018014	09:37	-15.77	-74.71	39.00	47.68	11.00	98.65	42.97	256.22	27.00	24.50	0.77	0.87	78.48	2.05	A143A
2018084	20:34	-6.63	129.82	169.00	47.68	11.00	114.09	319.57	72.44	60.00	19.25	1.70	0.95	70.90	2.11	A143A
2018181	04:16	19.02	-105.12	15.00	47.68	11.00	92.44	37.39	301.77	54.00	5.00	1.27	0.24	126.95	0.90	A143A
2018200	13:51	17.93	-97.72	48.00	47.68	11.00	88.91	39.80	295.60	38.00	5.75	2.17	0.40	111.62	1.38	A143A
2018209	23:07	-8.24	116.51	14.00	47.68	11.00	106.49	317.23	84.08	36.00	25.50	1.42	0.87	77.78	2.12	A143A
2018217	12:06	-8.26	116.44	34.00	47.68	11.00	106.45	317.22	84.15	53.00	20.50	1.05	0.47	86.36	2.54	A143A
2018229	15:55	-7.37	119.80	529.00	47.68	11.00	108.05	317.72	80.95	79.00	6.25	2.17	0.56	91.94	1.18	A143A
2018250	02:32	-2.35	-78.90	93.00	47.68	11.00	91.66	42.53	268.35	62.00	11.25	1.05	0.19	94.83	0.84	A143A
2018305	22:39	-19.58	-69.27	102.00	48.45	8.93	96.90	41.03	248.39	30.00	14.50	0.77	0.18	67.40	0.65	A100A
2019006	17:47	2.26	126.76	43.00	48.45	8.93	106.34	322.16	67.05	68.00	3.75	1.40	0.41	75.42	0.68	A100A
2019020	01:52	-30.04	-71.38	63.00	48.45	8.93	105.93	43.03	242.73	54.00	17.50	1.10	0.38	72.24	1.52	A100A
2019060	09:10	-14.71	-70.15	267.00	48.45	8.93	93.80	40.93	252.21	0.00	24.25	1.07	0.94	66.70	0.74	A100A
2018305	22:39	-19.58	-69.27	102.00	48.12	8.55	96.54	41.25	248.08	51.00	22.25	0.50	0.46	68.02	0.41	A101B
2019006	17:47	2.26	126.76	43.00	48.12	8.55	106.70	321.94	66.83	-2.00	21.50	0.90	0.50	68.53	1.11	A101B
2019053	10:37	-2.19	-77.05	145.00	48.12	8.55	88.67	41.93	265.28	5.00	4.00	1.45	0.34	81.93	0.19	A101B
2019060	09:10	-14.71	-70.15	267.00	48.12	8.55	93.45	41.17	251.92	7.00	17.50	1.20	0.47	71.03	0.61	A101B
2019091	18:59	-18.21	65.37	10.00	48.12	8.55	83.22	325.61	126.76	13.00	20.25	0.52	0.39	48.46	0.72	A101B
2019096	22:15	-6.85	125.02	539.00	48.12	8.55	112.61	319.47	74.34	61.00	24.75	0.72	0.94	99.94	3.34	A101B
2018305	22:39	-19.58	-69.27	102.00	48.14	9.20	96.96	41.39	248.54	15.00	20.50	0.62	0.32	70.11	0.84	A102A
2019005	19:45	-8.14	-71.59	570.00	48.14	9.20	89.90	41.39	257.77	2.00	26.50	0.88	0.98	70.54	2.17	A102A
2019053	10:37	-2.19	-77.05	145.00	48.14	9.20	89.11	41.95	265.76	5.00	2.75	1.60	0.27	83.81	0.41	A102A
2019060	09:10	-14.71	-70.15	267.00	48.14	9.20	93.88	41.28	252.39	38.00	9.25	0.72	0.09	78.05	0.34	A102A
2018305	22:39	-19.58	-69.27	102.00	47.80	9.55	97.05	41.79	248.76	42.00	19.25	1.50	0.64	65.88	3.08	A103D
2018363	03:59	5.90	126.92	60.00	47.80	9.55	103.47	322.00	65.28	55.00	10.50	1.60	0.19	85.21	0.53	A103D
2019005	19:45	-8.14	-71.59	570.00	47.80	9.55	90.06	41.77	258.03	49.00	26.00	1.67	0.57	79.99	2.01	A103D
2019006	17:47	2.26	126.76	43.00	47.80	9.55	106.21	321.36	67.73	38.00	13.25	1.75	0.34	82.16	3.56	A103D
2018363	03:59	5.90	126.92	60.00	48.35	9.83	103.07	322.43	65.39	64.00	2.25	3.08	0.14	74.44	0.18	A108A
2019005	19:45	-8.14	-71.59	570.00	48.35	9.83	90.36	41.27	258.24	66.00	3.25	2.35	0.38	76.33	0.32	A108A
2019020	01:52	-30.04	-71.38	63.00	48.35	9.83	106.42	43.42	243.30	49.00	8.75	1.10	0.22	72.29	0.97	A108A
2019053	10:37	-2.19	-77.05	145.00	48.35	9.83	89.54	41.77	266.23	72.00	4.50	1.95	0.43	86.51	0.27	A108A
2019060	09:10	-14.71	-70.15	267.00	48.35	9.83	94.34	41.21	252.87	63.00	2.25	2.30	0.39	73.75	0.20	A108A
2018363	03:59	5.90	126.92	60.00	48.44	9.46	103.25	322.63	65.07	78.00	17.75	0.85	0.33	237.94	0.55	A109A
2019005	19:45	-8.14	-71.59	570.00	48.44	9.46	90.14	41.13	257.96	57.00	8.75	1.72	0.59	71.07	0.45	A109A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Statio n Lat.	Station Long.	Distan ce	Azimuth	Back Azimut h	Phi	dPhi	Delay Time	d(Del ay Time)	Source Polarizati on	d(Sour ce Polariz ation)	Station
2019053	10:37	-2.19	-77.05	145.00	48.44	9.46	89.30	41.66	265.95	69.00	24.00	0.95	0.97	86.36	1.25	A109A
2019060	09:10	-14.71	-70.15	267.00	48.44	9.46	94.13	41.04	252.60	1.00	19.25	0.80	0.45	70.75	0.24	A109A
2019113	05:57	11.76	125.23	56.00	48.44	9.46	97.61	322.78	62.84	72.00	11.00	1.23	0.32	231.52	1.25	A109A

Table 2 Supplementary Material - Null measurements

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2019053	10:37	-2.19	-77.05	145.00	48.45	8.93	88.95	41.62	265.55	A100A
2019005	19:45	-8.14	-71.59	570.00	48.12	8.55	89.47	41.32	257.28	A101B
2019020	01:52	-30.04	-71.38	63.00	48.12	8.55	105.55	43.22	242.40	A101B
2019113	05:57	11.76	125.23	56.00	48.12	8.55	98.30	322.77	62.16	A101B
2019006	17:47	2.26	126.76	43.00	48.14	9.20	106.29	321.78	67.36	A102A
2019113	05:57	11.76	125.23	56.00	48.14	9.20	97.90	322.58	62.67	A102A
2018305	22:39	-19.58	-69.27	102.00	48.35	9.83	97.43	41.35	249.02	A108A
2019006	17:47	2.26	126.76	43.00	48.35	9.83	105.83	321.82	67.82	A108A
2019134	13:18	-4.08	152.57	10.00	48.35	9.83	125.61	330.21	47.97	A108A
2015315	02:14	-29.51	-72.01	12.00	48.99	8.49	105.90	42.50	243.37	A126A
2018305	22:39	-19.58	-69.27	102.00	48.88	6.38	95.51	39.98	246.59	A151A
2019005	19:45	-8.14	-71.59	570.00	48.88	6.38	88.25	40.23	255.64	A151A
2019053	10:37	-2.19	-77.05	145.00	48.88	6.38	87.31	41.03	263.62	A151A
2019060	09:10	-14.71	-70.15	267.00	48.88	6.38	92.34	39.98	250.36	A151A
2017049	12:30	-23.86	-66.66	222.00	48.00	5.73	96.43	40.10	241.42	A157A
2015328	23:05	-10.54	-70.94	606.00	48.01	6.35	89.39	40.93	253.60	A158A
2016207	17:46	-26.11	-70.51	72.00	48.01	6.35	100.78	41.74	243.04	A158A
2017010	06:33	4.48	122.62	627.00	48.01	6.35	103.82	321.68	67.02	A158A
2017243	17:26	-1.16	99.69	43.00	48.01	6.35	93.10	317.83	88.30	A158A
2018236	09:24	-11.04	-70.83	630.00	48.01	6.35	89.70	40.90	253.19	A158A
2017243	17:26	-1.16	99.69	43.00	47.69	5.05	93.98	317.54	87.35	A160A
2018231	15:16	-8.32	116.63	21.00	47.69	5.05	110.60	317.84	79.46	A160A
2018236	09:24	-11.04	-70.83	630.00	47.69	5.05	88.77	40.95	252.23	A160A
2018271	10:22	-0.18	119.84	10.00	47.69	5.05	106.59	320.21	71.32	A160A
2016207	17:46	-26.11	-70.51	72.00	47.20	5.20	99.72	42.10	242.13	A163A
2016211	21:38	18.54	145.51	196.00	47.20	5.20	105.47	333.14	38.95	A163A
2016267	00:33	34.46	141.64	10.00	47.20	5.20	89.79	331.97	34.71	A163A
2018236	09:24	-11.04	-70.83	630.00	47.20	5.20	88.71	41.45	252.35	A163A
2018271	10:21	-0.18	119.84	10.00	47.20	5.20	106.65	319.69	71.58	A163A
2018014	09:38	-15.77	-74.71	39.00	46.33	6.68	95.44	43.49	253.00	A173A
2018250	02:32	-2.35	-78.90	93.00	46.33	6.68	88.63	43.71	265.20	A173A
2017283	06:52	-18.57	-69.75	85.00	48.83	5.92	94.73	39.98	247.25	A210A
2016159	19:35	1.28	126.37	31.00	48.41	6.62	108.30	322.46	66.10	A211A
2017010	06:33	4.48	122.62	627.00	48.41	6.62	103.50	321.98	67.15	A211A
2016153	23:16	-2.10	100.67	50.00	47.50	5.48	95.05	317.32	87.60	A213A
2016232	07:52	-55.29	-31.88	10.00	47.50	5.48	107.13	25.50	201.30	A213A
2016293	00:45	-4.86	108.16	614.00	47.50	5.48	102.13	317.42	83.91	A213A
2017283	06:52	-18.57	-69.75	85.00	47.50	5.48	93.94	41.09	246.84	A213A
2018236	09:24	-11.04	-70.83	630.00	47.50	5.48	88.98	41.22	252.55	A213A
2015259	23:14	-31.57	-71.67	22.00	7.13	47.85	118.79	99.82	237.94	MOF
2018014	09:38	-15.77	-74.71	39.00	7.13	47.85	123.20	91.74	255.88	MOF
2015042	19:17	-23.11	-66.69	223.00	46.04	5.57	94.86	41.74	241.65	OG35
2015082	05:11	-18.35	-69.17	130.00	46.04	5.57	92.89	42.28	246.56	OG35

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2015161	14:12	-22.40	-68.43	124.00	46.04	5.57	95.41	42.26	243.33	OG35
2016153	23:16	-2.10	100.67	50.00	46.04	5.57	95.05	315.86	87.79	OG35
2016217	16:44	24.94	142.01	510.00	46.04	5.57	99.05	330.92	39.31	OG35
2017105	08:39	-23.27	-67.72	155.00	46.04	5.57	95.61	42.09	242.25	OG35
2017283	06:52	-18.57	-69.75	85.00	46.04	5.57	93.42	42.45	246.82	OG35
2018271	10:22	-0.18	119.84	10.00	46.04	5.57	106.77	318.46	72.20	OG35
2018305	22:39	-19.58	-69.27	102.00	46.04	5.57	93.86	42.36	245.80	OG35
2017010	06:32	4.48	122.62	627.00	45.88	5.89	104.94	319.78	67.16	OGMY
2018271	10:21	-0.18	119.84	10.00	45.88	5.89	106.61	318.23	72.49	OGMY
2018305	22:39	-19.58	-69.27	102.00	45.88	5.89	93.99	42.60	246.01	OGMY
2015042	19:17	-23.11	-66.69	223.00	45.61	5.70	94.73	42.17	241.71	OGSM
2015161	14:12	-22.40	-68.43	124.00	45.61	5.70	95.29	42.69	243.38	OGSM
2015262	05:26	-29.64	-72.08	6.00	45.61	5.70	102.77	44.70	240.74	OGSM
2016207	17:46	-26.11	-70.51	72.00	45.61	5.70	99.28	43.69	242.22	OGSM
2016293	00:45	-4.86	108.16	614.00	45.61	5.70	102.17	315.48	84.48	OGSM
2017010	06:32	4.48	122.62	627.00	45.61	5.70	105.17	319.58	67.07	OGSM
2017049	12:30	-23.86	-66.66	222.00	45.61	5.70	95.26	42.20	241.18	OGSM
2017105	08:39	-23.27	-67.72	155.00	45.61	5.70	95.48	42.52	242.30	OGSM
2018271	10:21	-0.18	119.84	10.00	45.61	5.70	106.82	318.00	72.42	OGSM
2016153	23:16	-2.10	100.67	50.00	46.76	5.92	94.78	316.56	87.99	RIVEL
2016157	16:45	-4.59	125.63	429.00	46.76	5.92	113.41	319.40	70.65	RIVEL
2016159	11:11	18.36	-105.17	10.00	46.76	5.92	90.44	39.90	297.61	RIVEL
2016207	17:46	-26.11	-70.51	72.00	46.76	5.92	99.95	42.73	242.55	RIVEL
2016211	21:38	18.54	145.51	196.00	46.76	5.92	105.49	332.45	39.66	RIVEL
2016293	00:45	-4.86	108.16	614.00	46.76	5.92	101.91	316.63	84.40	RIVEL
2017010	06:33	4.48	122.62	627.00	46.76	5.92	104.57	320.61	66.97	RIVEL
2016326	21:19	37.39	141.39	9.00	6.65	47.71	88.93	277.48	52.65	RONF
2016207	17:46	-26.11	-70.51	72.00	48.41	7.35	101.56	41.67	243.80	WLS
2016232	07:52	-55.29	-31.88	10.00	48.41	7.35	108.45	26.37	202.42	WLS
2017010	06:33	4.48	122.62	627.00	48.41	7.35	103.04	321.80	67.74	WLS
2017283	06:52	-18.57	-69.75	85.00	48.41	7.35	95.45	40.72	248.26	WLS
2018092	14:00	-20.66	-63.01	559.00	48.41	7.35	92.97	38.93	242.03	WLS
2018209	23:07	-8.24	116.51	14.00	48.41	7.35	108.82	318.33	81.04	WLS
2018236	09:24	-11.04	-70.83	630.00	48.41	7.35	90.45	40.70	253.94	WLS
2018250	02:32	-2.35	-78.90	93.00	48.41	7.35	89.25	41.67	265.65	WLS
2015315	02:14	-29.51	-72.01	12.00	48.93	14.99	109.78	44.41	247.68	A015A
2016111	08:53	0.64	-80.21	14.00	48.93	14.99	92.95	41.12	274.34	A015A
2016113	03:40	-0.28	-80.50	10.00	48.93	14.99	93.83	41.14	273.95	A015A
2016129	07:54	16.41	-97.84	22.00	48.93	14.99	91.98	37.45	297.74	A015A
2016139	17:06	0.49	-79.62	29.00	48.93	14.99	92.67	41.15	273.79	A015A
2016153	23:16	-2.10	100.67	50.00	48.93	14.99	88.72	318.87	94.63	A015A
2016157	16:45	-4.59	125.63	429.00	48.93	14.99	106.94	319.82	77.22	A015A
2016217	14:35	-22.33	-66.01	270.00	48.93	14.99	100.87	41.55	248.62	A015A
2016236	19:59	-7.29	122.43	533.00	48.93	14.99	106.91	318.89	81.57	A015A
2016293	00:46	-4.86	108.16	614.00	48.93	14.99	95.71	318.57	90.81	A015A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016328	10:19	27.18	140.03	481.00	48.93	14.99	89.75	327.32	46.84	A015A
2017010	06:33	4.48	122.62	627.00	48.93	14.99	98.09	320.59	73.69	A015A
2017105	08:39	-23.27	-67.72	155.00	48.93	14.99	102.61	42.09	249.19	A015A
2017132	11:01	12.92	-90.06	16.00	48.93	14.99	90.00	39.55	289.69	A015A
2017140	01:26	9.38	123.95	533.00	48.93	14.99	95.14	321.23	69.56	A015A
2017173	12:51	13.72	-90.97	38.00	48.93	14.99	89.95	39.35	290.88	A015A
2017253	03:27	15.40	-94.53	29.00	48.93	14.99	90.81	38.43	294.61	A015A
2017297	11:07	-7.22	123.07	553.00	48.93	14.99	107.27	318.97	81.02	A015A
2017337	11:39	-0.47	-80.31	17.00	48.93	14.99	93.85	41.16	273.68	A015A
2017349	17:07	-7.49	108.17	90.00	48.93	14.99	97.68	318.36	92.55	A015A
2018021	01:26	-18.88	-69.44	116.00	48.93	14.99	100.44	41.87	253.39	A015A
2018084	20:34	-6.63	129.82	169.00	48.93	14.99	111.18	320.07	75.22	A015A
2016159	19:35	1.28	126.37	31.00	48.12	13.31	104.24	320.51	71.62	A032A
2016293	00:46	-4.86	108.16	614.00	48.12	13.31	96.83	317.75	89.64	A032A
2016329	19:03	11.91	-88.90	10.00	48.12	13.31	89.22	40.91	286.92	A032A
2015315	02:14	-29.51	-72.01	12.00	47.48	13.13	108.06	45.31	246.00	A033A
2015328	23:05	-10.54	-70.94	606.00	47.48	13.13	93.70	42.54	258.56	A033A
2016139	08:17	0.43	-79.79	16.00	47.48	13.13	91.66	42.67	272.43	A033A
2016139	17:05	0.49	-79.62	29.00	47.48	13.13	91.50	42.67	272.35	A033A
2016217	14:34	-22.33	-66.01	270.00	47.48	13.13	99.16	42.44	247.08	A033A
2017010	06:32	4.48	122.62	627.00	47.48	13.13	99.71	319.55	72.46	A033A
2017105	08:39	-23.27	-67.72	155.00	47.48	13.13	100.92	43.00	247.61	A033A
2017132	11:00	12.92	-90.06	16.00	47.48	13.13	89.29	41.34	288.31	A033A
2017181	22:49	-0.28	-80.49	13.00	47.48	13.13	92.66	42.66	272.47	A033A
2017283	06:52	-18.57	-69.75	85.00	47.48	13.13	98.79	42.93	252.26	A033A
2018209	23:07	-8.24	116.51	14.00	47.48	13.13	105.07	316.89	85.74	A033A
2018217	12:06	-8.26	116.44	34.00	47.48	13.13	105.04	316.88	85.80	A033A
2018250	02:32	-2.35	-78.90	93.00	47.48	13.13	93.09	42.76	269.90	A033A
2018271	10:22	-0.18	119.84	10.00	47.48	13.13	101.38	318.49	77.68	A033A
2016153	23:16	-2.10	100.67	50.00	46.91	13.08	89.87	316.76	93.18	A034A
2016217	14:35	-22.33	-66.01	270.00	46.91	13.08	98.91	42.96	246.96	A034A
2016011	16:58	3.90	126.86	13.00	47.20	12.72	103.23	320.26	69.27	A035A
2016157	16:45	-4.59	125.63	429.00	47.20	12.72	108.83	318.42	75.96	A035A
2016159	19:35	1.28	126.37	31.00	47.20	12.72	104.91	319.73	71.39	A035A
2016217	14:35	-22.33	-66.01	270.00	47.20	12.72	98.80	42.59	246.76	A035A
2016309	16:40	-35.09	-71.05	90.00	47.20	12.72	110.97	46.55	240.81	A035A
2017010	06:33	4.48	122.62	627.00	47.20	12.72	100.06	319.37	72.19	A035A
2017049	12:30	-23.86	-66.66	222.00	47.20	12.72	100.32	42.94	246.16	A035A
2017052	14:29	-19.28	-63.90	595.00	47.20	12.72	95.22	41.77	247.34	A035A
2017105	08:39	-23.27	-67.72	155.00	47.20	12.72	100.55	43.16	247.29	A035A
2017196	12:32	0.41	121.98	113.00	47.20	12.72	102.69	318.71	75.39	A035A
2017283	06:52	-18.57	-69.75	85.00	47.20	12.72	98.44	43.11	251.93	A035A
2016011	16:58	3.90	126.86	13.00	47.38	12.31	103.43	320.54	68.91	A036A
2016113	03:23	-0.29	-80.50	10.00	47.38	12.31	92.12	42.79	271.87	A036A
2016113	03:40	-0.28	-80.50	10.00	47.38	12.31	92.11	42.79	271.87	A036A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016207	17:46	-26.11	-70.51	72.00	47.38	12.31	104.16	44.06	246.93	A036A
2016217	14:35	-22.33	-66.01	270.00	47.38	12.31	98.61	42.31	246.50	A036A
2017010	06:33	4.48	122.62	627.00	47.38	12.31	100.27	319.63	71.84	A036A
2017052	14:29	-19.28	-63.90	595.00	47.38	12.31	95.03	41.50	247.06	A036A
2017105	08:39	-23.27	-67.72	155.00	47.38	12.31	100.37	42.88	247.04	A036A
2017114	21:57	-33.04	-72.06	28.00	47.38	12.31	110.00	46.03	242.82	A036A
2017132	11:00	12.92	-90.06	16.00	47.38	12.31	88.79	41.60	287.71	A036A
2017181	22:49	-0.28	-80.49	13.00	47.38	12.31	92.11	42.79	271.86	A036A
2017337	11:39	-0.47	-80.31	17.00	47.38	12.31	92.12	42.79	271.60	A036A
2016111	08:53	0.64	-80.21	14.00	47.07	10.26	89.86	43.12	270.78	A037A
2017010	06:33	4.48	122.62	627.00	47.07	10.26	101.69	319.79	70.32	A037A
2017049	12:30	-23.86	-66.66	222.00	47.07	10.26	98.74	42.35	244.46	A037A
2017283	06:52	-18.57	-69.75	85.00	47.07	10.26	96.81	42.69	250.19	A037A
2016111	08:53	0.64	-80.21	14.00	47.46	11.92	90.98	42.70	272.00	A038A
2016159	19:35	1.28	126.37	31.00	47.46	11.92	105.34	320.17	70.68	A038A
2016201	05:38	-30.25	-71.97	8.00	47.46	11.92	107.80	45.12	244.64	A038A
2016325	21:17	-31.62	-68.63	108.00	47.46	11.92	106.75	44.34	241.50	A038A
2016329	19:03	11.91	-88.90	10.00	47.46	11.92	88.51	41.81	285.91	A038A
2017049	12:30	-23.86	-66.66	222.00	47.46	11.92	99.93	42.47	245.65	A038A
2018021	01:26	-18.88	-69.44	116.00	47.46	11.92	98.03	42.65	250.98	A038A
2018092	14:00	-20.66	-63.01	559.00	47.46	11.92	95.30	41.15	245.25	A038A
2015260	04:30	-31.52	-71.80	23.00	47.03	7.89	105.96	44.43	240.92	A060A
2015315	02:14	-29.51	-72.01	12.00	47.10	8.93	105.31	44.39	243.19	A061A
2016148	04:04	26.99	130.14	10.00	47.10	8.93	89.21	324.24	49.75	A061A
2016159	11:11	18.36	-105.17	10.00	47.10	8.93	92.08	38.61	299.83	A061A
2016207	17:46	-26.11	-70.51	72.00	47.10	8.93	101.95	43.35	244.61	A061A
2016232	07:52	-55.29	-31.88	10.00	47.10	8.93	107.65	27.94	203.10	A061A
2017105	08:39	-23.27	-67.72	155.00	47.10	8.93	98.15	42.18	244.67	A061A
2015315	02:14	-29.51	-72.01	12.00	49.85	10.21	107.29	42.20	244.76	A111A
2015328	23:05	-10.54	-70.94	606.00	49.85	10.21	92.33	39.80	256.52	A111A
2016113	03:23	-0.29	-80.50	10.00	49.85	10.21	90.68	40.34	270.36	A111A
2016153	23:16	-2.10	100.67	50.00	49.85	10.21	91.89	319.63	91.00	A111A
2016159	11:11	18.36	-105.17	10.00	49.85	10.21	91.43	35.81	300.87	A111A
2016159	19:35	1.28	126.37	31.00	49.85	10.21	105.57	322.90	68.68	A111A
2016207	17:46	-26.11	-70.51	72.00	49.85	10.21	103.87	41.15	246.07	A111A
2017283	06:52	-18.57	-69.75	85.00	49.85	10.21	97.72	40.04	250.49	A111A
2016207	17:46	-26.11	-70.51	72.00	49.65	7.91	102.43	40.70	244.42	A112A
2017283	06:52	-18.57	-69.75	85.00	49.65	7.91	96.24	39.70	248.78	A112A
2016159	11:11	18.36	-105.17	10.00	49.55	8.73	90.75	36.55	299.73	A113A
2016159	19:35	1.28	126.37	31.00	49.55	8.73	106.57	322.98	67.53	A113A
2016207	17:46	-26.11	-70.51	72.00	49.55	8.73	102.87	41.03	244.97	A113A
2017010	06:33	4.48	122.62	627.00	49.55	8.73	101.78	322.53	68.62	A113A
2017223	05:48	14.01	120.74	172.00	49.55	8.73	93.12	322.79	64.32	A113A
2017283	06:52	-18.57	-69.75	85.00	49.55	8.73	96.71	39.99	249.37	A113A
2015315	02:14	-29.51	-72.01	12.00	49.59	9.18	106.57	42.14	243.99	A114A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016159	11:11	18.36	-105.17	10.00	49.59	9.18	90.98	36.37	300.08	A114A
2016159	19:35	1.28	126.37	31.00	49.59	9.18	106.29	322.91	67.89	A114A
2017010	06:33	4.48	122.62	627.00	49.59	9.18	101.49	322.46	68.98	A114A
2017283	06:52	-18.57	-69.75	85.00	49.59	9.18	97.00	40.05	249.71	A114A
2015315	02:14	-29.51	-72.01	12.00	49.27	9.05	106.36	42.40	243.82	A115A
2016159	19:35	1.28	126.37	31.00	49.27	9.05	106.48	322.64	67.87	A115A
2017049	12:30	-23.86	-66.66	222.00	49.27	9.05	98.97	39.98	243.92	A115A
2017049	12:30	-23.86	-66.66	222.00	49.40	9.48	99.28	39.99	244.25	A116A
2017105	08:39	-23.27	-67.72	155.00	49.40	9.48	99.46	40.23	245.39	A116A
2017283	06:52	-18.57	-69.75	85.00	49.40	9.48	97.12	40.30	249.90	A116A
2015315	02:14	-29.51	-72.01	12.00	49.04	9.57	106.56	42.77	244.11	A117A
2015328	23:05	-10.54	-70.94	606.00	49.04	9.57	91.73	40.49	256.01	A117A
2016157	16:45	-4.59	125.63	429.00	49.04	9.57	110.37	320.91	72.78	A117A
2016201	05:38	-30.25	-71.97	8.00	49.04	9.57	107.08	42.91	243.56	A117A
2016207	17:46	-26.11	-70.51	72.00	49.04	9.57	103.16	41.73	245.44	A117A
2016325	21:17	-31.62	-68.63	108.00	49.04	9.57	106.15	42.11	240.38	A117A
2017010	06:33	4.48	122.62	627.00	49.04	9.57	101.45	321.85	69.39	A117A
2017105	08:39	-23.27	-67.72	155.00	49.04	9.57	99.36	40.58	245.39	A117A
2017283	06:52	-18.57	-69.75	85.00	49.04	9.57	97.05	40.66	249.92	A117A
2015315	02:14	-29.51	-72.01	12.00	49.35	9.97	106.93	42.60	244.46	A118A
2015328	23:05	-10.54	-70.94	606.00	49.01	10.04	92.02	40.60	256.36	A119A
2016153	23:16	-2.10	100.67	50.00	49.01	10.04	91.99	318.79	90.90	A119A
2017243	17:26	-1.16	99.69	43.00	49.01	10.04	90.64	318.81	91.02	A119A
2018092	14:00	-20.66	-63.01	559.00	47.55	11.44	95.04	40.93	244.92	A140A
2018240	07:28	-10.89	124.12	14.00	47.55	11.44	113.25	317.14	80.51	A140A
2016139	08:17	0.43	-79.79	16.00	47.75	11.85	90.79	42.42	271.50	A141A
2016159	19:35	1.28	126.37	31.00	47.75	11.85	105.28	320.47	70.55	A141A
2016207	17:46	-26.11	-70.51	72.00	47.75	11.85	104.03	43.58	246.71	A141A
2016217	14:35	-22.33	-66.01	270.00	47.75	11.85	98.48	41.84	246.23	A141A
2016325	21:17	-31.62	-68.63	108.00	47.75	11.85	106.85	44.06	241.53	A141A
2017010	06:33	4.48	122.62	627.00	47.75	11.85	100.45	320.09	71.42	A141A
2017283	06:52	-18.57	-69.75	85.00	47.75	11.85	98.05	42.39	251.40	A141A
2018092	14:00	-20.66	-63.01	559.00	47.75	11.85	95.38	40.86	245.23	A141A
2018231	15:16	-8.32	116.63	21.00	47.75	11.85	106.05	317.24	84.67	A141A
2016139	17:06	0.49	-79.62	29.00	47.68	11.00	90.06	42.50	270.79	A143A
2016193	02:31	0.58	-79.64	21.00	47.68	11.00	90.01	42.50	270.86	A143A
2016217	14:35	-22.33	-66.01	270.00	47.68	11.00	97.93	41.66	245.63	A143A
2017049	12:30	-23.86	-66.66	222.00	47.68	11.00	99.46	42.00	245.06	A143A
2017132	11:01	12.92	-90.06	16.00	47.68	11.00	87.86	41.58	286.75	A143A
2017140	01:26	9.38	123.95	533.00	47.68	11.00	98.08	321.06	66.61	A143A
2018092	14:00	-20.66	-63.01	559.00	47.68	11.00	94.84	40.68	244.62	A143A
2018236	09:24	-11.04	-70.83	630.00	47.68	11.00	92.64	42.03	256.61	A143A
2018092	14:00	-20.66	-63.01	559.00	48.10	12.08	95.67	40.61	245.42	A144A
2018229	15:55	-7.37	119.80	529.00	48.10	12.08	107.27	318.03	81.66	A144A
2018250	02:32	-2.35	-78.90	93.00	48.10	12.08	92.39	42.13	269.16	A144A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016139	17:06	0.49	-79.62	29.00	47.87	12.40	91.00	42.30	271.82	A145A
2016157	16:45	-4.59	125.63	429.00	47.87	12.40	108.88	319.16	75.48	A145A
2018092	14:00	-20.66	-63.01	559.00	47.87	12.40	95.77	40.91	245.62	A145A
2018229	15:55	-7.37	119.80	529.00	47.87	12.40	107.10	317.76	81.97	A145A
2018250	02:32	-2.35	-78.90	93.00	47.87	12.40	92.60	42.36	269.39	A145A
2018271	10:22	-0.18	119.84	10.00	47.87	12.40	101.78	318.99	77.04	A145A
2016211	21:38	18.54	145.51	196.00	45.25	7.61	105.87	330.50	41.40	A282A
2016238	17:24	30.61	137.85	456.00	45.25	7.61	91.99	327.35	41.19	A282A
2016329	19:03	11.91	-88.90	10.00	45.25	7.61	86.17	44.70	282.94	A282A
2015351	20:09	15.80	-93.63	85.00	45.14	9.38	87.84	43.64	290.18	A284A
2016111	08:53	0.64	-80.21	14.00	45.14	9.38	89.26	45.06	270.16	A284A
2016159	19:35	1.28	126.37	31.00	45.14	9.38	107.78	318.52	69.33	A284A
2016207	17:46	-26.11	-70.51	72.00	45.14	9.38	101.39	45.30	244.55	A284A
2016211	21:38	18.54	145.51	196.00	45.14	9.38	105.12	329.46	42.93	A284A
2016238	17:24	30.61	137.85	456.00	45.14	9.38	91.24	326.34	42.47	A284A
2016329	19:03	11.91	-88.90	10.00	45.14	9.38	87.42	44.52	284.18	A284A
2016211	21:38	18.54	145.51	196.00	45.37	8.83	105.21	329.92	42.42	A286A
2016217	16:44	24.94	142.01	510.00	45.37	8.83	98.08	328.72	41.96	A286A
2018181	04:16	19.02	-105.12	15.00	45.37	8.83	92.35	40.15	300.08	A286A
2016159	11:11	18.36	-105.17	10.00	45.62	8.36	92.47	40.09	299.36	A287A
2016211	21:38	18.54	145.51	196.00	45.62	8.36	105.25	330.35	41.97	A287A
2016329	19:03	11.91	-88.90	10.00	45.62	8.36	86.60	44.22	283.44	A287A
2017010	06:33	4.48	122.62	627.00	45.62	8.36	103.43	318.87	69.15	A287A
2018181	04:16	19.02	-105.12	15.00	45.62	8.36	91.93	40.09	299.75	A287A
2018250	02:32	-2.35	-78.90	93.00	45.62	8.36	89.74	44.51	266.41	A287A
2016207	17:46	-26.11	-70.51	72.00	46.01	8.48	101.20	44.22	244.12	A288A
2018240	22:55	16.80	146.84	55.00	46.01	8.48	107.03	331.03	41.73	A288A
2015262	05:26	-29.64	-72.08	6.00	46.05	9.76	105.49	45.68	243.41	A289A
2015315	02:14	-29.51	-72.01	12.00	46.05	9.76	105.35	45.63	243.46	A289A
2015351	20:09	15.80	-93.63	85.00	46.05	9.76	87.77	42.69	290.41	A289A
2016159	11:11	18.36	-105.17	10.00	46.05	9.76	93.10	39.24	300.40	A289A
2016207	17:46	-26.11	-70.51	72.00	46.05	9.76	102.02	44.58	244.97	A289A
2017105	08:39	-23.27	-67.72	155.00	46.05	9.76	98.22	43.39	245.10	A289A
2017283	06:52	-18.57	-69.75	85.00	46.05	9.76	96.14	43.53	249.73	A289A
2018250	02:32	-2.35	-78.90	93.00	46.05	9.76	90.74	44.13	267.41	A289A
2016113	03:23	-0.29	-80.50	10.00	46.51	10.90	91.18	43.68	270.82	A290A
2016159	11:11	18.36	-105.17	10.00	46.51	10.90	93.55	38.43	301.27	A290A
2016211	21:38	18.54	145.51	196.00	46.51	10.90	103.39	329.64	43.97	A290A
2017105	08:39	-23.27	-67.72	155.00	46.51	10.90	99.14	43.30	245.94	A290A
2017283	06:52	-18.57	-69.75	85.00	46.51	10.90	97.04	43.37	250.58	A290A
2017049	12:30	-23.86	-66.66	222.00	45.82	13.13	100.02	44.34	246.20	A300A
2017105	08:39	-23.27	-67.72	155.00	45.82	13.13	100.28	44.56	247.33	A300A
2017187	08:23	11.13	124.63	9.00	45.82	13.13	96.57	319.08	66.81	A300A
2016113	03:23	-0.29	-80.50	10.00	45.62	12.62	92.40	44.54	272.02	A301A
2016364	22:50	-9.03	118.66	79.00	45.31	10.66	109.02	314.78	83.55	A313A

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2017052	14:29	-19.28	-63.90	595.00	45.31	10.66	93.16	42.94	245.77	A313A
2017105	08:39	-23.27	-67.72	155.00	45.31	10.66	98.49	44.33	245.61	A313A
2017283	06:52	-18.57	-69.75	85.00	45.31	10.66	96.48	44.45	250.28	A313A
2016207	17:46	-26.11	-70.51	72.00	48.73	10.30	103.47	42.23	245.88	A360A
2016217	14:35	-22.33	-66.01	270.00	48.73	10.30	97.93	40.51	245.27	A360A
2017049	12:30	-23.86	-66.66	222.00	48.73	10.30	99.48	40.84	244.72	A360A
2017196	12:32	0.41	121.98	113.00	48.73	10.30	103.85	320.68	73.14	A360A
2017283	06:52	-18.57	-69.75	85.00	48.73	10.30	97.39	41.12	250.41	A360A
2018021	01:26	-18.88	-69.44	116.00	48.73	10.30	97.43	41.08	249.99	A360A
2016207	17:46	-26.11	-70.51	72.00	48.52	10.93	103.77	42.60	246.27	A363A
2016217	14:35	-22.33	-66.01	270.00	48.52	10.93	98.23	40.87	245.69	A363A
2017010	06:33	4.48	122.62	627.00	48.52	10.93	100.78	321.03	70.57	A363A
2017052	14:29	-19.28	-63.90	595.00	48.52	10.93	94.64	40.07	246.16	A363A
2017105	08:39	-23.27	-67.72	155.00	48.52	10.93	99.97	41.44	246.27	A363A
2017196	12:32	0.41	121.98	113.00	48.52	10.93	103.50	320.35	73.70	A363A
2017010	06:33	4.48	122.62	627.00	48.50	11.45	100.46	320.90	70.98	A364A
2017049	12:30	-23.86	-66.66	222.00	48.50	11.45	100.08	41.38	245.50	A364A
2017052	14:29	-19.28	-63.90	595.00	48.50	11.45	94.95	40.23	246.54	A364A
2017105	08:39	-23.27	-67.72	155.00	48.50	11.45	100.28	41.60	246.63	A364A
2017140	01:26	9.38	123.95	533.00	48.50	11.45	97.48	321.70	66.86	A364A
2017283	06:52	-18.57	-69.75	85.00	48.50	11.45	98.04	41.59	251.21	A364A
2018021	01:26	-18.88	-69.44	116.00	48.50	11.45	98.08	41.55	250.79	A364A
2016211	21:38	18.54	145.51	196.00	47.83	10.62	102.57	330.72	43.53	A366A
2017105	08:39	-23.27	-67.72	155.00	47.83	10.62	99.50	41.99	245.95	A366A
2016159	19:35	1.28	126.37	31.00	48.31	11.92	105.05	321.00	70.47	A367A
2017243	17:26	-1.16	99.69	43.00	48.31	11.92	89.37	318.15	92.43	A367A
2017283	06:52	-18.57	-69.75	85.00	48.31	11.92	98.28	41.88	251.52	A367A
2016207	17:46	-26.11	-70.51	72.00	49.13	10.55	103.78	41.92	246.14	A368A
2017049	12:30	-23.86	-66.66	222.00	49.13	10.55	99.79	40.55	244.96	A368A
2018021	01:26	-18.88	-69.44	116.00	49.13	10.55	97.72	40.75	250.21	A368A
2016157	16:45	-4.59	125.63	429.00	49.12	11.02	109.43	320.70	73.95	A369A
2016159	19:35	1.28	126.37	31.00	49.12	11.02	105.34	322.00	69.53	A369A
2016207	17:46	-26.11	-70.51	72.00	49.12	11.02	104.06	42.06	246.46	A369A
2016217	14:35	-22.33	-66.01	270.00	49.12	11.02	98.53	40.35	245.83	A369A
2016325	21:17	-31.62	-68.63	108.00	49.12	11.02	107.01	42.53	241.36	A369A
2017010	06:33	4.48	122.62	627.00	49.12	11.02	100.52	321.58	70.53	A369A
2017052	14:29	-19.28	-63.90	595.00	49.12	11.02	94.93	39.55	246.27	A369A
2017196	12:32	0.41	121.98	113.00	49.12	11.02	103.28	320.92	73.63	A369A
2017283	06:52	-18.57	-69.75	85.00	49.12	11.02	97.97	40.91	250.99	A369A
2015262	13:12	-32.33	-72.06	18.00	46.73	11.32	108.61	46.14	242.54	ABSI
2016159	11:11	18.36	-105.17	10.00	47.59	8.25	91.44	38.41	299.34	ACB
2016201	05:38	-30.25	-71.97	8.00	47.59	8.25	105.63	43.85	242.31	ACB
2016207	17:46	-26.11	-70.51	72.00	47.59	8.25	101.75	42.70	244.26	ACB
2016211	21:38	18.54	145.51	196.00	47.59	8.25	103.83	331.76	41.54	ACB
2016217	14:35	-22.33	-66.01	270.00	47.59	8.25	96.20	40.95	243.70	ACB

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016217	16:44	24.94	142.01	510.00	47.59	8.25	96.68	330.51	41.32	ACB
2016238	17:24	30.61	137.85	456.00	47.59	8.25	89.95	328.56	41.63	ACB
2017105	08:39	-23.27	-67.72	155.00	47.59	8.25	97.95	41.54	244.27	ACB
2017283	06:52	-18.57	-69.75	85.00	47.59	8.25	95.71	41.72	248.83	ACB
2018021	01:26	-18.88	-69.44	116.00	47.59	8.25	95.75	41.66	248.40	ACB
2018092	14:00	-20.66	-63.01	559.00	47.59	8.25	93.13	39.94	242.64	ACB
2018250	02:32	-2.35	-78.90	93.00	47.59	8.25	89.79	42.54	266.33	ACB
2015161	14:12	-22.40	-68.43	124.00	47.87	8.18	97.81	41.38	245.33	BERGE
2015232	11:20	0.49	126.59	46.00	47.87	8.18	108.30	321.41	67.88	BERGE
2015261	09:30	-32.37	-72.23	8.00	47.87	8.18	107.40	44.08	240.97	BERGE
2015262	05:26	-29.64	-72.08	6.00	47.87	8.18	105.35	43.48	242.84	BERGE
2016159	11:11	18.36	-105.17	10.00	47.87	8.18	91.26	38.19	299.29	BERGE
2016201	05:38	-30.25	-71.97	8.00	47.87	8.18	105.72	43.56	242.33	BERGE
2016207	17:46	-26.11	-70.51	72.00	47.87	8.18	101.82	42.42	244.26	BERGE
2017010	06:33	4.48	122.62	627.00	47.87	8.18	102.73	321.07	68.51	BERGE
2017105	08:39	-23.27	-67.72	155.00	47.87	8.18	98.02	41.26	244.25	BERGE
2017223	05:48	14.01	120.74	172.00	47.87	8.18	94.18	321.44	63.99	BERGE
2017283	06:52	-18.57	-69.75	85.00	47.87	8.18	95.77	41.43	248.80	BERGE
2018092	14:00	-20.66	-63.01	559.00	47.87	8.18	93.21	39.67	242.60	BERGE
2018100	10:39	-31.03	-71.53	66.00	47.87	8.18	106.02	43.57	241.49	BERGE
2018236	09:24	-11.04	-70.83	630.00	47.87	8.18	90.84	41.38	254.54	BERGE
2015161	14:12	-22.40	-68.43	124.00	48.33	8.33	98.09	41.00	245.49	BFO
2015171	02:30	-36.36	-73.81	11.00	48.33	8.33	111.47	45.26	239.23	BFO
2015262	05:26	-29.64	-72.08	6.00	48.33	8.33	105.65	43.10	243.05	BFO
2015262	13:12	-32.33	-72.06	18.00	48.33	8.33	107.58	43.65	241.12	BFO
2016159	11:11	18.36	-105.17	10.00	48.33	8.33	91.12	37.74	299.41	BFO
2016201	05:38	-30.25	-71.97	8.00	48.33	8.33	106.02	43.19	242.55	BFO
2016217	14:35	-22.33	-66.01	270.00	48.33	8.33	96.58	40.30	243.82	BFO
2016217	16:44	24.94	142.01	510.00	48.33	8.33	96.09	330.96	41.32	BFO
2017049	12:30	-23.86	-66.66	222.00	48.33	8.33	98.13	40.62	243.29	BFO
2017105	08:39	-23.27	-67.72	155.00	48.33	8.33	98.32	40.88	244.42	BFO
2017283	06:52	-18.57	-69.75	85.00	48.33	8.33	96.03	41.04	248.95	BFO
2018092	14:00	-20.66	-63.01	559.00	48.33	8.33	93.51	39.30	242.74	BFO
2018250	02:32	-2.35	-78.90	93.00	48.33	8.33	89.89	41.80	266.38	BFO
2018240	22:55	16.80	146.84	55.00	46.87	8.43	106.41	331.66	41.51	BNALP
2016159	11:11	18.36	-105.17	10.00	46.50	11.32	93.80	38.29	301.58	BOSI
2016207	17:46	-26.11	-70.51	72.00	46.50	11.32	103.19	44.62	246.08	BOSI
2016211	21:38	18.54	145.51	196.00	46.50	11.32	103.20	329.42	44.32	BOSI
2016217	16:44	24.94	142.01	510.00	46.50	11.32	96.07	328.21	43.81	BOSI
2016238	17:24	30.61	137.85	456.00	46.50	11.32	89.33	326.28	43.85	BOSI
2016329	19:03	11.91	-88.90	10.00	46.50	11.32	88.38	42.86	285.50	BOSI
2017010	06:33	4.48	122.62	627.00	46.48	10.37	101.82	319.20	70.52	BRMO
2017132	11:01	12.92	-90.06	16.00	46.48	10.37	87.79	42.86	286.34	BRMO
2018021	01:26	-18.88	-69.44	116.00	46.48	10.37	96.70	43.23	249.78	BRMO
2016207	17:46	-26.11	-70.51	72.00	47.23	8.01	101.44	42.95	244.03	DAGMA

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2017105	08:39	-23.27	-67.72	155.00	47.23	8.01	97.64	41.79	244.06	DAGMA
2018250	02:32	-2.35	-78.90	93.00	47.90	8.85	90.21	42.26	266.76	EMING
2015161	14:12	-22.40	-68.43	124.00	47.44	8.01	97.52	41.73	245.16	EMMET
2016207	17:46	-26.11	-70.51	72.00	47.44	8.01	101.53	42.77	244.07	EMMET
2016217	14:35	-22.33	-66.01	270.00	47.44	8.01	95.99	41.01	243.51	EMMET
2017283	06:52	-18.57	-69.75	85.00	47.44	8.01	95.51	41.80	248.64	EMMET
2018092	14:00	-20.66	-63.01	559.00	47.44	8.01	92.91	40.00	242.46	EMMET
2018236	09:24	-11.04	-70.83	630.00	47.44	8.01	90.62	41.76	254.42	EMMET
2018250	02:32	-2.35	-78.90	93.00	47.44	8.01	89.62	42.68	266.15	EMMET
2016159	11:11	18.36	-105.17	10.00	46.44	8.11	91.92	39.47	299.20	FIESA
2016211	21:38	18.54	145.51	196.00	46.44	8.11	104.76	331.05	41.61	FIESA
2015351	20:09	15.80	-93.63	85.00	46.62	10.26	87.90	42.03	290.75	FUORN
2016159	11:11	18.36	-105.17	10.00	46.62	10.26	93.11	38.56	300.80	FUORN
2016159	19:35	1.28	126.37	31.00	46.62	10.26	106.69	319.75	69.59	FUORN
2016207	17:46	-26.11	-70.51	72.00	46.62	10.26	102.58	44.19	245.41	FUORN
2016211	21:38	18.54	145.51	196.00	46.62	10.26	103.62	330.05	43.42	FUORN
2016217	14:35	-22.33	-66.01	270.00	46.62	10.26	97.02	42.43	244.99	FUORN
2017105	08:39	-23.27	-67.72	155.00	46.62	10.26	98.78	43.01	245.52	FUORN
2015271	15:48	-23.80	-66.61	219.00	49.69	11.22	100.36	40.19	245.53	GRA1
2016153	23:16	-2.10	100.67	50.00	49.69	11.22	91.23	319.49	91.77	GRA1
2018250	02:32	-2.35	-78.90	93.00	49.69	11.22	91.85	40.52	268.58	GRA1
2018271	10:22	-0.18	119.84	10.00	49.69	11.22	102.11	320.99	75.75	GRA1
2015135	20:46	-2.54	102.22	151.00	49.66	11.36	92.48	319.42	90.99	GRA2
2015351	20:09	15.80	-93.63	85.00	49.66	11.36	87.49	38.93	291.44	GRA2
2016153	23:16	-2.10	100.67	50.00	49.66	11.36	91.14	319.46	91.88	GRA2
2016293	00:46	-4.86	108.16	614.00	49.66	11.36	98.09	319.32	87.98	GRA2
2017196	12:32	0.41	121.98	113.00	49.66	11.36	102.91	321.39	73.78	GRA2
2017243	17:26	-1.16	99.69	43.00	49.66	11.36	89.79	319.49	92.02	GRA2
2017283	06:52	-18.57	-69.75	85.00	49.66	11.36	98.35	40.47	251.30	GRA2
2018209	23:07	-8.24	116.51	14.00	49.66	11.36	106.04	319.25	83.78	GRA2
2018236	09:24	-11.04	-70.83	630.00	49.66	11.36	93.32	40.16	256.97	GRA2
2018250	02:32	-2.35	-78.90	93.00	49.66	11.36	91.94	40.56	268.68	GRA2
2018271	10:22	-0.18	119.84	10.00	49.66	11.36	102.03	320.93	75.86	GRA2
2015135	20:46	-2.54	102.22	151.00	49.76	11.32	92.50	319.53	90.95	GRA3
2015232	11:20	0.49	126.59	46.00	49.76	11.32	105.69	322.47	69.92	GRA3
2015351	20:09	15.80	-93.63	85.00	49.76	11.32	87.42	38.84	291.40	GRA3
2016153	23:16	-2.10	100.67	50.00	49.76	11.32	91.17	319.57	91.85	GRA3
2016217	16:44	24.94	142.01	510.00	49.76	11.32	93.70	330.48	43.61	GRA3
2016329	19:03	11.91	-88.90	10.00	49.76	11.32	87.51	39.70	285.39	GRA3
2017181	22:49	-0.28	-80.49	13.00	49.76	11.32	91.38	40.42	271.20	GRA3
2017349	17:07	-7.49	108.17	90.00	49.76	11.32	100.10	319.16	89.65	GRA3
2018229	15:55	-7.37	119.80	529.00	49.76	11.32	107.51	319.84	80.54	GRA3
2018250	02:32	-2.35	-78.90	93.00	49.76	11.32	91.92	40.45	268.65	GRA3
2016159	11:11	18.36	-105.17	10.00	49.57	11.44	92.25	35.63	301.81	GRA4
2017010	06:33	4.48	122.62	627.00	49.57	11.44	100.12	321.92	70.79	GRA4

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2018229	15:55	-7.37	119.80	529.00	49.57	11.44	107.47	319.62	80.70	GRA4
2018231	04:30	-8.34	116.60	16.00	49.57	11.44	106.14	319.14	83.87	GRA4
2018250	02:32	-2.35	-78.90	93.00	49.57	11.44	91.99	40.65	268.73	GRA4
2018271	10:22	-0.18	119.84	10.00	49.57	11.44	102.00	320.83	75.94	GRA4
2015150	11:43	27.84	140.49	664.00	46.58	8.32	94.23	329.16	41.16	GRIMS
2015315	02:14	-29.51	-72.01	12.00	46.58	8.32	104.70	44.67	242.67	GRIMS
2016211	21:38	18.54	145.51	196.00	46.58	8.32	104.55	331.03	41.77	GRIMS
2015351	20:09	15.80	-93.63	85.00	46.46	11.38	88.67	41.90	291.55	KOSI
2016159	11:11	18.36	-105.17	10.00	46.46	11.38	93.85	38.30	301.62	KOSI
2016207	17:46	-26.11	-70.51	72.00	46.46	11.38	103.21	44.66	246.11	KOSI
2016211	21:38	18.54	145.51	196.00	46.46	11.38	103.20	329.36	44.38	KOSI
2016217	14:35	-22.33	-66.01	270.00	46.46	11.38	97.66	42.89	245.74	KOSI
2016238	17:24	30.61	137.85	456.00	46.46	11.38	89.32	326.23	43.90	KOSI
2015351	20:09	15.80	-93.63	85.00	46.37	7.64	86.28	42.88	288.90	LKBD2
2016159	11:11	18.36	-105.17	10.00	46.37	7.64	91.67	39.68	298.86	LKBD2
2016211	21:38	18.54	145.51	196.00	46.37	7.64	105.02	331.26	41.22	LKBD2
2016217	16:44	24.94	142.01	510.00	46.37	7.64	97.87	330.02	40.93	LKBD2
2016329	19:03	11.91	-88.90	10.00	46.37	7.64	85.94	43.60	282.89	LKBD2
2017165	07:49	14.91	-92.01	93.00	46.37	7.64	85.86	43.18	287.14	LKBD2
2017173	12:51	13.72	-90.97	38.00	46.37	7.64	86.03	43.33	285.60	LKBD2
2015161	14:12	-22.40	-68.43	124.00	45.96	10.94	98.77	43.93	246.97	LUSI
2015184	07:03	10.17	125.89	32.00	45.96	10.94	99.44	320.12	64.81	LUSI
2016207	17:46	-26.11	-70.51	72.00	45.96	10.94	102.73	45.01	245.72	LUSI
2016217	14:35	-22.33	-66.01	270.00	45.96	10.94	97.17	43.23	245.38	LUSI
2017049	12:30	-23.86	-66.66	222.00	45.96	10.94	98.69	43.57	244.77	LUSI
2017052	14:29	-19.28	-63.90	595.00	45.96	10.94	93.61	42.43	246.00	LUSI
2017105	08:39	-23.27	-67.72	155.00	45.96	10.94	98.94	43.82	245.89	LUSI
2018092	14:00	-20.66	-63.01	559.00	45.96	10.94	94.06	42.23	244.45	LUSI
2018236	09:24	-11.04	-70.83	630.00	45.96	10.94	92.20	43.70	256.49	LUSI
2015161	14:12	-22.40	-68.43	124.00	45.77	9.72	97.91	43.76	246.12	MDI
2015315	02:14	-29.51	-72.01	12.00	45.77	9.72	105.20	45.87	243.37	MDI
2016139	08:17	0.43	-79.79	16.00	45.77	9.72	89.35	44.42	269.95	MDI
2016159	11:11	18.36	-105.17	10.00	45.77	9.72	93.22	39.49	300.36	MDI
2016211	21:38	18.54	145.51	196.00	45.77	9.72	104.50	329.73	43.10	MDI
2016217	14:35	-22.33	-66.01	270.00	45.77	9.72	96.32	43.04	244.53	MDI
2016329	19:03	11.91	-88.90	10.00	45.77	9.72	87.49	43.85	284.39	MDI
2017262	18:34	18.55	-98.49	48.00	45.77	9.72	88.95	41.68	295.66	MDI
2018200	13:51	17.93	-97.72	48.00	45.77	9.72	88.92	41.91	294.71	MDI
2015171	02:30	-36.36	-73.81	11.00	47.71	8.25	111.10	45.80	238.98	METMA
2015232	11:20	0.49	126.59	46.00	47.71	8.25	108.32	321.24	67.99	METMA
2015261	09:30	-32.37	-72.23	8.00	47.71	8.25	107.37	44.25	240.98	METMA
2015315	02:14	-29.51	-72.01	12.00	47.71	8.25	105.18	43.60	242.90	METMA
2015328	23:10	-10.06	-71.02	620.00	47.71	8.25	90.24	41.57	255.38	METMA
2016159	11:11	18.36	-105.17	10.00	47.71	8.25	91.38	38.31	299.34	METMA
2016207	17:46	-26.11	-70.51	72.00	47.71	8.25	101.80	42.58	244.28	METMA

DATE (YYYYJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2017049	12:30	-23.86	-66.66	222.00	47.71	8.25	97.80	41.16	243.16	METMA
2017105	08:39	-23.27	-67.72	155.00	47.71	8.25	98.00	41.42	244.28	METMA
2017283	06:52	-18.57	-69.75	85.00	47.71	8.25	95.76	41.60	248.84	METMA
2018092	14:00	-20.66	-63.01	559.00	47.71	8.25	93.18	39.83	242.65	METMA
2018236	09:24	-11.04	-70.83	630.00	47.71	8.25	90.85	41.54	254.59	METMA
2018250	02:32	-2.35	-78.90	93.00	47.71	8.25	89.80	42.42	266.32	METMA
2016329	19:03	11.91	-88.90	10.00	49.83	9.29	86.22	39.97	283.86	MILB
2017010	06:33	4.48	122.62	627.00	49.83	9.29	101.34	322.66	69.02	MILB
2017283	06:52	-18.57	-69.75	85.00	49.83	9.29	97.15	39.85	249.81	MILB
2015161	14:12	-22.40	-68.43	124.00	46.62	10.55	98.77	43.21	246.80	MOSI
2016159	11:11	18.36	-105.17	10.00	46.62	10.55	93.28	38.47	301.01	MOSI
2016207	17:46	-26.11	-70.51	72.00	46.62	10.55	102.76	44.28	245.60	MOSI
2016217	14:35	-22.33	-66.01	270.00	46.62	10.55	97.20	42.51	245.19	MOSI
2017010	06:33	4.48	122.62	627.00	46.62	10.55	101.65	319.29	70.63	MOSI
2017196	12:32	0.41	121.98	113.00	46.62	10.55	104.28	318.54	73.85	MOSI
2017283	06:52	-18.57	-69.75	85.00	46.62	10.55	96.84	43.18	250.34	MOSI
2018092	14:00	-20.66	-63.01	559.00	46.62	10.55	94.10	41.52	244.22	MOSI
2018236	09:24	-11.04	-70.83	630.00	46.62	10.55	92.09	43.00	256.24	MOSI
2018240	22:55	16.80	146.84	55.00	46.62	10.55	105.61	330.36	43.41	MOSI
2018250	02:32	-2.35	-78.90	93.00	46.62	10.55	91.31	43.59	267.99	MOSI
2015264	18:00	-31.73	-71.38	35.00	47.38	7.17	105.60	43.75	240.12	MTI02
2016207	17:46	-26.11	-70.51	72.00	47.38	7.17	100.99	42.56	243.48	MTI02
2016217	14:35	-22.33	-66.01	270.00	47.38	7.17	95.45	40.80	242.91	MTI02
2016232	07:52	-55.29	-31.88	10.00	47.38	7.17	107.45	26.66	202.19	MTI02
2017283	06:52	-18.57	-69.75	85.00	47.38	7.17	94.95	41.64	248.03	MTI02
2018092	14:00	-20.66	-63.01	559.00	47.38	7.17	92.38	39.78	241.85	MTI02
2018236	09:24	-11.04	-70.83	630.00	47.38	7.17	90.05	41.66	253.79	MTI02
2018250	02:32	-2.35	-78.90	93.00	47.38	7.17	89.04	42.69	265.53	MTI02
2015150	11:43	27.84	140.49	664.00	46.60	8.75	94.02	328.95	41.48	NALPS
2016207	17:46	-26.11	-70.51	72.00	46.60	8.75	101.62	43.76	244.40	NALPS
2016211	21:38	18.54	145.51	196.00	46.60	8.75	104.34	330.82	42.13	NALPS
2016217	14:35	-22.33	-66.01	270.00	46.60	8.75	96.07	42.00	243.94	NALPS
2016217	16:44	24.94	142.01	510.00	46.60	8.75	97.20	329.59	41.79	NALPS
2017049	12:30	-23.86	-66.66	222.00	46.60	8.75	97.60	42.32	243.36	NALPS
2017105	08:39	-23.27	-67.72	155.00	46.60	8.75	97.82	42.59	244.49	NALPS
2016139	08:17	0.43	-79.79	16.00	45.31	11.17	90.38	44.88	270.98	OPPE
2016159	11:11	18.36	-105.17	10.00	45.31	11.17	94.33	39.36	301.40	OPPE
2016238	17:24	30.61	137.85	456.00	45.31	11.17	90.25	325.53	43.75	OPPE
2015161	14:12	-22.40	-68.43	124.00	46.83	9.11	97.95	42.61	245.84	PANIX
2015174	12:38	27.74	139.73	460.00	46.83	9.11	93.42	328.52	42.38	PANIX
2015262	05:26	-29.64	-72.08	6.00	46.83	9.11	105.44	44.75	243.19	PANIX
2015271	15:48	-23.80	-66.61	219.00	46.83	9.11	97.85	42.20	243.64	PANIX
2016159	11:11	18.36	-105.17	10.00	46.83	9.11	92.33	38.79	299.95	PANIX
2016207	17:46	-26.11	-70.51	72.00	46.83	9.11	101.95	43.66	244.69	PANIX
2016211	21:38	18.54	145.51	196.00	46.83	9.11	104.00	330.79	42.40	PANIX

DATE (YYYYJJJ)	TIME	Event Lat.	Event Long.	Event depth (km)	Station Lat.	Station Long.	Distance	Azimuth	Back Azimuth	Station
2016217	16:44	24.94	142.01	510.00	46.83	9.11	96.86	329.56	42.05	PANIX
2017049	12:30	-23.86	-66.66	222.00	46.83	9.11	97.93	42.22	243.64	PANIX
2017283	06:52	-18.57	-69.75	85.00	46.83	9.11	95.99	42.64	249.36	PANIX
2018092	14:00	-20.66	-63.01	559.00	46.83	9.11	93.30	40.89	243.22	PANIX
2015262	05:26	-29.64	-72.08	6.00	46.93	11.41	106.90	45.37	244.69	ROSI
2016207	17:46	-26.11	-70.51	72.00	46.93	11.41	103.42	44.24	246.23	ROSI
2017283	06:52	-18.57	-69.75	85.00	46.93	11.41	97.51	43.08	250.98	ROSI
2016207	17:46	-26.11	-70.51	72.00	47.30	7.09	100.91	42.60	243.42	SAIRA
2018250	02:32	-2.35	-78.90	93.00	47.30	7.09	88.98	42.77	265.47	SAIRA
2015259	08:00	1.88	126.43	41.00	45.62	10.52	106.45	318.83	69.62	SALO
2016139	08:17	0.43	-79.79	16.00	45.62	10.52	89.92	44.57	270.52	SALO
2016207	17:46	-26.11	-70.51	72.00	45.62	10.52	102.33	45.20	245.38	SALO
2017181	22:49	-0.28	-80.49	13.00	45.62	10.52	90.91	44.57	270.53	SALO
2017196	12:32	0.41	121.98	113.00	45.62	10.52	104.58	317.55	74.08	SALO
2017283	06:52	-18.57	-69.75	85.00	45.62	10.52	96.49	44.12	250.22	SALO
2016211	21:38	18.54	145.51	196.00	46.36	7.30	105.18	331.43	40.93	SENIN
2016217	16:44	24.94	142.01	510.00	46.36	7.30	98.03	330.20	40.66	SENIN
2017181	22:49	-0.28	-80.49	13.00	46.36	7.30	88.67	43.80	268.21	SENIN
2015150	11:43	27.84	140.49	664.00	46.24	8.02	94.62	329.09	40.94	SIMPL
2015171	02:30	-36.36	-73.81	11.00	46.24	8.02	110.20	47.06	238.36	SIMPL
2015259	08:00	1.88	126.43	41.00	46.24	8.02	107.85	320.11	67.45	SIMPL
2016207	17:46	-26.11	-70.51	72.00	46.24	8.02	101.01	43.87	243.86	SIMPL
2016232	07:52	-55.29	-31.88	10.00	46.24	8.02	106.61	27.68	202.51	SIMPL
2017130	23:43	-56.41	-25.74	15.00	46.24	8.02	106.13	23.67	198.76	SIMPL
2016207	17:46	-26.11	-70.51	72.00	46.21	7.60	100.74	43.76	243.57	VANNI
2016329	19:03	11.91	-88.90	10.00	46.21	7.60	85.95	43.77	282.86	VANNI
2016159	11:11	18.36	-105.17	10.00	45.87	8.77	92.60	39.74	299.67	VARE
2018250	02:32	-2.35	-78.90	93.00	45.87	8.77	90.04	44.28	266.70	VARE
2016232	07:52	-55.29	-31.88	10.00	45.76	10.12	106.75	29.28	203.56	ZONE
2018100	10:39	-31.03	-71.53	66.00	45.76	10.12	106.20	46.16	242.18	ZONE
2018250	02:32	-2.35	-78.90	93.00	45.76	10.12	90.98	44.43	267.66	ZONE
2015161	14:12	-22.40	-68.43	124.00	47.37	8.58	97.85	41.96	245.54	ZUR
2016201	05:38	-30.25	-71.97	8.00	47.37	8.58	105.73	44.15	242.47	ZUR
2016207	17:46	-26.11	-70.51	72.00	47.37	8.58	101.85	43.00	244.44	ZUR
2017049	12:30	-23.86	-66.66	222.00	47.37	8.58	97.84	41.57	243.34	ZUR
2017105	08:39	-23.27	-67.72	155.00	47.37	8.58	98.05	41.83	244.47	ZUR
2018092	14:00	-20.66	-63.01	559.00	47.37	8.58	93.22	40.24	242.87	ZUR

Table 3 Supplementary Material - Average values for phi and dt from two different computation methods

Sta	lat	lon	stacked surface phi	phi error	stacked surface dt	dt error	angular mean phi	phi error	average dt	dt standard deviation
A015A	48.93	14.9	-87.0	2.00	0.90	0.025	88.38	00.78	1.18	0.46
A032A	48.12	13.3	85.00	3.50	1.27	0.050	86.00	01.00	1.31	0.28
A033A	47.48	13.1	83.00	1.75	0.80	0.037	-82.93	00.35	0.94	0.39
A034A	46.91	13.0	89.00	2.00	1.97	0.068	89.67	00.99	1.88	0.44
A035A	47.20	12.7	81.00	2.25	1.35	0.075	68.85	00.75	1.26	0.43
A036A	47.38	12.3	75.00	1.25	1.32	0.062	69.50	00.74	1.39	0.51
A037A	47.07	10.2	36.00	1.25	1.05	0.025	55.33	00.73	1.27	0.47
A038A	47.46	11.9	67.00	1.75	1.05	0.075	63.29	00.85	1.50	0.53
A060A	47.03	7.89	51.00	4.00	1.52	0.125	44.00	01.00	1.77	0.35
A061A	47.10	8.93	51.00	1.00	1.40	0.025	52.41	00.93	1.62	0.48
A062A	46.18	9.11	65.00	3.75	1.07	0.062	63.33	00.96	1.65	0.60
A100A	48.45	8.93	53.00	10.7	1.00	0.212	39.68	00.64	1.08	0.22
A101B	48.12	8.55	44.00	6.25	0.52	0.056	19.99	00.68	0.88	0.35
A102A	48.14	9.20	17.00	4.50	0.77	0.081	14.51	00.88	0.95	0.38
A103D	47.80	9.55	54.00	4.25	1.60	0.081	45.99	00.97	1.63	0.09
A108A	48.35	9.83	68.00	1.75	2.72	0.193	62.58	00.96	1.93	0.50
A109A	48.44	9.46	64.00	1.75	1.55	0.125	62.82	00.64	1.11	0.34
A111A	49.85	10.2	79.00	2.00	0.97	0.031	80.62	00.93	1.10	0.42
A112A	49.65	7.91	66.00	1.50	1.80	0.043	71.95	00.91	1.63	0.27
A113A	49.55	8.73	64.00	1.50	1.40	0.056	49.81	00.61	1.33	0.21
A114A	49.59	9.18	52.00	0.75	1.37	0.025	55.25	00.99	1.42	0.33
A115A	49.27	9.05	60.00	1.00	1.85	0.031	55.35	00.97	1.70	0.12
A116A	49.40	9.48	57.00	1.50	1.50	0.081	51.33	00.82	1.41	0.62
A117A	49.04	9.57	64.00	1.75	1.37	0.037	58.05	00.87	1.48	0.41
A126A	48.99	8.49	36.00	17.7	1.62	0.837	35.00	01.00	1.60	0.00
A140A	47.55	11.4	56.00	3.00	0.50	0.043	58.38	00.57	1.19	0.52
A141A	47.75	11.8	73.00	1.75	0.97	0.031	65.47	00.75	1.33	0.38
A143A	47.68	11.0	57.00	0.75	1.15	0.025	58.29	00.78	1.30	0.41
A144A	48.10	12.0	14.00	16.0	0.42	0.168	73.37	00.44	1.61	0.58
A145A	47.87	12.4	67.00	2.75	1.10	0.125	68.45	00.90	1.41	0.59
A151A	48.88	6.38	-32.0	5.25	1.62	0.325	-33.00	01.00	1.60	0.00
A157A	48.00	5.73	-24.0	4.25	1.92	0.581	-25.00	01.00	1.90	0.00
A158A	48.01	6.35	-88.0	1.75	0.90	0.100	88.18	00.61	1.24	0.44
A160A	47.69	5.05	73.00	6.00	2.12	0.281	85.50	00.80	2.37	0.52
A163A	47.20	5.20	-2.00	9.75	0.72	0.168	-5.50	00.99	0.79	0.11
A173A	46.33	6.68	-3.00	2.50	1.00	0.043	07.31	00.72	1.46	0.48
A210A	48.83	5.92	77.00	1.75	0.85	0.025	82.08	00.56	1.07	0.52
A211A	48.41	6.62	72.00	2.25	1.00	0.075	76.10	00.93	1.29	0.47
A213A	47.50	5.48	48.00	6.50	0.65	0.137	-88.06	00.76	1.33	0.36
A214A	46.36	5.80	-1.00	7.75	0.45	0.037	22.88	00.48	1.23	0.51

Sta	lat	lon	stacked surface phi	phi error	stacked surface dt	dt error	angular mean phi	phi error	average dt	dt standard deviation
A282A	45.25	7.61	50.00	4.50	1.37	0.112	43.41	00.75	1.36	0.19
A283A	45.23	8.32	22.00	15.0	1.8	0.50	21.00	01.00	1.80	0.00
A284A	45.14	9.38	39.00	1.00	0.90	0.093	28.65	00.61	1.56	0.69
A286A	45.37	8.83	12.00	7.25	0.80	0.081	21.50	00.87	0.81	0.04
A287A	45.62	8.36	48.00	5.00	0.80	0.168	60.02	00.98	0.78	0.39
A288A	46.01	8.48	57.00	2.75	0.97	0.062	80.82	00.63	1.95	0.55
A289A	46.05	9.76	67.00	2.25	1.20	0.068	77.83	00.75	1.40	0.59
A290A	46.51	10.9	55.00	2.25	1.72	0.068	51.48	00.87	1.71	0.44
A300A	45.82	13.1	68.00	0.75	1.12	0.012	55.50	00.80	0.94	0.25
A301A	45.62	12.6	29.00	5.50	0.85	0.062	32.15	00.77	1.17	0.49
A302A	45.63	11.9	56.00	1.00	1.32	0.050	44.71	00.85	1.58	0.56
A303A	45.34	12.3	48.00	4.00	0.57	0.062	46.24	00.35	0.86	0.27
A312A	45.11	10.4	72.00	4.25	1.47	0.331	42.50	00.52	1.24	0.32
A313A	45.31	10.6	-60.0	9.25	0.30	0.093	75.91	00.55	1.08	0.31
A360A	48.73	10.3	67.00	1.50	1.15	0.031	71.32	00.87	1.28	0.18
A362A	48.36	10.4	54.00	3.25	1.07	0.068	43.04	00.97	1.27	0.34
A363A	48.52	10.9	73.00	1.25	1.27	0.050	78.65	00.79	0.98	0.35
A364A	48.50	11.4	67.00	2.50	0.82	0.087	63.00	00.99	0.79	0.01
A365A	48.17	10.7	50.00	2.75	1.27	0.056	32.43	00.72	1.21	0.32
A366A	47.83	10.6	57.00	1.25	1.27	0.062	59.82	00.68	1.40	0.28
A367A	48.31	11.9	73.00	1.00	1.52	0.050	74.25	00.99	1.48	0.28
A368A	49.13	10.5	53.00	3.00	0.80	0.037	56.08	00.90	1.15	0.23
A369A	49.12	11.0	74.00	0.75	0.90	0.037	75.09	00.90	1.46	0.27
ABSI	46.73	11.32	62.00	1.25	1.92	0.050	54.44	00.93	1.62	0.35
ACB	47.59	8.25	46.00	8.75	1.82	0.162	42.01	00.99	2.02	0.44
BERGE	47.87	8.18	54.00	1.25	1.45	0.043	46.24	00.62	1.52	0.47
BFO	48.33	8.33	71.00	1.50	1.17	0.043	46.98	00.86	1.32	0.44
BNALP	46.87	8.43	51.00	1.00	1.50	0.025	50.14	00.95	1.69	0.41
BOSI	46.50	11.32	68.00	1.50	1.27	0.050	60.50	00.93	1.36	0.04
BRMO	46.48	10.37	57.00	2.50	0.90	0.168	60.01	00.97	1.25	0.38
CIEL	48.83	7.36	73.00	2.25	1.10	0.050	60.11	00.79	1.48	0.49
DAGMA	47.23	8.01	62.00	0.75	1.45	0.037	56.75	00.91	1.46	0.23
EMING	47.90	8.85	66.00	1.00	1.35	0.037	52.56	00.74	1.67	0.51
EMMET	47.44	8.01	47.00	1.50	1.57	0.050	48.05	00.97	1.38	0.16
FIESA	46.44	8.11	41.00	2.00	1.20	0.043	43.58	00.91	1.64	0.31
FUORN	46.62	10.2	56.00	1.50	1.07	0.043	68.14	00.84	1.12	0.49
GRA1	49.69	11.22	84.00	1.00	1.30	0.056	87.42	00.80	1.56	0.39
GRA2	49.66	11.36	-83.0	3.25	0.70	0.037	-89.36	00.87	1.26	0.48
GRA3	49.76	11.32	84.00	1.00	1.52	0.100	-89.68	00.85	1.54	0.60
GRA4	49.57	11.44	82.00	1.50	0.87	0.050	-87.81	00.73	1.65	0.60
GRIMS	46.58	8.32	46.00	1.00	1.72	0.018	50.08	00.96	1.75	0.32

Sta	lat	lon	stacked surface phi	phi error	stacked surface dt	dt error	angular mean phi	phi error	average dt	dt standard deviation
KOSI	46.46	11.38	69.00	2.25	1.55	0.106	55.08	00.91	1.67	0.26
LKBD2	46.37	7.64	13.00	1.25	1.62	0.056	26.53	00.86	1.72	0.37
LUSI	45.96	10.94	61.00	1.75	1.20	0.031	68.31	00.82	1.56	0.43
MDI	45.77	9.72	76.00	3.00	1.30	0.137	66.34	00.94	1.37	0.54
METMA	47.71	8.25	53.00	0.75	1.62	0.037	47.25	00.92	1.70	0.54
MILB	49.83	9.29	71.00	1.00	1.17	0.037	52.33	00.78	1.23	0.50
MOSI	46.62	10.55	59.00	1.50	1.35	0.062	59.23	00.89	1.42	0.31
MTI02	47.38	7.17	76.00	5.00	1.82	0.118	75.00	01.00	1.80	0.00
NALPS	46.60	8.75	51.00	1.25	1.52	0.012	47.22	00.98	1.53	0.40
OG35	46.04	5.57	-21.0	3.75	0.55	0.093	16.55	00.19	1.49	0.66
OGMY	45.88	5.89	-23.0	1.75	0.95	0.062	-84.18	00.33	1.29	0.62
OGSM	45.61	5.70	-34.0	1.25	0.95	0.037	-20.60	00.49	1.06	0.36
OPPE	45.31	11.17	74.00	1.75	1.22	0.062	42.57	00.60	1.32	0.18
PANIX	46.83	9.11	47.00	1.50	1.42	0.018	49.06	00.94	1.40	0.23
RIVEL	46.76	5.92	20.00	12.5	0.42	0.143	10.59	00.73	1.57	0.78
ROSI	46.93	11.41	73.00	1.75	1.50	0.081	63.19	00.91	1.79	0.44
SAIRA	47.30	7.09	52.00	2.50	0.85	0.050	51.43	00.84	1.15	0.41
SALO	45.62	10.52	73.00	3.75	1.00	0.050	55.70	00.70	1.34	0.38
SENIN	46.36	7.30	29.00	3.50	0.95	0.062	19.68	00.86	1.49	0.39
SIMPL	46.24	8.02	54.00	2.25	1.02	0.037	36.01	00.82	1.11	0.40
TMO22	49.22	8.18	68.00	7.25	3.50	0.843	64.00	01.00	0.70	0.00
UBR	47.68	10.11	60.00	1.25	1.50	0.031	49.37	00.80	1.70	0.46
VANNI	46.21	7.60	18.00	2.00	1.00	0.081	29.59	00.90	1.45	0.29
VARE	45.87	8.77	62.00	2.75	0.90	0.075	78.04	00.83	1.29	0.72
WALHA	47.75	9.12	52.00	1.50	2.02	0.037	55.23	00.94	2.06	0.34
WLS	48.41	7.35	81.00	1.25	1.27	0.050	68.52	00.65	1.36	0.58
ZONE	45.76	10.12	76.00	2.25	0.95	0.043	63.52	00.59	1.23	0.65
ZUR	47.37	8.58	62.00	1.50	1.55	0.050	51.94	00.96	1.45	0.28