

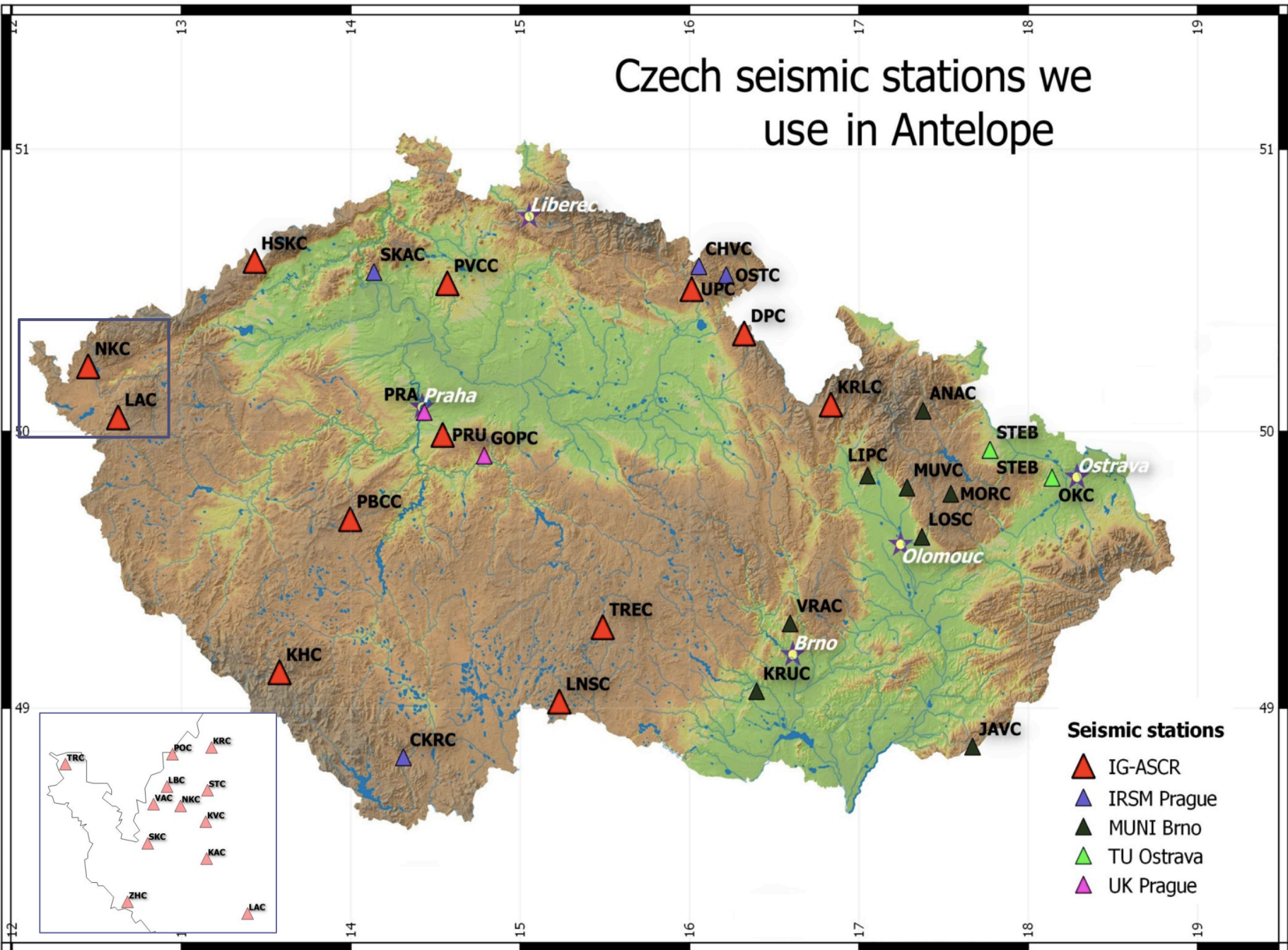
# ANTELOPE USAGE AT CZECH REGIONAL SEISMIC NETWORK - IG-ASCR PRAGUE

Adrián Michálek  
IG-ASCR Prague



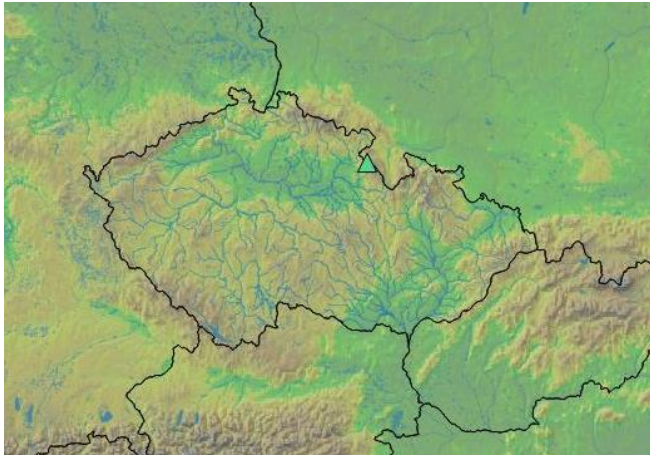
Antelope Users Group meeting, 12-13 March 2015, Udine

# Czech seismic stations we use in Antelope



Station	Station code	Network code	Latitude (N)	Longitude (E)	Elevation (m)	Institution	Sensor	Instrumentation	Sampling	Open	Close	Velocity gain (nm/s/C)
Průhonice	PRU	CZ	49.9883	14.5417	302	IG-ASCR	STS-2	Q330S	20/100	26.5.2010	present	1.67
	PRU	CZ	49.9883	14.5417	302	IG-ASCR	SKM-3	Q330S	100	26.5.2010	present	49.3
Kašperské Hory	KHC	CZ	49.1309	13.5782	700	IG-ASCR	Vegik	Q330S	100	7.5.2010	present	0.1
	KHC	CZ	49.1309	13.5782	700	IG-ASCR	STS-2	Q330S	20/100	7.5.2010	present	1.67
Dobruška/Polom	DPC	CZ	50.3502	16.3222	748	IG-ASCR	FBA	Q330HR	100	3.5.2007	present	-
	DPC	CZ	50.3502	16.3222	748	IG-ASCR	STS-1	Q330HR	20/100	3.5.2007	present	0.25
Nový Kostel	NKC	CZ	50.2331	12.4479	564	IG-ASCR	FBA	Q330S	100	19.6.2010	present	-
	NKC	CZ	50.2331	12.4479	564	IG-ASCR	STS-2	Q330S	20/100	19.6.2010	present	1.67
Ostrava/Krásné Pole	OKC	CZ	49.8346	18.1400	272	TU/UGN Ostrava	SM-3	Q330S	100	24.3.2011	present	122.7
	OKC	CZ	49.8346	18.1400	272	TU/UGN Ostrava	CMG-3ESP	Q330S	20/100	24.3.2011	present	1.201
Panská Ves	PVCC	CZ	50.5282	14.569	311	IG-ASCR	STS-2	Q330S	20/100	9.4.2011	present	1.67
Úpice	UPC	CZ	50.5074	16.0121	416	IG-ASCR	STS-2	Q330S	20/100	30.6.2010	present	1.67
Králíky	KRLC	CZ	50.0966	16.8341	614	IG-ASCR	CMG-40T	ED+SC	20/100	1.5.2010	present	1.25
Třešť	TREC	CZ	49.2948	15.4871	559	IG-ASCR	CMG-3T	Q330S	20/100	23.5.2012	present	1.67
Příbram	PBCC	CZ	49.2948	15.4871	559	IG-ASCR	CMG-40T	ED+SC	20/100	10.7.2013	present	2.38
Vranov	VRAC	CZ	49.3084	16.5933	475	MUNI Brno	STS-2 HG	Q330S	40/100	4.6.2012	present	0.125
Moravský Beroun	MORC	GE	49.7768	17.5425	742	MUNI Brno/ Geofon	STS-2	Q330HR	20/80	8.6.2010	present	0.397
Moravský Krumlov	KRUC	CZ	49.0619	16.3952	341	MUNI Brno/ ZAMG	STS-2	Q330S	40/100	10.12:2012	present	1.67
Velká Javorina	JAVC	CZ	48.8591	17.6707	827	MUNI Brno/ ZAMG	STS-2	Q380	20/80	27.10.1995	present	1.67
Praha	PRA	CZ	50.0703	14.4331	225	UK Prague	CMG-3T	DM-24	20/100	2.4.2012	present	2.1287
Pecný	GOPC	CZ	49.914	14.787	545	UK Prague	CMG-3T	DM-24	20/100	9.4.2010	present	0.53373
Ostaš	OSTC	CZ	50.5565	16.2156	556	IRSM Prague	STS-2	RUP	20/100	1.10.2005	present	0.0031
Chvaleč	CHVC	CZ	50.5881	16.0547	580	IRSM Prague	STS-2	RUP	20/100	3.5.2009	present	0.0124
Český Krumlov	CKRC	CZ	48.81989	14.30955	500	IRSM Prague	STS-2	RUP	20/100	10.7.2013	present	0.0124
Landštejn	LNSC	CZ	49.02	15.23	645	IG-ASCR	STS-2.5	Vistec (ED+SC)	20/100	2014?		0.668
Hora Sv. Kateřiny	HSKC	CZ	50.61	13.43	590	IG-ASCR	STS-2	Vistec (Q330S)	20/100	2013	present	1.67

# Dobruška/Polom (DPC)



- **DAS:** Quanterra 330 HR since 2007
- **Sensor:** STS-1, EpiSensor FBA ES-T
- **Sampling:** 20Hz continuous, 100Hz triggered
- **Data format:** miniSEED

# Kašperské Hory (KHC)



- **DAS:** Quanterra 330 since 2010
- **Sensor:** STS-2, SKM-3
- **Sampling:** 20Hz, 100Hz
- **Data format:** miniSEED

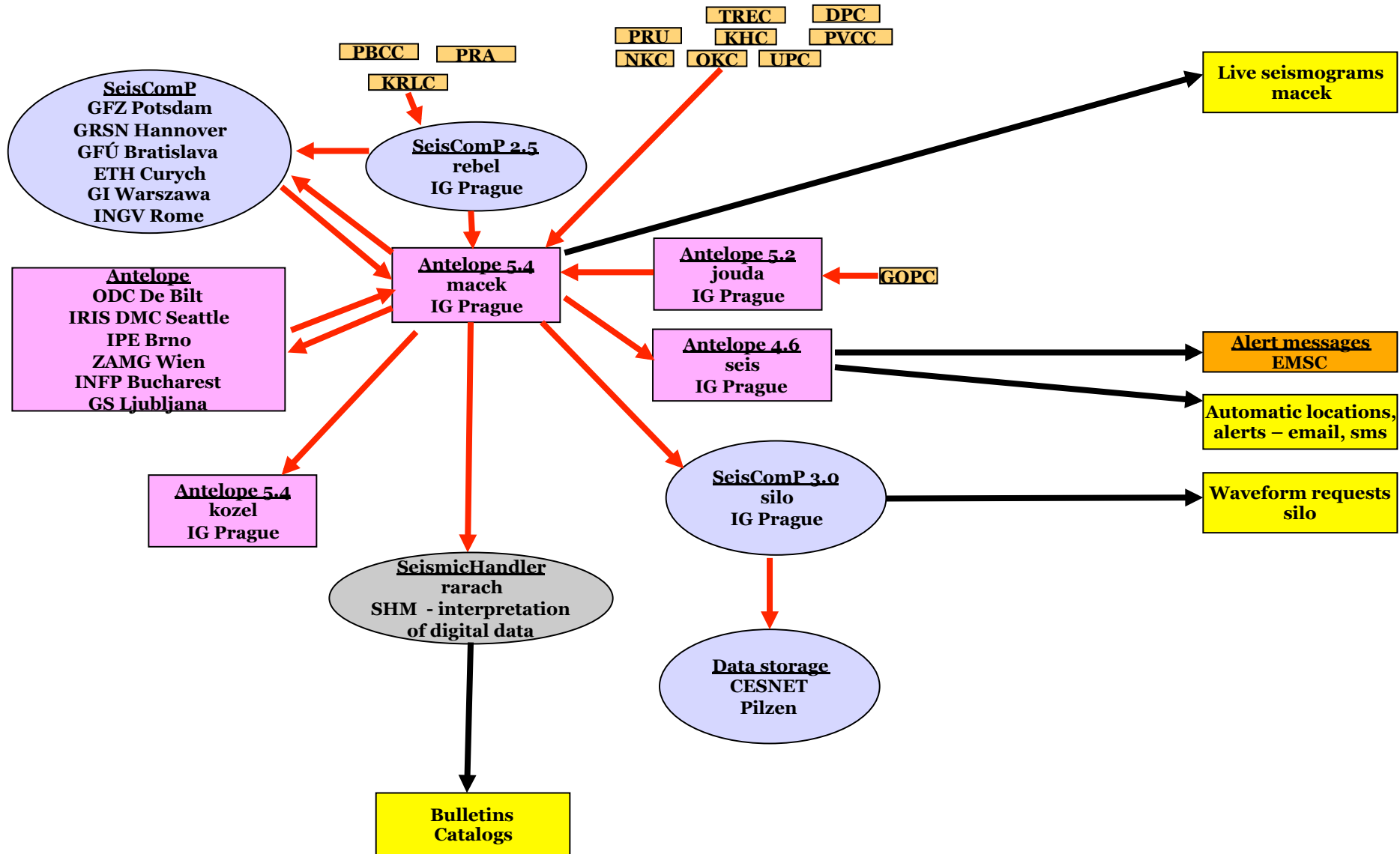
# Other seismic stations we use in Antelope

## Networks

- ▲ BW
- ▲ GR
- ▲ OE
- ▲ PL
- ▲ SK
- ▲ SX
- ▲ Others



# Schema of the seismic service





## 2 Mac Computers

- OS X 10.9.5
- Intel(R) Xeon(R) CPU (3.20GHz, 2.40GHz)
- antelope 5.4

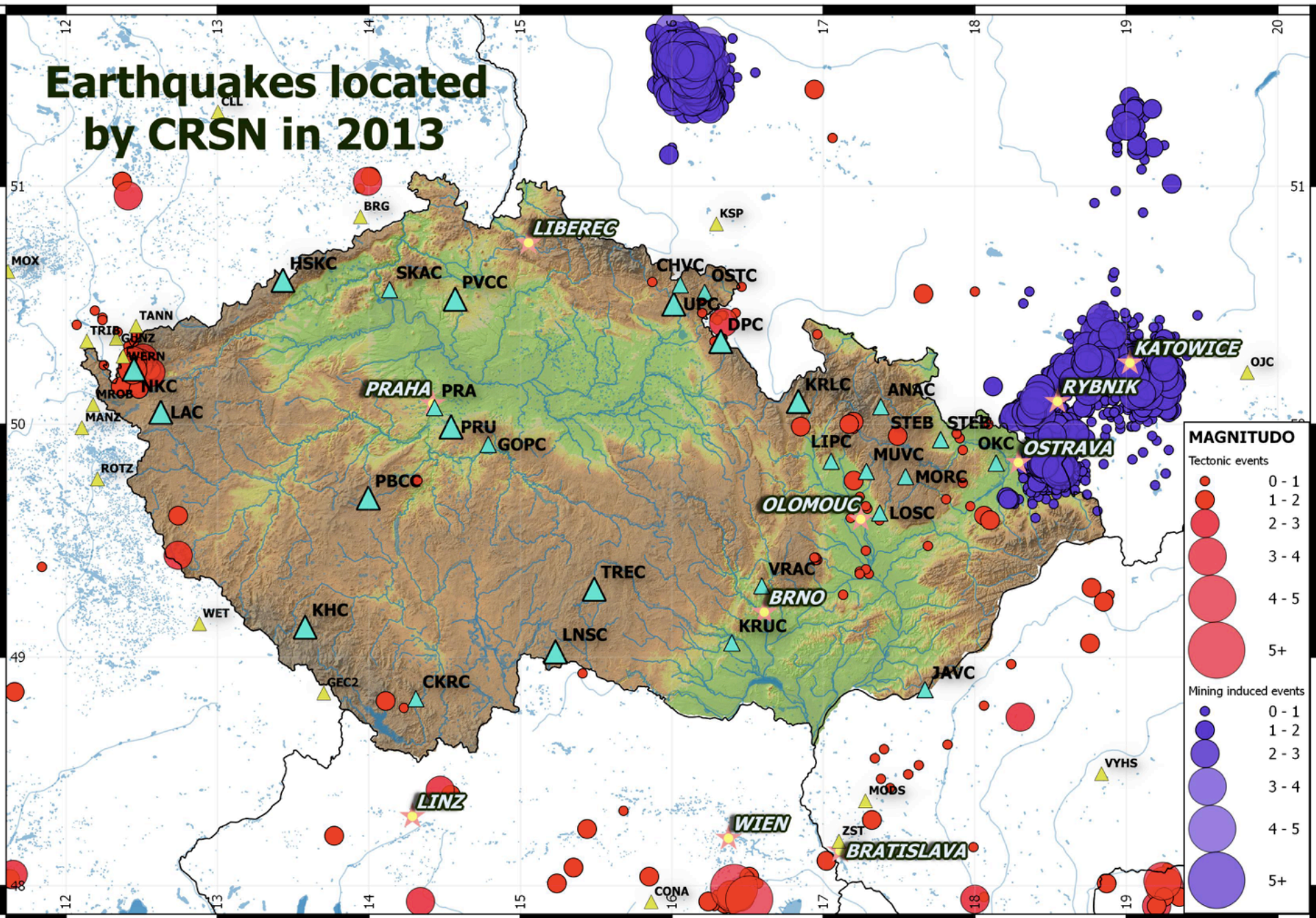


## 1 Sun Computer

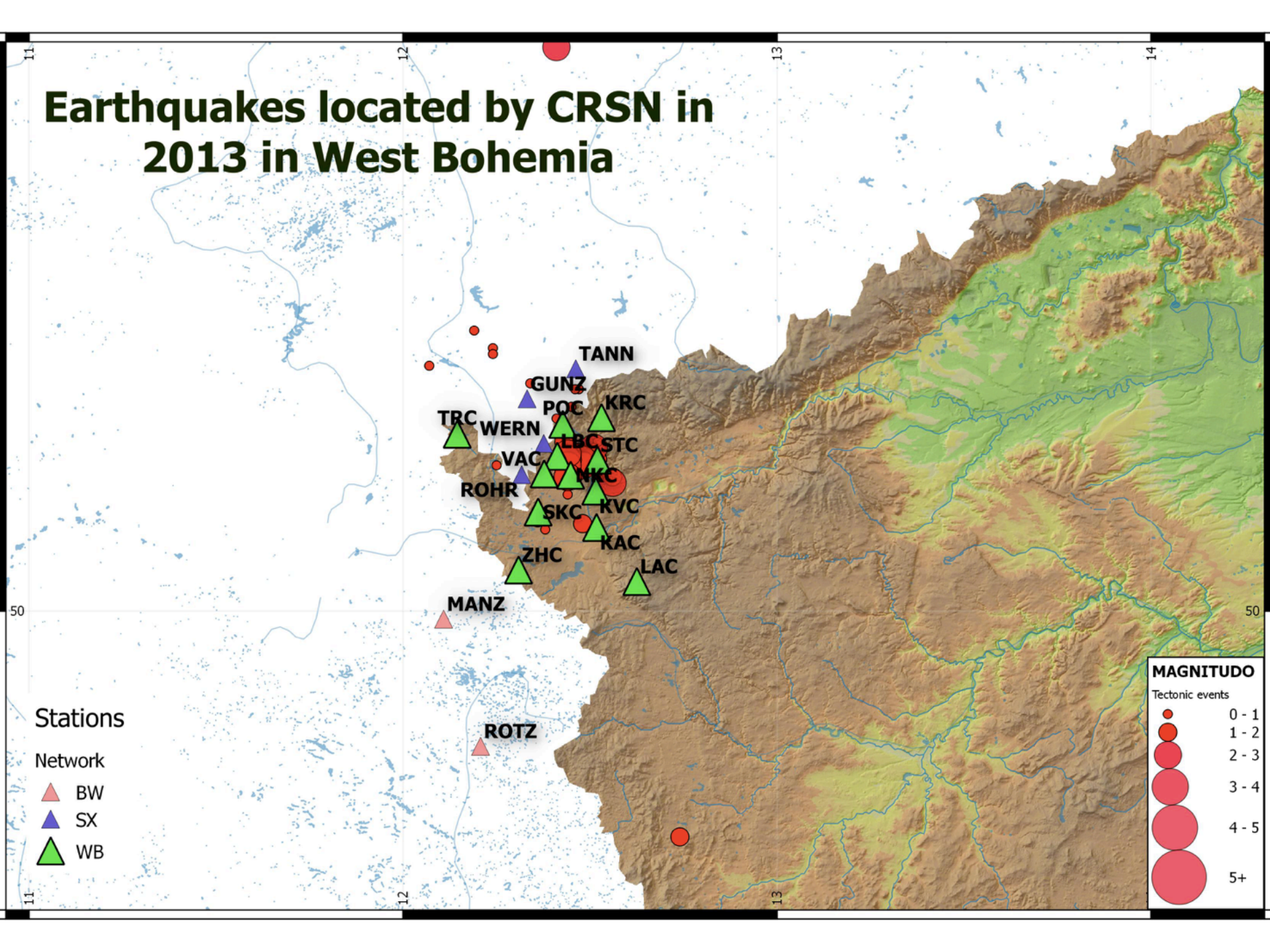
- Solaris
- antelope 4.6



# Earthquakes located by CRSN in 2013



# Earthquakes located by CRSN in 2013 in West Bohemia



## Stations

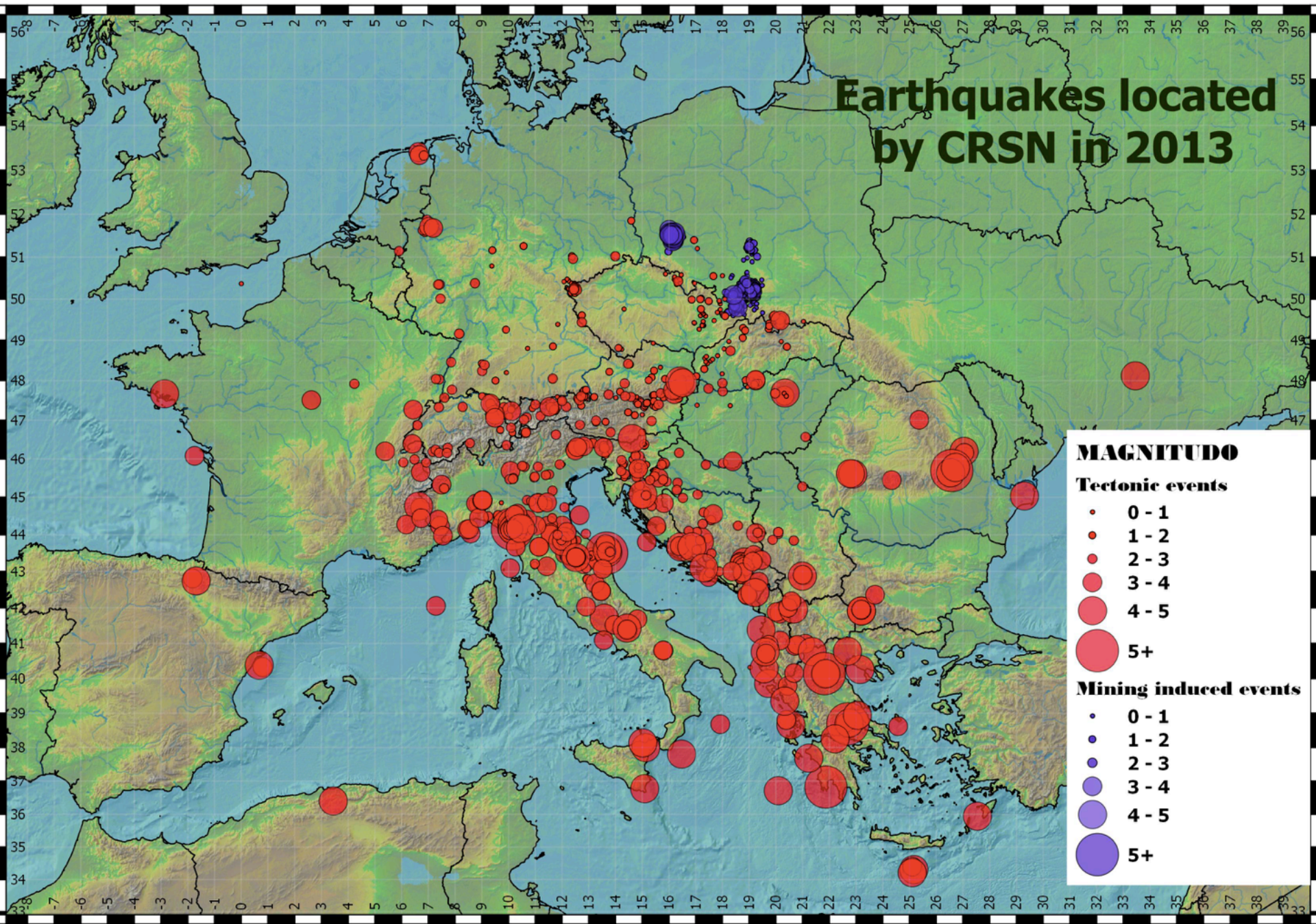
- Network
- △ BW
  - △ SX
  - △ WB

**MAGNITUDO**

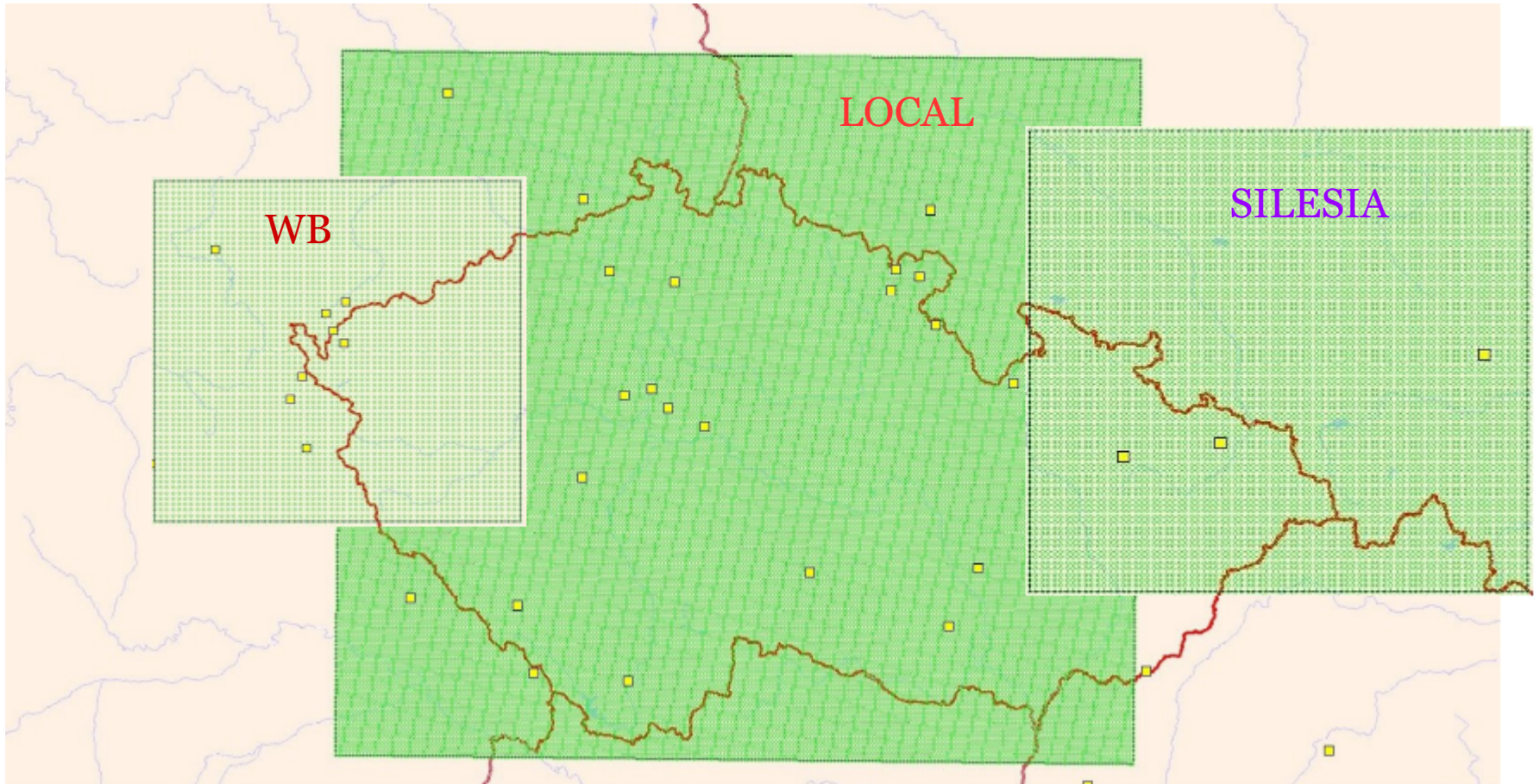
Tectonic events

- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- 5 +

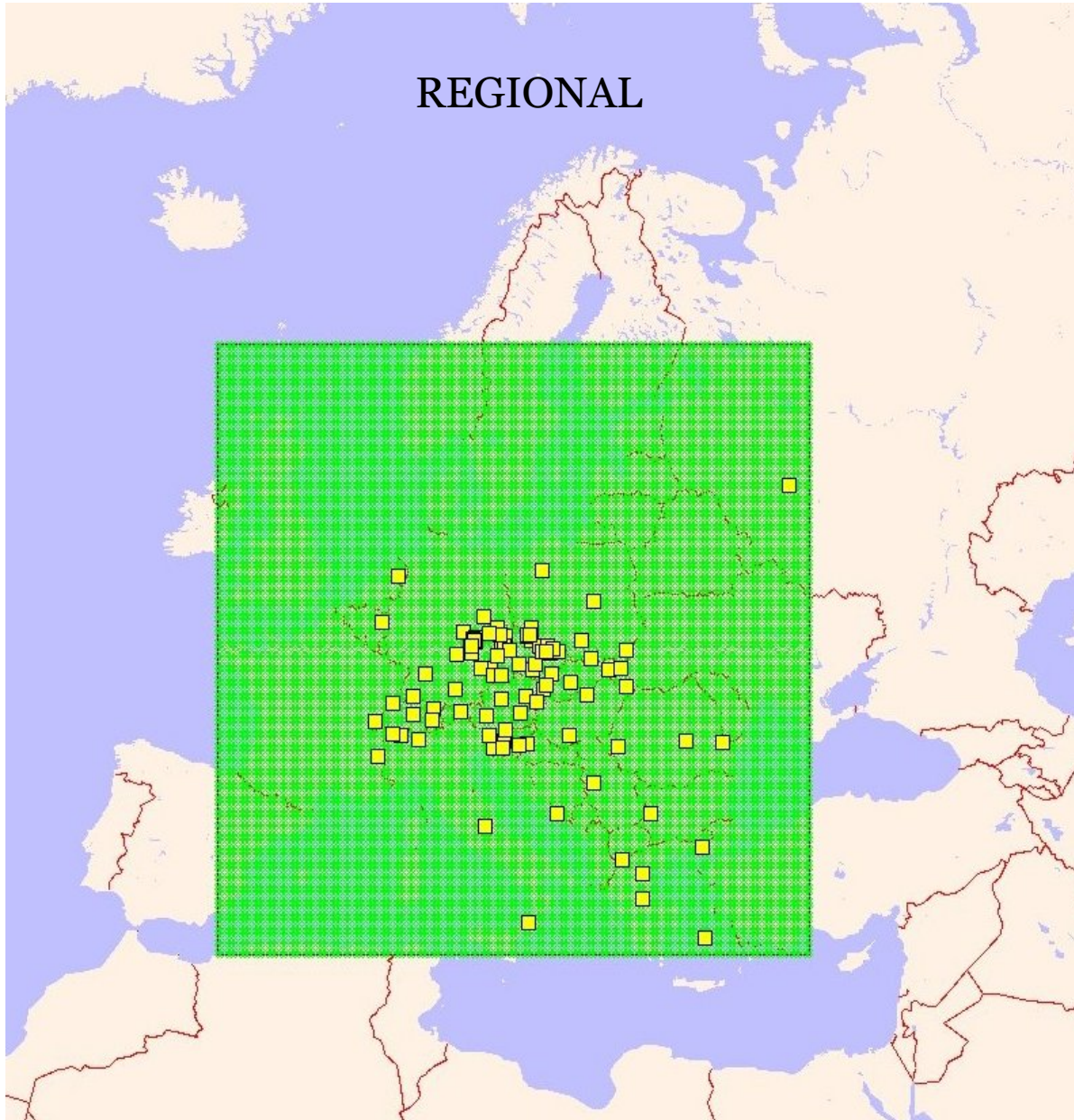
# Earthquakes located by CRSN in 2013



# TTGRIDS



# REGIONAL



# Antelope + Seismic Handler

Czech Regional Seismic Network

seis:/arch/service/antelope/gfu database=db/gfu orb=localhost:7301

Data report for 1 days beginning Saturday May 02 2009-122

Total detections:	6109	Total triggers :	12100		
Total origins :	11	Total origins :	11	Total events :	10

Evid #56820 : ADRIATIC SEA

Orid	Author	Mb	Ml	Time	Latitude	Longitude	Depth
58999	myorbamb	2.53		1:03:08.418	42.3944	16.0801	10.0

Evid #56821 : ALASKA PENINSULA

59000	orbassocms			2:19:23.613	56.4041	-160.4864	30.0
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Evid #56822 : AUSTRIA

59001	myorbaml		1.68	9:28:26.622	47.9996	14.7012	10.0
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Evid #56823 : CZECH AND SLOVAK REP

59002	myorbaml		2.00	10:40:38.399	50.4623	13.5338	0.0
-------	----------	--	------	--------------	---------	---------	-----

59003	myorba			10:40:39.822	50.4205	13.4202	0.0
-------	--------	--	--	--------------	---------	---------	-----

Evid #56825 : POLAND

59004	myorbamb	1.63		11:49:52.803	49.1084	19.5854	10.0
-------	----------	------	--	--------------	---------	---------	------

Evid #56826 : NEAR WEST COAST OF HONSHU, JAPAN

59005	orbassocms			15:06:26.611	37.4885	137.4538	30.0
-------	------------	--	--	--------------	---------	----------	------

Evid #56827 : GREECE

59006	myorba			15:44:28.468	38.3835	21.5955	10.0
-------	--------	--	--	--------------	---------	---------	------

Evid #56828 : NORTHWEST OF KURIL ISLANDS

59007	orbassocms			18:41:30.865	51.3168	152.0270	30.0
-------	------------	--	--	--------------	---------	----------	------

Evid #56829 : CZECH AND SLOVAK REP

59008	myorba			20:39:06.376	48.3218	19.2124	10.0
-------	--------	--	--	--------------	---------	---------	------

Evid #56830 : POLAND

59009	myorbaml		2.50	20:57:14.575	51.3961	15.9616	10.0
-------	----------	--	------	--------------	---------	---------	------

phas...    X

local Pg

tele

X

Pg

sign:

◇ + ◇ - ◇ 0

onset spec:

◇ e ◇ i

reliable:

◇ y ◇ n

event type

other

quality

2

More

Rename Del

slowness

azimuth

Latitude

Longitude

distance

depth

date

time

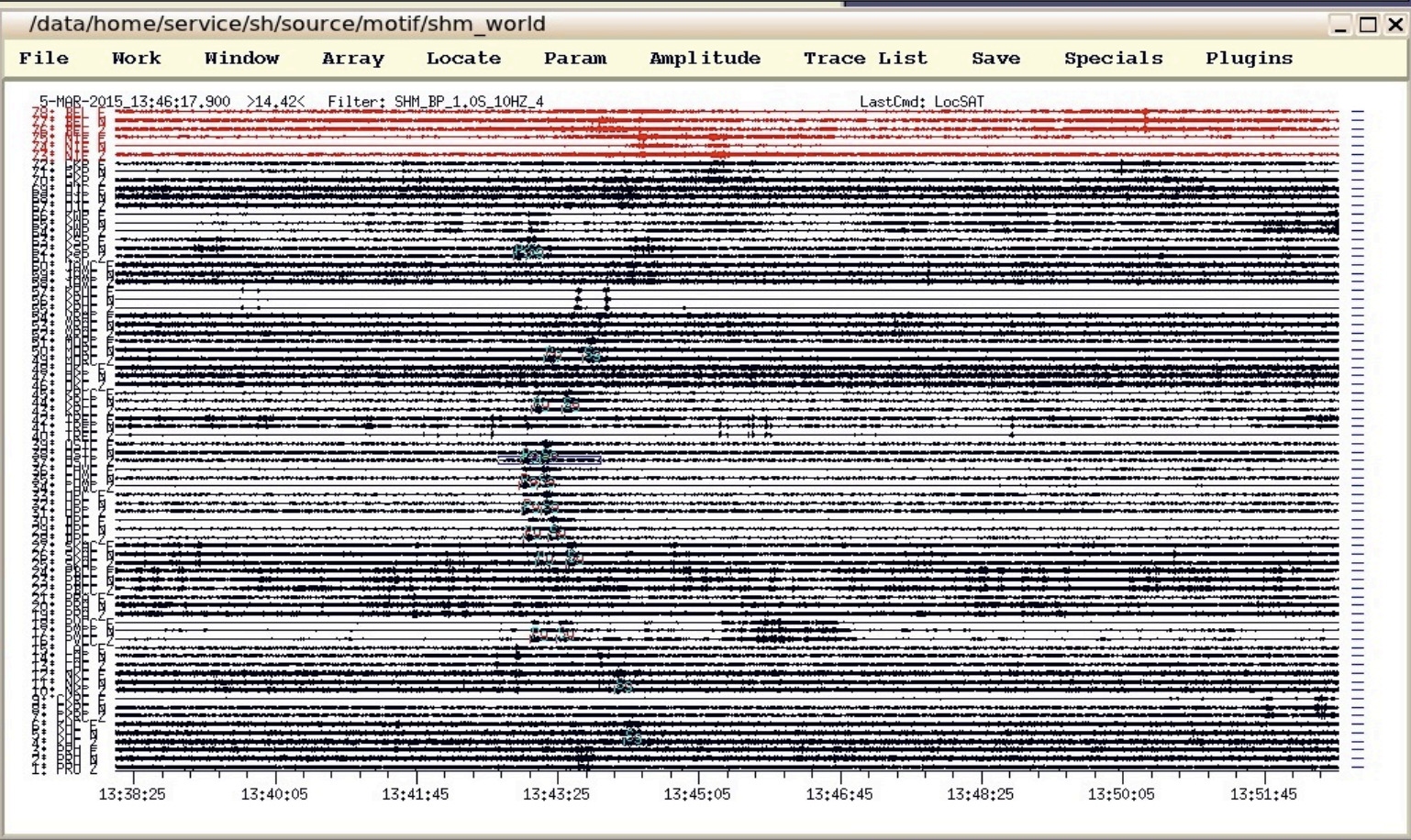
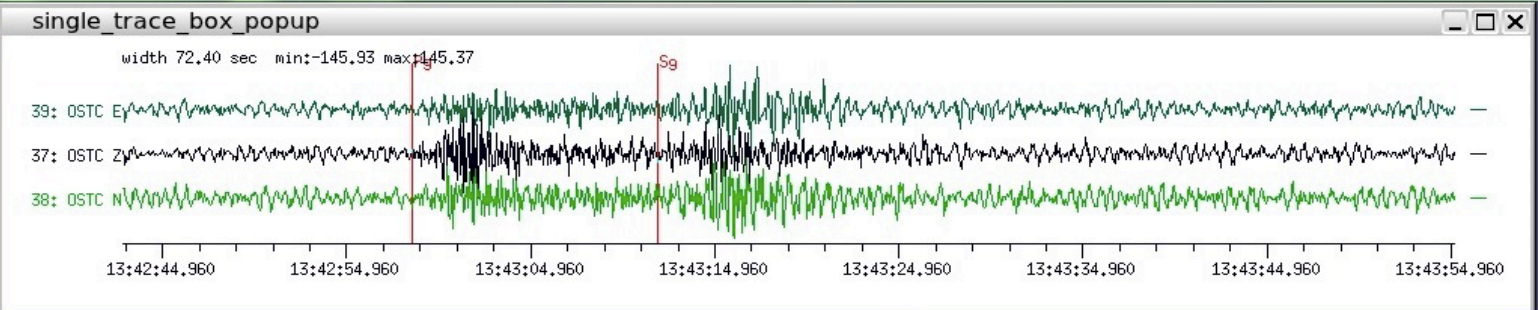
Q

Set

0

zoom

SetSlow



```

!i: reading RAC-E
*** SEED-12 stream/t
## stream rac-bh-n,
!i: reading RAC-E

*** SEED-12 stream/t
## stream rac-bh-e, addm ..... time
!i: reading BEL-BH-Z
*Seed: no valid calibration for bel-bf
!i: reading BEL-BH-N
*Seed: no valid calibration for bel-bf
!i: reading BEL-BH-E
*Seed: no valid calibration for bel-bf
6= brief
[1] 25606
6= brief
[1] 25655
6= brief
[1] 25704
6= brief
[1] 25753
6= brief
[1] 25802

```

phas...   X ...   X

local Pg

tele

X

Pg

sign:

◇ + ◇ - ◇ 0

onset spec:

◇ e ◇ i

reliable:

◇ y ◇ n

event type

other

quality

2

More

Rename Del

li: reading RAC-E

\*\*\* SEED-12 stream/t  
## stream rac-bh-n,  
li: reading RAC-E

\*\*\* SEED-12 stream/t  
## stream rac-bh-e, addim ..... time  
li: reading BEL-BH-Z  
\*Seed: no valid calibration for bel-bf  
li: reading BEL-BH-N  
\*Seed: no valid calibration for bel-bf  
li: reading BEL-BH-E  
\*Seed: no valid calibration for bel-bf

6= brief  
[1] 25606  
6= brief  
[1] 25655  
6= brief  
[1] 25704  
6= brief  
[1] 25753  
6= brief  
[1] 25802

slowness

0.00

azimuth

0.0

Latitude

51.532

Longitude

16.141

distance

0.0km

depth

0.0

date

5-MAR-

time

13:42:4

Q 0

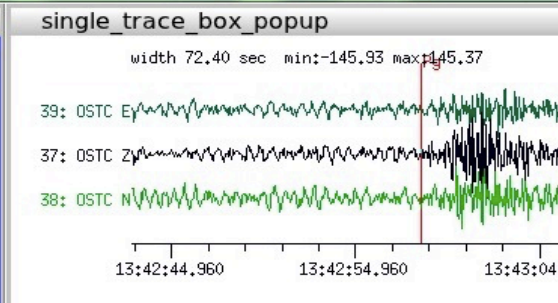
Set

1

0

zoom

SetSlow



/data/home/service/sh/source/motif/shm\_w

File Work Window Array Locate

5-MAR-2015\_13:46:17.900 >14.42< Filter: SHM\_BP\_1.OS\_1

Ariv ID	Statn	Phase	Type	at	True	Normalized	Distance (deg.)	Azinuth (deg.)	Data Inport	Err
8	KSP	Pg	t	d	0.435	0.435	0.700	172.22	0.104	0
9	KSP	Sg	t	d	-0.239	-0.239	0.700	172.22	0.137	0
1	CHVC	Sg	t	d	0.272	0.272	0.947	183.31	0.145	0
2	CHVC	Pg	t	d	0.295	0.295	0.947	183.31	0.081	0
13	OSTC	Pg	t	d	0.839	0.839	0.978	177.20	0.092	0
14	OSTC	Sg	t	d	0.612	0.612	0.978	177.20	0.139	0
19	UPC	Pg	t	d	0.801	0.801	1.029	184.57	0.080	0
20	UPC	Sg	t	d	0.190	0.190	1.030	184.57	0.146	0
3	DPC	Sg	t	d	0.092	0.092	1.189	174.39	0.137	0
4	DPC	Pg	t	d	-0.731	-0.731	1.189	174.39	0.098	0
15	PVCC	Sg	t	d	-0.758	-0.758	1.413	225.24	0.196	0
16	PVCC	Pg	t	d	0.251	0.251	1.413	225.24	0.145	0
6	KRLC	Sg	t	d	-0.205	-0.205	1.515	164.17	0.141	0
7	KRLC	Pg	t	d	-0.776	-0.776	1.515	164.17	0.133	0
17	SKAC	Sg	t	d	-0.300	-0.300	1.592	233.44	0.220	0
18	SKAC	Pg	t	d	0.199	0.199	1.592	233.44	0.186	0
10	MORC	Sg	t	d	-0.216	-0.216	1.971	152.54	0.177	0
11	MORC	Pg	t	d	-0.728	-0.728	1.971	152.54	0.197	0
12	NKC	Sg	t	d	0.288	0.288	2.676	242.36	0.265	0
5	KHC	Sg	t	d	-0.322	-0.322	2.911	215.32	0.180	0

13:38:25 13:40:05 13:41:45

xedit

Quit Save Load /data/home/service/sh/shscratch//locsats\_edit.txt

Use Control-S and Control-R to Search.

No tags file found. Run "ctags -R" to build a tags file.

/data/home/service/sh/shscratch//locsats\_edit.txt Read - Write L1

Location ran for 4 iterations ... Converged!

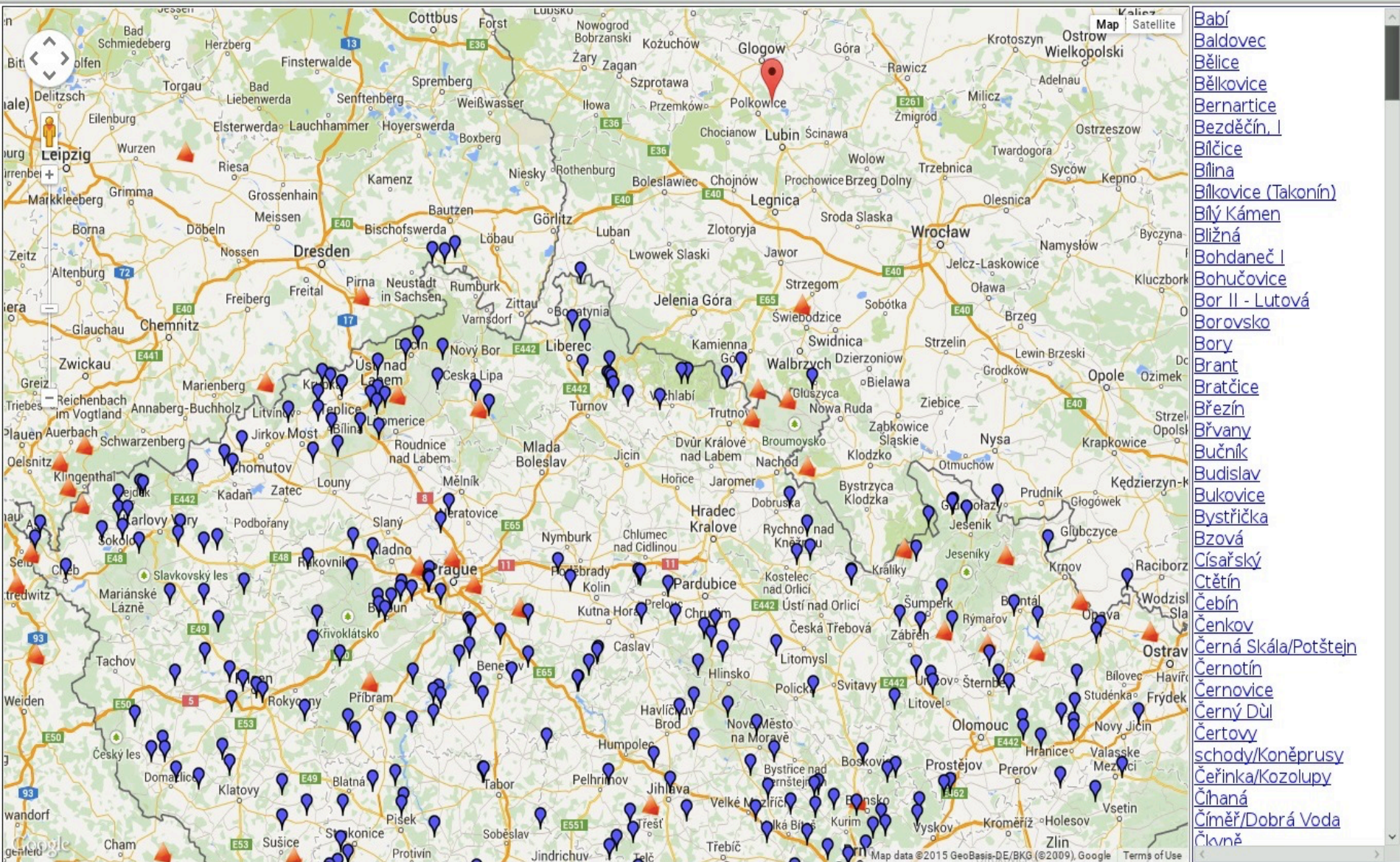
Latitude: 51.532 deg. N +/- 3.762 kn.  
Longitude: 16.141 deg. E +/- 2.269 kn.  
Depth: 0.000 kn. +/- 0.000 kn. (Fixed)  
origin time: 5-MAR-2015\_13:42:40.151

Ariv ID	Statn	Phase	Type	at	True	Normalized	Distance (deg.)	Azinuth (deg.)	Data Inport	Err
8	KSP	Pg	t	d	0.435	0.435	0.700	172.22	0.104	0
9	KSP	Sg	t	d	-0.239	-0.239	0.700	172.22	0.137	0
1	CHVC	Sg	t	d	0.272	0.272	0.947	183.31	0.145	0
2	CHVC	Pg	t	d	0.295	0.295	0.947	183.31	0.081	0
13	OSTC	Pg	t	d	0.839	0.839	0.978	177.20	0.092	0
14	OSTC	Sg	t	d	0.612	0.612	0.978	177.20	0.139	0
19	UPC	Pg	t	d	0.801	0.801	1.029	184.57	0.080	0
20	UPC	Sg	t	d	0.190	0.190	1.030	184.57	0.146	0
3	DPC	Sg	t	d	0.092	0.092	1.189	174.39	0.137	0
4	DPC	Pg	t	d	-0.731	-0.731	1.189	174.39	0.098	0
15	PVCC	Sg	t	d	-0.758	-0.758	1.413	225.24	0.196	0
16	PVCC	Pg	t	d	0.251	0.251	1.413	225.24	0.145	0
6	KRLC	Sg	t	d	-0.205	-0.205	1.515	164.17	0.141	0
7	KRLC	Pg	t	d	-0.776	-0.776	1.515	164.17	0.133	0
17	SKAC	Sg	t	d	-0.300	-0.300	1.592	233.44	0.220	0
18	SKAC	Pg	t	d	0.199	0.199	1.592	233.44	0.186	0
10	MORC	Sg	t	d	-0.216	-0.216	1.971	152.54	0.177	0
11	MORC	Pg	t	d	-0.728	-0.728	1.971	152.54	0.197	0
12	NKC	Sg	t	d	0.288	0.288	2.676	242.36	0.265	0
5	KHC	Sg	t	d	-0.322	-0.322	2.911	215.32	0.180	0



# Google Maps Javascript API v3 Example: Marker Categories - Mozilla Firefox

file:///data/home/service/sh/private/epi\_quarries/changing/e.html



- [Babí](#)
- [Baldovec](#)
- [Bělce](#)
- [Bělkovice](#)
- [Bernartice](#)
- [Bezděčín, I](#)
- [Bílčice](#)
- [Bílina](#)
- [Bílkovice \(Takonín\)](#)
- [Bílý Kámen](#)
- [Bližná](#)
- [Bohdaneč I](#)
- [Bohučovice](#)
- [Bor II - Lutová](#)
- [Borovsko](#)
- [Bory](#)
- [Brant](#)
- [Bratčice](#)
- [Břežín](#)
- [Břvany](#)
- [Bučník](#)
- [Budislav](#)
- [Bukovice](#)
- [Bystrčička](#)
- [Bzová](#)
- [Čisárský](#)
- [Čtětín](#)
- [Čebín](#)
- [Čenkov](#)
- [Černá Skála/Potštein](#)
- [Černotín](#)
- [Černovice](#)
- [Černý Důl](#)
- [Čertovy](#)
- [schody/Koněprusy](#)
- [Čeřinka/Kozolupy](#)
- [Čičaná](#)
- [Číměř/Dobrá Voda](#)
- [Člvaně](#)

# Antelope 4.6 - origin alarm

Automatic report from seis:7301

Time=05.Mar 13:42:42

lat= 51.40 lon=15.96

Magnitude: ml= 2.24 mb= - ms= -

ndef=8 nass=8

Region: POLAND

Criteria: czech\_reg

Polygons: Poland

162km NNE from Praha

26km NNW from Legnica

159km ENE from Dresden

206km E from Torgau

215km SE from Berlin

OriginID( for dbpick): 98992

Automatically sent by Antelope, Geophys. Inst. Prague,  
jzd

# Antelope 4.6 - send bulletin

Event 96813 POLAND

Date Time Err RMS Latitude Longitude Smaj Smin Az Depth Err

Ndef Nsta Gap mdist Mdist Qual Author OrigID

2015/03/05 13:42:42.69 -1.00 0.30 51.3961 15.9616 -1.0 -1.0 -1 10.0 -1.0

8 0 269 0.59 1.42 a i uk myorbamb 98992

Sta Dist EvAz Phase Time TRes Azim AzRes Slow SRes Def SNR

Amp Per Qual Magnitude ArrID

BRG 1.37 248.4 P 13:43:07.563 -0.3 T\_\_ 6.5

m\_i 0.0 896624

CHVC 0.81 175.8 P 13:42:58.195 -0.1 T\_\_ 14.0

m\_i 0.0 896625

DPC 1.07 167.6 P 13:43:03.520 0.2 T\_\_ 5.4

m\_i 0.0 896626

KRLC 1.42 158.2 P 13:43:08.095 -0.4 T\_\_ 3.6

m\_i 0.0 896627

KSP 0.59 159.2 P 13:42:54.160 0.1 T\_\_ 5.1

m\_i 0.0 896628

OSTC 0.85 169.1 P 13:42:59.745 0.6 T\_\_ 10.1

m\_i 0.0 896629

PVCC 1.23 225.8 P 13:43:06.070 0.1 T\_\_ 9.1

m\_i 0.0 896630

UPC 0.90 177.5 P 13:42:59.770 -0.1 T\_\_ 5.6

m\_i 0.0 896631

# Seismic Handler - output

\*5

T134240.2 N51.53 E16.14 Ho !GFU

R548

CLUBIN

?CHVC DP000.9

EPG 134257.4

ESG 4310.5 TV0.6 AV5.9

?DPC DP001.2

EPG 134300.7

ESG 4318.0 TV0.6 AV2.6

?KHC DP002.9

ESG 134412.2

?KRLC DP001.5

EPG 134306.5

ESG 4328.0

?KSP DP000.7

EPG 134253.1

ESG 4302.1

?MORC DP002.0

EPG 134314.7

ESG 4342.5

?NKC DP002.7

ESG 134405.4

?OSTC DP001.0

EPG 134258.5

ESG 4311.8

?PVCC DP001.4

EPG 134305.7

ESG 4324.2 TV0.2 AV16.2

?SKAC DP001.6

EPG 134308.9

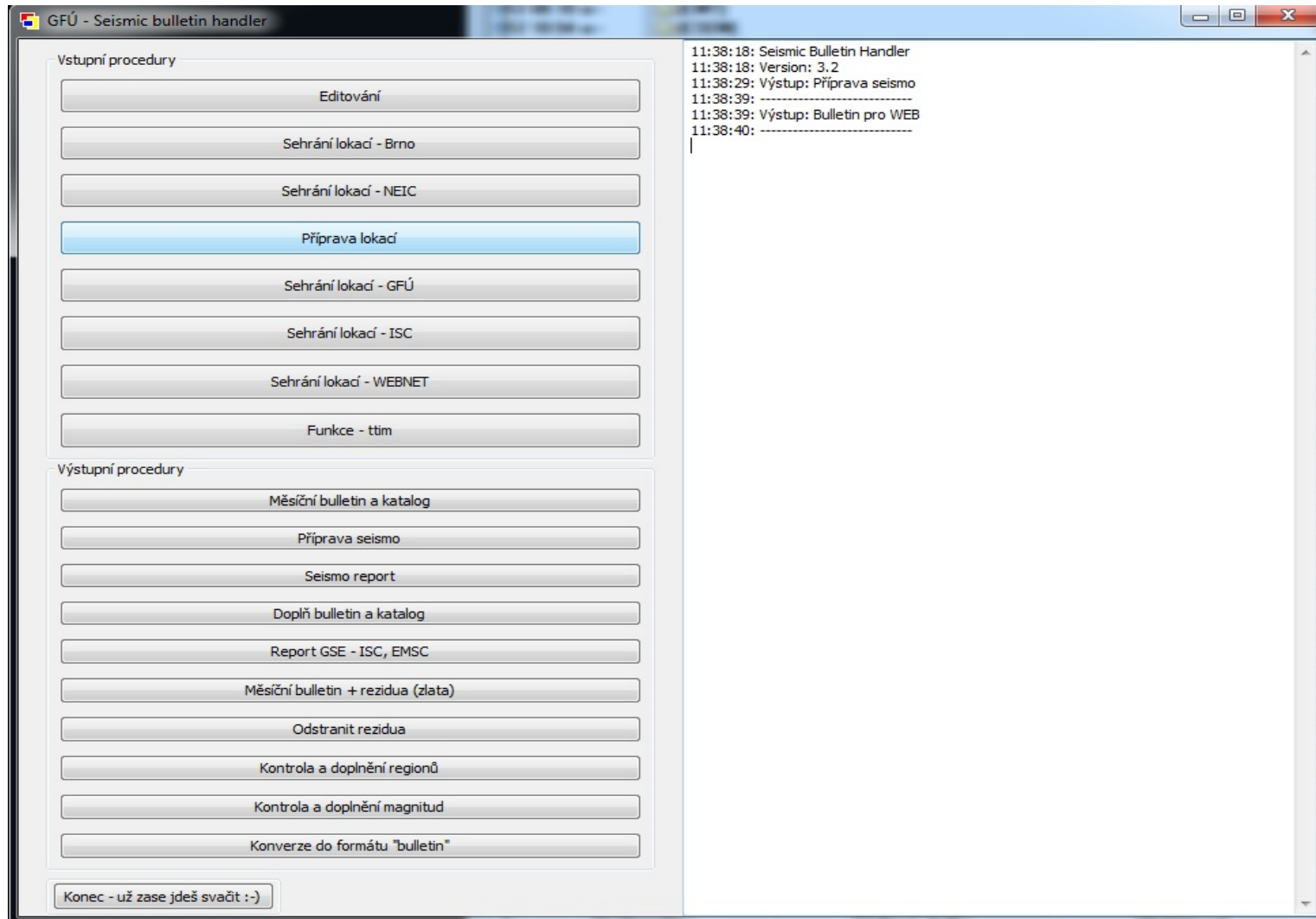
ESG 4330.4 TV0.7 AV14.5

?UPC DP001.0

EPG 134259.4

ESG 4313.0 TV1.1 AV18.9

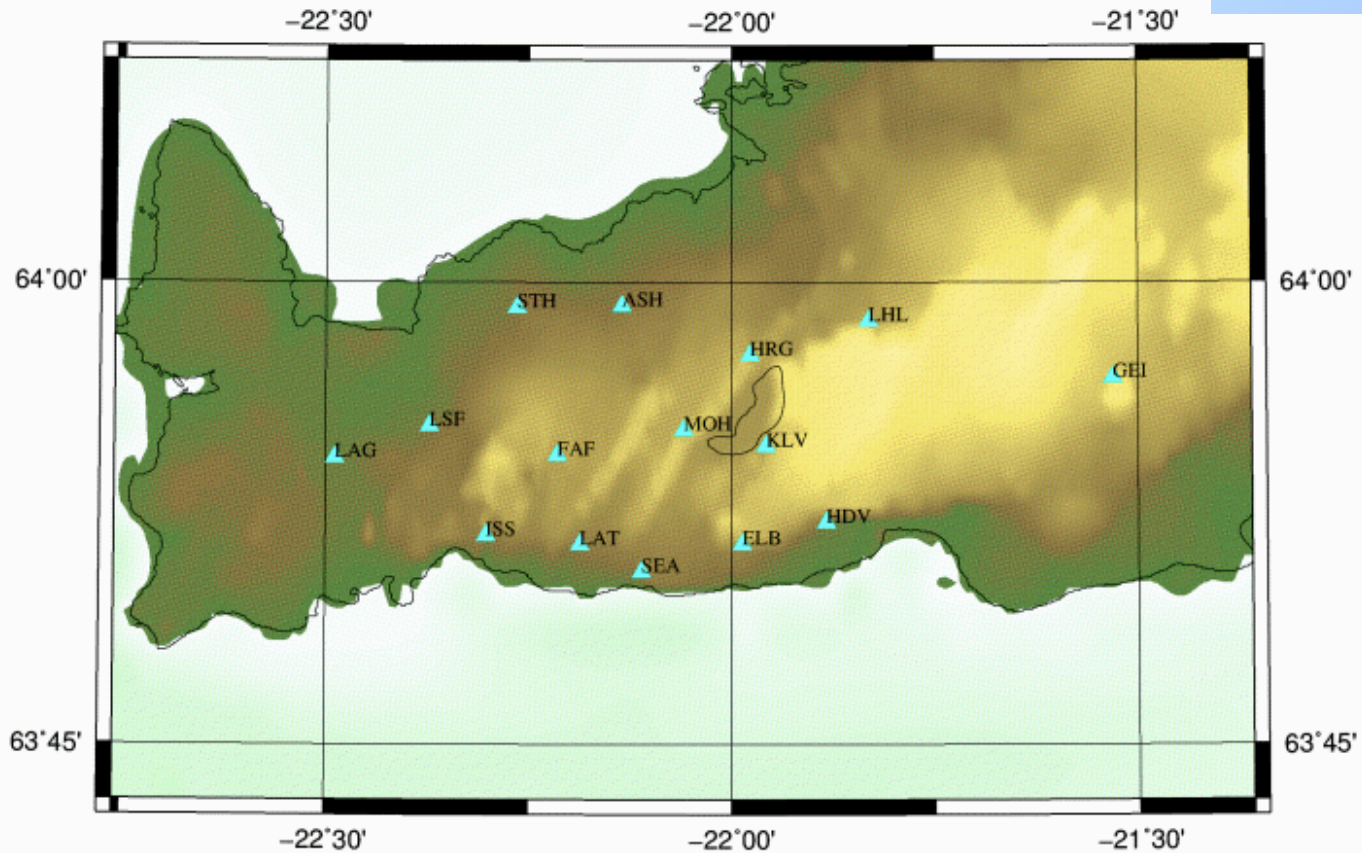
# Bulletin\_handler (J.Semrád)



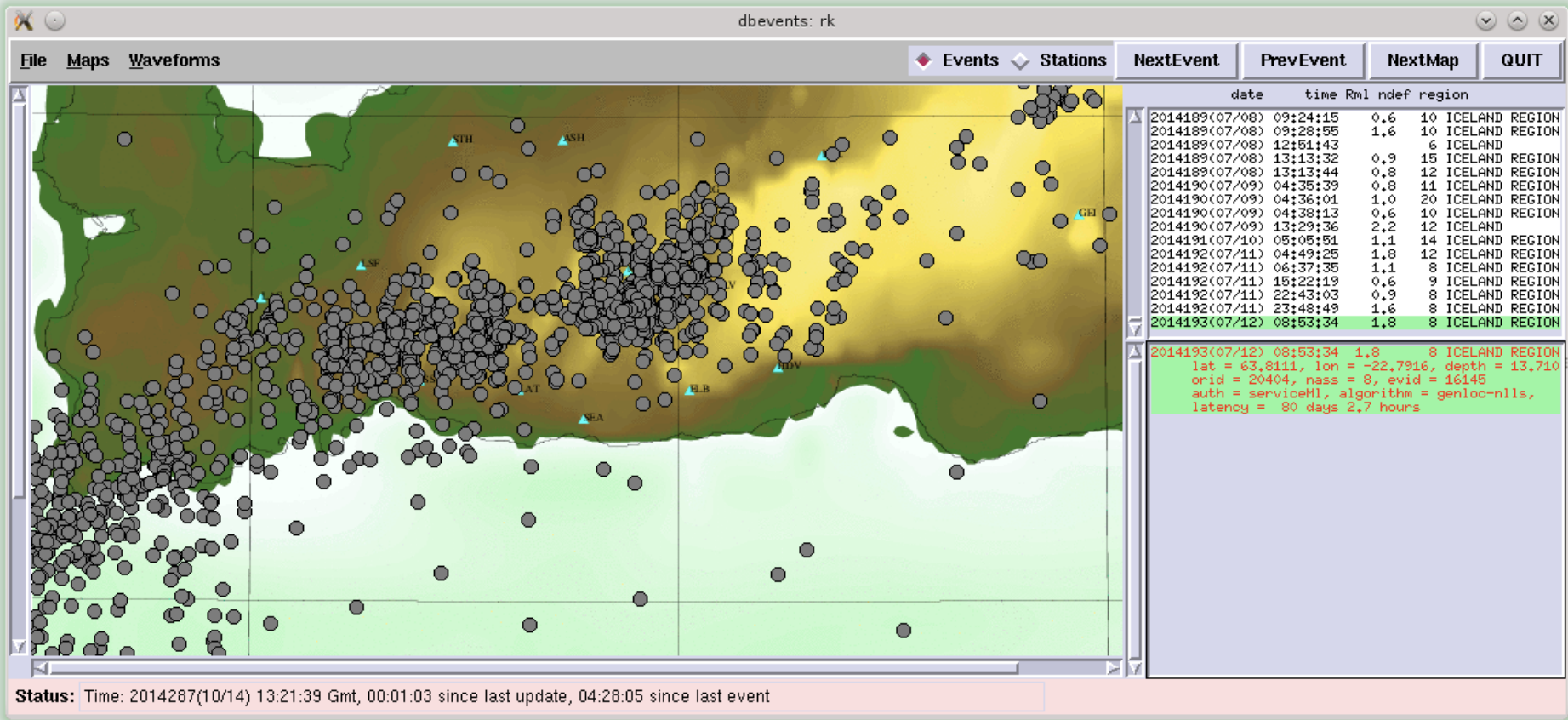
# Databases in antelope

- Gfu
- Webnet
- Reykjanet

# ReykjaNET & Antelope

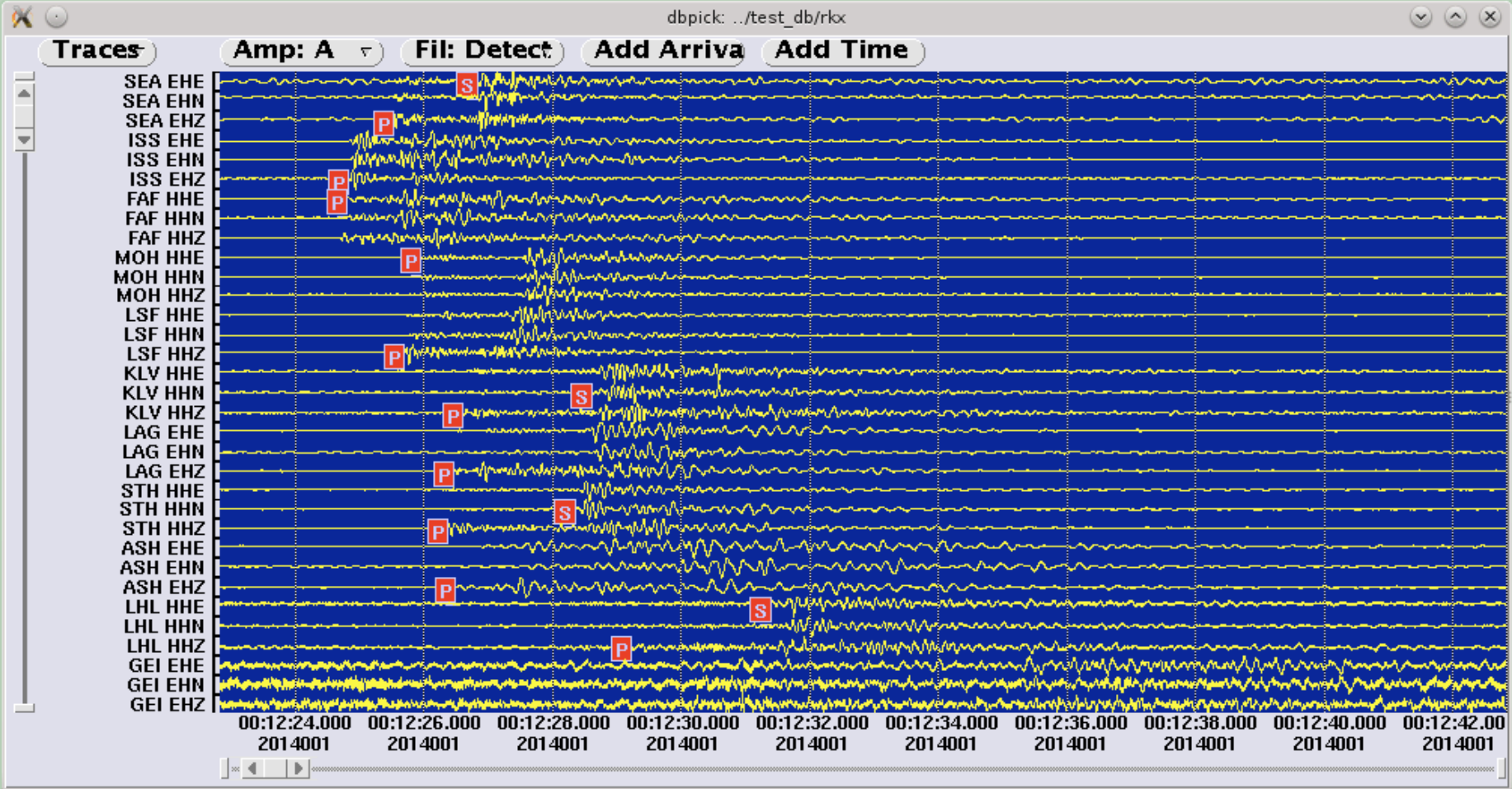


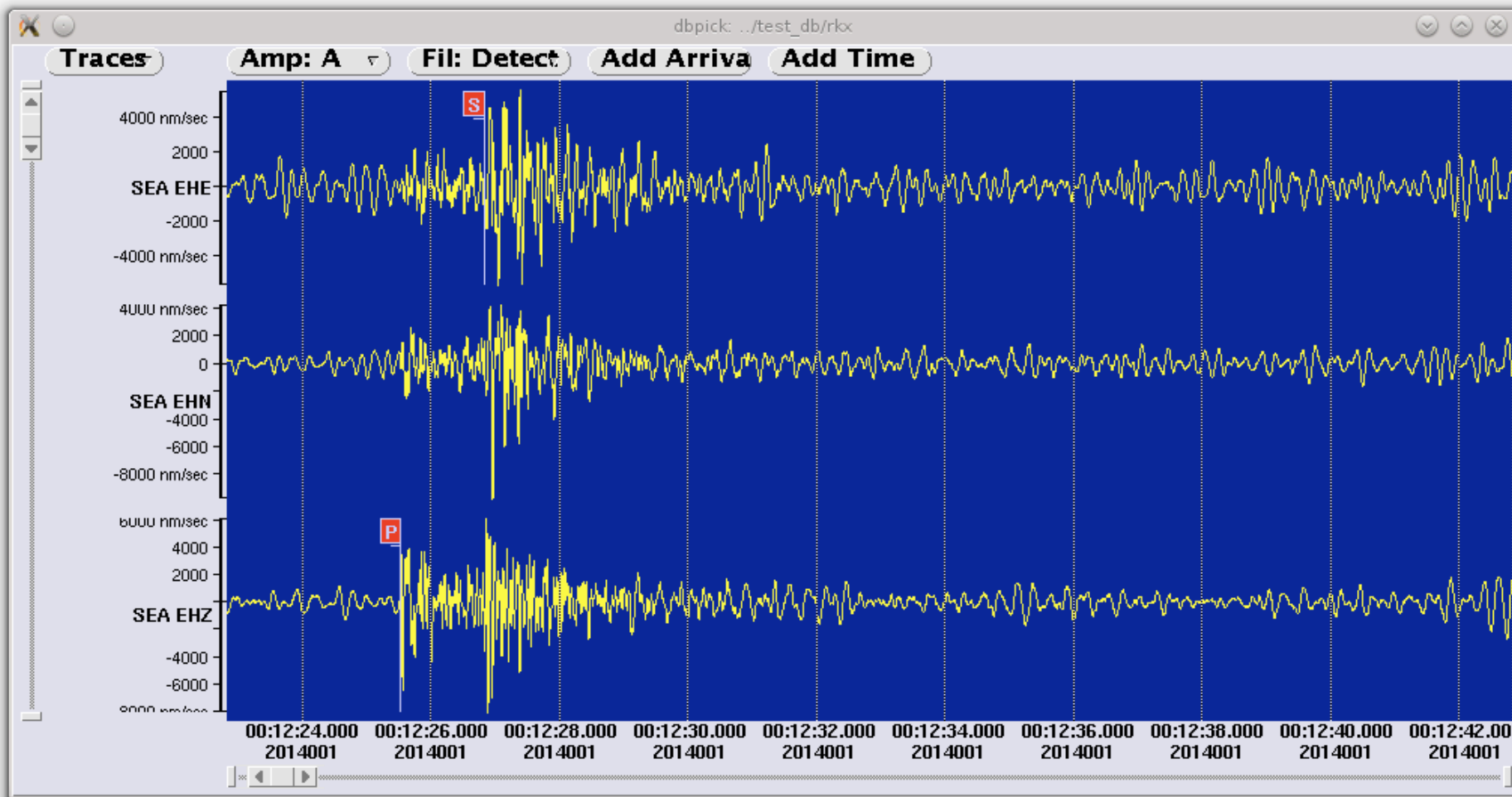
# dbevents





# dbpick





# Antelope and WWW

- Rtwebservice
- Dbheli
- Recent automatic locations
- WB epicentre map



DBEVENTS    RTD    SOURCES    CLIENTS    RTM

RECENT EARTHQUAKES FROM GFU KOZEL

File Show Waveforms Database editing enabled Current Time: 2015-065 (06 Mar) 12:47:07 GMT

ML 1.0 | ZECH AND SLOVAK REPUBLIC | pref\_lat: 49.18 | pref\_lon: 16.58 | pref\_depth: 2 km | T + 2.45 hours

**Displayed Origin**

Preference: Preferred  
 Lat: 49.1828°  
 Lon: 16.5832°  
 Depth: 2.0000 km  
 Region: CZECH AND SL  
 Magnitudes: 1.0 ML  
 Uncertainties:  
 Origin Time (GMT): 2015-065 (06 Ma)  
 Origin Time (Local): 2015-065 (06 Ma)  
 Database IDs:  
 evid 377623  
 orid 377623  
 pref 377623  
 Phases:  
 7 defining  
 12 associated  
 Author: oa\_ml

**Latest Magnitudes**

author	ML
oa_ml	0.97 ± 0.0

**Best Moment Tensor**

Scalar Moment:  
 Percent Double-Couple:  
 Strike, Dip, Rake 1:  
 Strike, Dip, Rake 2:  
 Derived Mag:  
 MT Author:

pref	author	orid	depth	ndef	mt	mags	latency
oa_wb		3776250	0 km	4			2:12 minutes
oa_dbg		3776237	4 km	7			3:31 minutes
oa_ml		3776236	2 km	7	1.0 ML		3:31 minutes

origin time	evid	ndef	R	prefauth	mag	region
2015-065 (06 Mar) 10:48:10 UTC	3776244	7		oa_wbDbg		CZECH AND SLOVAK REPUBLICS
2015-065 (06 Mar) 10:39:52 UTC	3777093	0		USGS	5.0 Mb	OFF COAST OF SOUTHERN CHILE
2015-065 (06 Mar) 10:02:23 UTC	3776236	7		oa_ml	1.0 ML	CZECH AND SLOVAK REPUBLICS
2015-065 (06 Mar) 09:39:34 UTC	3775387	5		oa_wb		CZECH AND SLOVAK REPUBLICS
2015-065 (06 Mar) 08:22:18 UTC	3775390	0		USGS	5.6 Mb	MID-INDIAN RIDGE
2015-065 (06 Mar) 07:44:59 UTC	3774544	7		oa_sl		POLAND
2015-065 (06 Mar) 04:55:53 UTC	3772872	7		oa_ml		POLAND
2015-065 (06 Mar) 04:02:06 UTC	3772048	12		oa_u	5.8 Mww	STRAIT OF GIBRALTAR
2015-065 (06 Mar) 02:21:34 UTC	3771214	11		oa_sl		POLAND
2015-065 (06 Mar) 00:02:20 UTC	3769557	14		oa_dbg	6.1 Mww	POLAND
2015-064 (05 Mar) 23:06:01 UTC	3769539	16		oa_uDbg	4.8 Mb	HOKKAIDO, JAPAN REGION
2015-064 (05 Mar) 22:54:35 UTC	3769505	60		oa_uMb	5.4 Mb	SOUTHERN IRAN
2015-064 (05 Mar) 21:30:33 UTC	3768698	0		USGS	5.5 Mwb	NEAR COAST OF CENTRAL CHILE
2015-064 (05 Mar) 21:26:45 UTC	3767896	20		oa_uMb	6.3 Mwp	SOUTHWESTERN KASHMIR
2015-064 (05 Mar) 20:22:51 UTC	3767890	7		oa_sl		POLAND
2015-064 (05 Mar) 17:54:59 UTC	3767081	16		oa_uMb	5.0 Mb	OFF EAST COAST OF HONSHU, JAPAN
2015-064 (05 Mar) 17:19:50 UTC	3767055	16		oa_ml	2.3 ML	POLAND
2015-064 (05 Mar) 17:05:19 UTC	3766262	10		oa_ml	2.3 ML	POLAND
2015-064 (05 Mar) 13:42:44 UTC	3765967	4		oa_ml	2.1 ML	POLAND

Status: Database updated 6:47 minutes ago (origin table)





# Institute of Geophysics AS CR, v. v. i.

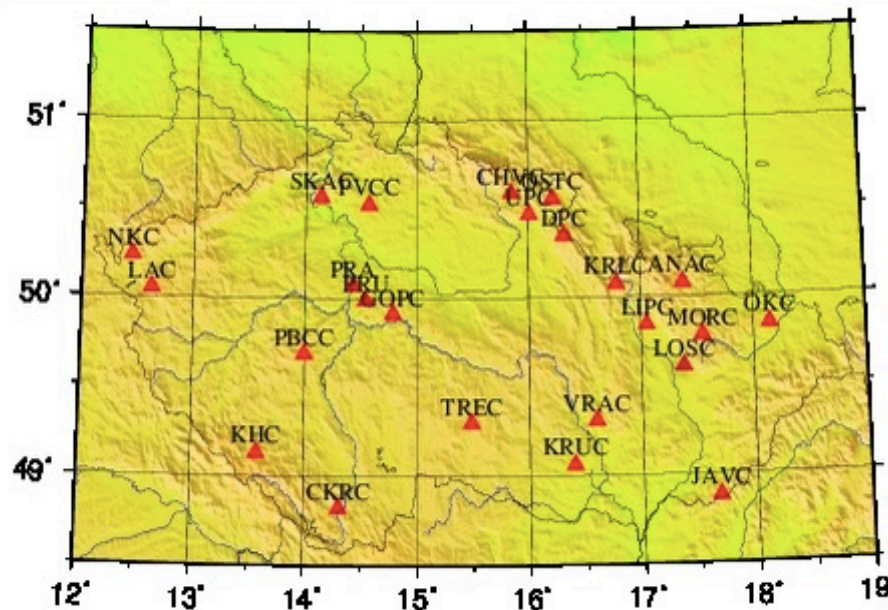
*Navigation: Home*

## Daily seismograms

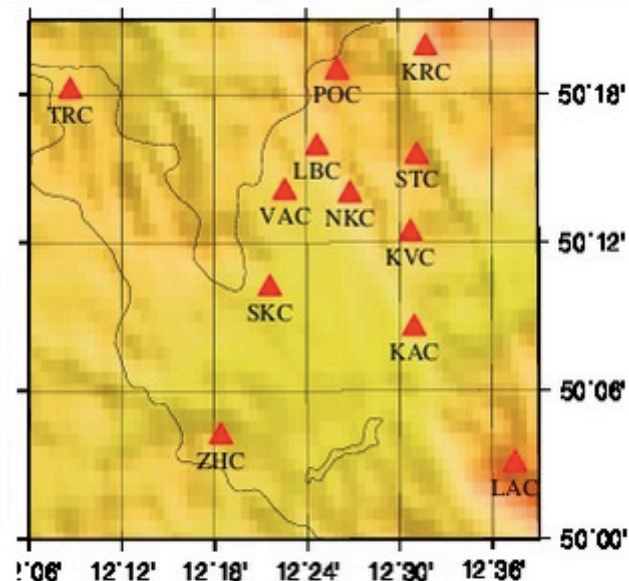
### Fast navigation

- [West Bohemia earthquakes](#)
- [Current seismic activity](#)
- [Daily seismograms](#)
- [Forecast of geomagnetic activity](#)
- [Conferences](#)
- [MSc and PhD projects offered](#)
- [Seismic service](#)
- [CzechGeo](#)
- [IUGG2015](#)

### Czech Regional Seismological Network



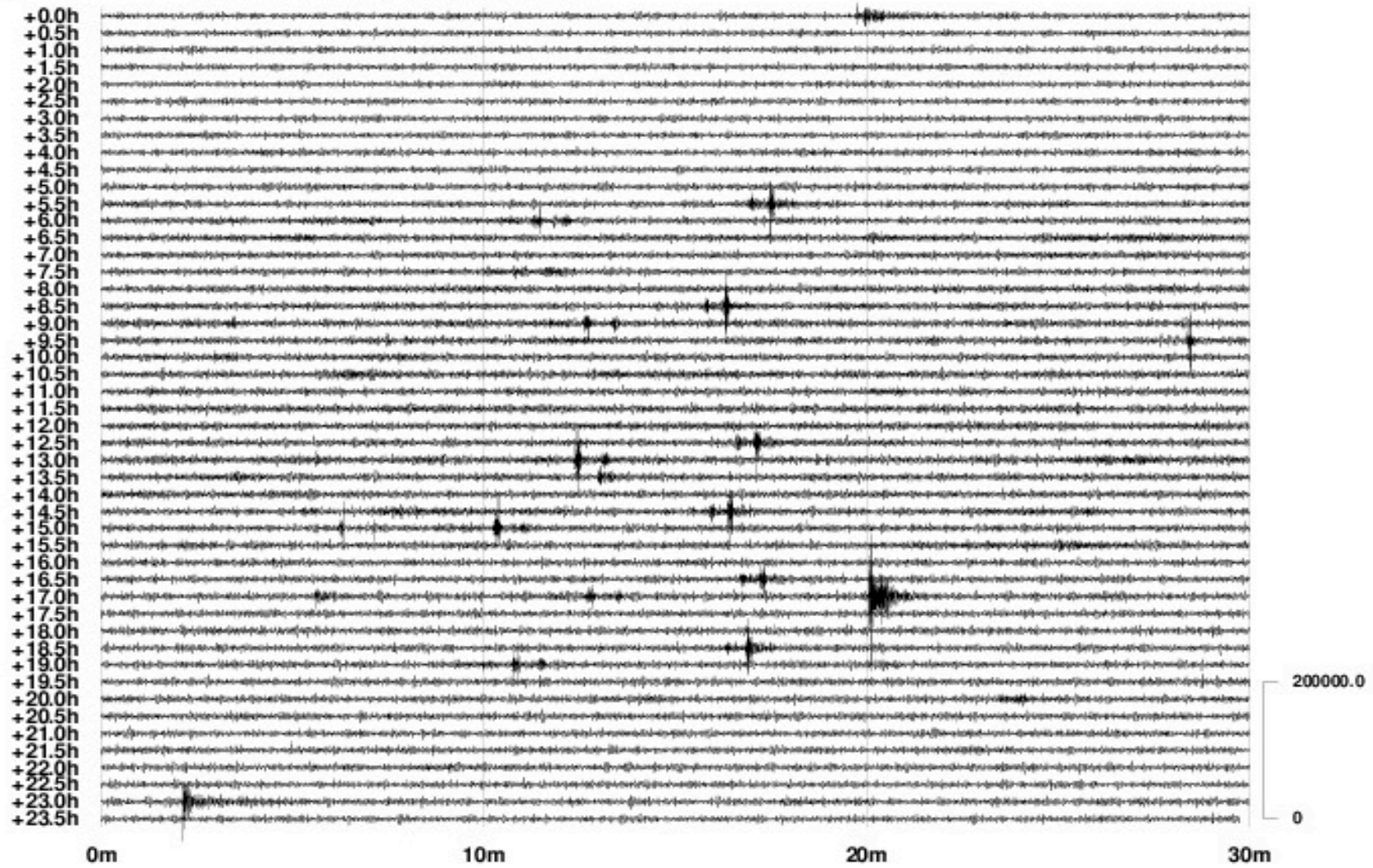
### Local seismic network WEBNET



Click on the station symbol to get the helicorder plot.

# CHVC BHZ

Start time: 2015064 3/05/15 00:00:00

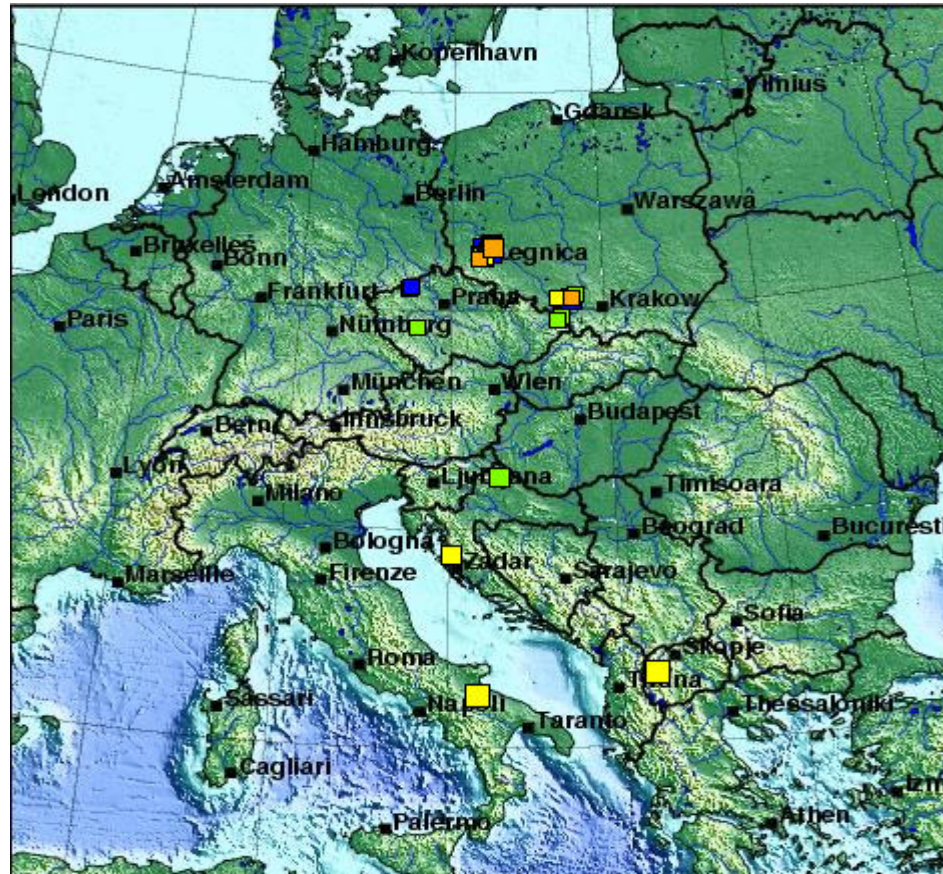


Filter: BW 0.5 3 10 3

BRTT dbheli: g fu /Volumes/rt/antelope/gfu/plotfiles/CHVC/dbheli.ps service Fri Mar 6 01:05:54 2015

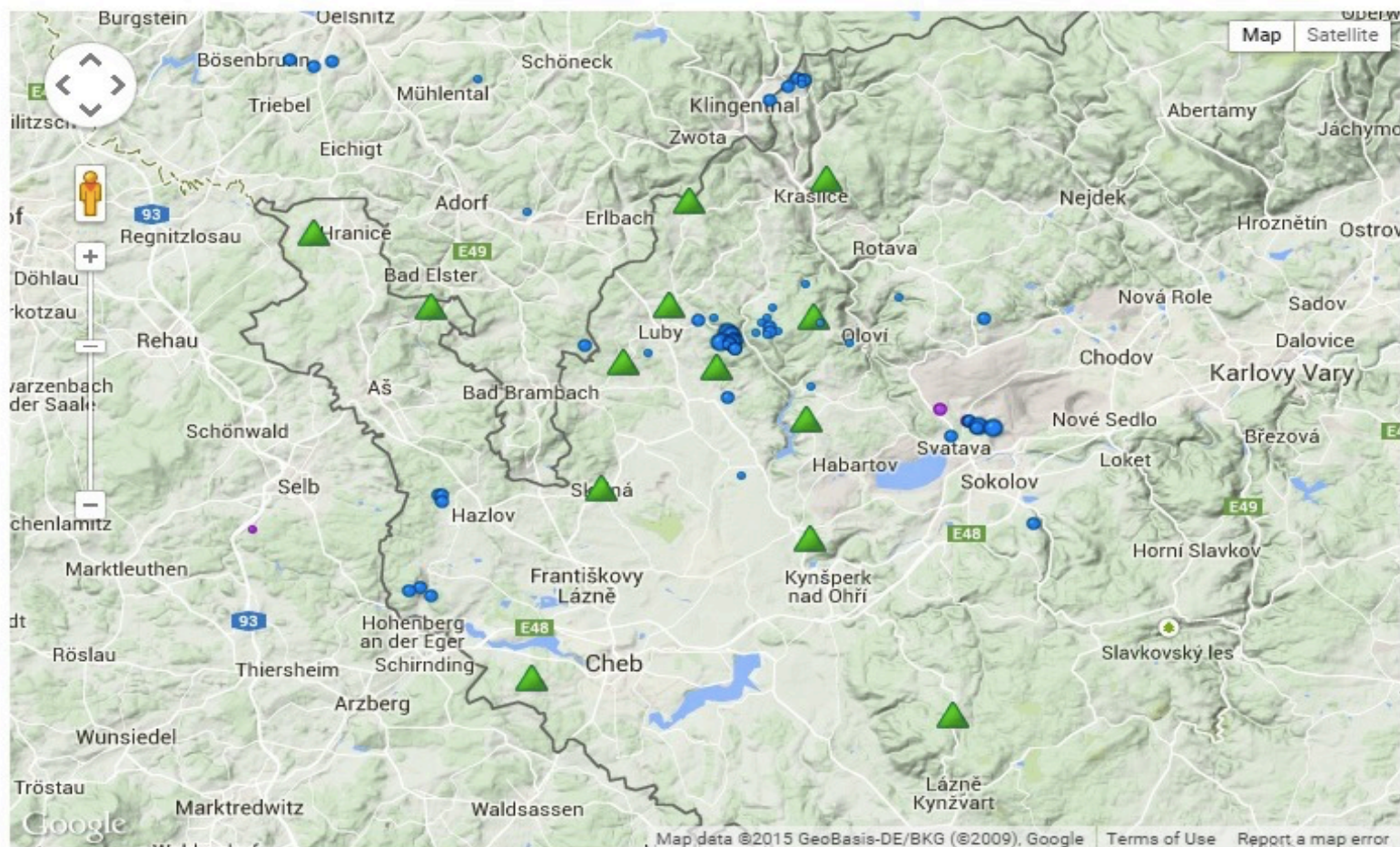


# Recent automatic locations (no warranty)

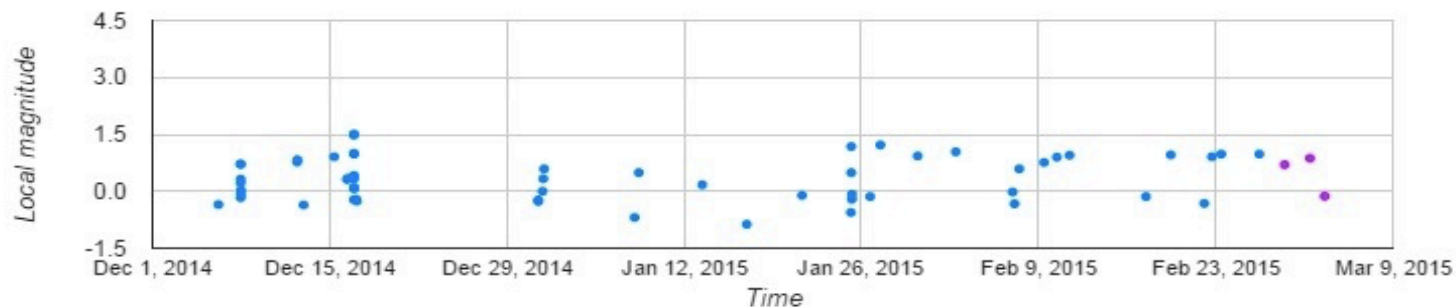


Map Legend					
Time Before Present	■	< 6 hours	Event Magnitude	□	< 2.0 mb/ml/ms
	■	< 12 hours		□	< 3.0 mb/ml/ms
	■	< 1 days		□	< 4.0 mb/ml/ms
	■	< 3 days			
	■	< 7 days			
	■	< 14 days			

- West Bohemia earthquakes
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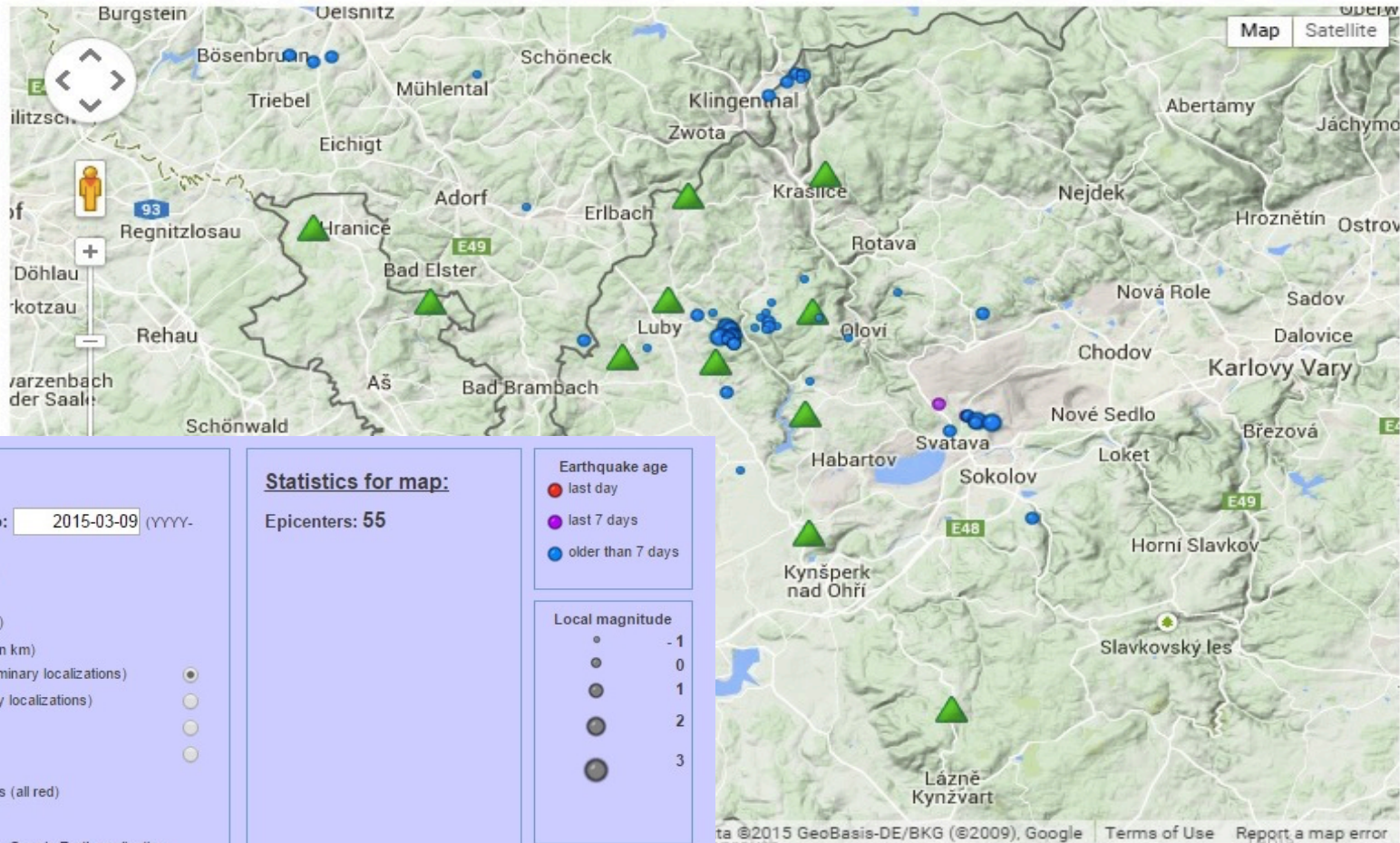


For verified localizations select the WEBNET catalog in the form below. (ver. 0.4)





- West Bohemia earthquakes
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**Data selection:**

Period from:  to:  (YYYY-MM-DD)  
 Period of last 90 days is used if not set.

Minimal magnitude:  (x.x)  
 Depth from:  to:  (in km)  
 Catalog: ANTELOPE (automatic; preliminary localizations)   
 PEPIN (automatic; preliminary localizations)   
 WEBNET (since 1994)   
 Neunhoefer (1962-1997)

- Do not distinguish the age by colors (all red)
- Hide stations
- Generate file for 3-D visualisation in Google Earth application

**Generate map**

**Statistics for map:**

Epicenters: **55**

Earthquake age

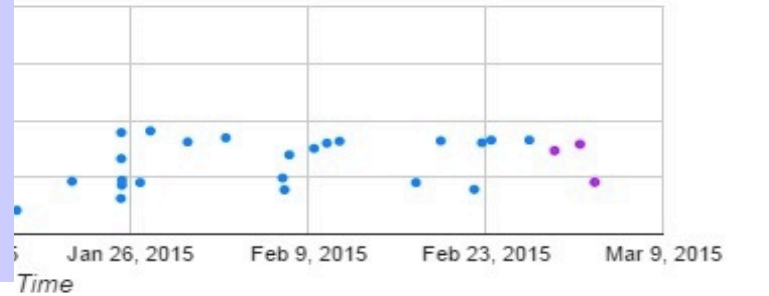
- last day
- last 7 days
- older than 7 days

Local magnitude

- -1
- 0
- 1
- 2
- 3

**Note to catalogs:** Automatic localizations are based on the ANTELOPE and PEPIN programs and error of these localizations can be up to several kilometers and error in magnitude up to 0,5. For more precise localizations switch to WEBNET catalog - manual, checked localizations with error in position up to 200m and the magnitude is verified. In the case of high rate of seismic activity the WEBNET catalog does not have to be in actual state.

**Use and distribution of data:** Data serve exclusively for the purpose of this website. The possibilities of further use or publication, please inform the author of the application.



# WWW interface for digital data request

Geophysical Institute of the Academy of Sciences of the Czech Republic  
[www.ig.cas.cz](http://www.ig.cas.cz)  
**Waveform Data Request**

**Search for earthquakes**  
Enter criteria in the following form to retrieve specific events.

**Segment of time**  
(YYYY-MM-DD HH:MM:SS) from 2012-06-16 12:00:00  
length[s] 300

**Stations**  
ALL   
DPC  GOPC  KHC  KRLC   
NKC  OKC  PRA  PRU   
PVCC  TREC  UPC  MORC   
KRUC  VRAC  JAVC

**Channels**  
ALL   
SHZ  SHN  SHE   
BHZ  BHN  BHE   
HHZ  HHN  HHE   
HLZ  HLN  HLE

**Data format**  
MiniSEED Steim2 ▾

Geophysical Institute of the Academy of Sciences of the Czech Republic  
[www.ig.cas.cz](http://www.ig.cas.cz)  
**Waveform Data Request - only for GFU**

**Search for earthquakes**  
Enter criteria in the following form to retrieve specific events.

**Time window**  
(YYYY-MM-DD HH:MM:SS) from 2012-06-16 12:00:00  
length[s] 300

**Stations**  
ALL   
**Czech Republic:**  
DPC  KHC  KRLC  NKC  OKC  PRU  PRA  GOPC  PVCC  UPC  TREC  JAVC  KRUC  MORC   
VRAC   
**Austria:**  
ARSA  DAVA  MOA  OBKA  WTTA   
**Poland:**  
KSP  OJC  KWP   
**Germany:**  
BRG  CLL  MOX  GRFO  WET  MANZ  ROTZ  TANN  GUNZ  WERN   
**Slovakia:**  
ZST  MODS  VYHS  CRVS  KOLS

**Channels**  
ALL   
BHZ  BHN  BHE   
SHZ  SHN  SHE   
HHZ  HHN  HHE   
HLZ  HLN  HLE

**Data format**  
MiniSEED Steim2 ▾  
MiniSEED Steim2  
MiniSEED Steim1  
GSE2.1 CM6

**Access password**  
If you don't have password, please contact [Jan Zednik](mailto:Jan.Zednik)

# Future plans

- Improve automatic locations and web interface
- Move all stuff to Mac servers
- Replace guralp2orb by seedlink at GOPC
- Shut down 4.6 and SUN computers



Thank you