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Supplement of

Studying local earthquakes in the area Baltic-Bothnia Megashear using the data of the POLENET/LAPNET temporary array

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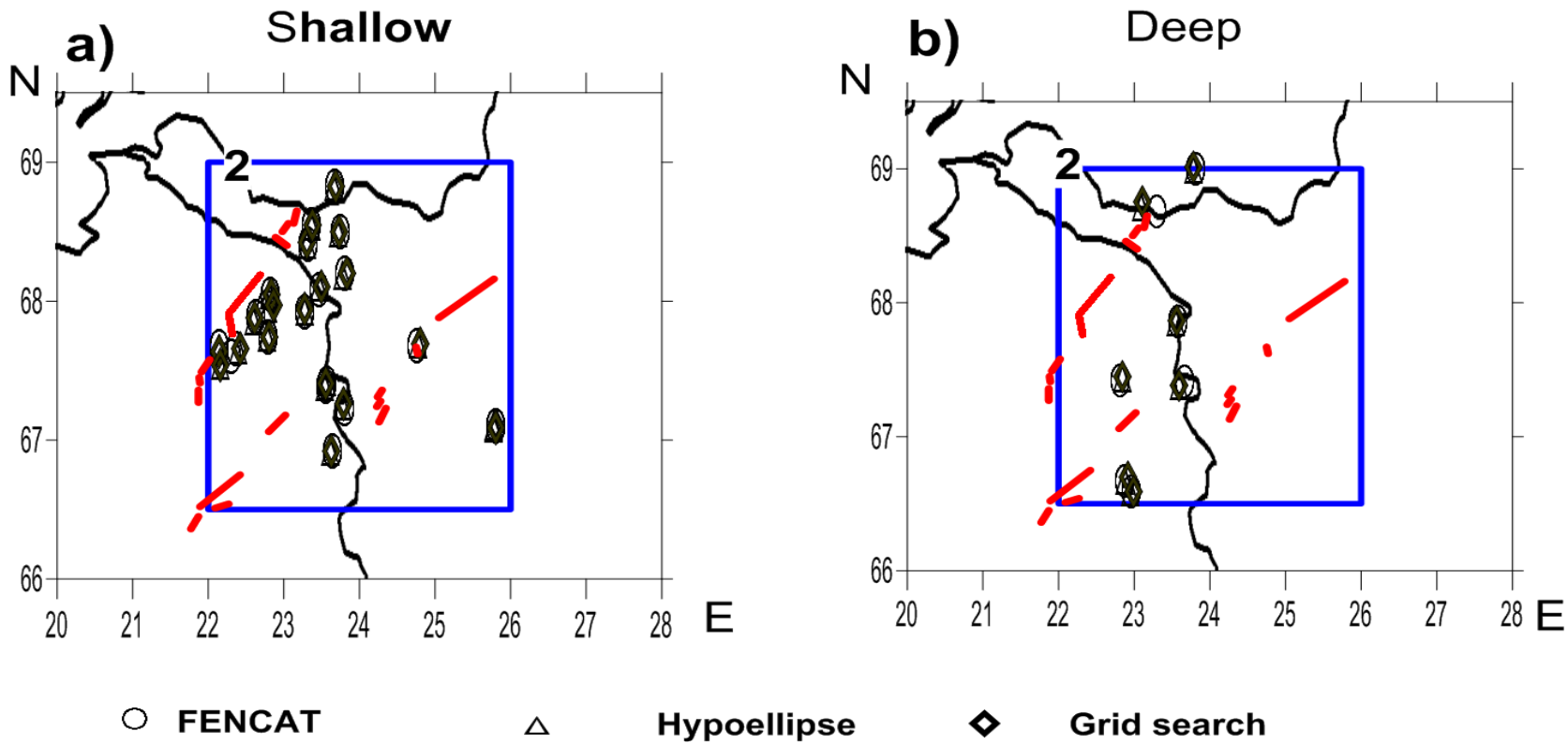

Figure 1S The map of shallow and deep events from Table 3 in FENCAT catalogue and after relocation.

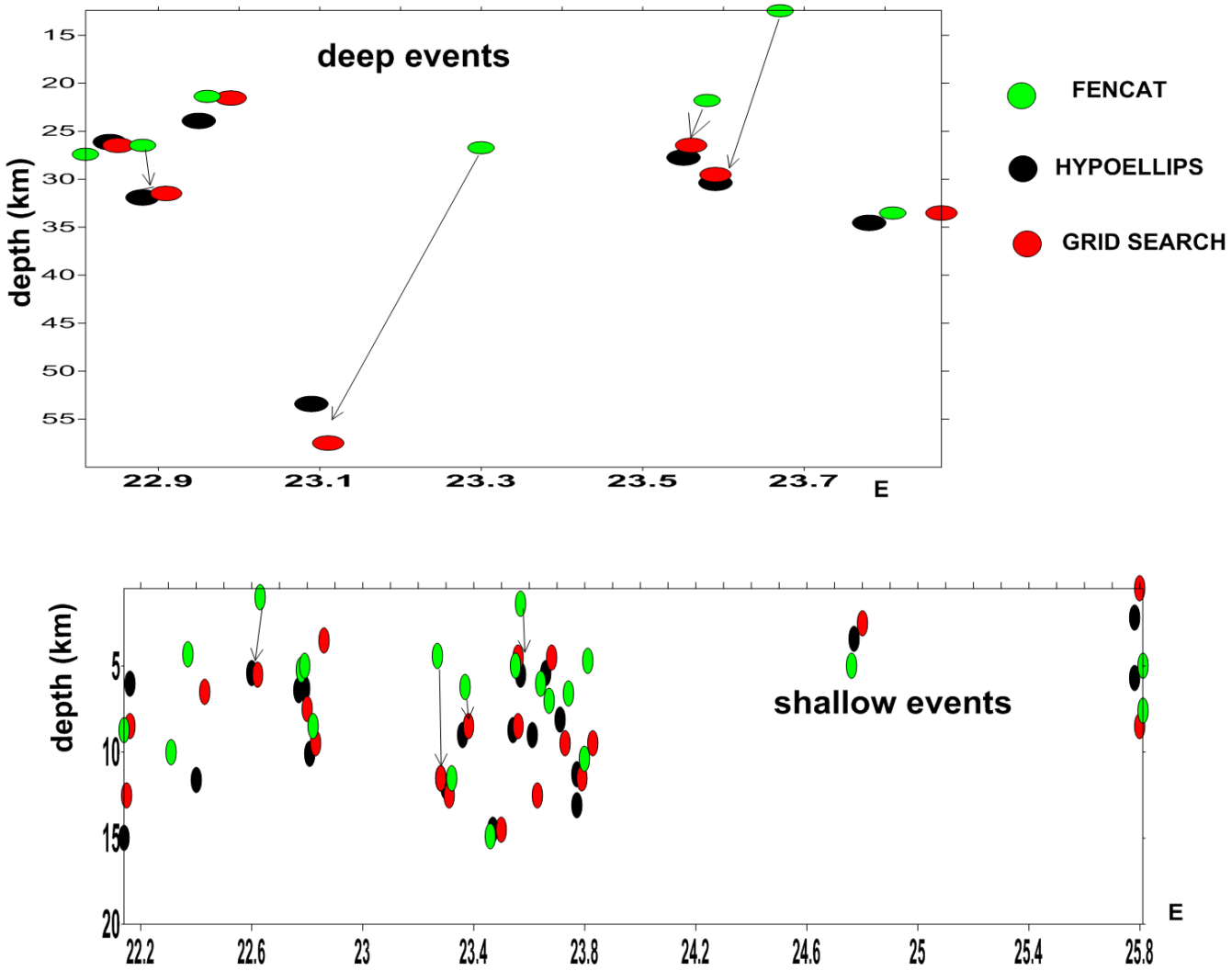

Figure 2S The depth distributions before and after relocation for deep and shallow earthquakes (vertical cross sections - longitude and depth).

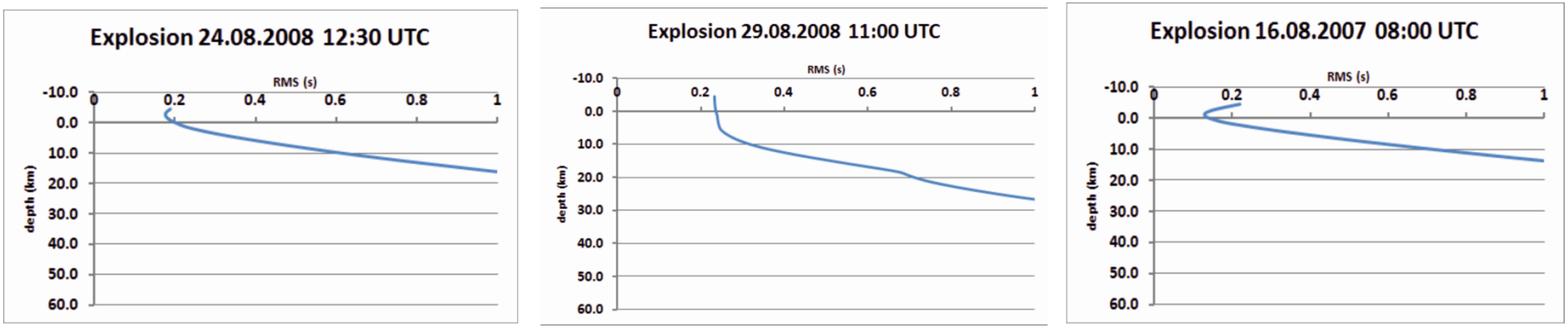

Figure 3S The relation between the hypocentre depth and the RMS for Hukkavaara explosions from Table 2

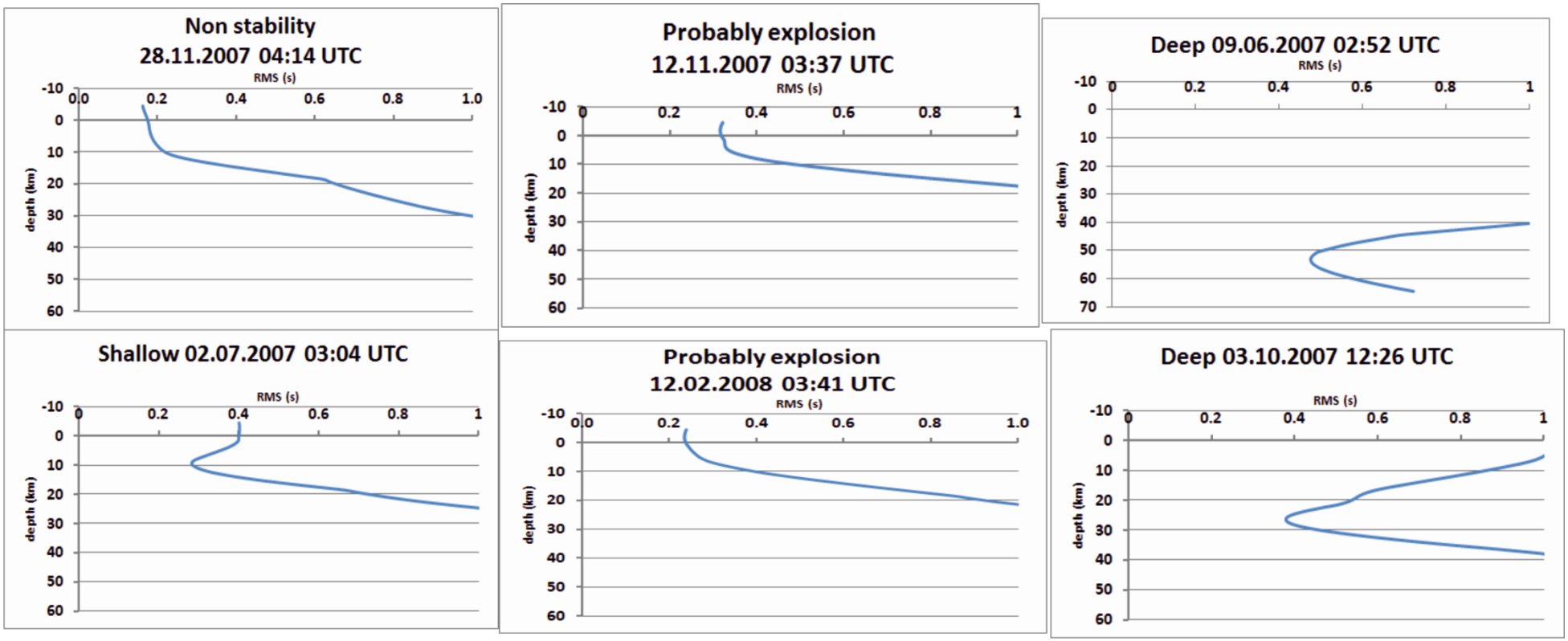

Figure 4S The relation between the hypocentre depth and the RMS for some events from Table 3.

F

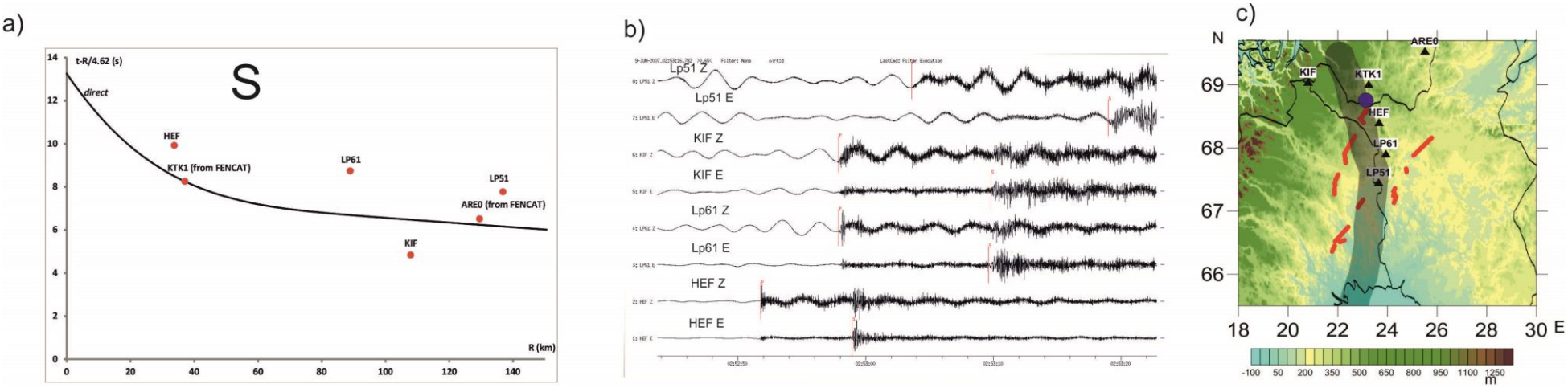

Figure 5S For event 09.06.2007 at 02:52 UTC, 68.68N, 23.30E, depth=26.7 km, ML=1.7 (FENCAT) a) the reduced calculated and picked travel times for S waves. b) Seismograms for the event without filtering, c) map of stations and event.

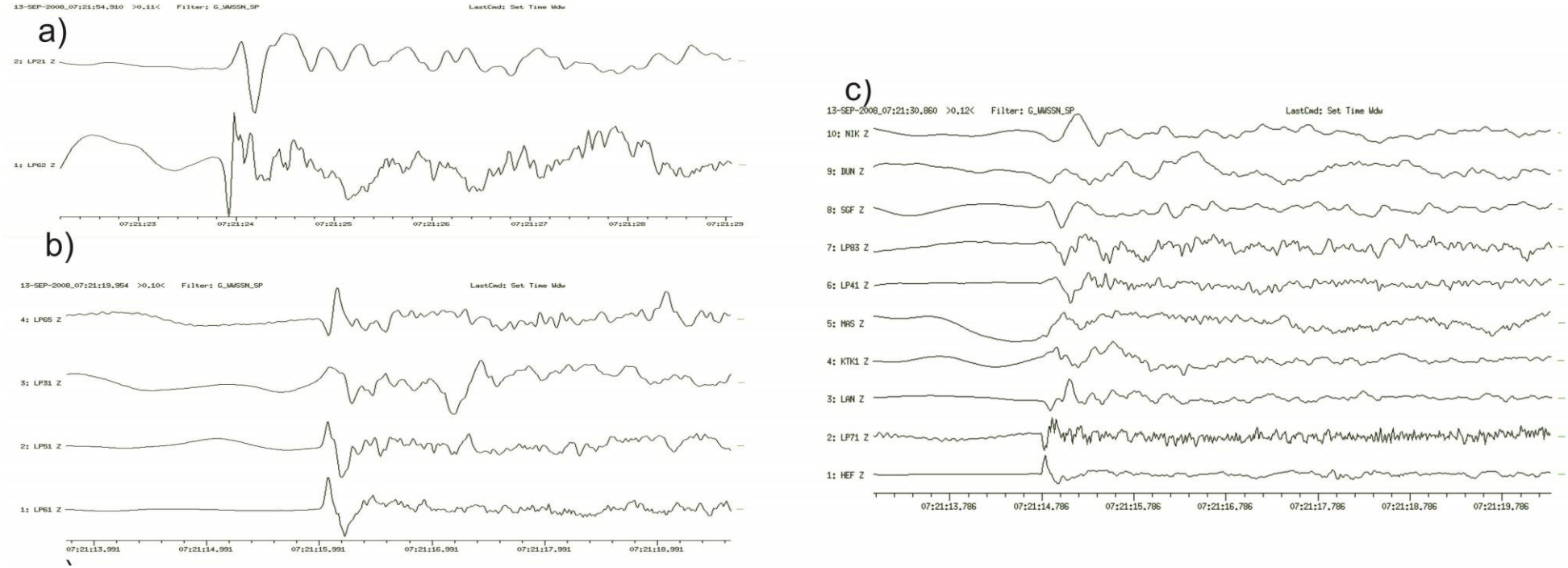

Figure 6S Seismograms for shallow event Ev1 from Table 4 showing the first motions for different resampling: a) 50 Hz, b) 80 Hz c) 100 Hz. The traces are aligned relatively to the first P arrival.

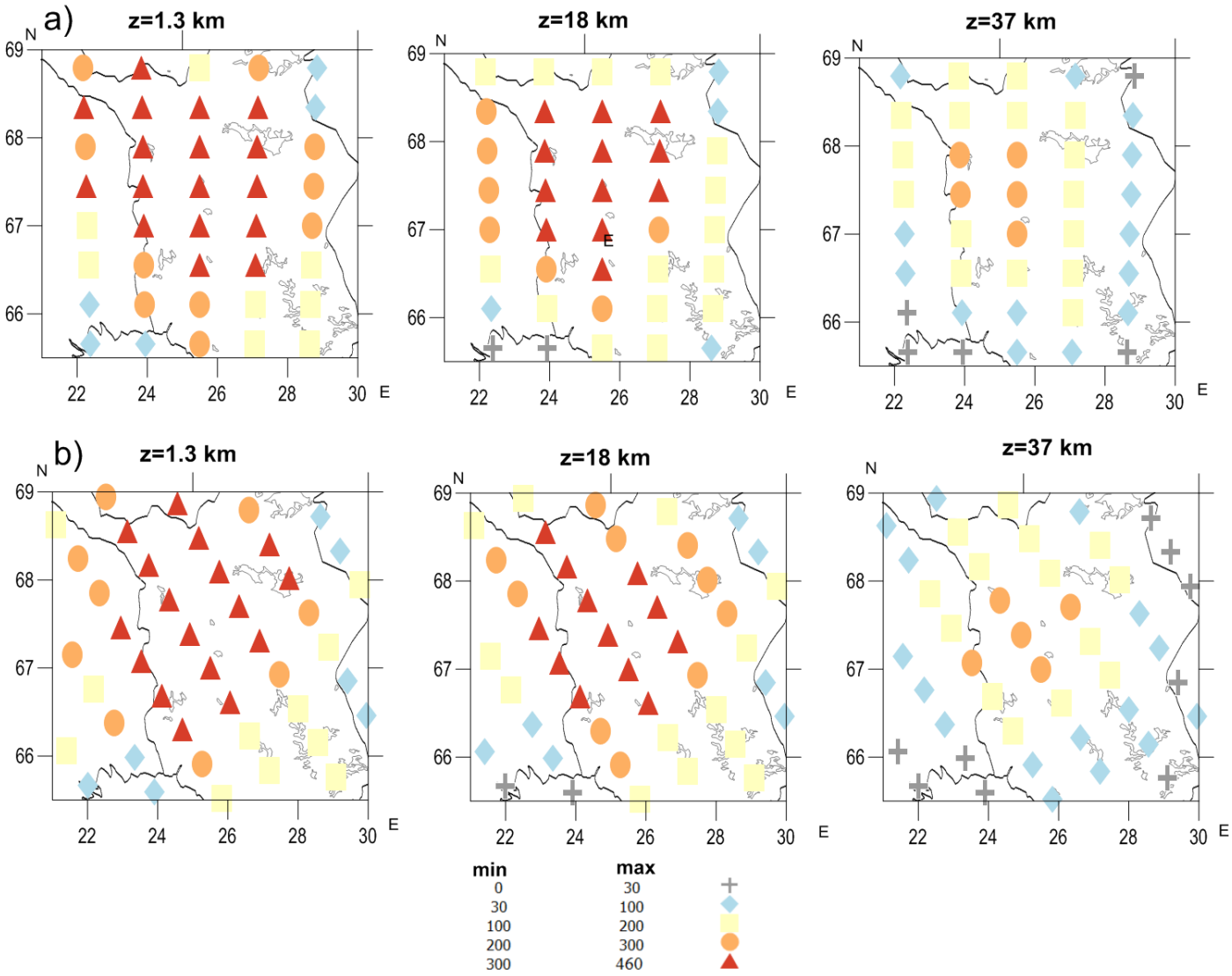

Figure 7S Khit map (analogue of the ray density map for blocks). It demonstrates how many times B-spline coefficient connected to particular grid point was used in linear system of equation.

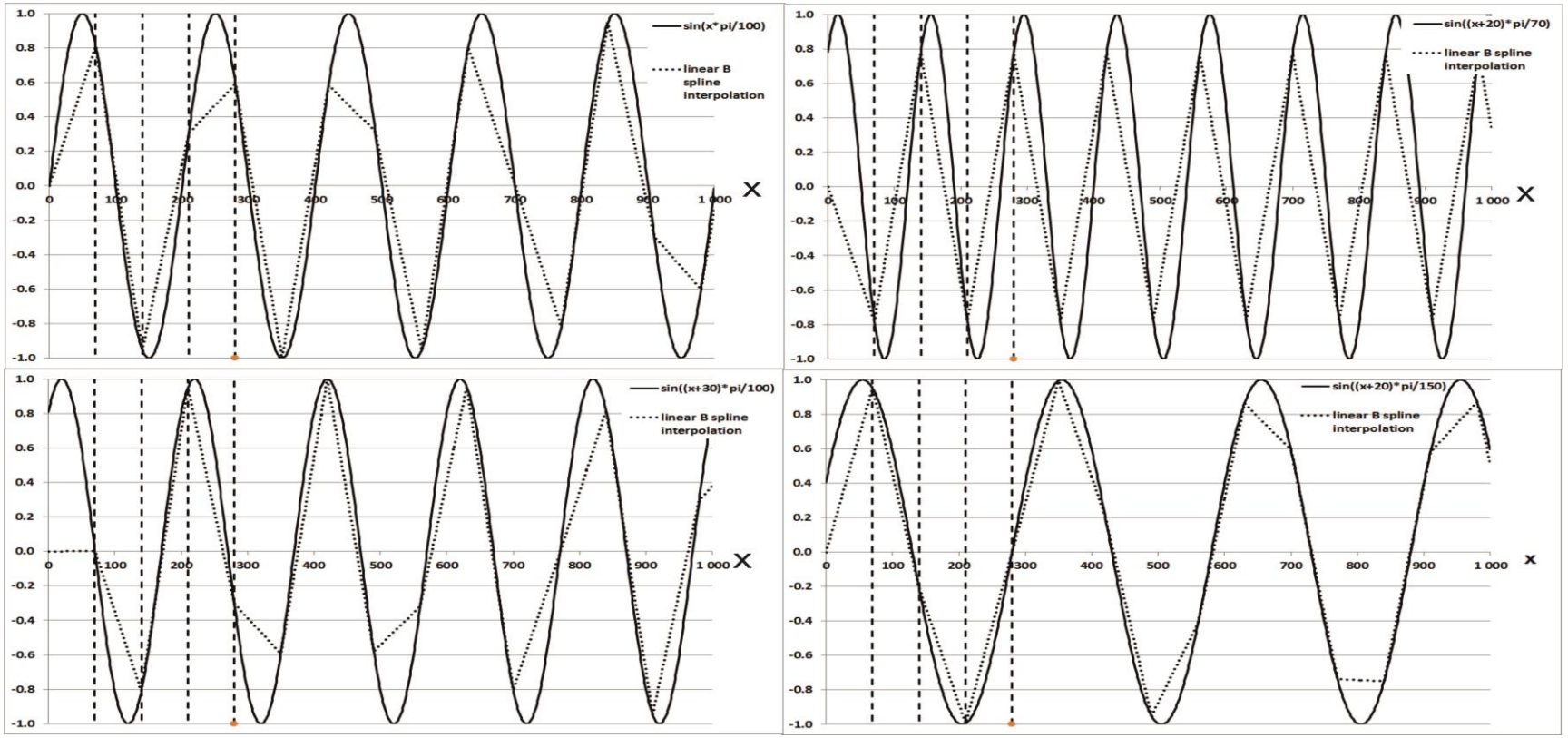

Figure 8S Different sinusoidal functions with half-period 100, 70 and 150 km and appropriate linear B spline interpolation with 70 km grid in 1D. At the beginning the vertical dotted lines denote the locations of parametrization nodes.

Table 1S Results of synthetic location with using of HYPOELLIPS method (index 1) and grid search method (index 2). Inversion of error free data. TEST (sec, lat, long,dep) is the correct location. Sec1/2 – final source time defined by HYPOELLIPS /by grid search method, lat1/2 (long1/2) – final latitude (longgitude) defined by HYPOELLIPS /by grid search method. Dep1/2 – depth defined by HYPOELLIPS /by grid search method, RMS1 – final HYPOELLIPS root-mean-square residual, RMS2 – final grid search method RMS The N P.st. –number of observations in permanent POLENET/LAPNET stations, N T.st. number of observations in temporary POLENET/LAPNET stations. σ_x and σ_z - the horizontal and the vertical uncertainties at the 68 per cent confidence level. Sta on r_{min} –the name of nearest station.

N	yymmdd	hh:mi	Sec	sec1/sec2	lat ^{0}N	lat ^{0}N 1/2	long ^{0}E	long ^{0}E 1/2	Dep (km)	dep (km)1/2	RMS(s)1	RMS(s)2	Gap (deg)	N	N	σ_x (km)	σ_z (km)	r_{min} (km)	Sta on r_{min}
			TEST		TEST		TEST		TEST					P.st.	T.st				
1	070609	2:52	41.8	41.6/41.6	68.72	68.72/68.73	23.09	23.09/23.11	53.4	53.6/54.5	0.05	0.08	122	9	12	0.3	0.5	32.6	ktk1
2	070702	3:04	10.1	10.0/ 9.9	68.05	68.05/68.05	22.81	22.81/22.81	10.1	10.7/11.5	0.06	0.09	67	13	8	0.2	0.4	34.1	lan
3	070716	22:43	0.6	0.4/ 0.4	68.49	68.49/68.49	23.74	23.74/23.75	7.3	7.2/ 8.5	0.04	0.09	102	8	6	0.3	0.7	9.8	hef
4	070917	1:50	41.3	41.2/41.2	68.42	68.42/68.42	23.31	23.31/23.33	12.9	13.1/13.5	0.02	0.07	107	5	11	0.2	0.4	14.5	hef
5	070920	20:38	39.5	39.4/39.3	67.86	67.86/67.86	22.60	22.61/22.62	5.4	6.2/ 5.5	0.05	0.07	176	6	15	0.2	0.5	56	lp61
6	071003	12:26	40.6	40.4/40.4	67.44	67.44/67.45	22.84	22.84/22.85	26.1	26.0/26.5	0.06	0.09	95	10	14	0.2	0.3	47.9	paj
7	071013	15:29	2.5	2.4/ 2.4	67.69	67.69/67.69	24.77	24.78/24.80	3.4	4.7/ 5.5	0.03	0.08	64	5	20	0.1	1.2	18.2	lp52
8	071112	3:37	31.6	31.5/31.5	66.67	66.67/66.68	25.86	25.87/25.89	0.0	2.8/ 3.5	0.04	0.07	55	14	24	0.1	0.7	9.3	rnf
9	071128	4:39	41.6	41.5/41.4	67.38	67.39/67.39	24.25	24.25/24.25	10.5	11.2/11.5	0.03	0.09	163	5	16	0.2	0.6	33.1	lp41
10	071128	4:14	44.7	44.6/44.5	67.39	67.39/67.40	24.32	24.32/24.32	1.9	5.2/ 7.5	0.04	0.06	158	5	17	0.2	2.3	33.7	lp41
11	071207	20:38	48.6	48.5/48.5	67.10	67.10/67.10	25.78	25.78/25.80	5.7	6.2/ 5.5	0.04	0.09	64	7	24	0.1	0.7	9.1	lp42
12	080119	19:52	3.0	2.9/ 2.9	67.25	67.25/67.26	23.77	23.77/23.79	11.3	11.8/11.5	0.05	0.09	37	15	30	0.1	0.3	23.5	lp51
13	080126	5:32	29.5	29.4/29.3	68.10	68.10/68.10	23.47	23.47/23.47	14.5	15.2/15.5	0.06	0.1	92	6	17	0.2	0.4	28	lp61
14	080212	3:41	11.7	11.7/11.6	66.93	66.94/66.94	24.05	24.05/24.06	0.0	0.7/ 1.5	0.03	0.1	165	7	25	0.2	0.7	22.6	lp41
15	080326	10:55	36.2	36.1/36.1	66.68	66.69/66.70	22.88	22.88/22.89	31.9	32.0/32.5	0.07	0.09	118	10	12	0.2	0.3	34.1	ert
16	080420	18:31	19.0	18.9/18.8	66.92	66.92/66.92	23.61	23.61/23.63	9.0	9.2/ 9.5	0.04	0.07	52	14	14	0.1	1	24.8	paj
17	080531	7:17	30.1	30.0/29.9	67.03	67.03/67.03	24.04	24.03/24.05	3.1	4.0/ 6.5	0.04	0.08	48	16	10	0.1	1.6	16.6	lp41
18	080607	11:33	22.4	22.2/22.2	68.83	68.83/68.83	23.66	23.66/23.68	5.4	6.2/ 6.5	0.04	0.06	59	13	13	0.1	0.4	26.7	ktk1
19	080719	19:11	19.1	19.0/18.9	67.95	67.95/67.96	22.79	22.79/22.81	6.3	6.2/ 6.5	0.04	0.07	81	17	14	0.1	0.4	35.1	lan
20	080830	4:48	49.5	49.3/49.3	67.74	67.74/67.75	22.77	22.77/22.78	6.4	7.9/ 9.5	0.05	0.1	75	21	11	0.2	0.6	45.1	mas
21	080913	7:21	10.4	10.3/10.2	68.19	68.19/68.20	23.80	23.80/23.80	11.7	12.6/12.5	0.06	0.1	47	15	31	0.1	0.2	24.3	hef

22	080922	14:30	8.3	8.1/ 8.1	67.86	67.87/67.87	23.55	23.55/23.56	27.7	27.8/27.5	0.07	0.1	61	15	21	0.1	0.3	16.9	lp61
23	081023	18:41	9.5	9.4/ 9.3	67.66	67.66/67.66	22.14	22.14/22.15	15.0	15.8/15.5	0.07	0.1	63	18	10	0.2	0.3	43.9	lan
24	081109	17:00	41.9	41.7/41.7	66.59	66.59/66.59	22.95	22.95/22.97	23.9	24.1/24.5	0.06	0.09	75	23	26	0.1	0.2	50.4	lp31
25	090120	11:32	20.4	20.2/20.2	67.54	67.54/67.55	22.17	22.17/22.18	5.9	6.7/ 6.5	0.05	0.08	118	19	3	0.2	0.6	11.1	mas
26	090129	22:20	35.4	35.2/35.3	69.00	69.00/69.00	23.78	23.78/23.79	34.5	34.3/34.5	0.06	0.08	108	17	20	0.2	0.2	21.8	ktk1
27	090207	9:39	8.3	8.1/ 8.1	67.39	67.39/67.40	23.54	23.54/23.56	8.7	9.3/ 9.5	0.05	0.08	37	21	21	0.1	0.3	8.2	lp51
28	090215	00:38	55.0	54.9/54.8	67.65	67.65/67.65	22.40	22.40/22.41	11.6	12.2/12.5	0.06	0.08	119	11	13	0.2	0.4	27	mas
29	090312	22:42	35.0	34.8/34.9	67.39	67.39/67.39	23.60	23.60/23.61	30.4	30.6/30.5	0.07	0.09	58	12	14	0.2	0.3	7.7	lp51
30	090401	23:51	46.4	46.3/46.3	67.09	67.09/67.09	25.78	25.78/25.80	2.2	2.7/ 2.5	0.03	0.05	65	5	17	0.2	1.4	8.5	lp42
31	090411	3:23	16.5	16.4/16.3	67.13	67.14/67.14	25.84	25.84/25.85	0.1	1.3/ 2.5	0.05	0.09	31	19	40	0.1	1	13.4	lp42
32	090425	10:32	45.7	45.5/45.5	68.54	68.54/68.55	23.36	23.35/23.36	9.0	10.1/10.5	0.05	0.1	55	13	16	0.1	0.4	19.9	hef
33	090504	22:45	44.9	44.8/44.7	67.42	67.42/67.42	23.57	23.57/23.58	5.5	5.9/ 6.5	0.03	0.06	45	17	10	0.1	0.4	5	lp51
34	090505	18:22	14.5	14.3/14.3	67.93	67.93/67.94	23.29	23.29/23.31	12.3	13.1/12.5	0.06	0.08	54	18	15	0.1	0.3	27.1	lp61

Table 2S Results of synthetic location with using of HYPOELLIPS method (index 1) and grid search method (index 2). Inversion of arrival times with a 0.1 s standard error. The notations are as in Table 1S.

N	yymmdd	hh:mi	Sec	sec1/sec2	lat ^{0}N	lat ^{0}N 1/2	long ^{0}E	long ^{0}E 1/2	Dep	dep (km)1/2	RMS(s)1	RMS(s)2	Gap (deg)	N	N	σ_x (km)	σ_z (km)	r_{min} (km)	Station r_{min}
			TEST		TEST		TEST		TEST					P.st.	T.st				
1	070609	2:52	41.8	41.6/41.6	68.7	68.72/68.73	23.1	23.09/23.11	53.4	54.1/54.5	0.07	0.09	122	9	12	0.3	0.5	32.6	ktk1
2	070702	3:04	10.1	10.0/ 9.9	68.1	68.05/68.05	22.8	22.81/22.81	10.1	10.8/11.5	0.08	0.10	67	13	8	0.2	0.4	34.1	lan
3	070716	22:43	0.6	0.4/ 0.4	68.5	68.49/68.49	23.7	23.74/23.75	7.3	7.8/ 8.5	0.06	0.07	102	8	6	0.3	0.7	9.6	hef
4	070917	1:50	41.3	41.2/41.2	68.4	68.41/68.42	23.3	23.31/23.33	12.9	13.3/13.5	0.07	0.08	107	5	11	0.2	0.4	14.5	hef
5	070920	20:38	39.5	39.4/39.3	67.9	67.86/67.86	22.6	22.61/22.62	5.4	5.9/ 5.5	0.07	0.08	176	6	15	0.2	0.5	56.0	lp61
6	071003	12:26	40.6	40.4/40.4	67.4	67.44/67.45	22.8	22.84/22.85	26.1	26.0/26.5	0.06	0.09	95	10	14	0.2	0.3	48.0	paj
7	071013	15:29	2.5	2.5/ 2.4	67.7	67.69/67.69	24.8	24.77/24.80	3.4	3.2/ 5.5	0.07	0.10	64	5	20	0.2	2.5	18.3	lp52
8	071112	3:37	31.6	31.5/31.3	66.7	66.67/66.68	25.9	25.87/25.89	0.0	2.8/0.5	0.08	0.09	55	14	24	0.1	0.7	9.3	rnf
9	071128	4:39	41.6	41.5/41.4	67.4	67.39/67.39	24.3	24.25/24.25	10.5	12.1/12.5	0.06	0.11	162	5	16	0.3	0.4	33.2	lp41

10	071128	4:14	44.7	44.6/44.6	67.4	67.39/67.40	24.3	24.32/24.34	1.9	6.3/ 8.5	0.06	0.08	158	5	17	0.2	1.9	33.7	lp41
11	071207	20:38	48.6	48.5/48.4	67.1	67.10/67.10	25.8	25.78/25.80	5.7	6.7/ 6.5	0.08	0.12	64	7	24	0.1	0.6	9.1	lp42
12	080119	19:52	3.0	2.9/ 2.9	67.3	67.25/67.26	23.8	23.77/23.79	11.3	12.1/11.5	0.06	0.10	37	15	29	0.1	0.3	23.5	lp51
13	080126	5:32	29.5	29.4/29.3	68.1	68.10/68.10	23.5	23.48/23.47	14.5	14.9/15.5	0.07	0.09	92	6	17	0.2	0.4	27.9	lp61
14	080212	3:41	11.7	11.6/11.5	66.9	66.93/66.93	24.1	24.05/24.06	0.0	0.7/-0.5	0.05	0.11	166	7	25	0.2	0.7	22.7	lp41
15	080326	10:55	36.2	36.1/36.1	66.7	66.69/66.70	22.9	22.88/22.89	31.9	32.1/32.5	0.09	0.12	118	10	12	0.2	0.3	34.3	ert
16	080420	18:31	19.0	18.9/18.8	66.9	66.92/66.92	23.6	23.61/23.63	9.0	8.2/ 9.5	0.06	0.10	52	14	14	0.1	1.1	24.7	paj
17	080531	7:17	30.1	30.0/29.9	67.0	67.03/67.03	24.0	24.03/24.05	3.1	3.7/ 7.5	0.05	0.10	48	16	10	0.1	1.8	16.8	lp41
18	080607	11:33	22.4	22.3/22.2	68.8	68.83/68.83	23.7	23.66/23.68	5.4	6.3/ 6.5	0.06	0.07	59	13	13	0.1	0.4	26.7	ktk1
19	080719	19:11	19.1	18.9/18.9	68.0	67.95/67.96	22.8	22.79/22.81	6.3	5.9/ 5.5	0.06	0.09	81	17	14	0.1	0.4	35.0	lan
20	080830	4:48	49.5	49.3/49.3	67.7	67.73/67.75	22.8	22.77/22.78	6.4	7.2/ 9.5	0.07	0.13	75	21	11	0.2	0.6	45.0	mas
21	080913	7:21	10.4	10.3/10.2	68.2	68.19/68.20	23.8	23.80/23.80	11.7	12.9/12.5	0.08	0.11	47	15	31	0.1	0.2	24.2	hef
22	080922	14:30	8.3	8.1/ 8.2	67.9	67.87/67.87	23.6	23.55/23.56	27.7	27.7/27.5	0.09	0.12	61	15	21	0.1	0.3	17.0	lp61
23	081023	18:41	9.5	9.4/ 9.3	67.7	67.66/67.66	22.1	22.14/22.15	15.0	16.2/15.5	0.08	0.13	63	18	10	0.2	0.3	43.8	lan
24	081109	17:00	41.9	41.7/41.7	66.6	66.59/66.59	23.0	22.95/22.97	23.9	24.5/24.5	0.09	0.10	75	23	26	0.1	0.2	50.5	lp31
25	090120	11:32	20.4	20.2/20.2	67.5	67.54/67.55	22.2	22.17/22.18	5.9	6.9/ 6.5	0.07	0.11	118	19	3	0.2	0.6	11.3	mas
26	090129	22:20	35.4	35.2/35.3	69.0	69.00/69.00	23.8	23.78/23.79	34.5	34.5/34.5	0.07	0.10	108	17	20	0.2	0.2	21.7	ktk1
27	090207	9:39	8.3	8.2/ 8.1	67.4	67.39/67.40	23.5	23.53/23.56	8.7	9.1/ 9.5	0.07	0.11	37	21	21	0.1	0.3	8.2	lp51
28	090215	00:38	55.0	54.9/54.8	67.7	67.65/67.65	22.4	22.40/22.41	11.6	12.3/12.5	0.07	0.08	119	11	13	0.2	0.3	27.0	mas
29	090312	22:42	35.0	34.8/34.8	67.4	67.39/67.39	23.6	23.59/23.61	30.4	30.6/31.5	0.08	0.10	58	12	14	0.2	0.3	7.7	lp51
30	090401	23:51	46.4	46.3/46.3	67.1	67.09/67.09	25.8	25.79/25.80	2.2	1.0/ 2.5	0.05	0.08	64	5	17	0.2	1.4	8.7	lp42
31	090411	3:23	16.5	16.4/16.3	67.1	67.14/67.14	25.8	25.84/25.85	0.1	1.3/ 2.5	0.07	0.10	31	19	40	0.1	1.2	13.4	lp42
32	090425	10:32	45.7	45.5/45.4	68.5	68.54/68.55	23.4	23.35/23.36	9.0	10.1/10.5	0.07	0.11	55	13	16	0.1	0.4	19.8	hef
33	090504	22:45	44.9	44.8/44.7	67.4	67.42/67.42	23.6	23.56/23.58	5.5	5.5/ 6.5	0.07	0.09	45	17	10	0.1	0.4	5.1	lp51
34	090505	18:22	14.5	14.3/14.3	67.9	67.93/67.94	23.3	23.29/23.31	12.3	12.6/13.5	0.08	0.11	54	18	15	0.1	0.3	27.2	lp61

Table 3S Results of synthetic location with using of HYPOELLIPS method (index 1) and grid search method (index 2). Inversion of arrival times with a 0.3 s standard error. The notations are as in Table 1S.

N	yymmdd	hh:mi	Sec	sec1/sec2	lat ^{0}N	lat ^{0}N 1/2	long ^{0}E	long ^{0}E 1/2	Dep (km)	dep (km)1/2	RMS(s)1	RMS(s)2	Gap (deg)	N	N	σ_x (km)	σ_z (km)	r_{min} (km)	Sta on

																			r_{min}
			TEST		TEST		TEST		TEST					P.st.	T.st				
1	070609	2:52	41.8	41.6/41.5	68.72	68.73/68.73	23.09	23.08/23.09	53.4	55.0/55.5	0.17	0.17	122	9	12	0.3	0.5	32.5	ktk1
2	070702	3:04	10.1	10.0/ 9.9	68.05	68.04/68.05	22.81	22.81/22.81	10.1	11.0/11.5	0.17	0.18	67	13	8	0.2	0.4	34	lan
3	070716	22:43	0.6	0.4/ 0.4	68.49	68.49/68.49	23.74	23.73/23.75	7.3	8.7/ 9.5	0.15	0.14	102	8	6	0.3	0.6	9.4	hef
4	070917	1:50	41.3	41.2/41.2	68.42	68.41/68.42	23.31	23.31/23.33	12.9	13.6/14.5	0.17	0.17	107	5	11	0.2	0.4	14.4	hef
5	070920	20:38	39.5	39.4/39.3	67.86	67.86/67.86	22.60	22.61/22.62	5.4	4.9/ 3.5	0.16	0.17	177	6	15	0.2	0.5	56.1	lp61
6	071003	12:26	40.6	40.4/40.4	67.44	67.44/67.45	22.84	22.84/22.85	26.1	26.1/26.5	0.13	0.14	95	10	14	0.2	0.3	48	paj
7	071013	15:29	2.5	2.5/ 2.5	67.69	67.69/67.69	24.77	24.77/24.80	3.4	1.3/ 2.5	0.18	0.19	64	5	20	0.1	33.3	18.2	lp52
8	071112	3:37	31.6	31.5/31.3	66.67	66.67/66.68	25.86	25.87/25.89	0.0	1.2/ 0.5	0.19	0.2	55	14	24	0.1	1.2	9.5	rnf
9	071128	4:39	41.6	41.5/41.5	67.38	67.39/67.39	24.25	24.26/24.27	10.5	12.9/12.5	0.14	0.16	162	5	16	0.3	0.4	33.3	lp41
10	071128	4:14	44.7	44.5/44.5	67.39	67.39/67.40	24.32	24.33/24.34	1.9	11.4/10.5	0.17	0.17	157	5	17	0.2	0.5	33.7	lp41
11	071207	20:38	48.6	48.5/48.4	67.10	67.10/67.10	25.78	25.78/25.80	5.7	7.9/ 6.5	0.19	0.21	64	7	24	0.1	0.5	9	lp42
12	080119	19:52	3.0	3.0/ 3.0	67.25	67.25/67.26	23.77	23.77/23.79	11.3	12.4/12.5	0.14	0.14	37	15	29	0.1	0.3	23.4	lp51
13	080126	5:32	29.5	29.4/29.4	68.10	68.10/68.10	23.47	23.48/23.50	14.5	14.2/14.5	0.14	0.15	91	6	17	0.2	0.4	27.8	lp61
14	080212	3:41	11.7	11.6/11.5	66.93	66.93/66.93	24.05	24.04/24.06	0.0	1.4/ 0.5	0.15	0.17	166	7	25	0.2	0.5	22.9	lp41
15	080326	10:55	36.2	36.1/36.2	66.68	66.69/66.70	22.88	22.89/22.91	31.9	32.2/32.5	0.17	0.19	118	10	12	0.2	0.3	34.6	ert
16	080420	18:31	19.0	18.9/18.8	66.92	66.92/66.92	23.61	23.60/23.61	9.0	5.9/ 8.5	0.15	0.16	52	14	14	0.1	1.5	24.6	paj
17	080531	7:17	30.1	30.0/29.9	67.03	67.02/67.03	24.04	24.03/24.05	3.1	3.1/ 6.5	0.15	0.17	48	16	10	0.1	2.3	17	lp41
18	080607	11:33	22.4	22.3/22.3	68.83	68.83/68.83	23.66	23.67/23.68	5.4	6.7/ 7.5	0.16	0.16	59	13	13	0.1	0.4	26.8	ktk1
19	080719	19:11	19.1	18.9/18.9	67.95	67.96/67.96	22.79	22.78/22.79	6.3	5.2/ 5.5	0.15	0.17	81	17	14	0.1	0.4	34.8	lan
20	080830	4:48	49.5	49.3/49.2	67.74	67.73/67.74	22.77	22.78/22.80	6.4	1.5/ 6.5	0.17	0.19	75	21	11	0.1	32.7	44.9	mas
21	080913	7:21	10.4	10.3/10.2	68.19	68.20/68.20	23.80	23.79/23.80	11.7	13.4/13.5	0.17	0.19	47	15	31	0.1	0.2	24.1	hef
22	080922	14:30	8.3	8.2/ 8.2	67.86	67.87/67.87	23.55	23.55/23.56	27.7	27.5/27.5	0.18	0.19	61	15	21	0.1	0.3	17	lp61
23	081023	18:41	9.5	9.4/ 9.4	67.66	67.66/67.67	22.14	22.15/22.15	15.0	17.0/17.5	0.17	0.19	63	18	10	0.2	0.3	43.5	lan
24	081109	17:00	41.9	41.7/41.7	66.59	66.59/66.59	22.95	22.94/22.97	23.9	24.9/24.5	0.18	0.19	76	23	26	0.1	0.2	50.7	lp31
25	090120	11:32	20.4	20.2/20.2	67.54	67.54/67.55	22.17	22.17/22.18	5.9	7.3/ 7.5	0.16	0.15	118	19	3	0.2	0.6	11.5	mas
26	090129	22:20	35.4	35.3/35.3	69.00	69.00/69.00	23.78	23.77/23.79	34.5	34.9/35.5	0.14	0.15	107	17	20	0.2	0.2	21.6	ktk1
27	090207	9:39	8.3	8.2/ 8.1	67.39	67.39/67.40	23.54	23.53/23.53	8.7	8.9/ 8.5	0.18	0.2	38	21	21	0.1	0.3	8.3	lp51
28	090215	00:38	55.0	54.9/54.8	67.65	67.65/67.65	22.40	22.40/22.41	11.6	12.5/12.5	0.16	0.17	119	11	13	0.2	0.3	27	mas
29	090312	22:42	35.0	34.8/34.8	67.39	67.39/67.39	23.60	23.59/23.61	30.4	30.8/31.5	0.2	0.2	58	12	14	0.2	0.3	7.8	lp51

30	090401	23:51	46.4	46.2/46.2	67.09	67.09/67.09	25.78	25.79/25.80	2.2	0.1/ 0.5	0.14	0.14	64	5	17	0.2	2.3	8.9	lp42
31	090411	3:23	16.5	16.3/16.2	67.13	67.14/67.14	25.84	25.84/25.85	0.1	0.0/ 0.5	0.18	0.19	31	19	40	0.1	1.7	13.4	lp42
32	090425	10:32	45.7	45.5/45.4	68.54	68.54/68.55	23.36	23.35/23.36	9.0	10.2/10.5	0.17	0.16	55	13	16	0.1	0.4	19.8	hef
33	090504	22:45	44.9	44.7/44.7	67.42	67.42/67.42	23.57	23.56/23.58	5.5	4.7/ 5.5	0.18	0.18	45	17	10	0.1	0.5	5.3	lp51
34	090505	18:22	14.5	14.3/14.3	67.93	67.93/67.94	23.29	23.28/23.31	12.3	11.8/11.5	0.17	0.18	54	18	15	0.1	0.4	27.3	lp61