

APPENDIX B
STATIONS LISTS
&
INSTRUMENTATION

No.	Station	Lat. (N)	Long. (E)	Sensor	Operated by
1	BSD	55.114	014.914	STS2	GFZ
2	CZA	53.230	017.094	STS2	GFZ
3	HLG	54.185	007.884	STS2	GFZ
4	LEN	53.090	011.479	STS2	GFZ
5	OLDS	56.619	016.499	STS2	GFZ
6	T0BG	52.958	012.034	STS2	GFZ
7	T14S	56.260	013.623	CMG-40T	GFZ
8	T16S	56.426	013.228	STS2	GFZ
9	T18S	56.520	013.565	CMG-40T	GFZ
10	T1BD	55.863	012.240	CMG-3T	GFZ
11	T1BG	54.073	010.457	CMG-3T	GFZ
12	T2BD	55.703	011.550	CMG-3T	GFZ
13	T2BG	54.217	010.067	CMG-3T	GFZ
14	T30S	57.096	013.947	STS2	GFZ
15	T3BD	55.536	012.078	STS2	GFZ
16	T3BG	54.328	010.547	CMG-40T	GFZ
17	T40S	57.582	015.039	CMG-40T	GFZ
18	T41S	57.837	015.165	CMG-40T	GFZ
19	T42S	57.761	014.664	CMG-40T	GFZ
20	T4BD	55.219	011.595	CMG-3T	GFZ
21	T4BG	53.137	009.802	CMG-3T	GFZ
22	T5BD	54.886	011.815	STS2	GFZ
23	T5BG	53.190	009.337	CMG-3T	GFZ
24	T60S	58.758	015.944	STS2	GFZ
25	T6BD	54.887	011.254	CMG-3T	GFZ
26	T6BG	53.380	009.594	CMG-3T	GFZ
27	T7BD	56.456	009.167	CMG-3T	GFZ
28	T7BG	52.258	008.556	CMG-3T	GFZ
29	T897	58.380	012.509	STS2	ZH
30	T8BG	53.850	012.905	3ESP	L
31	T9BG	52.724	011.480	3ESP	GFZ/L
32	TABG	53.677	012.228	3ESP	GFZ/L
33	TBBG	52.870	010.633	STS2	GFZ

Table B.1 The list of broadband station in TOR profile whose data have been used in this study (for abbreviations refer to Tables B. 4 and B. 5).

No.	Station	Lat. (N)	Long. (N)	Sensor	Operated by
1	T031	57.224	013.650	LEN5	UP
2	T034	57.313	014.359	MARK2	UP
3	T035	57.164	014.783	LEN5	UP
4	T036	57.434	013.941	LEN5	UP
5	T037	57.318	015.002	LEN5	UP
6	T038	57.671	013.968	LEN1	UP
7	T039	57.572	014.361	LEN1	UP
8	T043	58.026	014.732	LEN1	UP
9	T044	58.249	014.903	LEN1	UP
10	T052	57.893	015.673	LEN5	UP
11	T053	58.080	015.430	MARK2	UP
12	T054	58.055	015.932	LEN5	UP
13	T056	58.302	016.192	LEN5	UP
14	T057	58.474	015.994	MARK2	UP
15	T058	58.597	015.570	MARK2	UP
16	T059	58.526	016.576	LEN5	UP
17	T061	58.907	015.627	LEN1	UP
18	T065	55.347	013.362	LEN1	ZH
19	T066	55.563	012.948	LEN1	ZH
20	T067	55.563	013.564	LEN1	ZH
21	T068	55.766	012.925	LEN1	ZH
22	T069	56.015	012.841	LEN1	ZH
23	T070	56.033	013.611	LEN1	ZH
24	T071	56.245	012.653	LEN1	ZH
25	T072	56.469	013.869	LEN1	ZH
26	T073	56.218	013.230	LEN1	ZH
27	T074	56.676	013.927	LEN1	ZH
28	T075	56.699	014.538	LEN1	ZH
29	T076	56.727	013.163	LEN1	ZH
30	T077	56.956	014.401	LEN1	ZH
31	T10G	51.610	010.316	MARK	BO
32	T11G	51.726	009.416	MARK	BO
33	T12G	51.836	010.053	MARK	GFZ
34	T13G	51.988	009.603	MARK	GFZ
35	T14G	52.000	010.427	MARK	GFZ
36	T15G	52.062	010.015	MARK	BO
37	T16G	52.238	009.522	MARK	GFZ
38	T17G	52.219	010.238	MARK	GFZ
39	T18G	52.523	010.465	MARK	GFZ
40	T19G	52.547	009.484	MARK	GFZ
41	T1MG	54.223	010.074	MARK	GFZ
42	T21G	52.707	009.570	MARK	GFZ
43	T22G	52.754	010.114	MARK	GFZ
44	T24G	52.899	009.586	MARK	GFZ
45	T25G	53.070	010.341	MARK	GFZ

No.	Station	Lat. (N)	Long. (N)	Sensor	Operated by
46	T26G	52.959	012.032	MARK	GFZ
47	T27G	54.572	013.659	MARK	GFZ
48	T28G	54.476	013.471	MARK	GFZ
49	T29G	54.316	013.358	MARK	GFZ
50	T2MG	54.169	010.459	MARK	ZH
51	T30G	54.193	013.176	MARK	GFZ
52	T31G	54.015	013.070	MARK	GFZ
53	T32G	53.850	012.905	MARK	GFZ
54	T33G	53.692	012.751	MARK	GFZ
55	T34G	53.527	012.657	MARK	GFZ
56	T35G	53.354	012.440	MARK	GFZ
57	T36G	53.164	012.260	MARK	GFZ
58	T37G	52.820	011.845	MARK	GFZ
59	T38G	52.525	011.459	MARK	GFZ
60	T39G	52.336	011.381	MARK	GFZ
61	T3MG	54.457	010.056	MARK	GFZ
62	T40G	52.240	011.285	MARK	GFZ
63	T41G	52.085	011.121	MARK	GFZ
64	T42G	51.873	010.912	MARK	GFZ
65	T43G	51.687	010.791	MARK	GFZ
66	T44G	53.466	010.432	MARK	GFZ
67	T45G	53.219	010.654	MARK	GFZ
68	T46G	53.262	009.990	MARK	GFZ
69	T47G	53.704	010.776	MARK	GFZ
70	T48G	54.012	010.123	MARK	GFZ
71	T49G	53.883	009.767	MARK	GFZ
72	T4MG	54.013	010.011	MARK	GFZ
73	T50G	52.102	009.190	MARK	BO
74	T51G	52.069	008.370	MARK	BO
75	T52G	51.768	007.820	MARK	BO
76	T53G	52.894	011.142	MARK	GFZ
77	T54G	53.747	011.346	MARK	GFZ
78	T55G	53.926	011.152	MARK	GFZ
79	T5MG	53.834	009.768	MARK	GFZ
80	T60G	53.677	012.228	MARK	GFZ
81	T61G	54.171	012.344	MARK	GFZ
82	T6MG	54.579	011.015	MARK	ZH
83	T7MG	54.429	011.229	MARK	GFZ
84	T801	55.585	011.365	MARK	PO

No.	Station	Lat. (N)	Long. (N)	Sensor	Operated by
85	T802	55.399	011.805	MARK	GFZ
86	T803	55.327	012.282	MARK	GFZ
87	T804	55.325	011.345	MARK	PO
88	T805	55.114	011.991	MARK	PO
89	T806	54.810	012.036	MARK	PO
90	T807	54.758	011.227	MARK	GFZ
91	T808	54.689	011.647	MARK	PO
92	T809	54.807	010.722	MARK	PO
93	T810	55.074	010.891	MARK	PO
94	T811	55.680	012.429	MARK2	PO
95	T812	56.013	012.480	MARK2	PO
96	T813	55.800	011.943	MARK2	PO
97	T814	55.579	011.711	MARK2	PO
98	T815	54.994	012.509	MARK2	PO
99	T816	54.591	011.950	MARK2	PO
100	T817	54.804	011.522	MARK2	PO
101	T818	55.013	010.589	MARK2	PO
102	T819	55.195	010.770	MARK2	PO
103	T820	55.452	011.234	MARK2	PO
104	T898	57.067	013.484	LEN1	ZH
105	T899	55.755	013.236	LEN1	ZH
106	T8MG	54.221	010.885	MARK	GFZ
107	T998	56.013	012.478	LEN1	ZH
108	T999	56.068	012.232	LEN1	ZH

Table B.2 List of short–period stations in TOR profile whose data have been used in this study (for abbreviations refer to Tables B. 4 and B. 5).

No.	Station	Lat. (N)	Long. (E)	Sensor	Operated by
1	BUG	51.4450	007.2643	STS2	GRSN
2	BSEG	53.9350	010.3160	STS2	GRSN
3	BRNL	52.4270	013.3580	STS2	GRSN
4	IBBN	52.3070	007.7566	STS2	GRSN
5	CLZ	51.8420	010.3740	STS2	GRSN
6	HAM	53.4650	009.9247	STS2	GRSN
7	RGN	54.5480	013.3210	STS2	GRSN

Table B. 3 Stations of the German Regional Seismic Network (GRSN) whose data have been used in this study (for abbreviations refer to Tables B. 4 and B. 5).

Abbriviation	Seismometer	Damping (h_0)	Eigenperiod (T_0)
3ESP	Guralp CMG_3ESP	0.7	30
CMG-3T	Guralp CMG_3T	0.7	100
CMG-40T	Grualp CMG_40T	0.7	30
STS2	Streckeisen STS2	0.7	120
MARK	Mark L4-3D	0.7	1
MARK2	Mark L4-3D	0.7	0.5
LEN	Lennartz LE3D	0.7	1
LEN2	Lennartz LE3D	0.7	0.5
LEN5	Lennartz LE3D	0.7	5
S13	Kinematics S13	0.7	1

Table B. 4 The abbreviations for the seismometer types which have been used in Tables B. 1, B. 2, B. 3, B. 6 and B. 7.

Abbr.	Operator
BO	Dept. of Geophysics, Bochum University, Germany
GFZ	GeoForschungsZentrum Potsdam
GRSN	German Regional Seismic Network, Erlangen, Germany
L	Institute of Geophysics and Geology, Leipzig University
UP	Dept. of Earth Sciences, Uppsala University
PO	Institute of Geophysics, Academy of Sciences & Warsaw University, Warsaw, Poland
ZH	Institute of Geophysics, ETH Zürich, Switzerland
UT	Utrecht Universtiy, The netherlands
OU	Dept. of Geophysics, University of Oulo, Finland
HEL	University of Helsinki, Finland
FR	University of Grenoble & University of Strasbourg, France
STU	University of Stuttgart, Germany
APA	Geological Institute, Apatity, Russia

Table B. 5 The Abbreviations for the operators of the seismographs as used in Tables B. 1, B. 2, B. 3, B. 6, B. 7.

No.	Station	Lat. (N)	Long. (E)	Sensor	Operated by
1	FA05	62.5548	031.2190	CMG-3T	GFZ
2	FB05	62.8130	030.5965	CMG-3T	GFZ
3	FB07	62.1300	029.6020	STS2	GFZ
4	FB09	61.4650	028.2040	STS2	GFZ
5	FB11	60.7854	027.0180	*	HEL
6	FC04	63.4326	030.4135	CMG-3T	GFZ
7	FC05	63.0634	029.8672	CMG40T	GFZ
8	FC06	62.7626	029.3757	CMG40T	GFZ
9	FD03	64.0574	030.3050	CMG-3T	STU
10	FD04	63.6654	029.8744	CMG40T	GFZ
11	FD05	63.3498	029.2364	CMG-3T	GFZ
12	FD07	62.6570	027.8950	STS2	GFZ
13	FD09	61.9880	026.8770	STS2	GFZ
14	FD10	61.4444	026.0793	*	HEL
15	FD11	61.2863	025.7210	STS2	FR
16	FD13	60.5090	024.6514	*	UT
17	FD15	59.8427	023.2461	STS2	FR
18	FE09	62.1112	026.3095	*	UT
19	FF02	64.7819	029.9995	CMG-3T	STU
20	FF05	63.8216	027.9892	CMG-3T	GFZ
21	FF07	63.1920	026.5940	CMG-3T	GFZ
22	FF11	61.7983	024.2865	STS2	FR
23	FF13	61.0552	023.3426	STS2	FR
24	FF15	60.4160	022.4431	STS2	UP
25	FF30	64.4942	029.0969	STS2	STU
26	FF31	64.3770	028.6717	STS2	STU
27	FF32	64.3867	029.4277	STS2	STU
28	FF33	64.6211	028.8156	STS2	STU
29	FF90	62.4869	025.4724	3ESP	FR
30	FF91	62.6539	025.6921	3ESP	FR
31	FF92	62.4033	025.9019	3ESP	FR
32	FF93	62.2896	025.3067	STS2	FR
33	FF94	62.5696	025.0568	3ESP	FR
34	FG01	65.4384	029.5568	STS2	ZH
35	FH03	65.0604	027.6798	STS2	ZH
36	FH05	64.3714	026.4200	STS2	ZH
37	FH07	63.6722	025.2222	STS2	ZH
38	FH09	62.9635	024.0823	STS2	ZH
39	FH11	62.2394	023.0673	STS2	FR
40	FH13	61.5613	022.0083	STS2	UP
41	FJ01	65.9973	028.2552	STS2	ZH
42	FJ10	63.0422	022.6715	*	UT
43	FK05	64.8605	024.9332	STS2	ZH
44	FK07	64.1493	023.7527	STS2	ZH
45	FK09	63.4293	022.6313	STS2	ZH
46	FK11	62.6785	021.6708	STS2	UP

Table B. 6 List of the broadband stations in SVEKALAPKO network whose data have been used in this study. For stations whose sensor type is marked by * a STS2 restitution filter have been used (for abbreviations refer to Tables B. 4 and B. 5).

No.	Station	Lat. (N)	Long. (E)	Sensor	Operated by
1	FA06	62.2258	030.6109	*	HEL
2	FA07	61.9113	029.9914	*	HEL
3	FA08	61.5509	029.3596	*	HEL
4	FA09	61.2109	028.9451	*	HEL
5	FA10	60.9006	028.2319	*	HEL
6	FA11	60.5368	027.5547	*	HEL
7	FB06	62.4877	030.0057	*	HEL
8	FB08	61.8502	028.7955	*	HEL
9	FB10	61.1407	027.6157	*	HEL
10	FC01	64.6000	032.2170	*	APA
11	FC02	64.2500	032.1670	*	APA
12	FC07	62.4092	028.7245	*	HEL
13	FC08	62.1065	028.0629	LEN	PO
14	FC09	61.7454	027.4940	LEN	PO
15	FC10	61.3875	026.9454	LEN	PO
16	FC11	61.0361	026.3984	LEN	PO
17	FD02	64.3670	031.2330	*	APA
18	FD06	63.0115	028.6071	LEN	ZH
19	FD08	62.3236	027.3904	LEN	ZH
20	FD12	60.9495	025.1581	LEN	PO
21	FD14	60.1894	024.1946	LEN	PO
22	FE02	64.5670	030.5330	*	APA
23	FE03	64.2762	029.8353	LEN	SW
24	FE04	63.9338	029.1019	LEN	ZH
25	FE05	63.5819	028.5833	LEN	ZH
26	FE06	63.2807	027.9106	LEN	ZH
27	FE07	62.9190	027.4169	LEN	ZH
28	FE08	62.5908	026.7348	LEN	ZH
29	FE09	62.1112	026.3095	*	UT
30	FE10	61.9020	025.6595	LEN	PO
31	FE11	61.5296	025.0419	LEN	PO
32	FE12	61.1884	024.4612	LEN	PO
33	FE13	60.8313	023.9690	LEN	PO
34	FE14	60.4823	023.4693	LEN5	UP
35	FE15	60.1132	022.9337	LEN5	UP
36	FF01	64.9500	030.5330	*	APA
37	FF04	64.2063	028.4753	LEN2	OU
38	FF06	63.5015	027.2053	LEN	ZH
39	FF12	61.3742	023.8779	LEN	PO
40	FF14	60.6930	022.8185	LEN5	UP

No.	Station	Lat. (N)	Long. (E)	Sensor	Operated by
41	FG02	65.1555	029.1004	LEN2	OU
42	FG03	64.8245	028.4122	LEN2	OU
43	FG04	64.4511	027.7781	LEN2	OU
44	FG05	64.1484	027.2051	LEN	ZH
45	FG06	63.7632	026.5384	LEN	ZH
46	FG07	63.4193	025.8969	LEN	ZH
47	FG08	63.0838	025.3705	LEN	ZH
48	FG09	62.7204	024.7911	LEN	ZH
49	FG10	62.3992	024.2359	LEN	ZH
50	FG11	62.0887	023.7336	LEN5	UP
51	FG12	61.6505	023.1290	LEN UNTIL 98.12.19 AFTERWARDS LEN5	UP
52	FG13	61.3078	022.6855	LEN5	UP
53	FG14	60.9575	022.1068	LEN	UP
54	FG50	64.0850	027.7130	*	HEL
55	FH01	65.9111	029.0444	S13	OU
56	FH02	65.4113	028.2687	LEN2	OU
57	FH04	64.7034	027.1098	LEN2	OU
58	FH06	64.0269	025.8151	LEN	ZH
59	FH10	62.6228	023.5266	LEN	ZH
60	FH12	61.9016	022.3527	LEN5	UP
61	FH14	61.2393	021.4730	LEN	UP
62	FIA0	61.4436	026.0771	*	HEL
63	FJ02	65.6602	027.6511	LEN2	OU
64	FJ03	65.2966	026.9637	LEN2	OU
65	FJ05	64.6207	025.7188	LEN	ZH
66	FJ06	64.2760	025.0886	LEN	ZH
67	FJ07	63.9216	024.4865	LEN	ZH
68	FJ08	63.5498	023.9138	LEN	ZH
69	FJ09	63.1985	023.3240	LEN	ZH
70	FJ10	63.0422	022.6715	*	UT
71	FJ11	62.4209	022.1422	LEN5	UP
72	FJ12	62.1288	021.6775	LEN5	UP
73	FK04	65.0528	025.8964	S13	OU
74	FK06	64.4986	024.3215	LEN	ZH
75	FK08	63.7919	023.1814	LEN	ZH
76	FK10	63.0698	022.1038	LEN5	UP
77	FM20	67.3712	026.6291	*	OU

Table B. 7 List of the short–period stations in SVEKALAPKO network whose data have been used in this study. For stations whose sensor type is marked by * a MARK L4–3D restitution filter have been used (for abbreviations refer to Tables B. 4 and B. 5).

Seismometer	Poles	Zeros
Lennartz LE-3D (1Hz)	(-4.442,+4.443) (-4.442,+4.443)	(0.0,0.0) (0.0,0.0)
Lennartz LE-3D (2Hz)	(-8.88,+8.88) (-8.88,-8.88)	(0.0,0.0) (0.0,0.0)
Lennartz LE-3D (5sec)	(-0.888,+0.889) (-0.888,-0.889)	(0.0,0.0) (0.0,0.0)
STS2	(-3.701844e-02,-3.702961e-02) (-3.701844e-02,3.702961e-02)	(0.0,0.0) (0.0,0.0)
Guralp CMG_3T	(-0.04442,-0.04442) (-0.04442,0.04442)	(0.0,0.0) (0.0,0.0)
Guralp CMG_40T	(-0.1480,0.1480) (-0.1480,-0.1480)	(0.0,0.0) (0.0,0.0)
Kinematics S-13	(-4.44,+4.44) (-4.44,-4.44)	(0.0,0.0) (0.0,0.0)
MARK L4_3D (1Hz)	(-4.4429,+4.4429) (-4.4429,-4.4429)	(0.0,0.0) (0.0,0.0)
MARK L4_3D (2Hz)	(-8.8858,+8.8858) (-8.8858,-8.8858)	(0.0,0.0) (0.0,0.0)
Guralp CMG_ESP	(-0.049354,-0.049354) (-0.049354,0.049354)	(0.0,0.0) (0.0,0.0)

Table B. 8 Poles and zeroes of the seismometers used for instrument correction in this study. The values are for velocity response and for angular frequency (ω).