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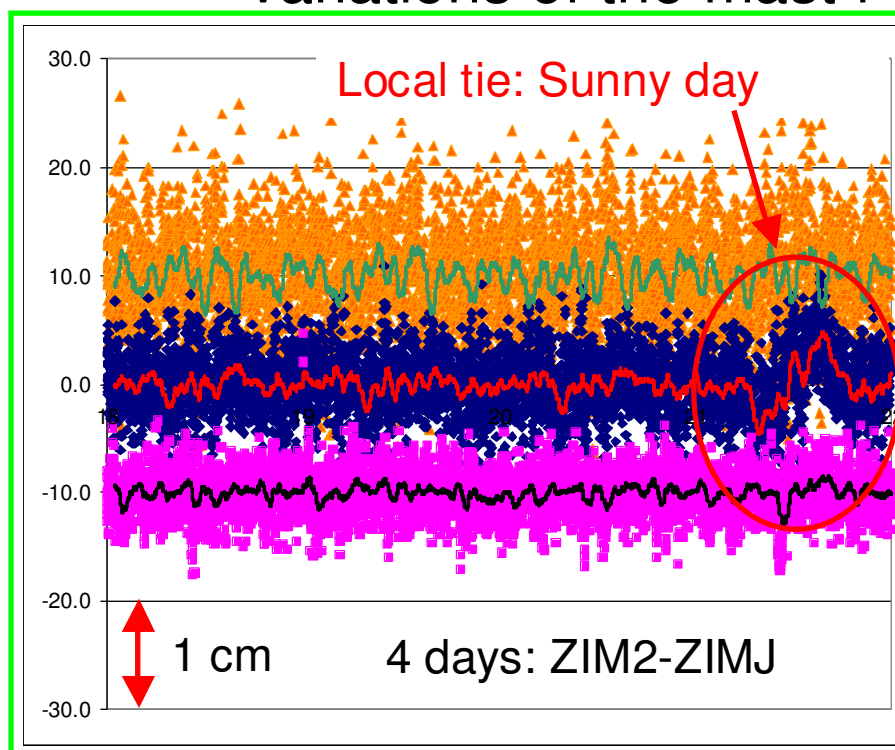
# National Report of Switzerland

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# Geostation Zimmerwald

- 3 sites deliver GPS/GNSS data to IGS/EUREF
- ZIMJ receiver stopped 22.Okt. 2010; new Javad Galileo receiver installed
- Yearly control of mast stability (21.Okt. 2010): temporal variations of the mast !

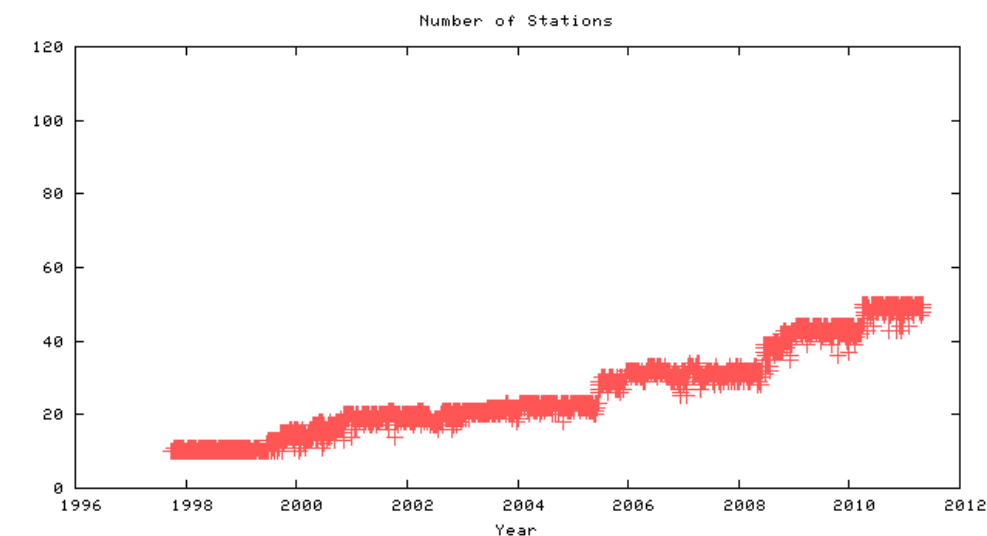




# Permanent GNSS Network AGNES: Bernese software analyses

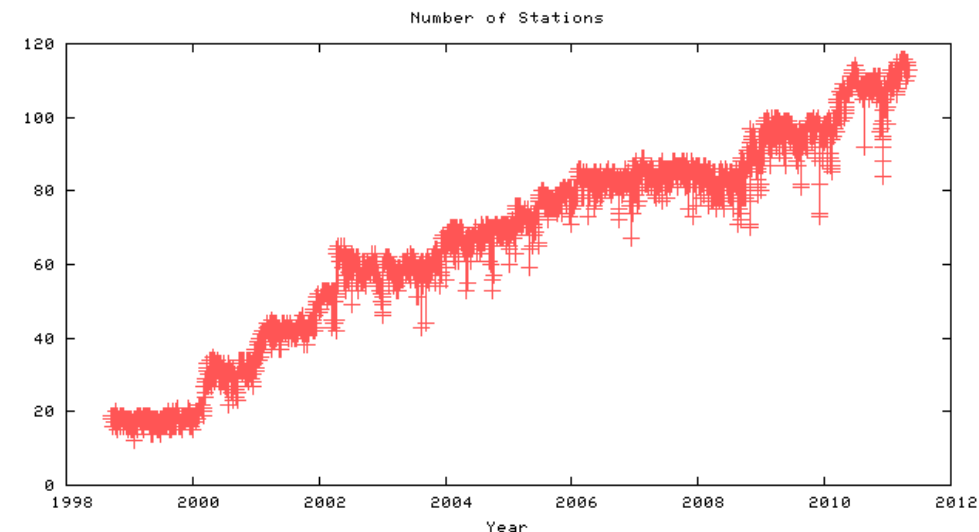
network (#stations)	availability	remark
EUREF subnet (50)	100 % daily	Reference Frame Europe 
AGNES + subnet EUREF (118)	100 % daily	Reference Frame Switzerland 
AGNES + subnet EUREF (115)	98 % hourly	Monitoring + weather prediction   

EUREF  
(day)



06/05/11 21:35

AGNES  
(day and hour)

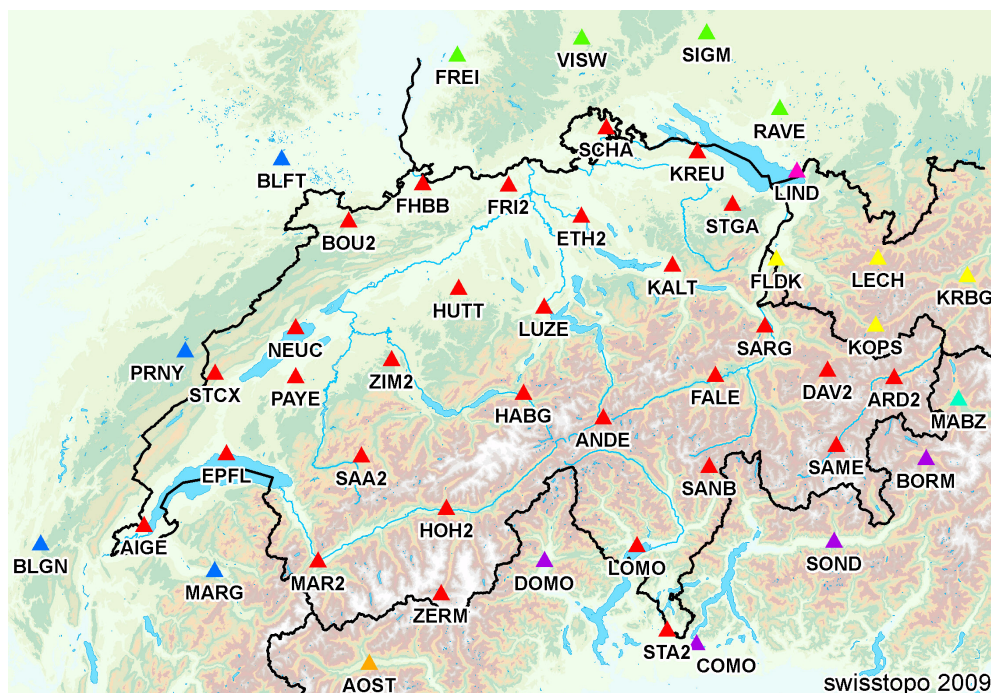


09/05/11 12:39



# Additional stations

- Close the border and integrated also in positioning service



## Postprocessing :

- AT - APOS
- DE - SAPOS Baden-Württemberg
- DE - SAPOS Bayern
- FR - TERIA
- IT - Bozen / Südtirol
- IT - GPSLombardia
- IT - Geotop**
- CH - AGNES

- ~10 Swiss third-party sites (all focus on geodynamics)
- New computer + processing in 3 clusters: hourly solutions 40% faster





# CHTRF2010: 15 weeks / 15 pictures

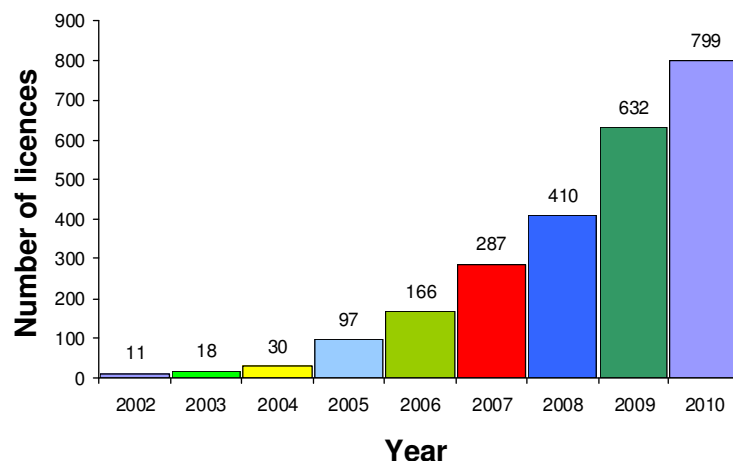


-> paper CHTRF2010 (E. Brockmann)



# Positioning service: swipos

- Increased licenses and reduced prices (30%)
- Products:
  - data streaming via NTRIP of an AGNES station: swipos-INFRA (prices identical as swipos-PP)
  - new user segment: agriculture
- Redesign of the swipos/AGNES operation:
  - S2S+ (ADSL+ GSM/GPRS) 99.7% availability
  - removal of PC at the station (not at double stations)
  - new network software and new private provider







# Cut-Through AlpTransit Gotthard Base Tunnel (57 km)

- GNSS: LV95 as reference for the tunnel project plus 31 additional control points
- Heights: in old system LN02, but corrected with information from new LHN95 (plus CHGeo98 geoid) plus only 30 km levelling to portals

15.10.2010 Sedrun  
cut-through-results:

Cross: 8.1 cm (Tol.: 25 cm)  
Height: 1.1 cm (Tol.: 12.5 cm)

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