

Seismic activity in West Bohemia in years 1991 - 2006

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**8TH CZECH-POLISH WORKSHOP ON RECENT GEODYNAMICS
OF THE SUDETEN AND ADJACENT AREAS**
Kłodzko, Poland, March 29-31, 2007

50°30'

■ Plauen

■ Adorf

■ Kraslice

● POCA

LUBY

■ Luby



● NKC

● JIND

● BERN

■ Aš

● SKC

● VACK

■ Cheb

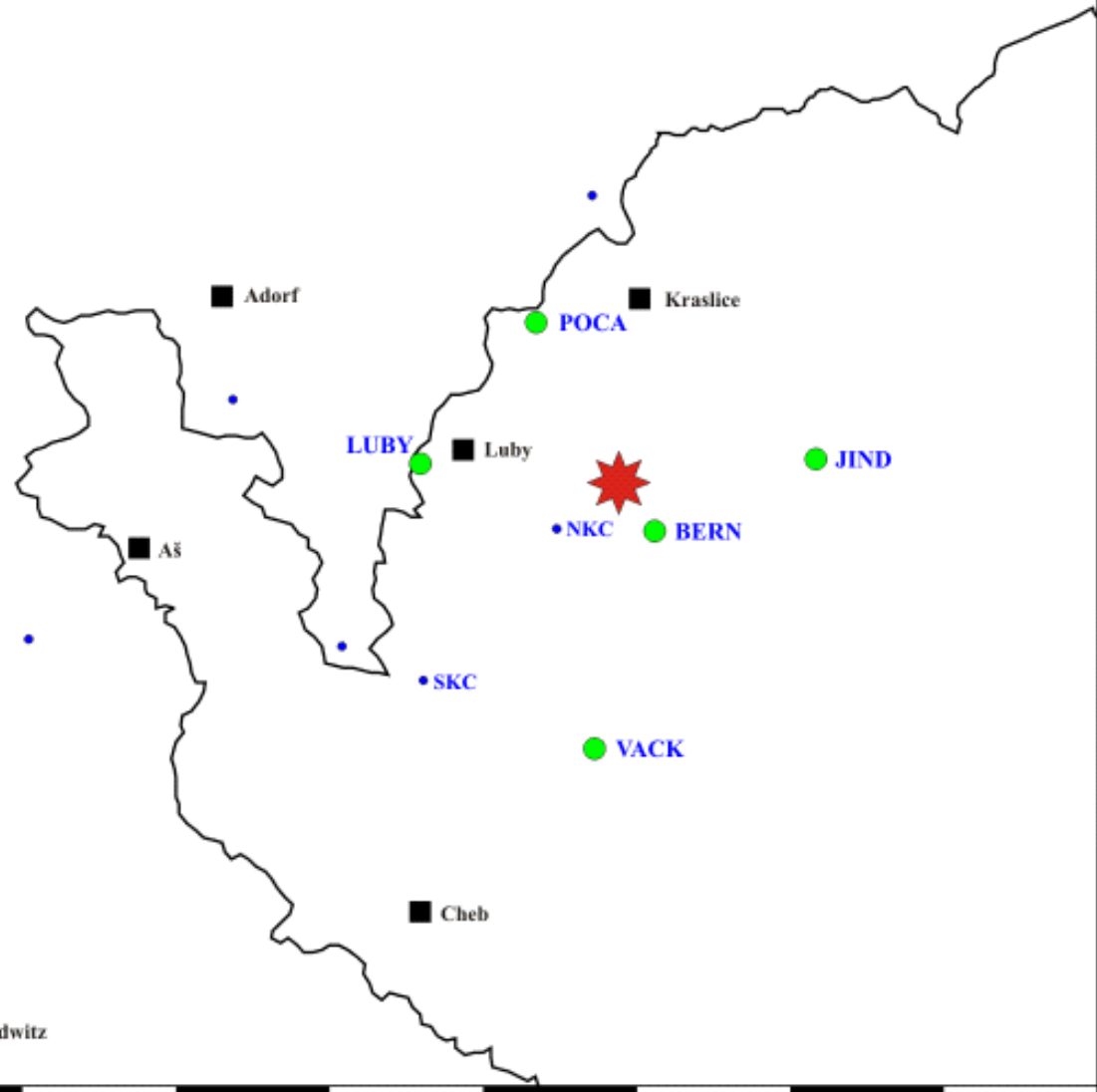
Markfredwitz



50°00'

12°00'

12°30'

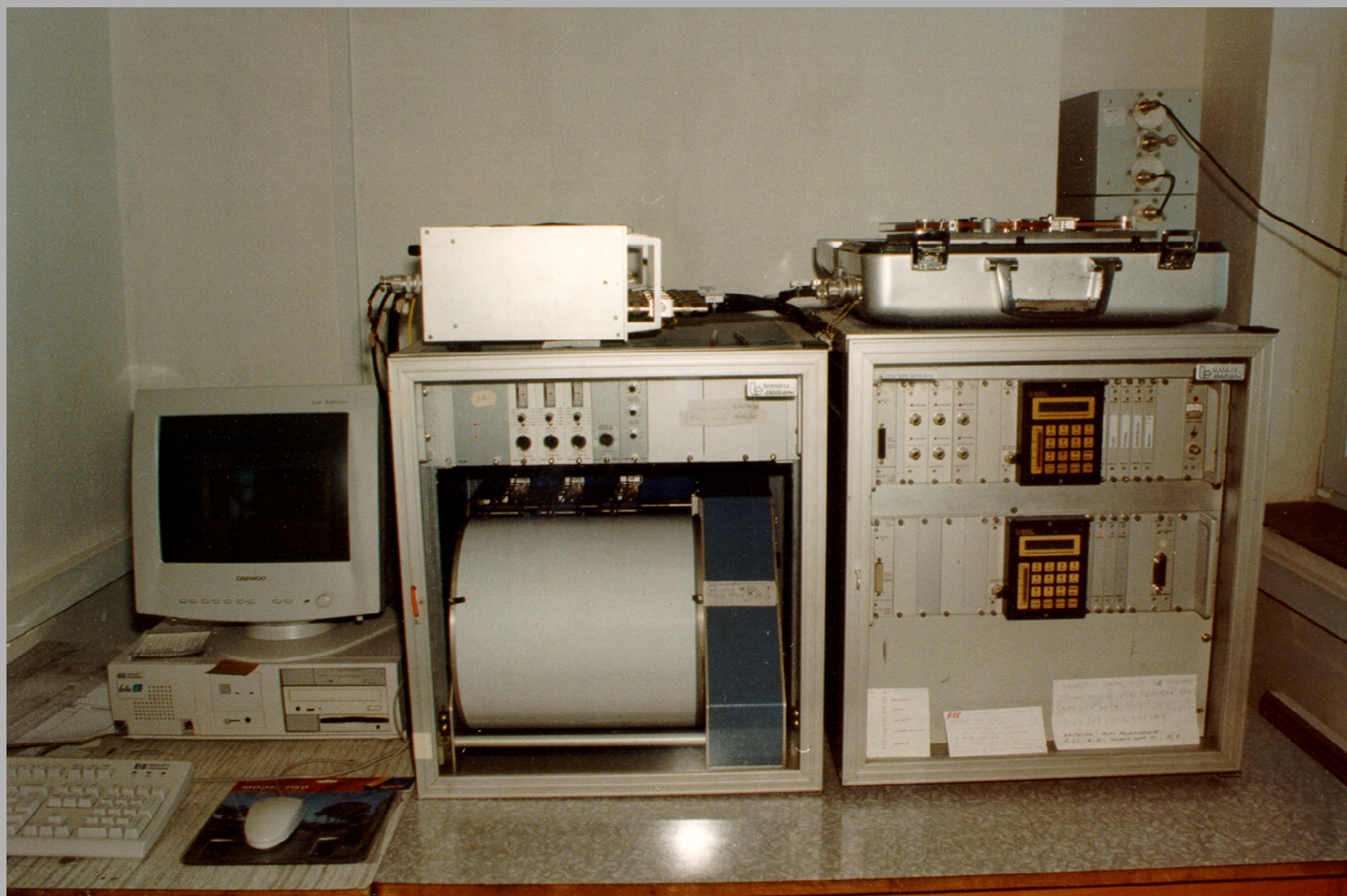


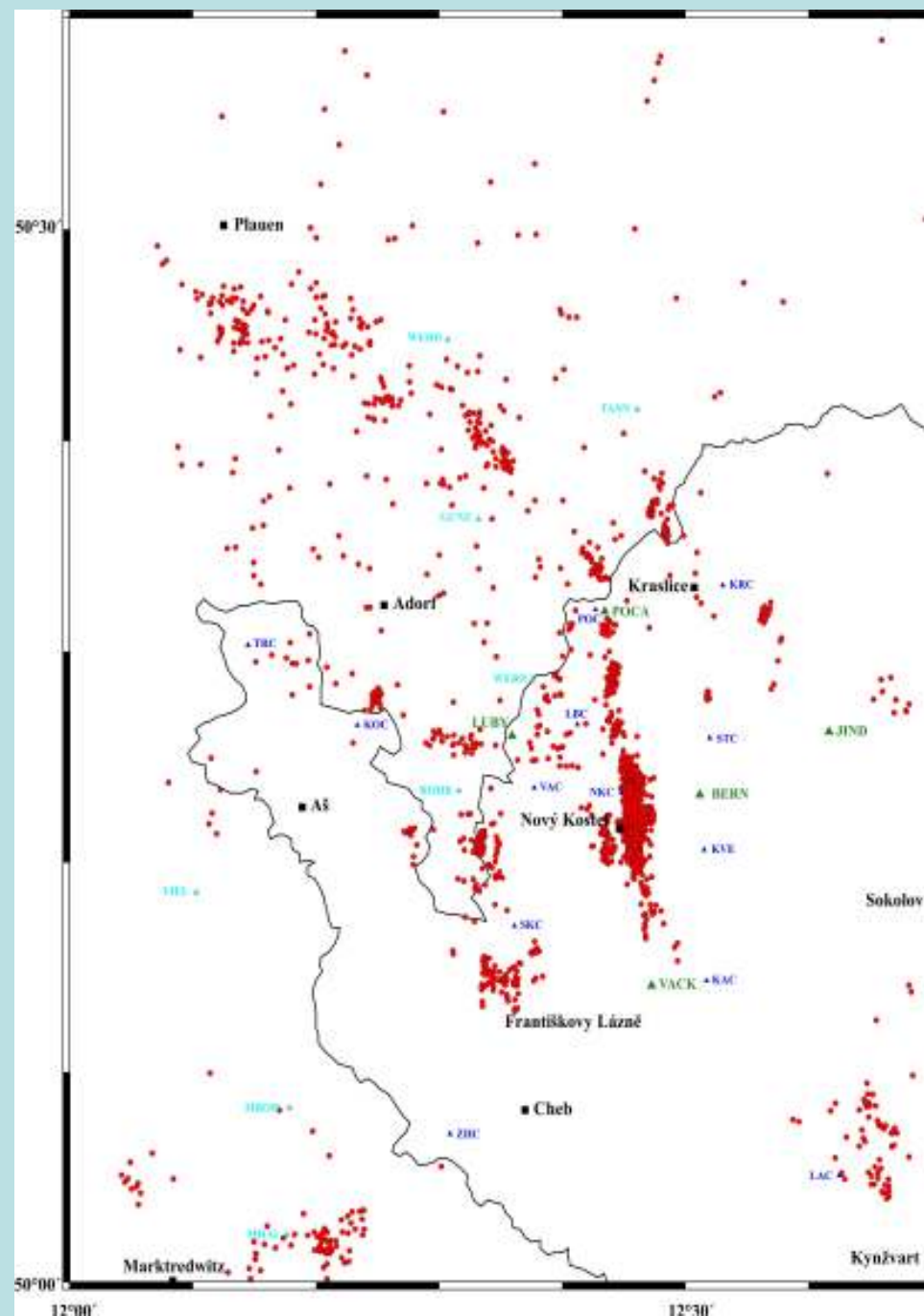
Seismological network KRASNET

- Data acquisition system : Lennartz 5800
- Stations: 5 channels: 15
- Digital acquisition in trigger status with coincidence
- Geophones WDS 2 Hz, 3 components, 6 m borehole
- Sample frequency 125 Hz, sample step 8 ms
- Frequency band 2 - 25 Hz
- Record medium - hard disk of PC
- Transmission of selected data via Internet to IPE
Brno

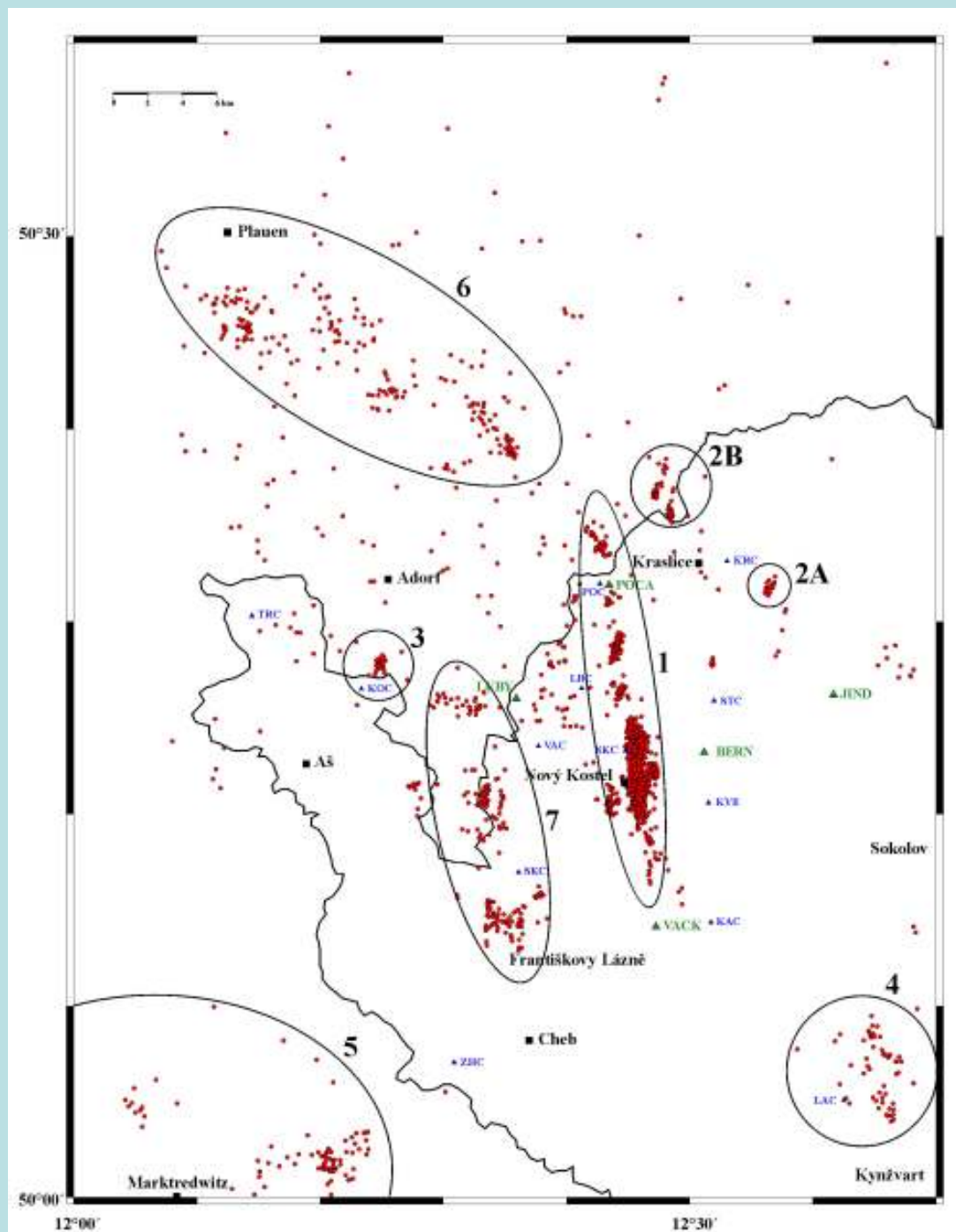


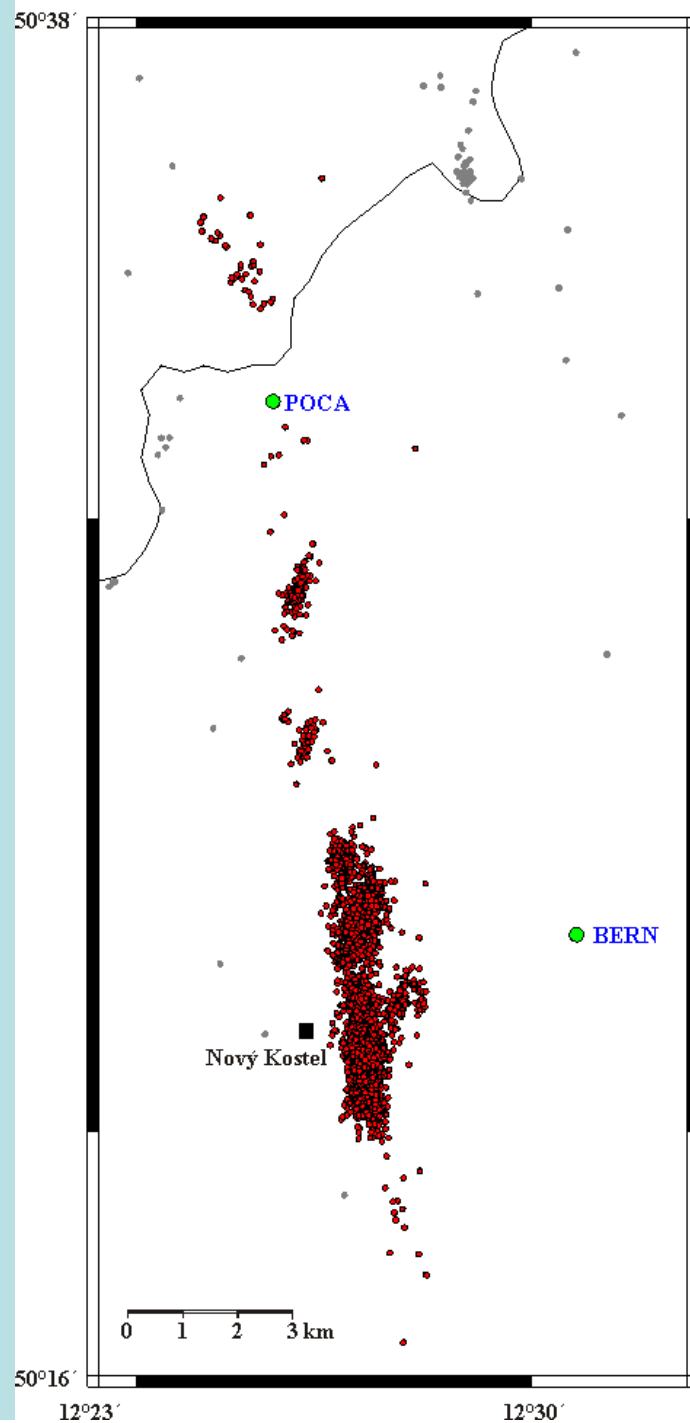






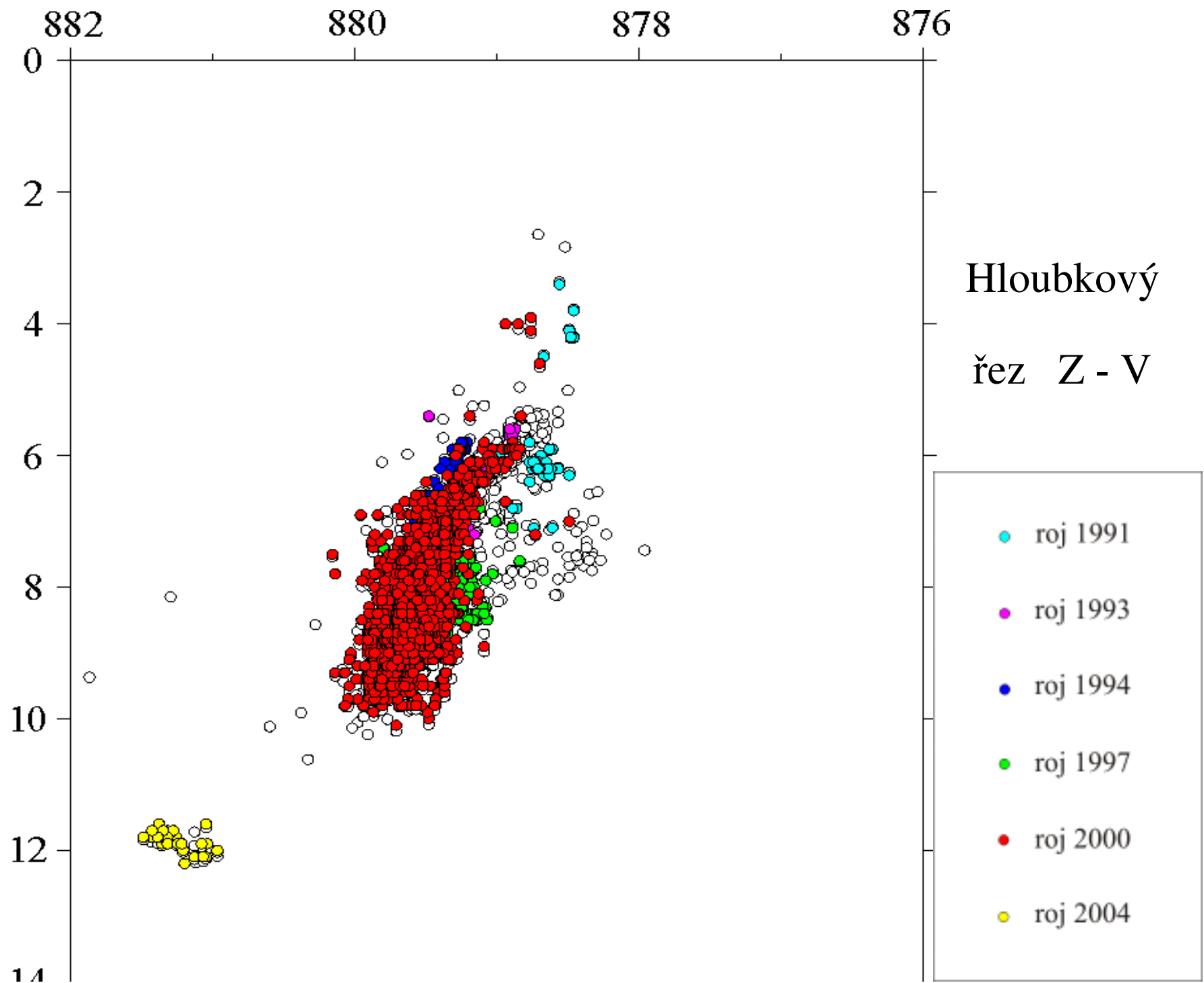
1991 - 2006



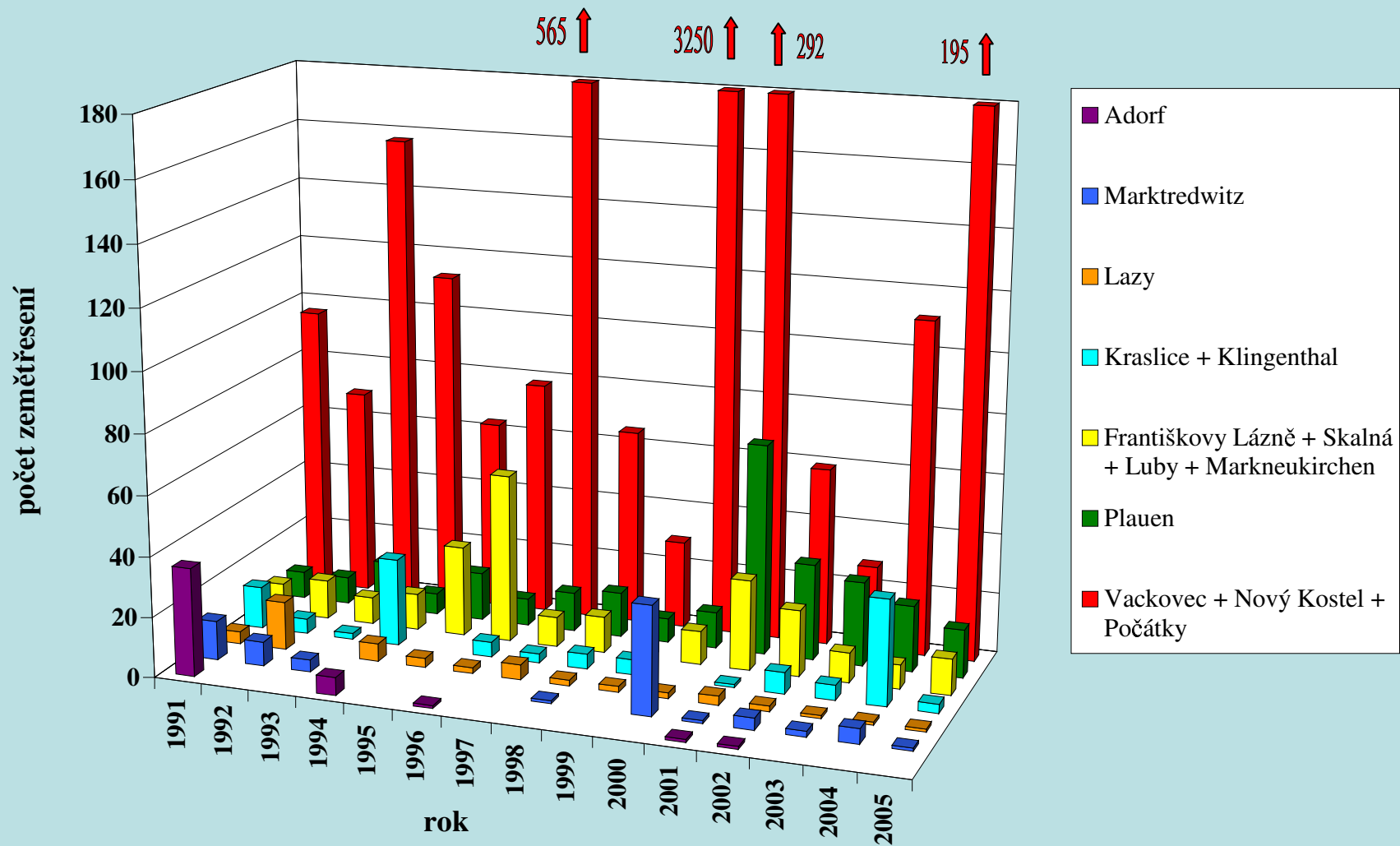


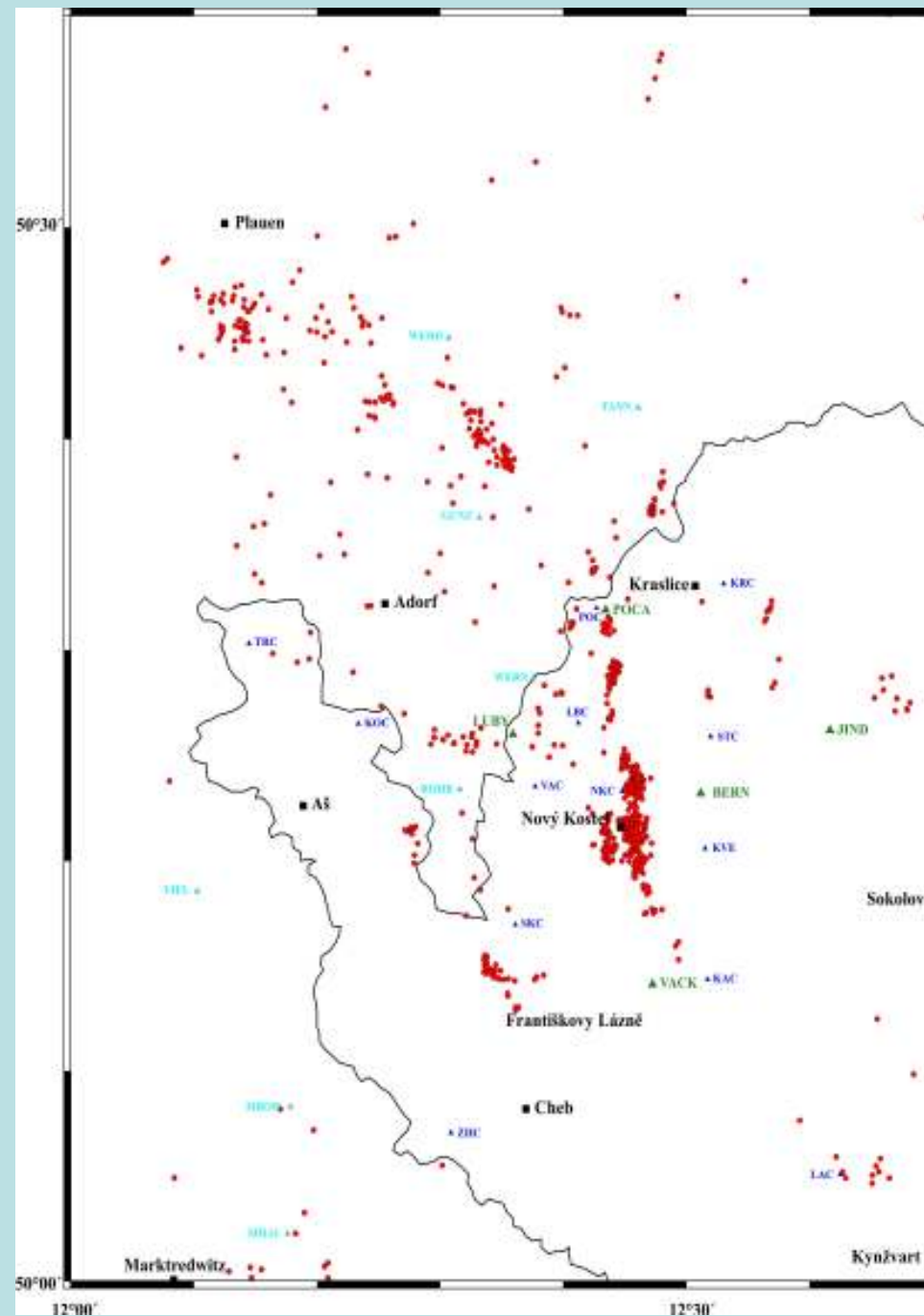
Oblast Nový Kostel - Počátky

1991 - 2001

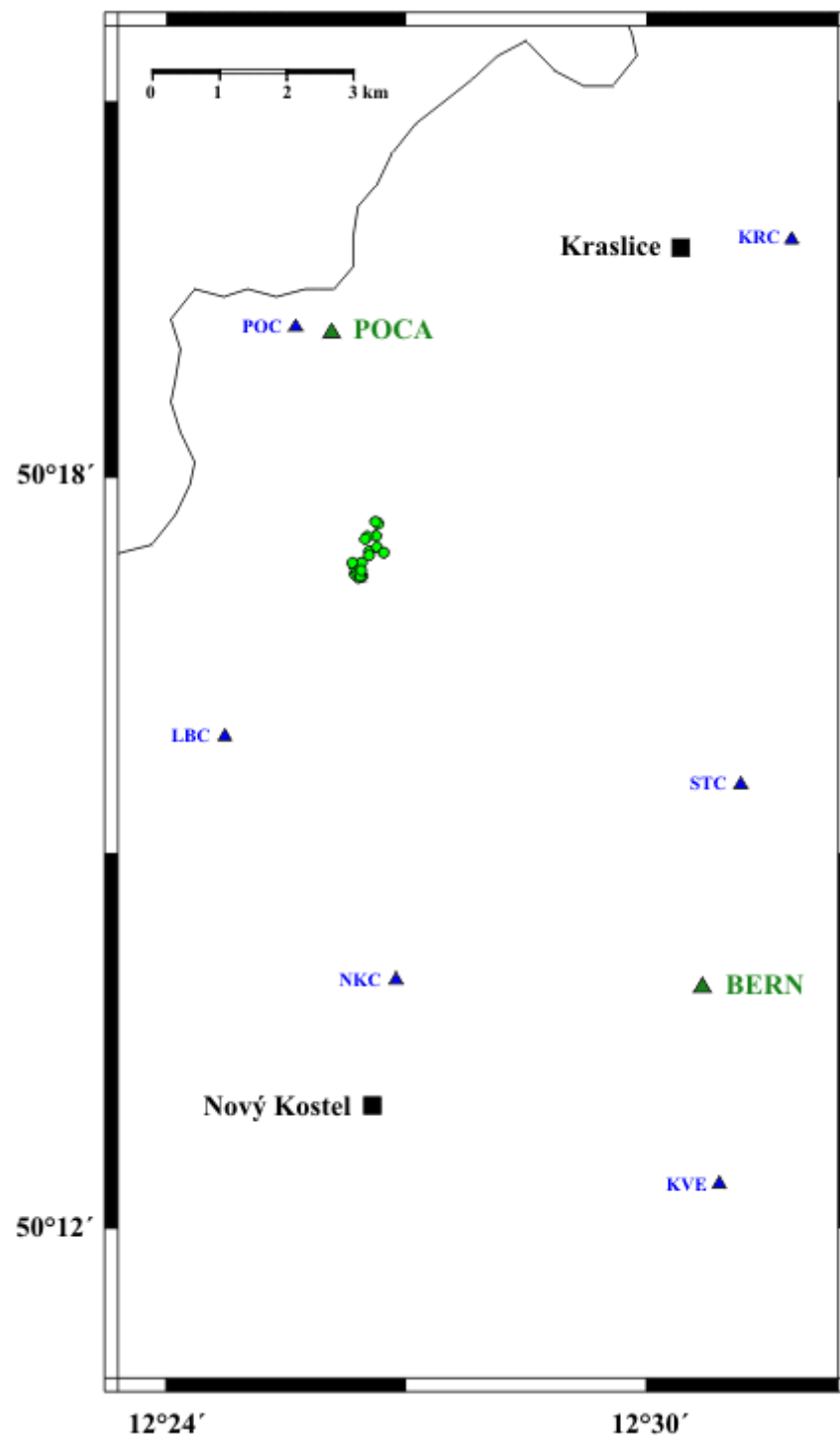


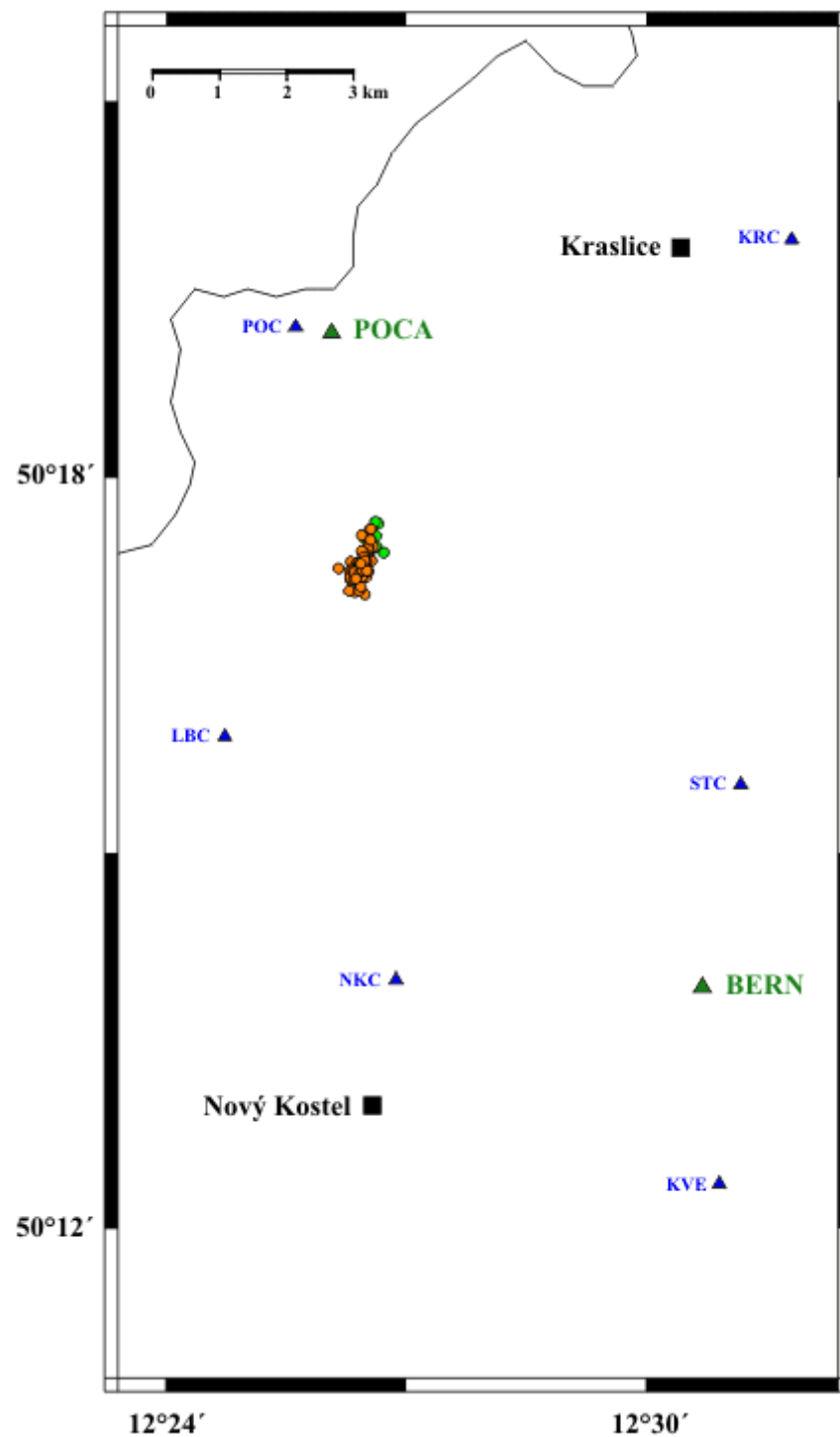
Počet zemětřesení v jednotlivých oblastech v letech 1991 - 2005

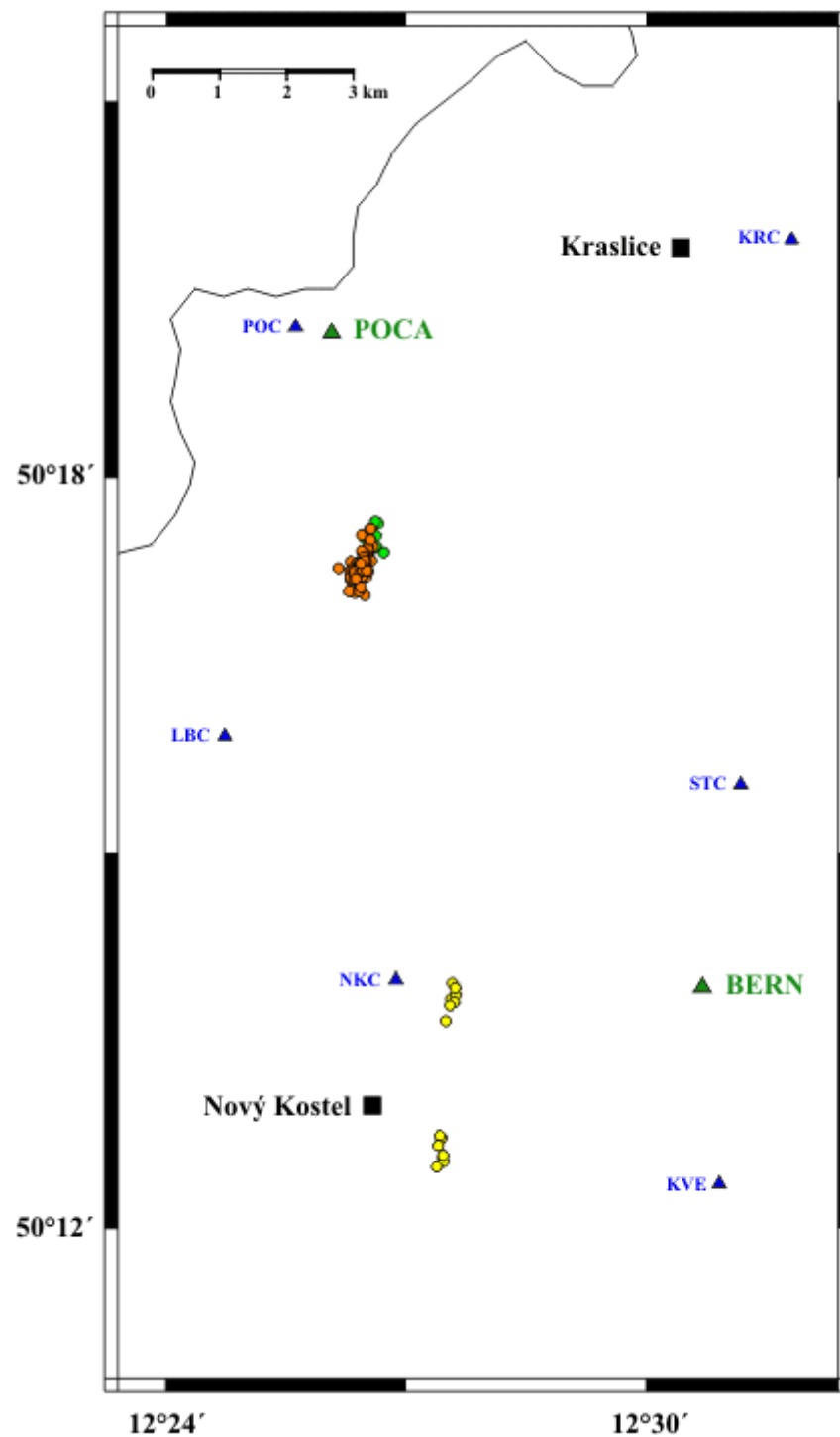


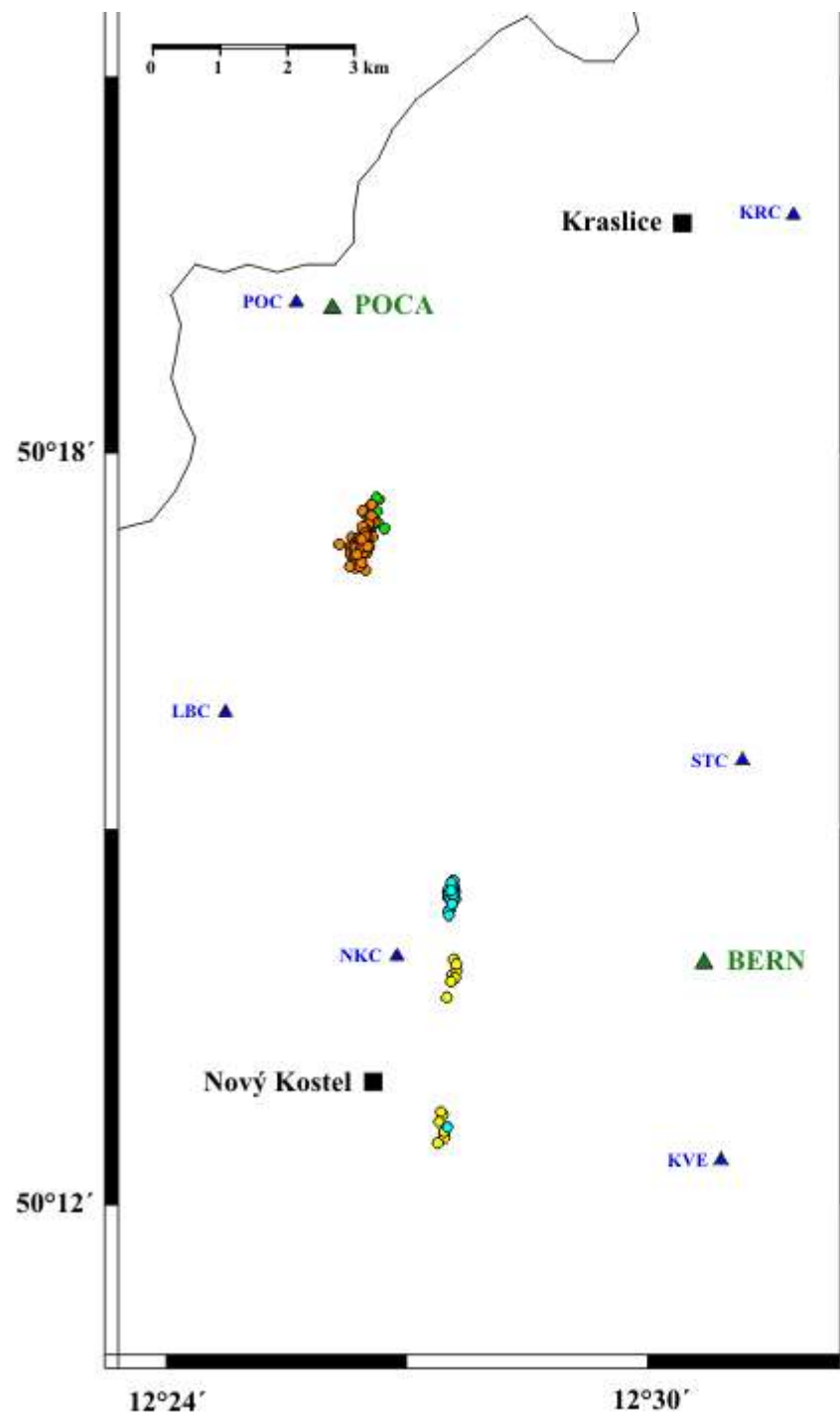


2001 - 2006

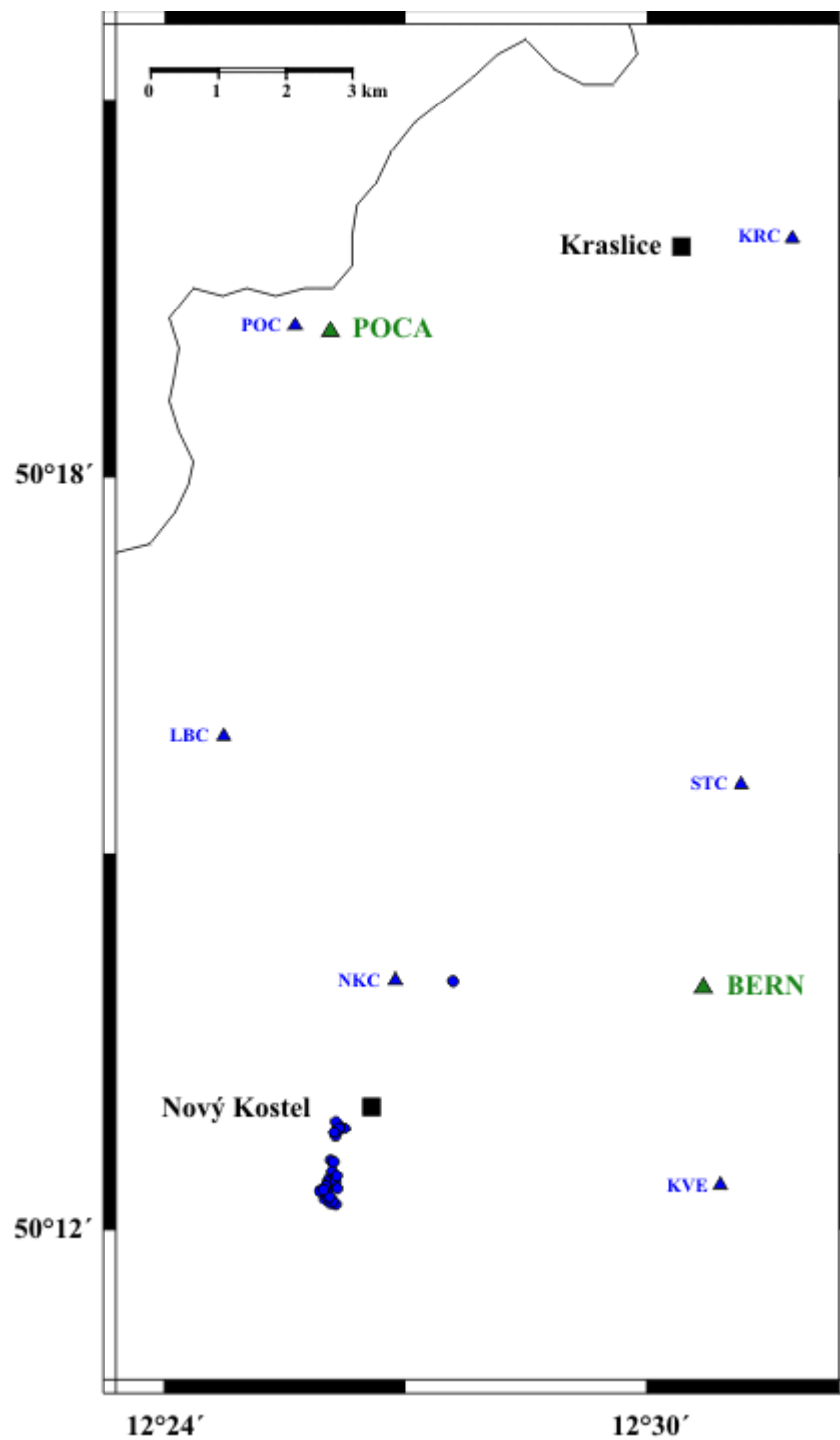


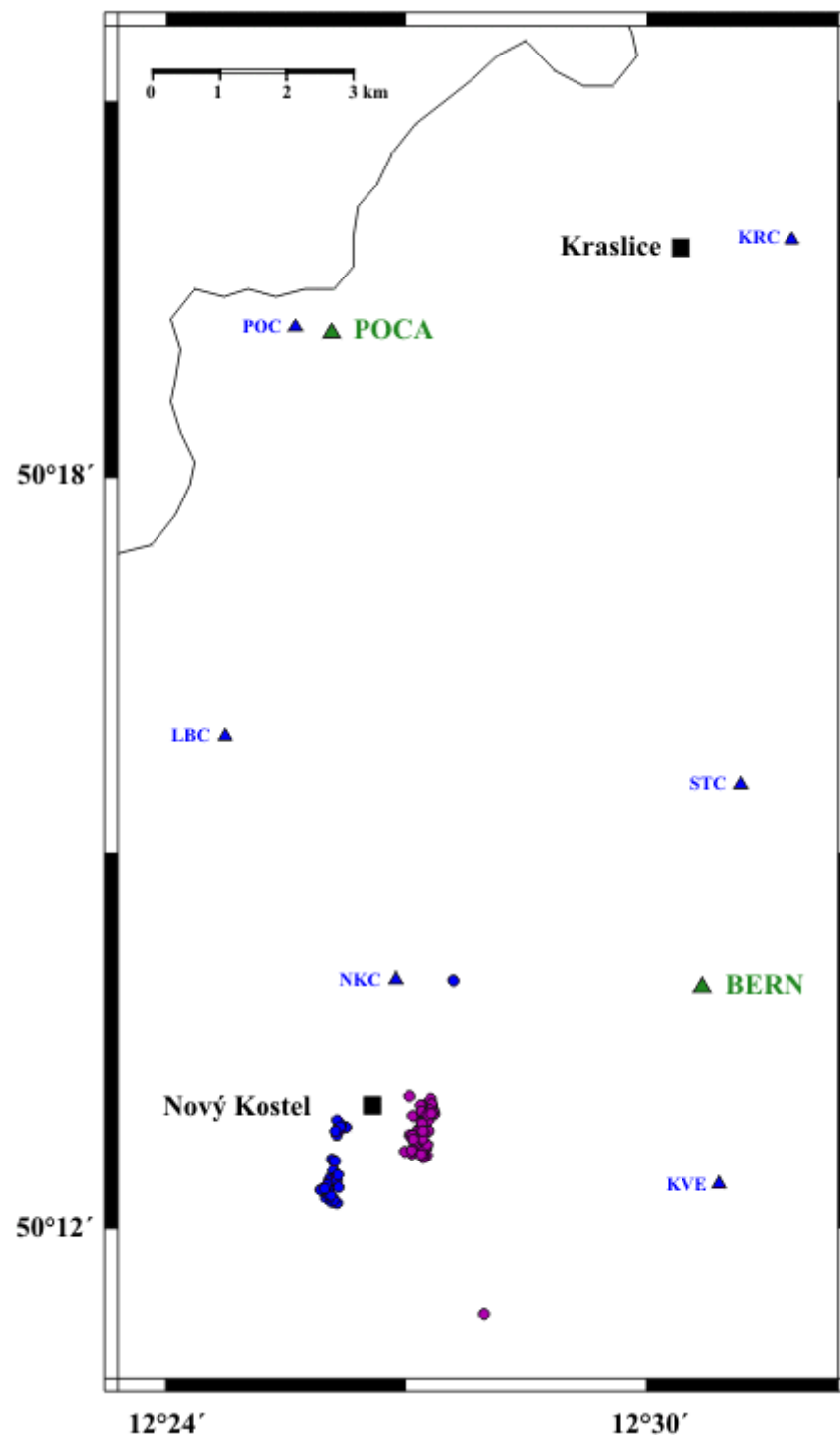


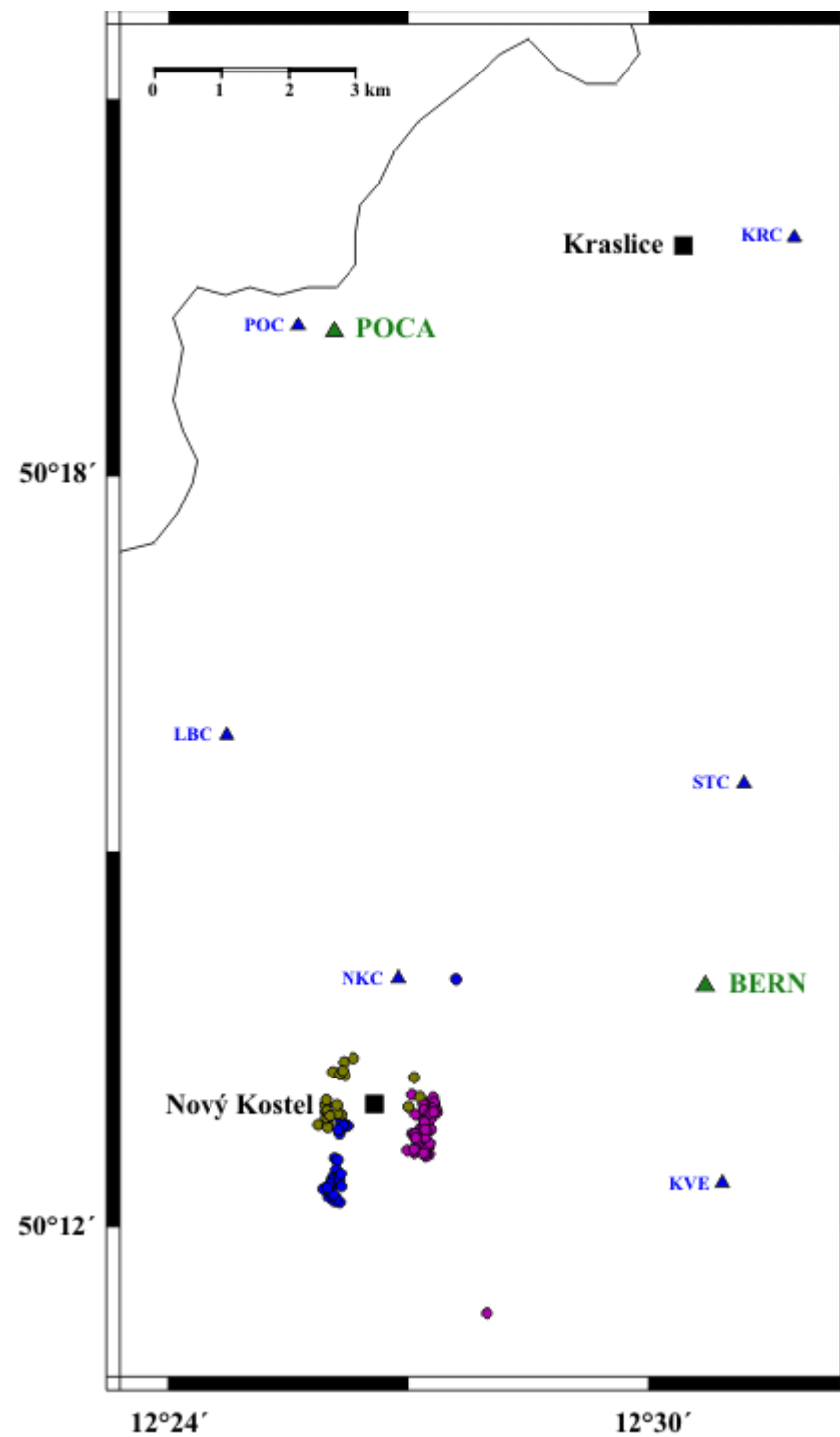


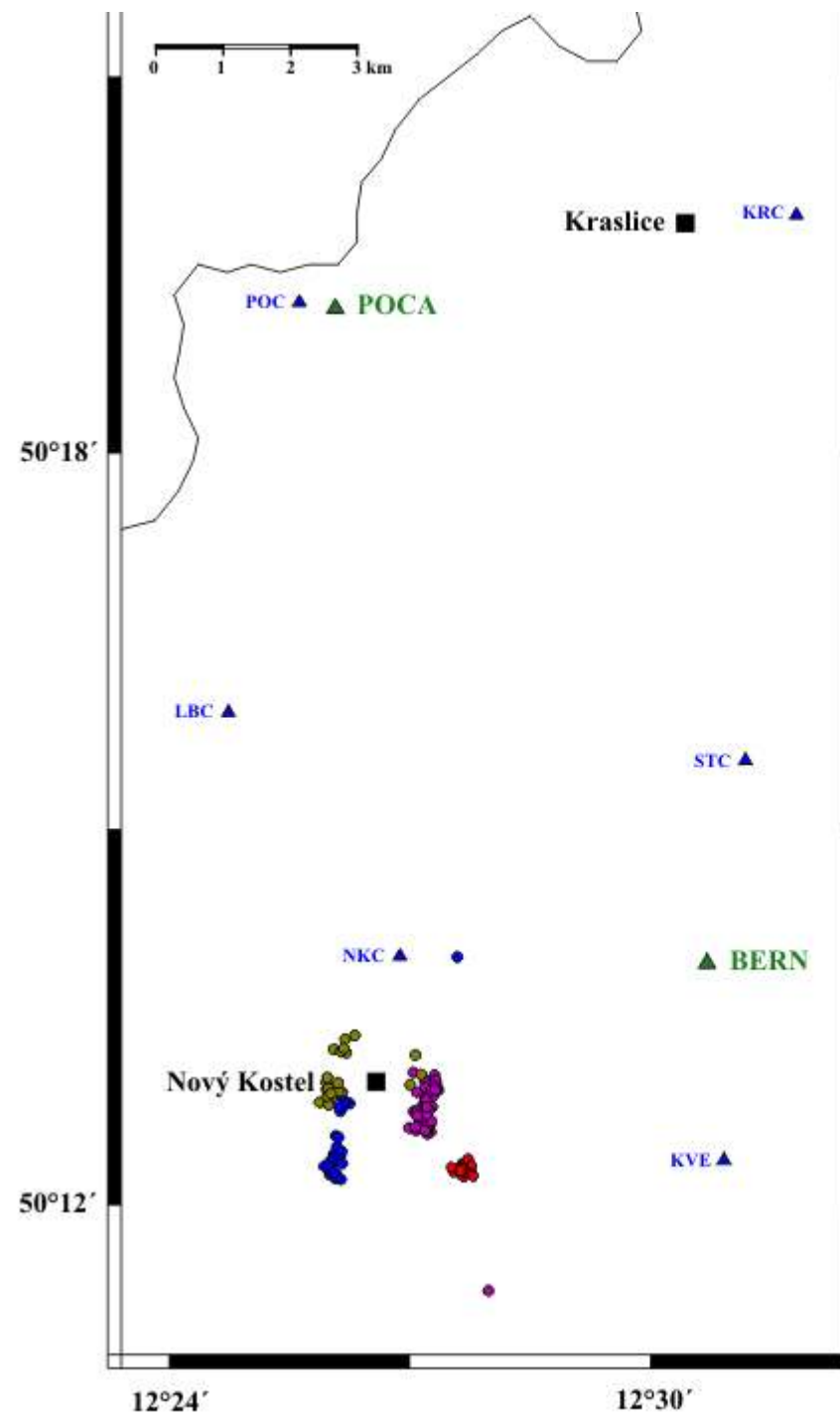


- 25.5.-28.5.2001
- 2.6.-15.6.2001
- 13.6.-16.6.2001
- 12.7.-16.7.2001

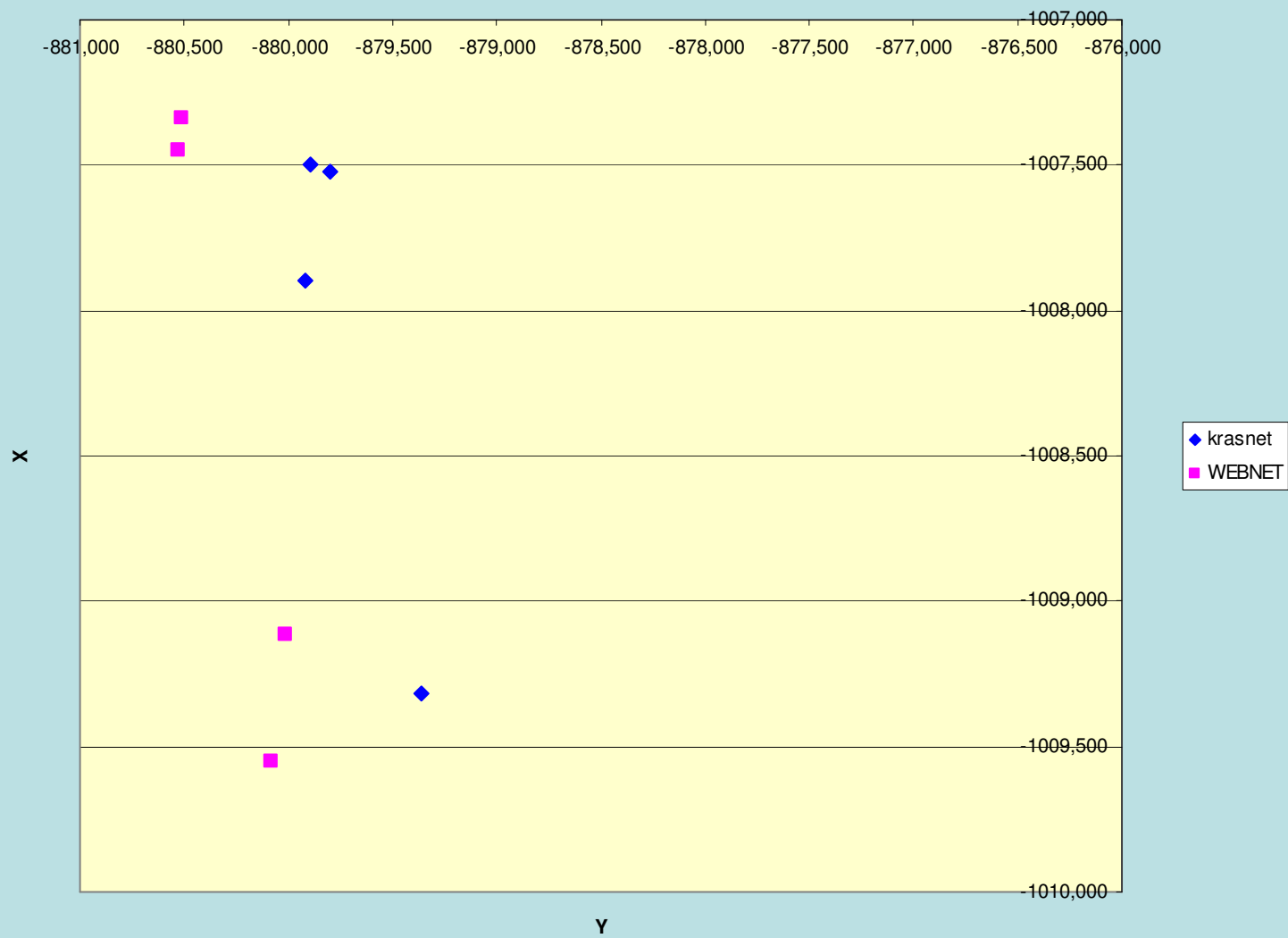


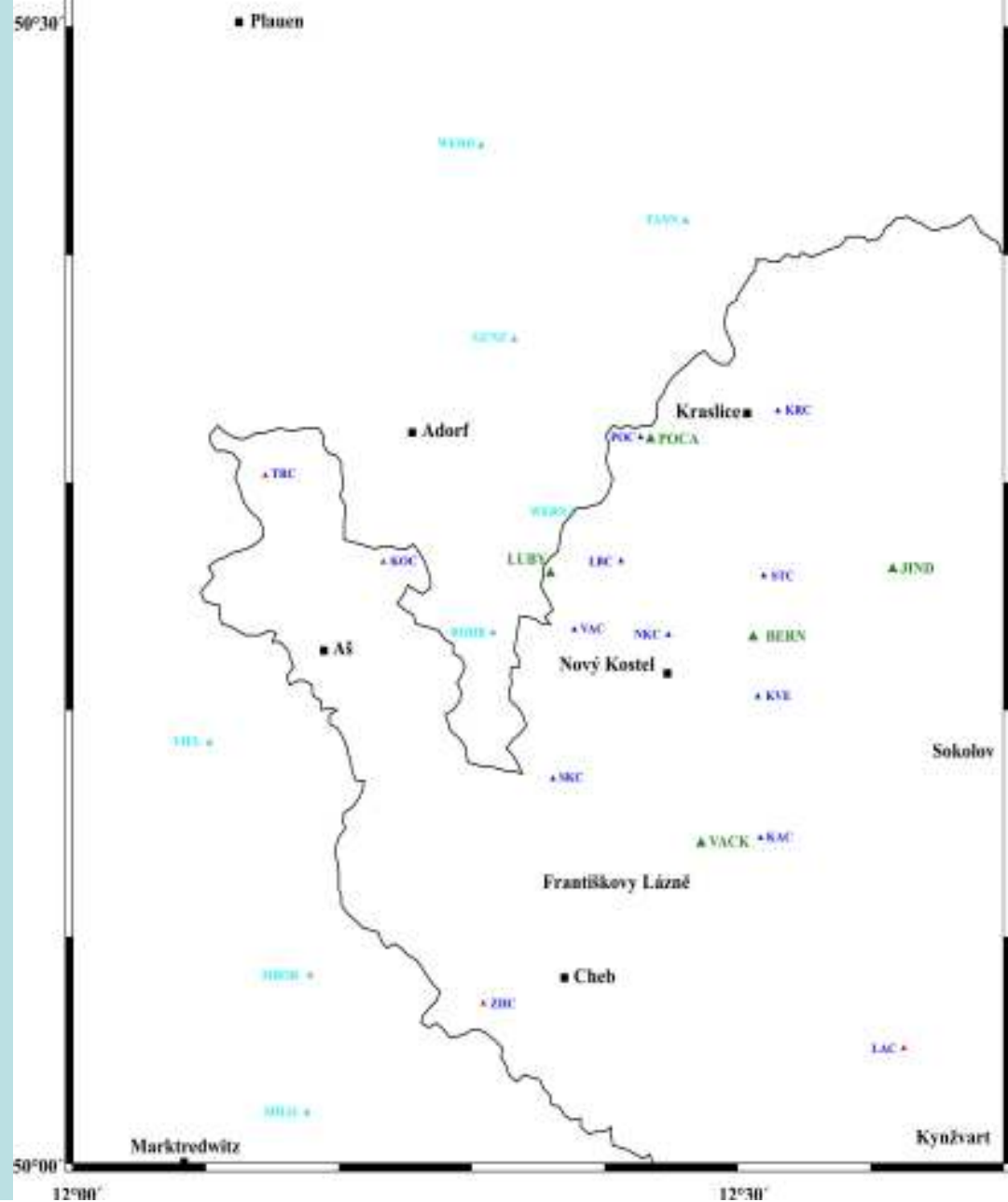


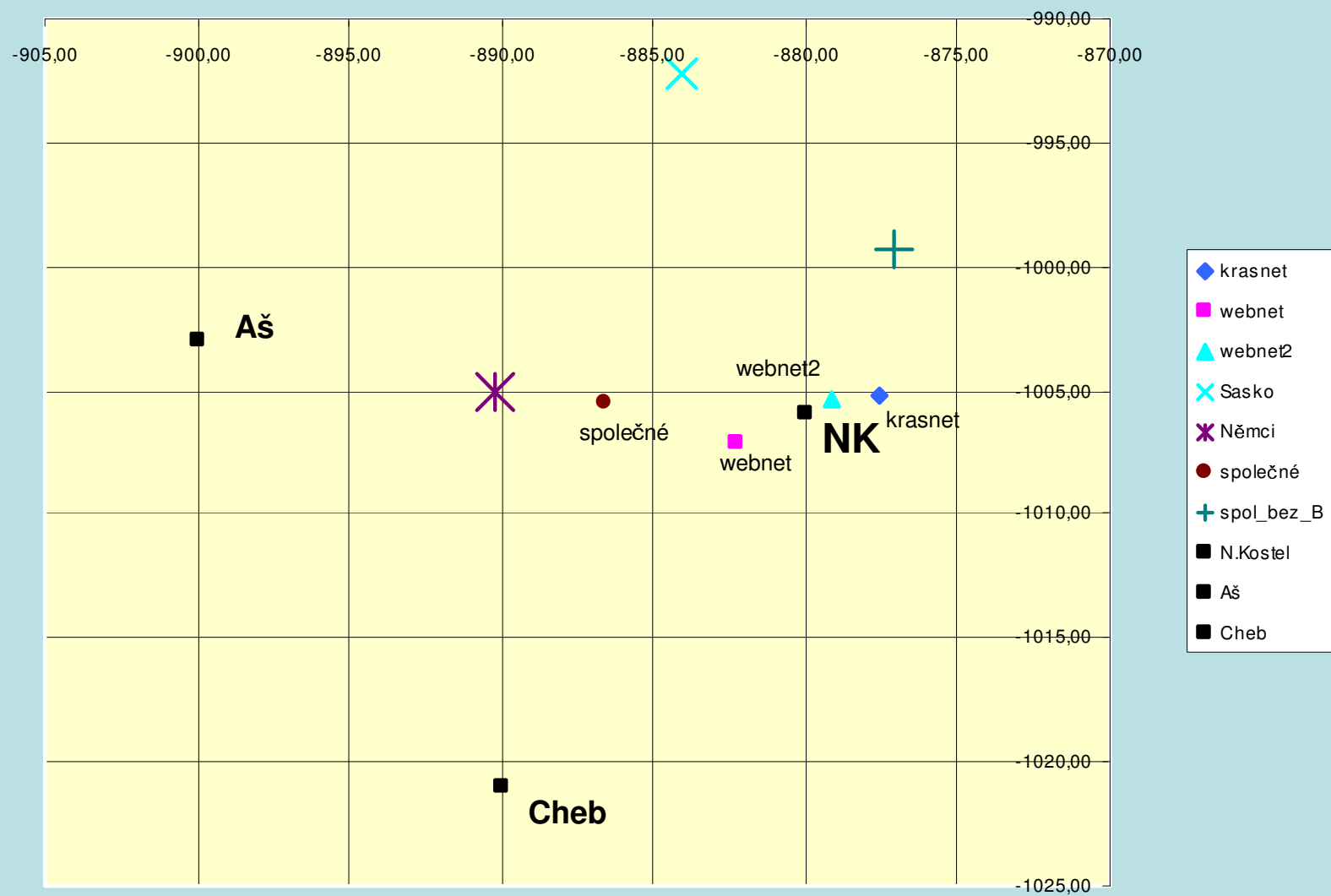


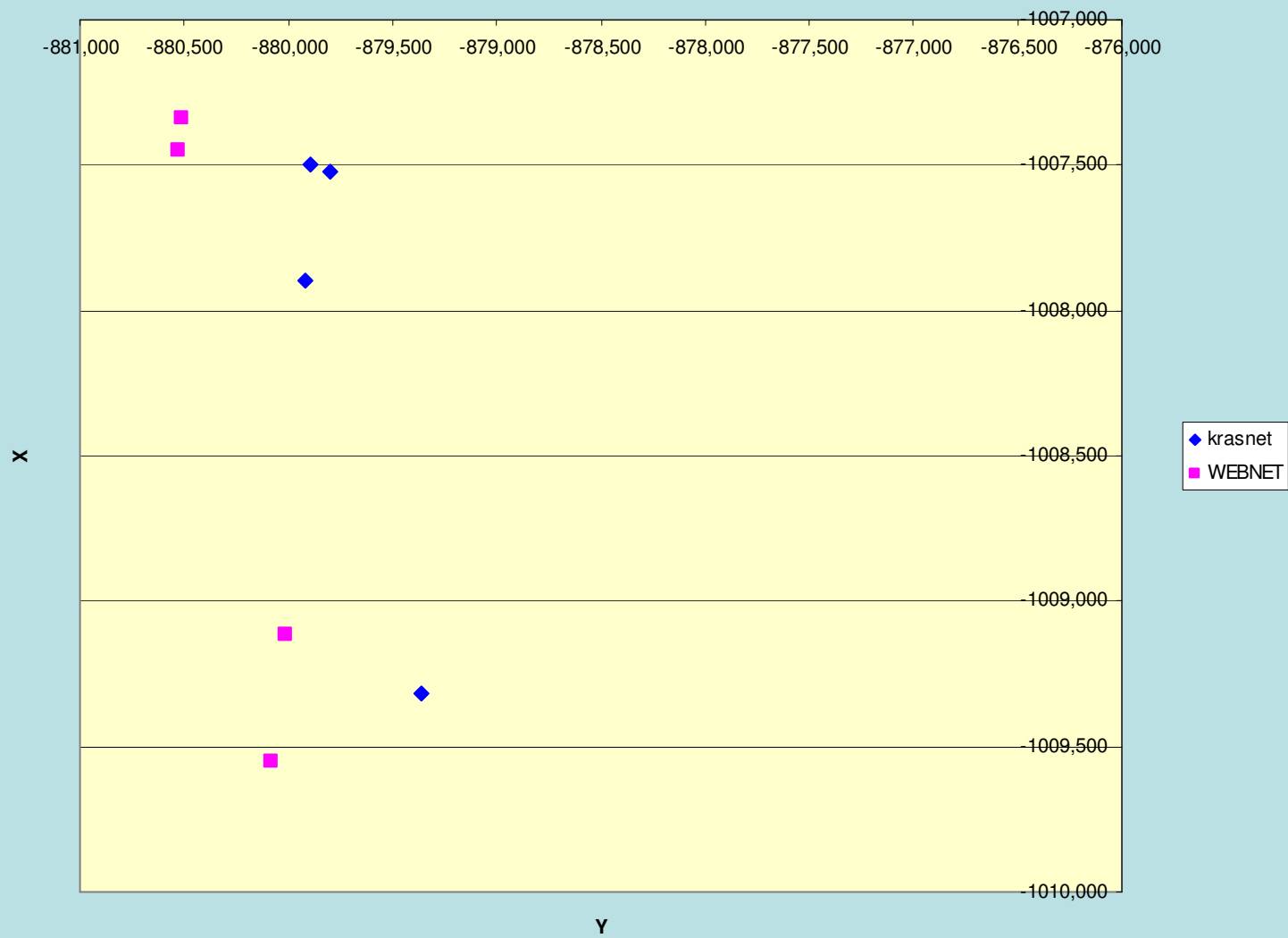


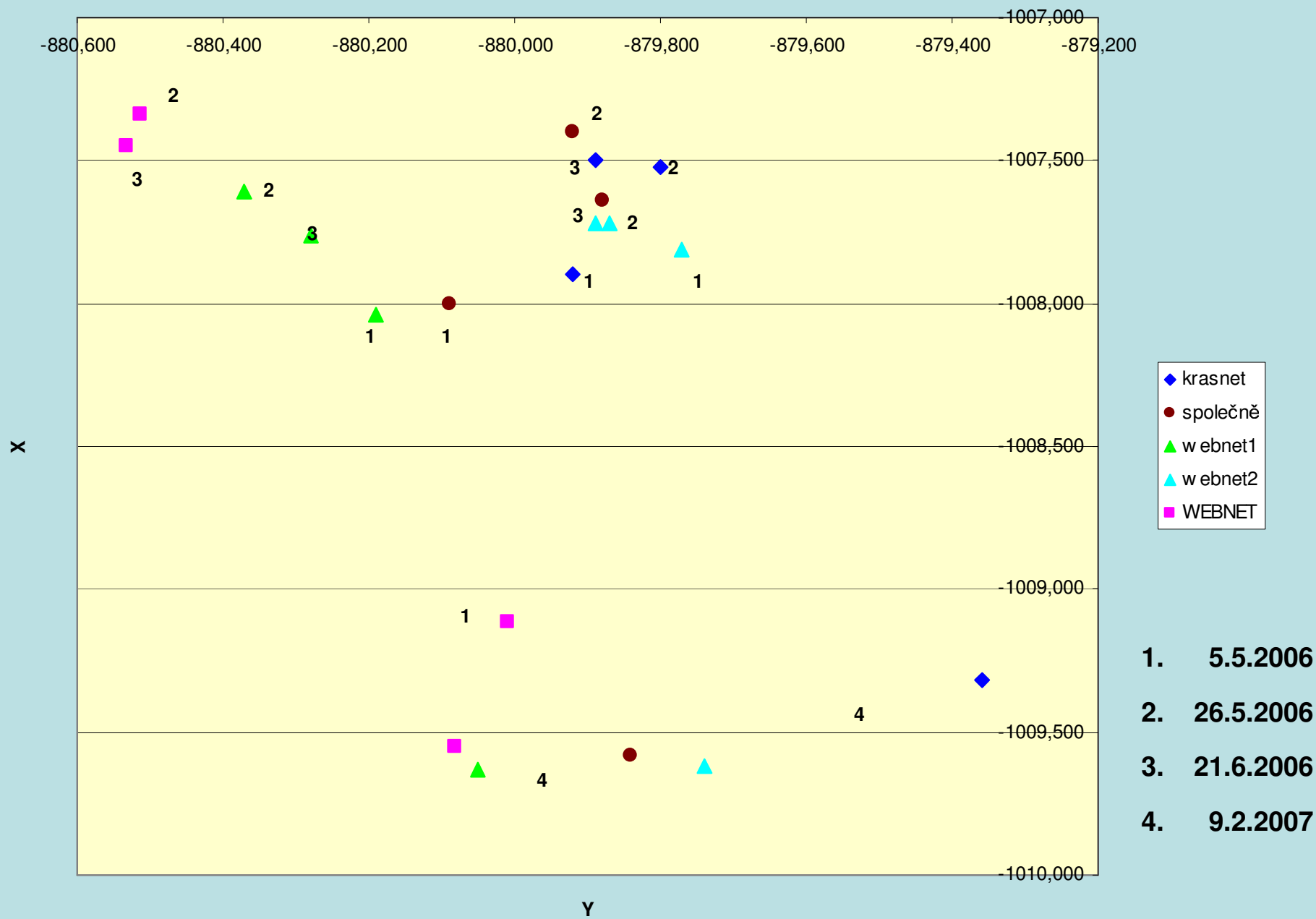
- 22.2.2004
- 15.6.-17.6.2005
- 21.6.-23.6.2006
- 9.2.-10.2.2007





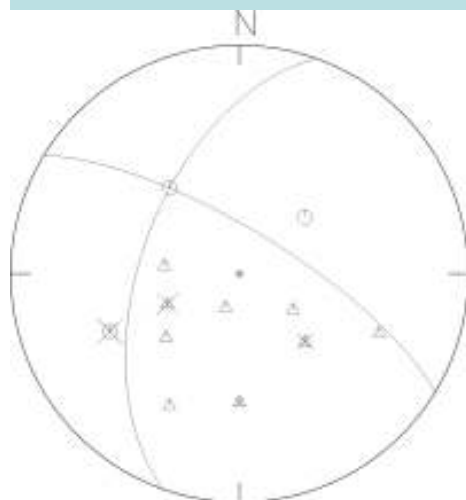






Ohniskové mechanizmy – Nový Kostel 22. 2. 2004

08:55

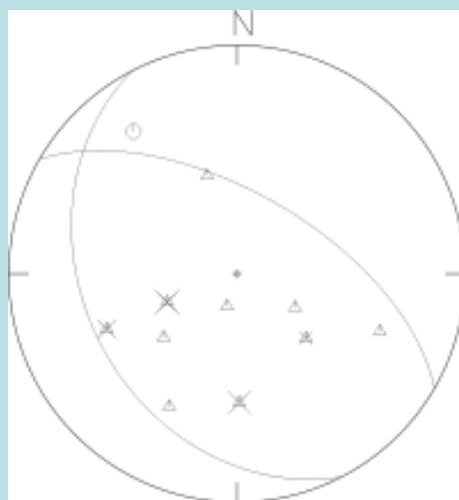


S = 200

D = 54

R = -20

09:31

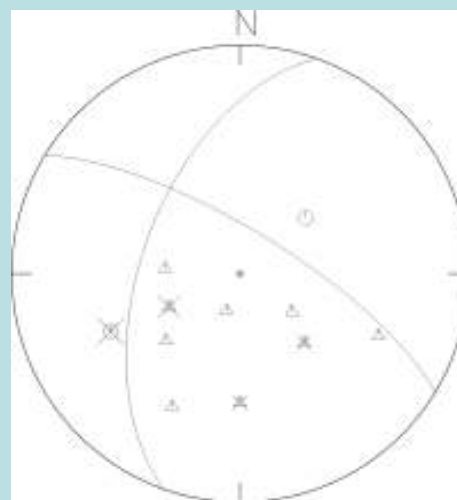


S = 153

D = 33

R = -62

09:34

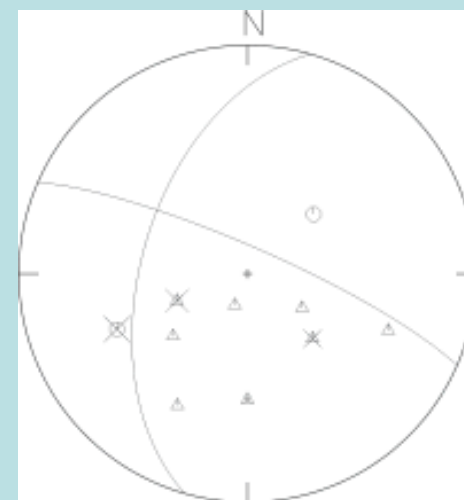


S = 200

D = 54

R = -20

16:46



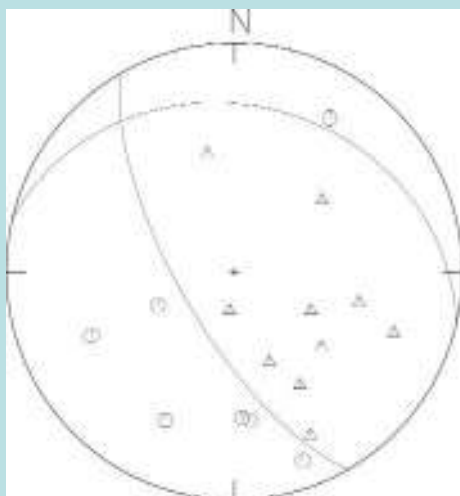
S = 196

D = 52

R = -12

Ohniskové mechanizmy – Nový Kostel 2005

15. 6. 2005 22:34

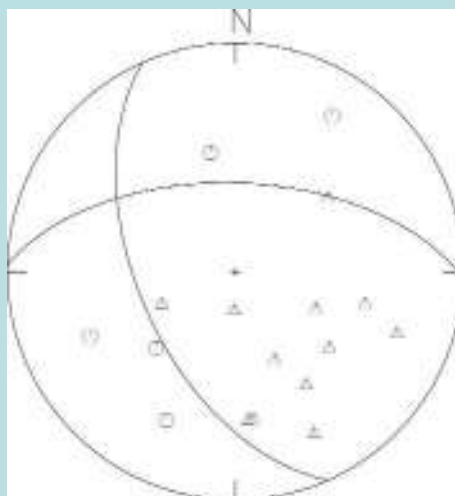


S = 150

D = 70

R = -70

17. 6. 2005 7:09

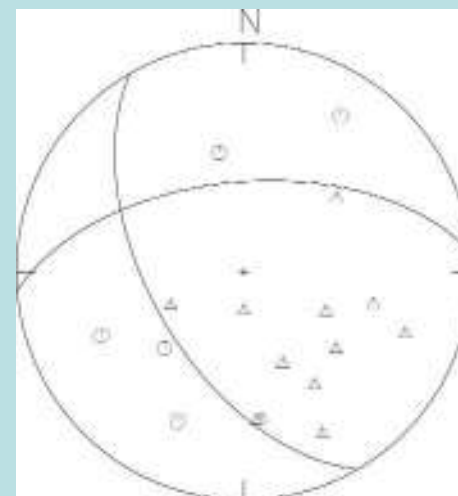


S = 156

D = 55

R = -40

17. 6. 2005 7:34



S = 150

D = 56

R = -40

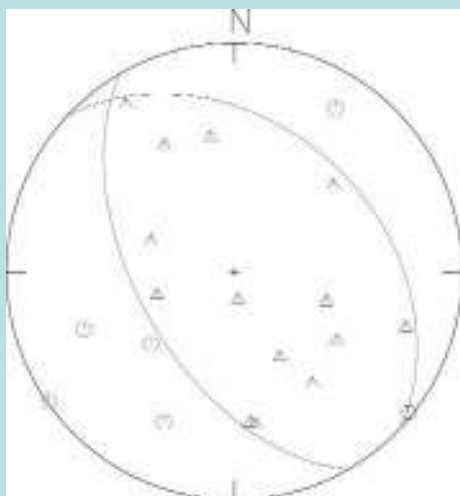
Ohniskové mechanizmy – Nový Kostel

2006 - 2007

26. 5.2006 17:57

21. 6.2006 00:06

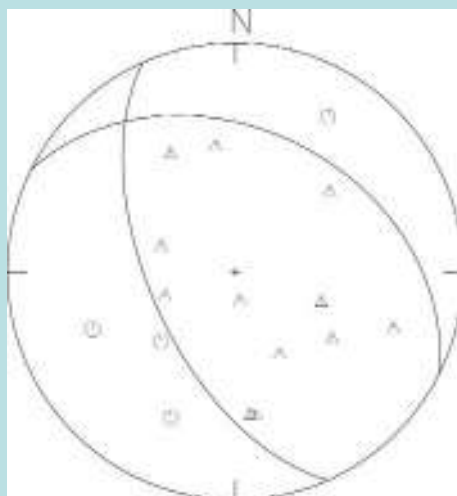
9. 2. 2007 13:53



S = 150

D = 55

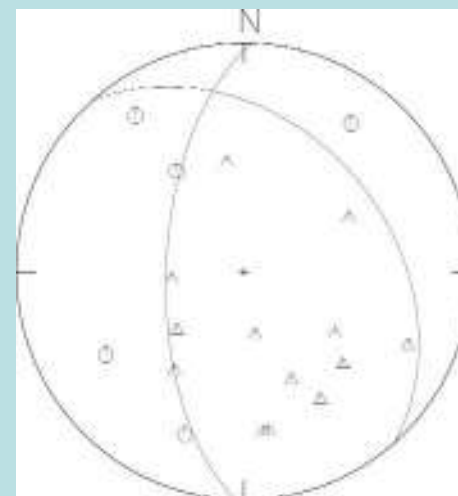
R = - 80



S = 156

D = 59

R = - 67



S = 182

D = 62

R = - 66

Z Á V Ě R Y

Seismická aktivita se soustřeďuje do sedmi hlavních oblastí

Největší počty jevů a nejvíce uvolněné energie se realizuje v oblasti Nový Kostel - Počátky

Ohniska zemětřesení se řadí podle linie Vackovec – Nový Kostel - Počátky

Menší klustery v obdobích menší seismické aktivity vykazují směr kosý k hlavnímu směru a vytvářejí paralelní systém zlomů typu „en echelon“

Seismická aktivita se projevuje jako seismické roje (2000, 1985,)

V období mezi roji jsou menší aktivity po cca třech letech oddělených obdobími relativního klidu (2007, 2004, 1997, 1994, 1991,)