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#### **National Report of Switzerland**

## Changes in personnel at swisstopo

Director of the Federal Office of Topography (swisstopo):

Retired by end of Dec. 2005: Dr. Erich Gubler



New Director of swisstopo: Jean-Philippe Amstein



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Head of the Geodesy Department

Retired by end of April 2006: Dr. Dieter Schneider



New Head of Geodesy Department: Adrian A. Wiget

#### **National Reference Frames**

- **3D GPS Base Network**: **200** (passive) points (LV95)
  - documentation and maintenance
  - determination of transformation reference points for the finite element transformation **FINELTRA**
  - improvement of the Control Point Data Service

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#### **Vertical Reference System/Frame:**

- kinematic adjustment of all levelling/gravity data
- combined geodetic network adjustment of orthometric heights, GPS-derived heights and data from the new geoid model "CHGeo2004"
- software **HTRANS** (old to new height system)
- 230 km of precision levellings (e.g. to Zimmerwald for monitoring the stability of the ECGN-station)



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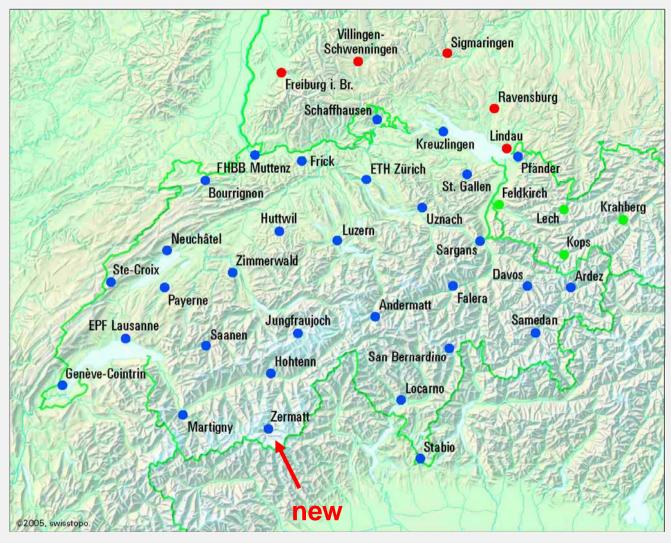
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National gravity network: absolute and relative gravity measurements



### Permanent GPS Network AGNES / swipos



# Permanent GPS Network AGNES and Positioning Service swipos

- **30** permanent stations in Switzerland (1 new station)
- plus 5 stations in Germany and 5 stations in Austria (inclusion of stations in France and Italy welcome)
- central data management and archiving improved
- concentrating on availability, reliability and integrity of the data
- continuous **monitoring** (presentation by E. Brockmann)
- important activities of the **Permanent Network Analysis Center**
- continuing the close and successful cooperation with the CODE at **AIUB** [e.g. in the implementation of GNSS (GLONASS)] (presentation by St. Schaer)

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- 4) **Swiss4D**: development of a kinematic 3D model for recent crustal movements in Switzerland using geodetic survey data:
  - horizontal components of the velocity field:
     GPS campaign data (1988 2004) and GPS permanent stations data (AGNES) since 1998
  - > vertical component: levelling data 1903 2004



## Swiss4D: velocity field (GPS and levelling)

(kinematic model relative to Zimmerwald [ITRF2000])

