Czech Regional
Seismic Network

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IG CAS Prague
Antelope Users Group Meeting, Vienna, 5-7 June 2023

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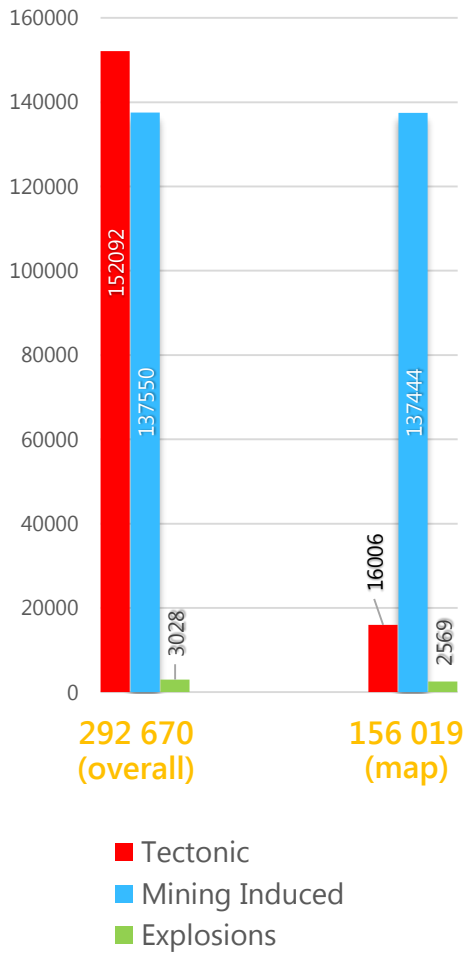
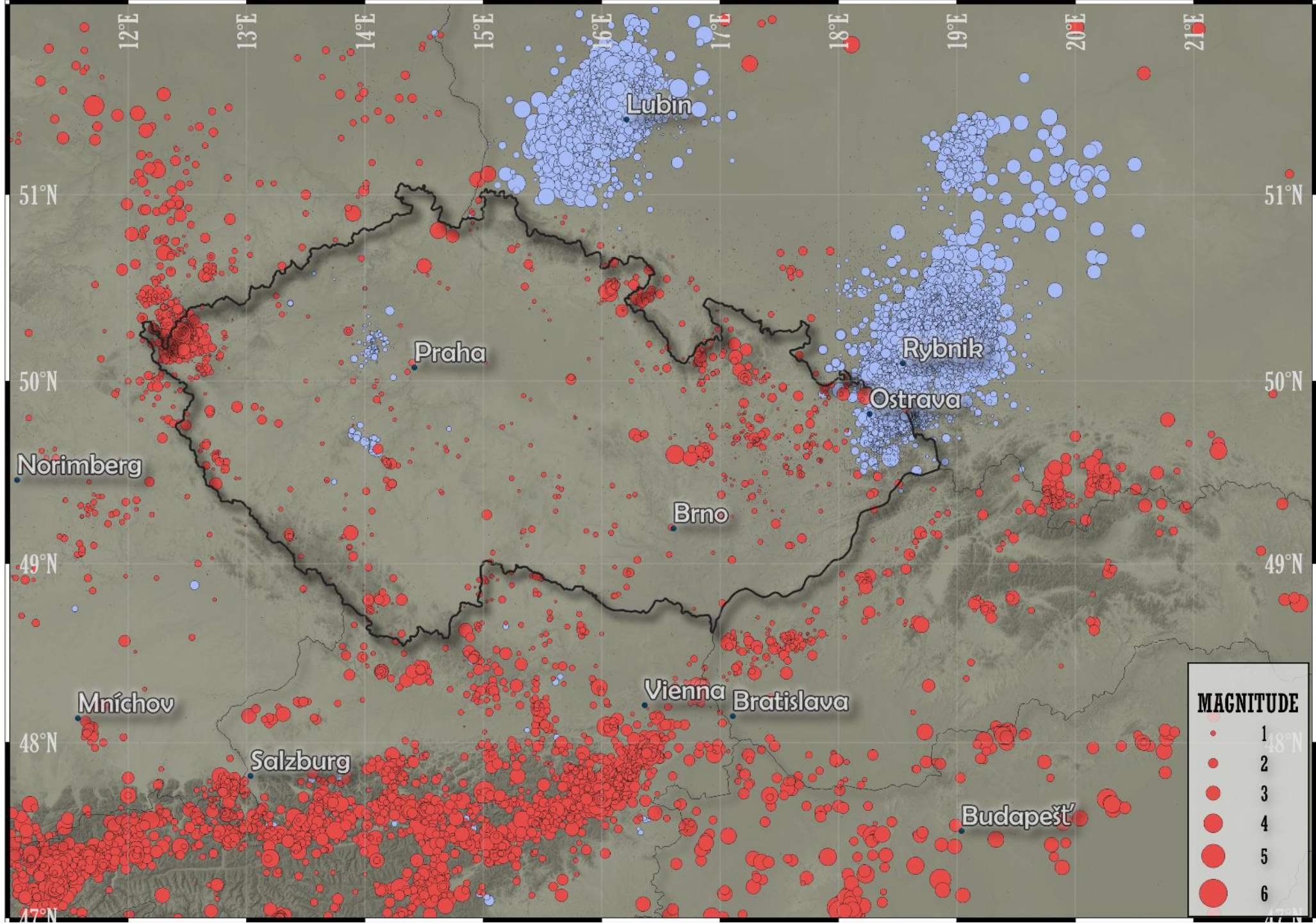
1. Seismicity
2. Stations and Network
3. Data management and products

Seismicity

Seismic events recorded by CRSN between 1976-2022





BIG EVENTS IN CZECH REPUBLIC

5.1 (ISC)

WEST BOHEMIA

21.12.1985

Intensity 7

4.8 (ISC)

WEST BOHEMIA

20.01.1986

Intensity 6.5

4.6 (ISC)

WEST BOHEMIA

20.12.1985

Intensity 6

4.5 (ISC)

WEST BOHEMIA

16.12.1985

Intensity 6

4.4 (WEBNET)

WEST BOHEMIA

31.05.2014

Intensity 6

BIG EVENTS IN CZECH REPUBLIC

3.8 (ISC)

Jeseníky mountains

10.09.1986

Intensity 5.5

3.5 (ISC)

NE BOHEMIA

07.05.1984

3.5 (IPE)

Hlučín

10.12.2017

Intensity 6

3.4 (GFU)

Hronov

25.10.2005

Intensity 5

3.3 (GFU)

Hronov

10.08.2005

Intensity 2

BIG EVENTS IN CZECH REPUBLIC
(ROCKBURST)

4.2 (ISC)

Ostrava coal region

02.10.2011

Intensity 3

4.2 (ISC)

Ostrava coal region

30.10.1982

4.1 (ISC)

Ostrava coal region

24.02.1980

4.0 (ISC)

Ostrava coal region

08.02.1983

3.9 (ISC)

Ostrava coal region

04.12.2008

Intensity 2

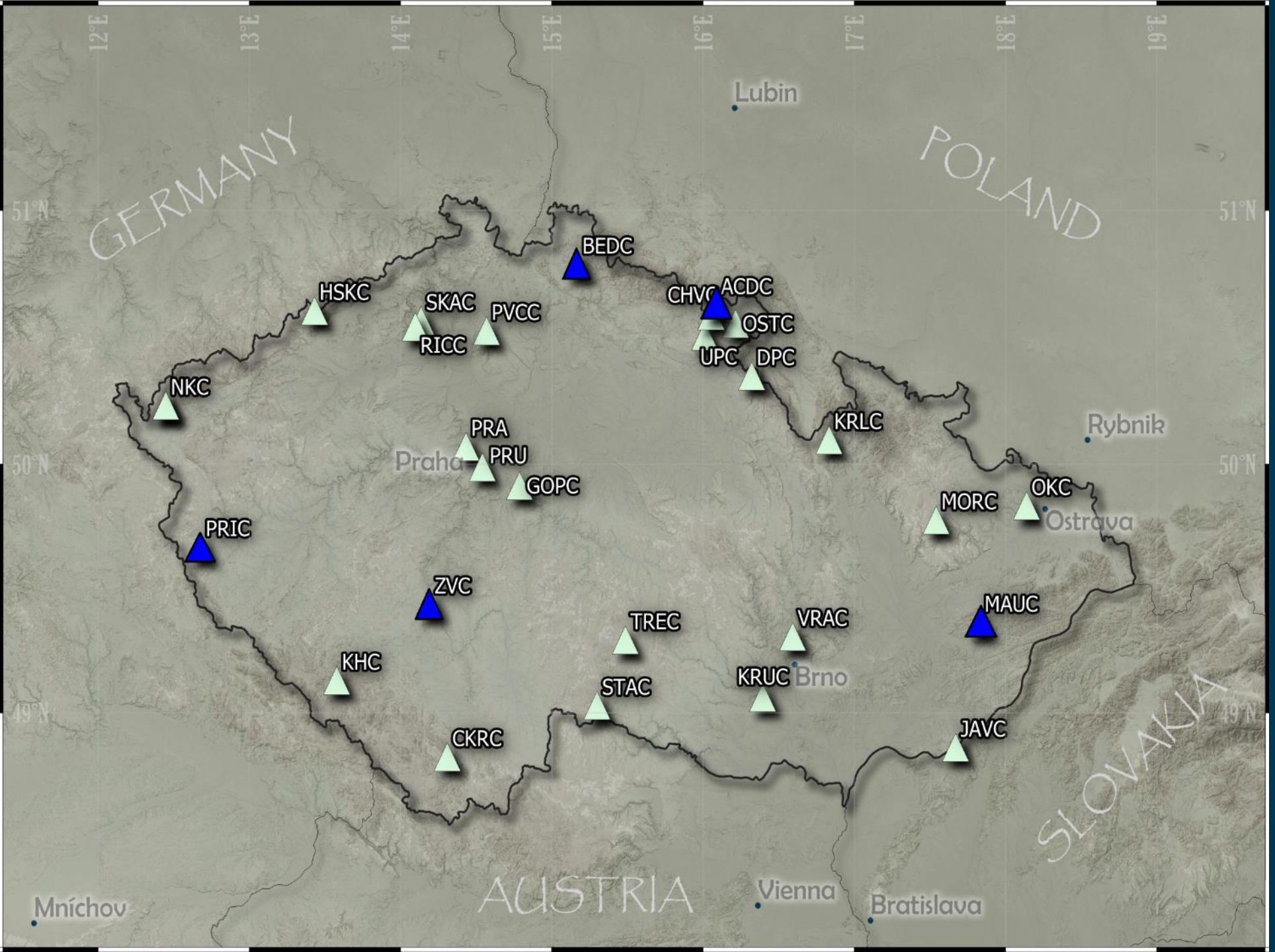
Stations and networks

CRSN network

- 27 BB stations

12 operated by IG ASCR

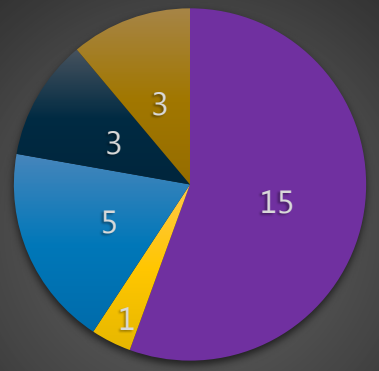
CRSN network



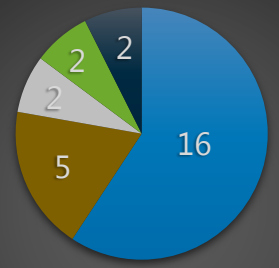
- 27 BB stations
- 5 new stations since 2017

Equipment

Sensors



Dataloggers

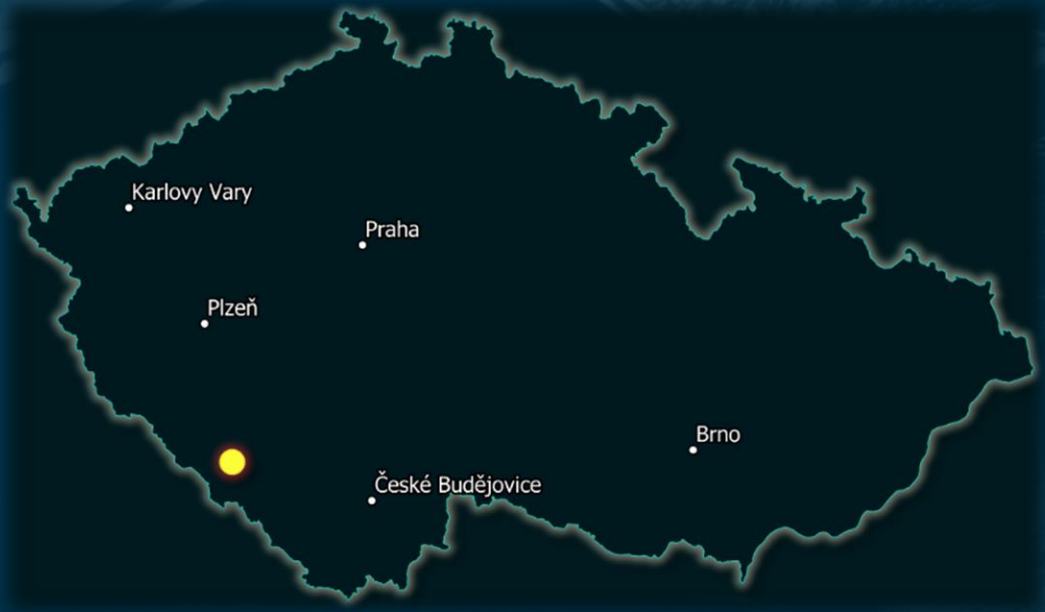


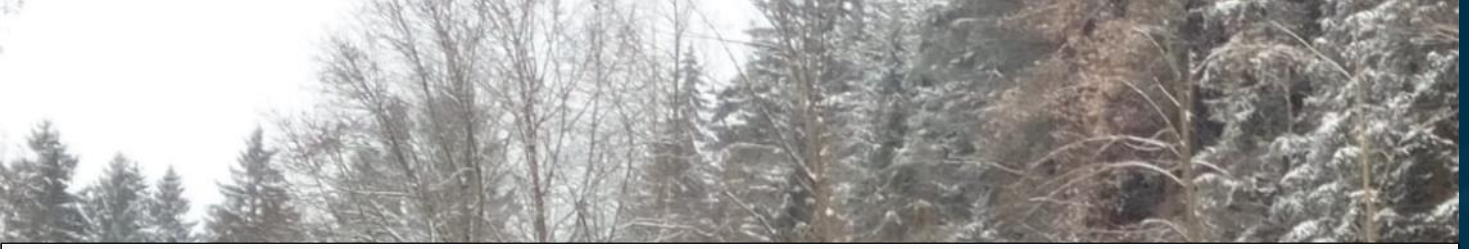
WB network

12°E
13°E
14°E
15°E
16°E
17°E
18°E
19°E
51°N
50°N
49°N
GERMANY
POLAND
SLOVAKIA
AUSTRIA
Lubin
Rybnik
Ostrava
Praha
Brno
Vienna
Bratislava
Mníchov
BEDC
HSKC
SKAC
PVCC
RICC
CHVC
ACDC
OSTC
UPC
DPC
NKC
KRLC
PRA
PRU
GOPC
MORC
OKC
PRIC
ZVC
TREC
VRAC
MAUC
KHC
STAC
KRUC
CKRC
JAVC

12°E
13°E
50°N
50°N

KHC



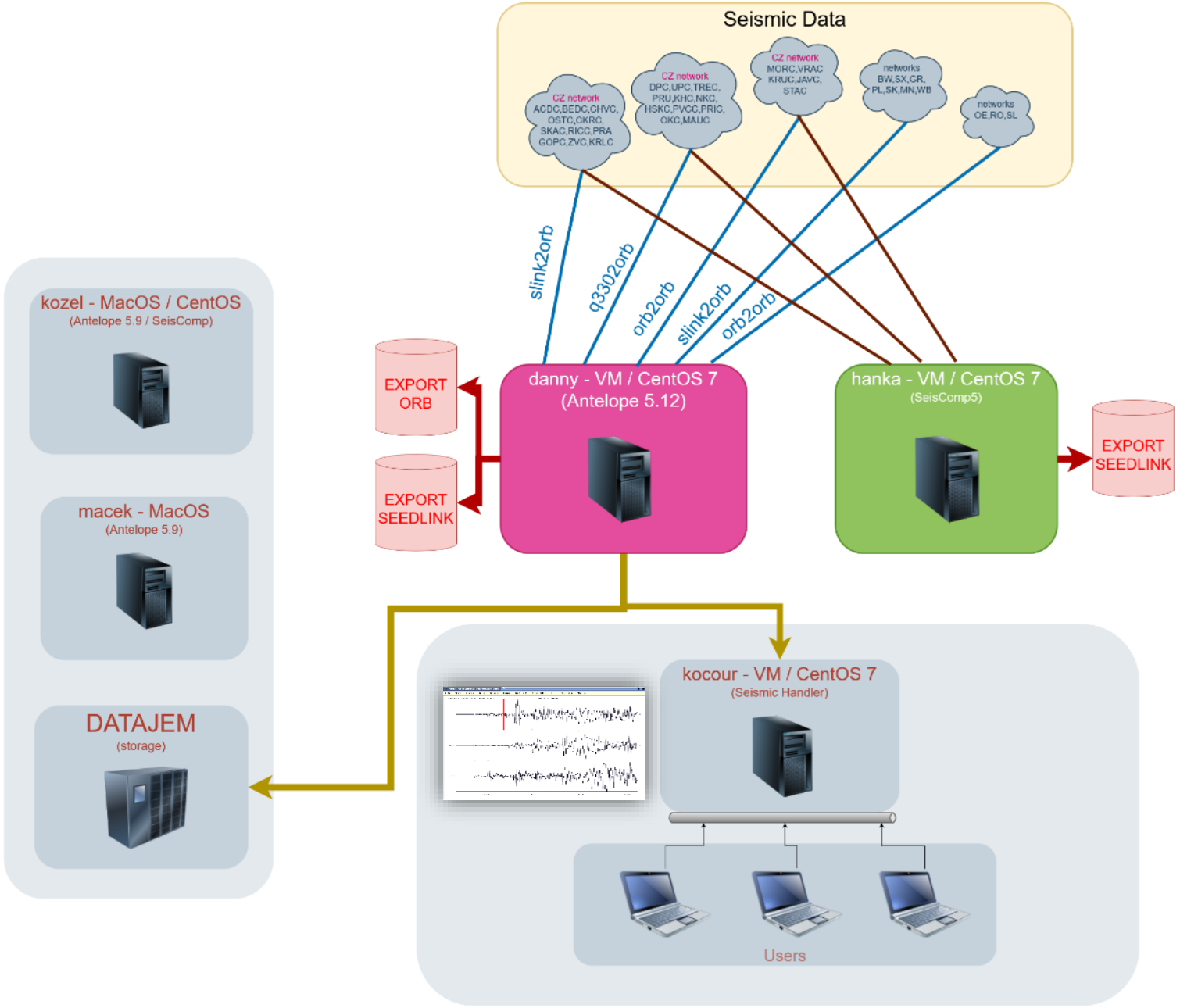


KHC

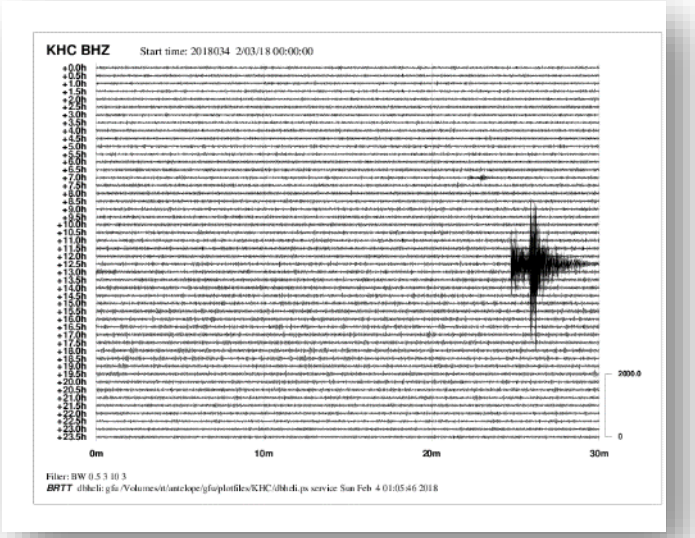
- Deep in former golden mine
- Built in 1960
- One of the most sensitive stations in the world
- First routine very-broadband recording in the world established by Axel Plešinger in 1973

Data management and products

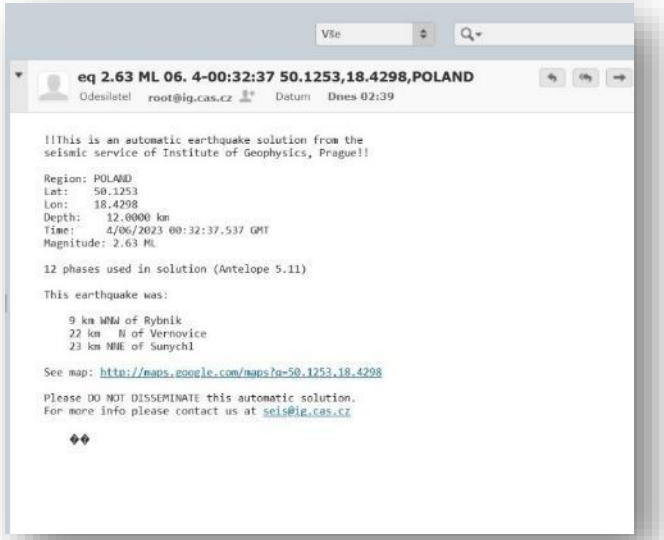
Dataflow schema



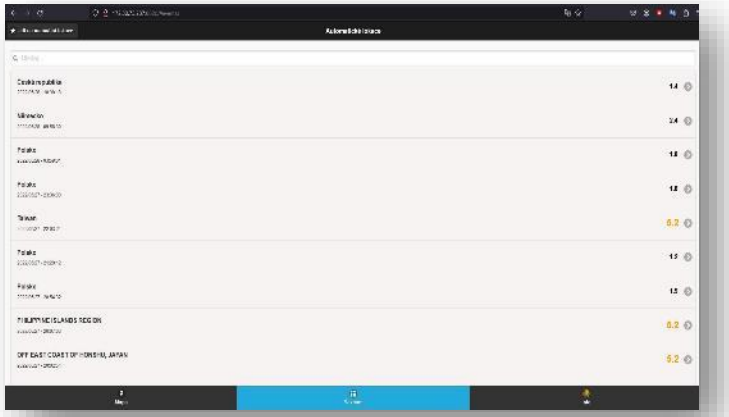
Antelope outputs



Daily seismograms



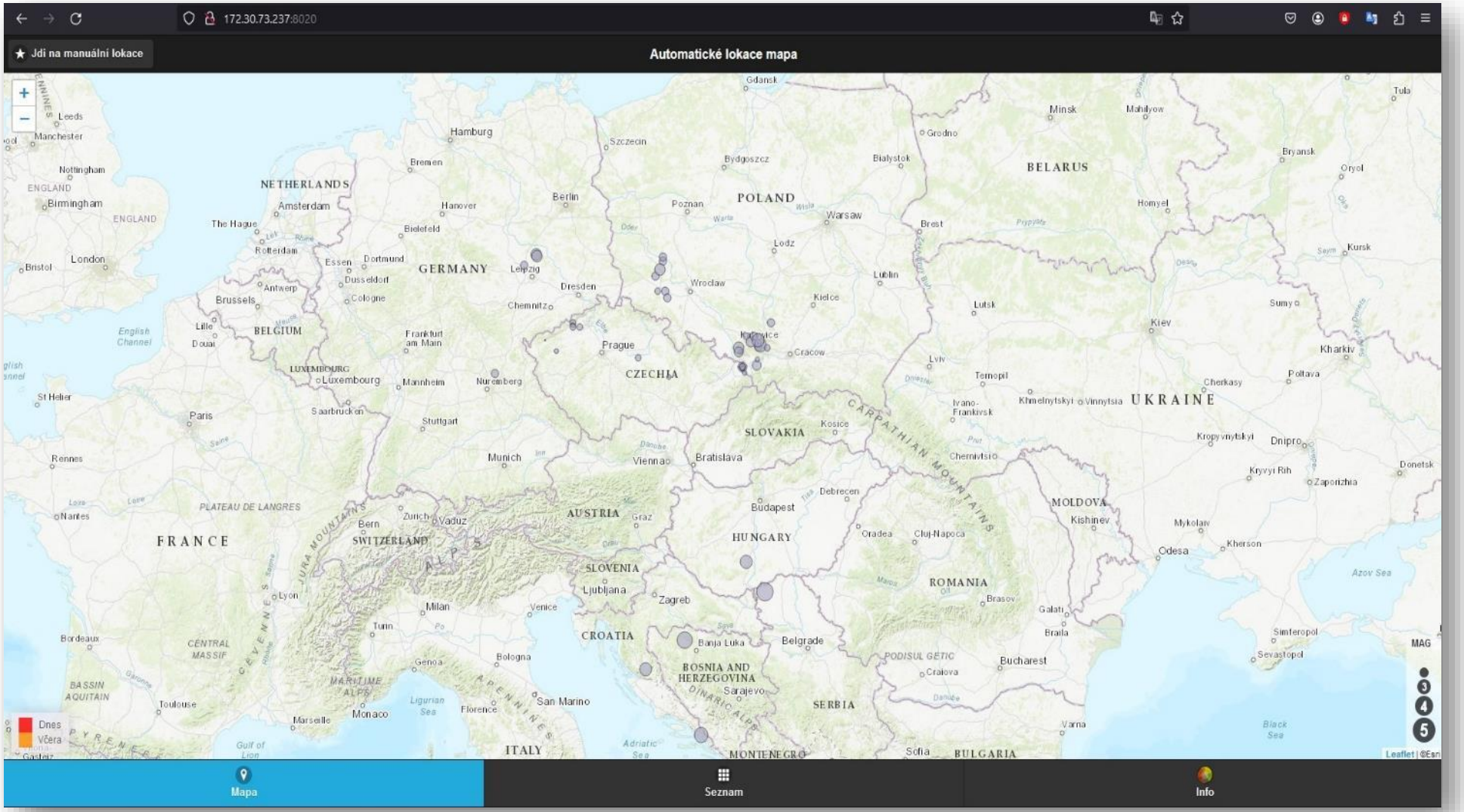
Automatic Alerts



Automatic locations

Automatic locations

rtwebserver



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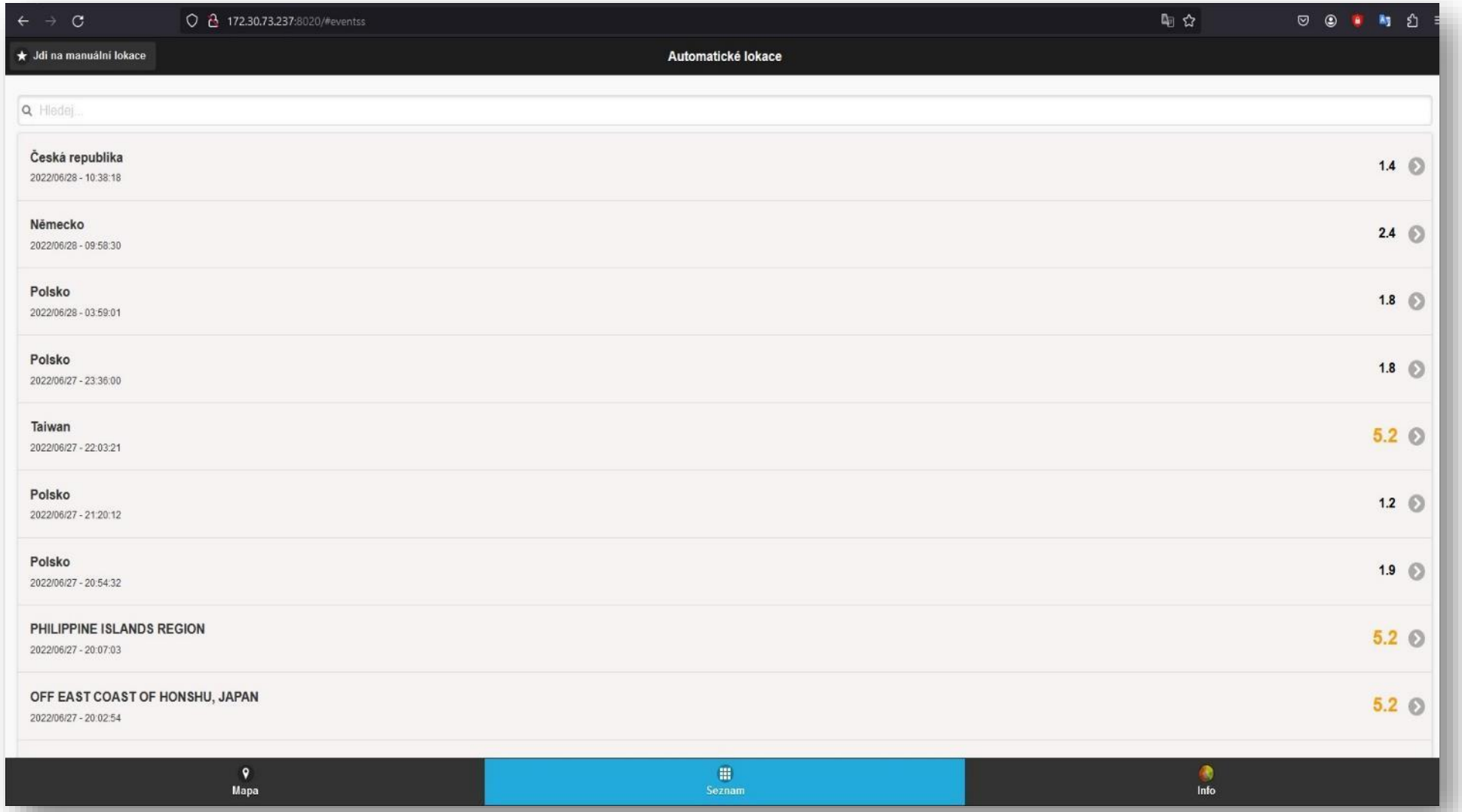

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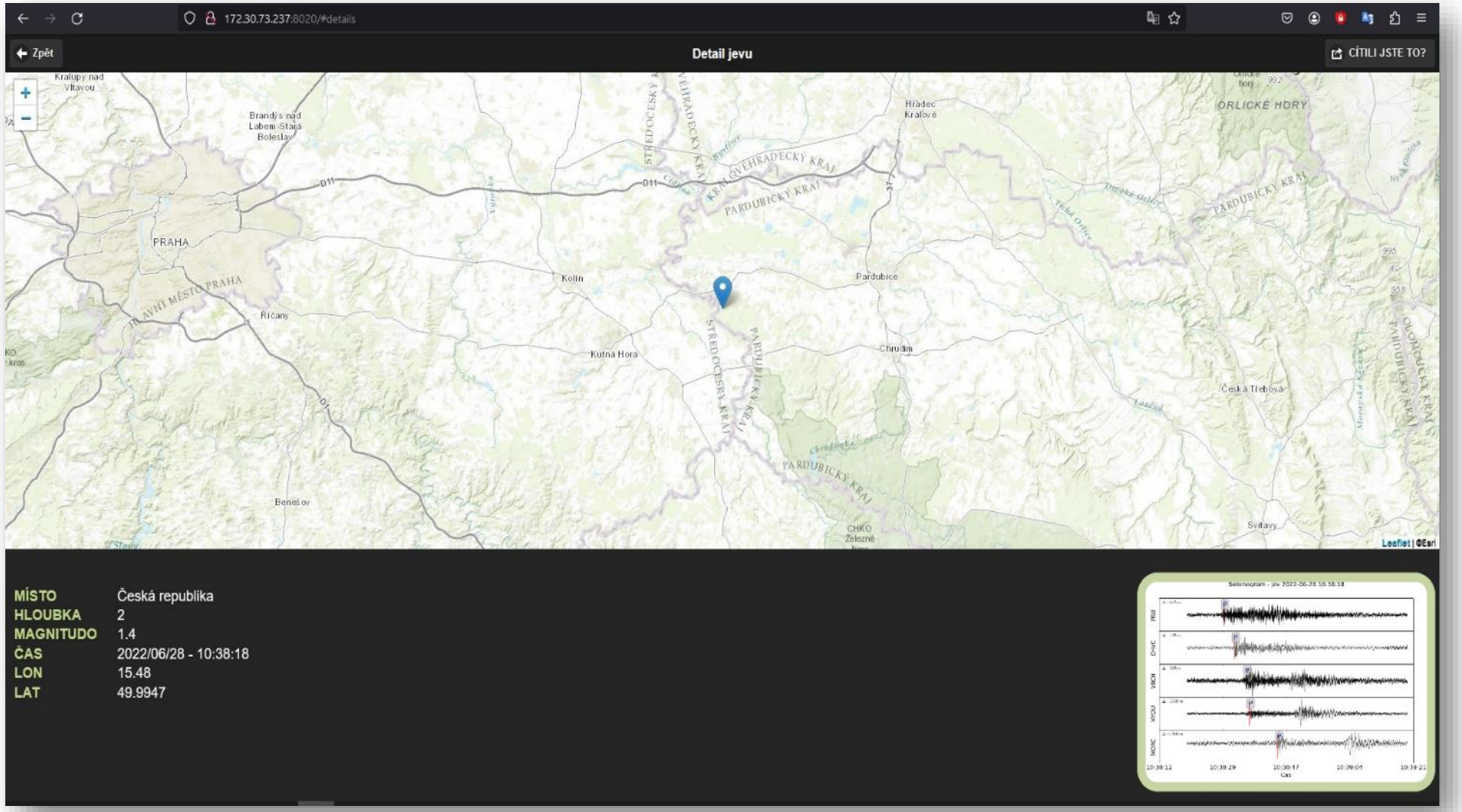
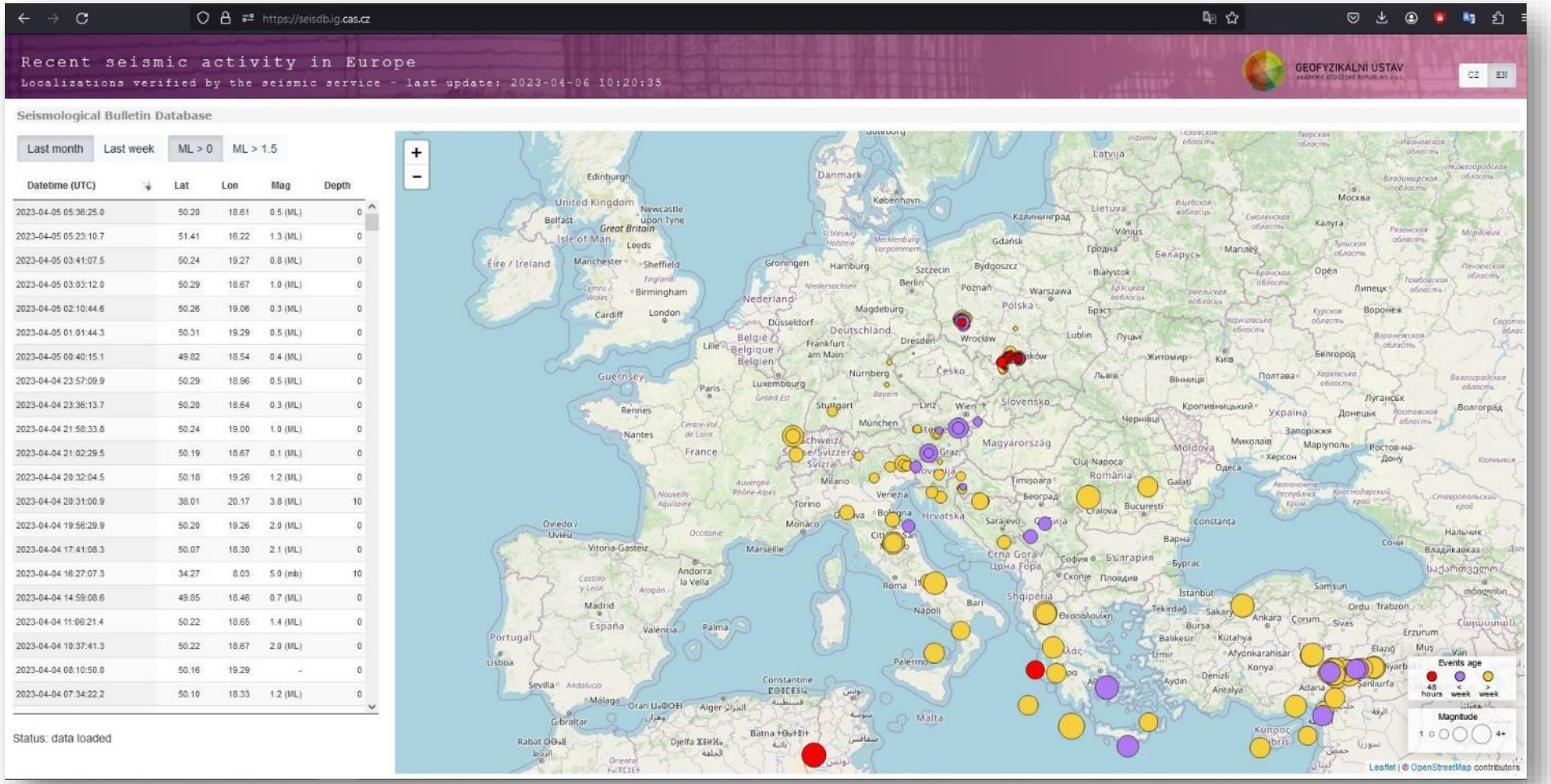


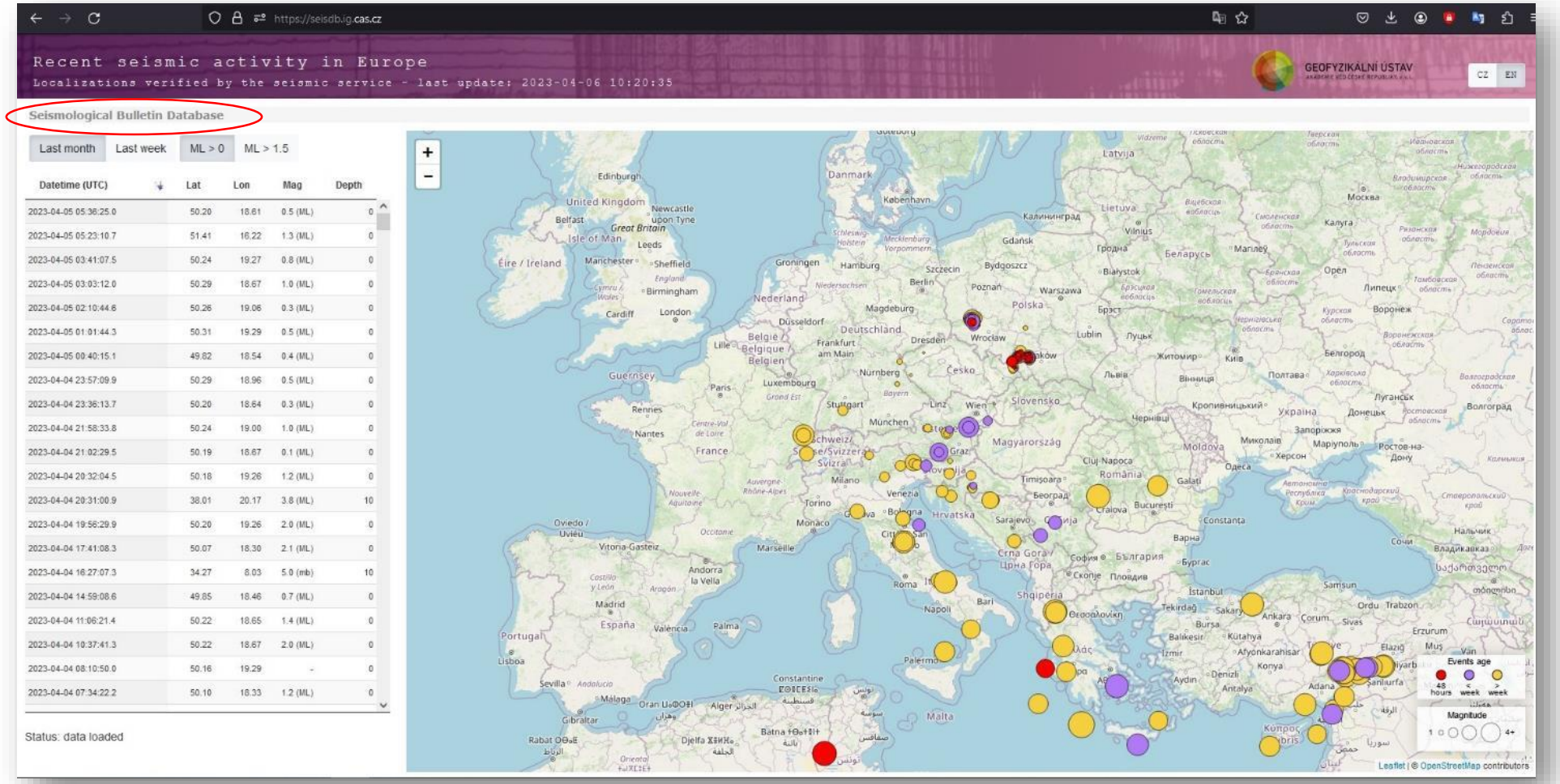
Manual locations

seisdb.ig.cas.cz



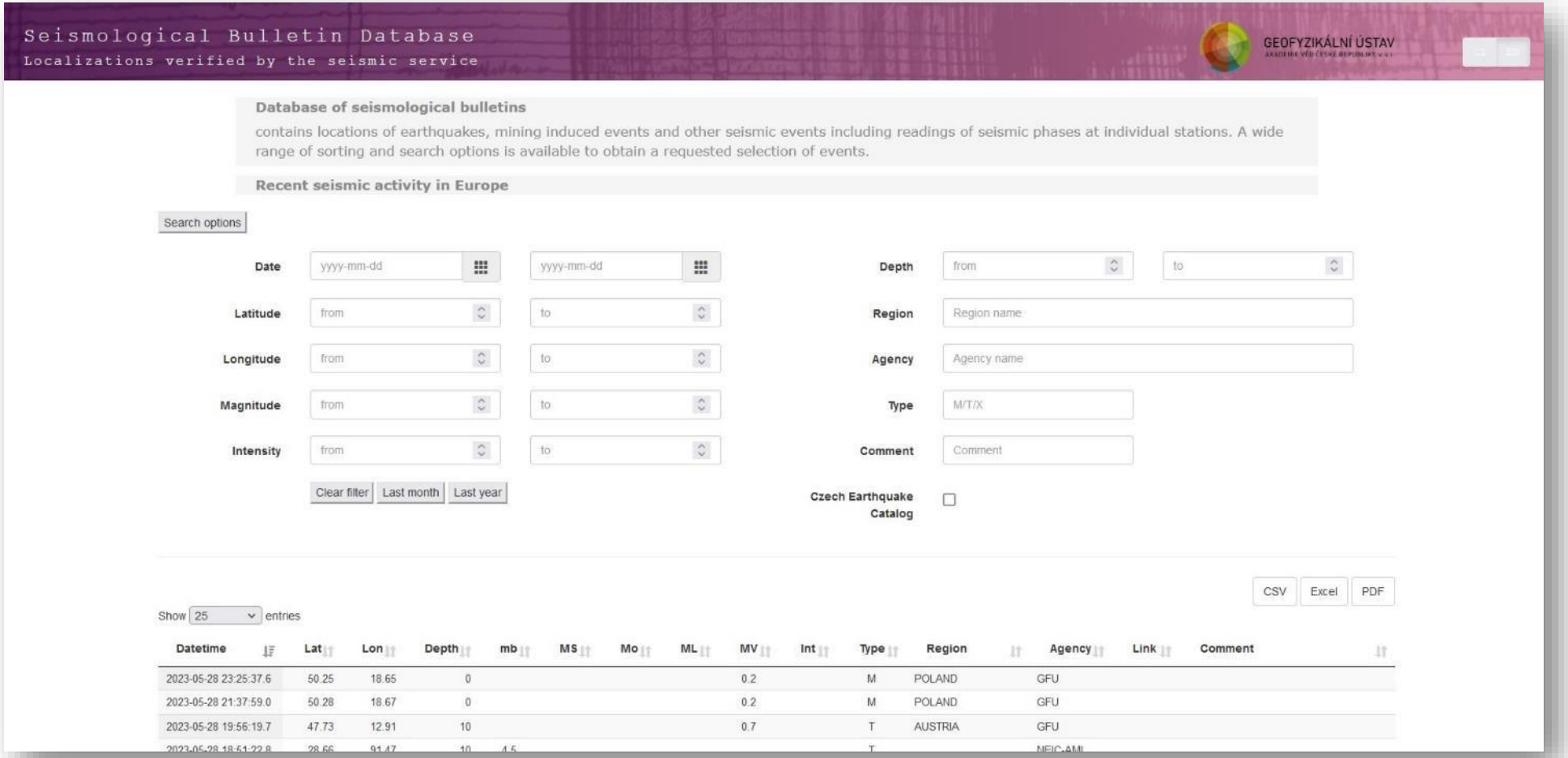
Manual locations

seisdb.ig.cas.cz



Manual locations

seisdb.ig.cas.cz/bull.html



FUTURE PLANS

- **Improve automatic procedures**
- **Automatic picks from Antelope to Seismic Handler**
- **Improve database of seismic bulletins**
- **Implement FDSN webservices**

THANK YOU