

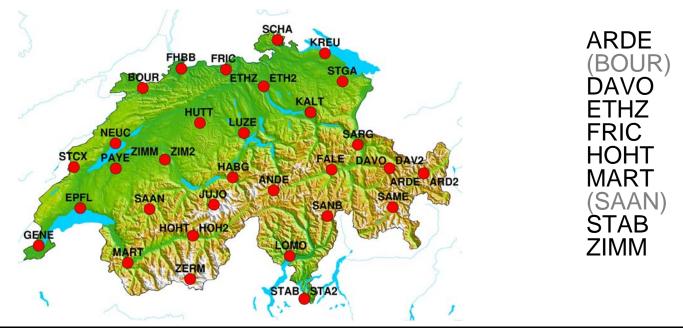
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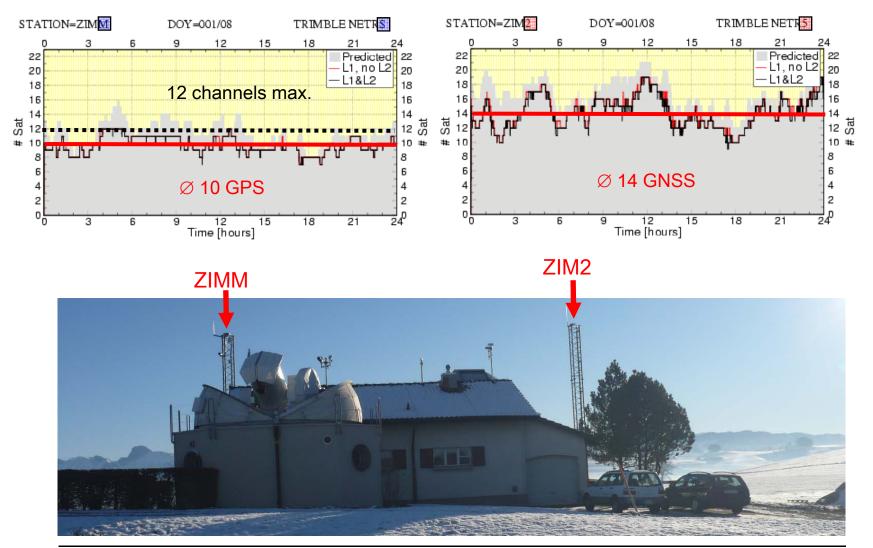
E. Brockmann, D. Ineichen, M. Kistler, U. Marti, A. Schlatter, B. Vogel, A. Wiget, U. Wild

GPS -> GNSS in AGNES network

- Project started Mid 2006: customers interest
- 10 double stations as compromise between real-time applications (higher availability of the positioning service swipos under difficult environment) and the aspects of reference frame maintenance (continuity of time series)



Zimmerwald: ZIMM (GPS) – ZIM2 (GNSS)

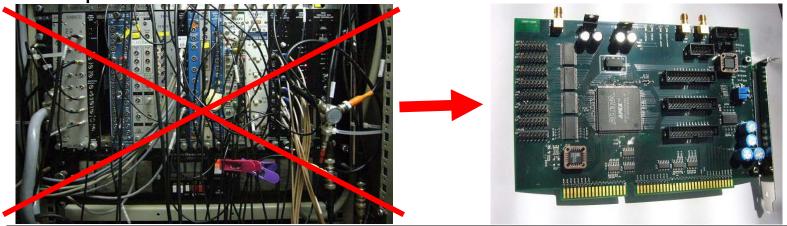


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Zimmerwald: new Laser system



- Laser type (Nd:YAG-Laser with wavelengths of 1064 and 532 nm) compatible with most of other SLR stations
- Higher repetition rate (100 Hz)
- Several software and hardware components changed and improved
- Operational again after 2-3 month shutdown with most of the problems solved



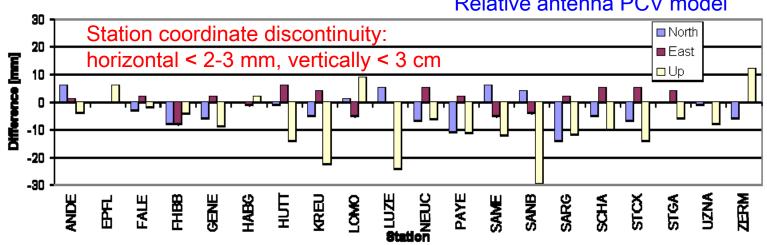
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0 **Activities AGNES 2007**

- Nov. 06 Oct. 07: GNSS-analyses changes BSW 5.0+ ۲
 - **CODE GNSS orbits** -
 - **Baseline optimization**
 - Preprocessing bugs eliminated and GNSS ambiguity resolution
- 14. June (PAYE) 2. July (GENE): 20 stations upgraded •



Relative antenna PCV model

D **Monitoring and Web**

18. Dec.: new site coordinates published and new web system (CMS)

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network monitoring

Control point "Viewer"

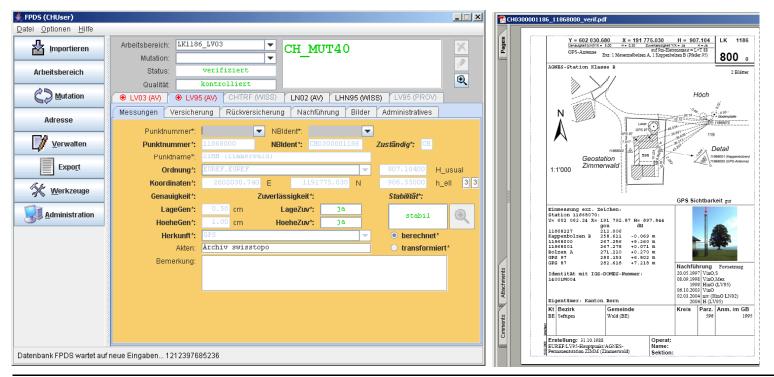
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Control Point Data Service (CPDS)

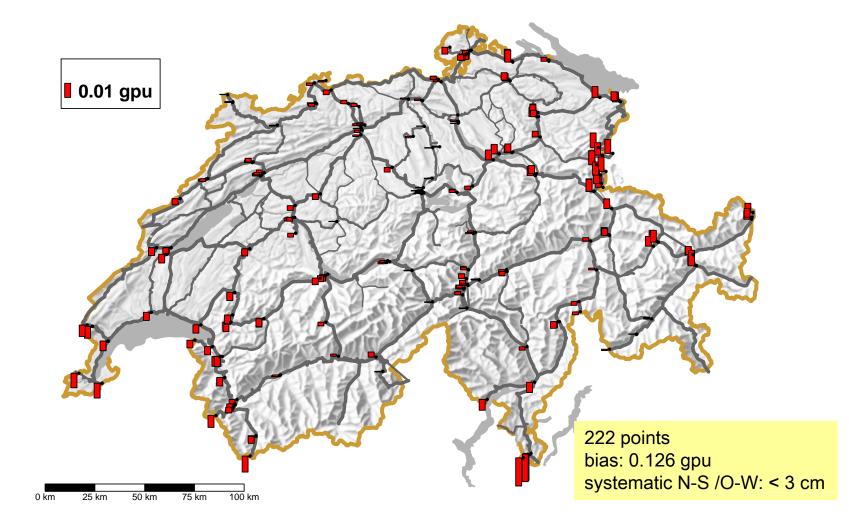
- Administration of reference points horizontally (20`000 ~ 100 %) and vertically (< 50%) on national and cantonal level
- Central database and graphical interface (distributed maintenance) + GIS-web-Viewer for public users



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geopotential heights LHN95 and EVRF07



Geographic information law

- Geographic information law + 10 ordinances, coming into force 1.7.2008
- includes catalogue of 150 geobasis data (reference frames and data of the reference networks)
- Transition phase for LV95: 2016 for geobasis data regulated by federal law; 2020 for all geobasis data
- Regulation of fees: marginal costs for personal use; ordinance on fees for commercial use in development
- compatible with the INSPIRE directive of the EU