



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

armasuisse
Bundesamt für Landestopografie swisstopo

wissen wohin
savoir où
sapere dove
knowing where

Status Switzerland

**A. Geiger (ETH Zurich),
E. Brockmann (swisstopo)**



ETH Zürich



Focus swisstopo

- Reprocessing
- Long-term analysis – climate monitoring
- MULTI-GNSS

Inventory of Reprocessed GNSS Datasets for Climate Monitoring Applications

Working Group 3: Climate Monitoring

Invent COST Action ES1206 - GNSS4SWEC

Working **GNSS-based Solutions:**

COST Act Analysis Center (AC) Information

GNSS-bas

Analysis Ce

AC / Solution Name

Contact Person(s)

swisstopo repro2 (with contributions to EUREF repro2)

E. Brockmann

AC / Solution Name

Contact Person(s)

CODE Repro2: CF2 series

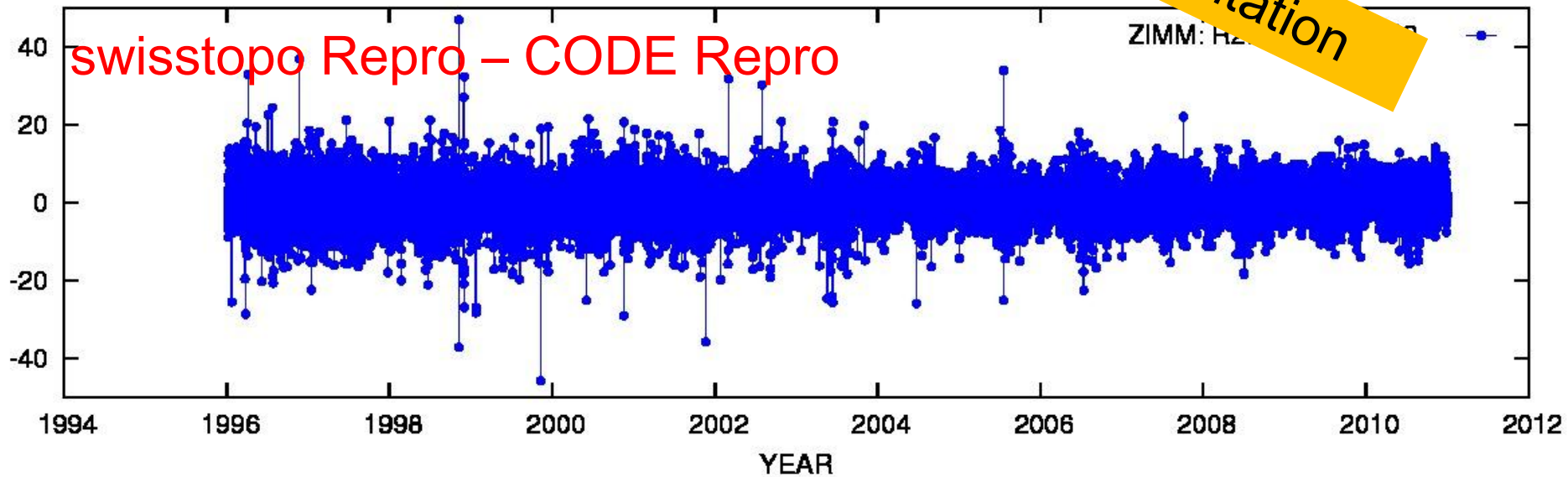
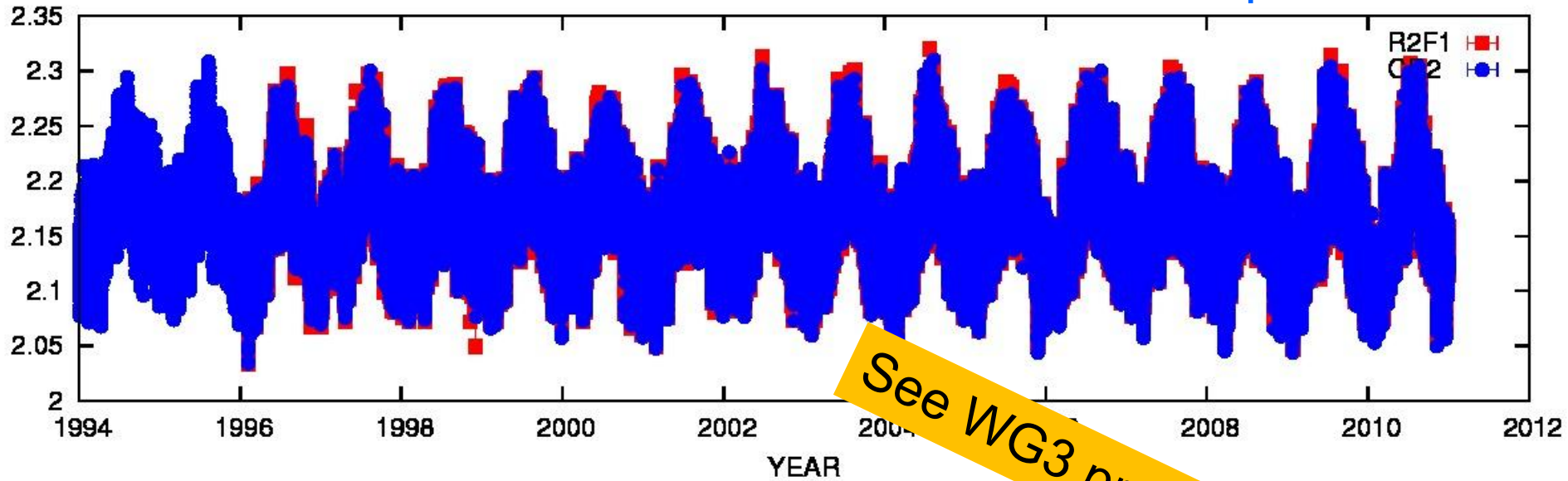
R. Dach

CODE Repro2: CO2 series

R. Dach

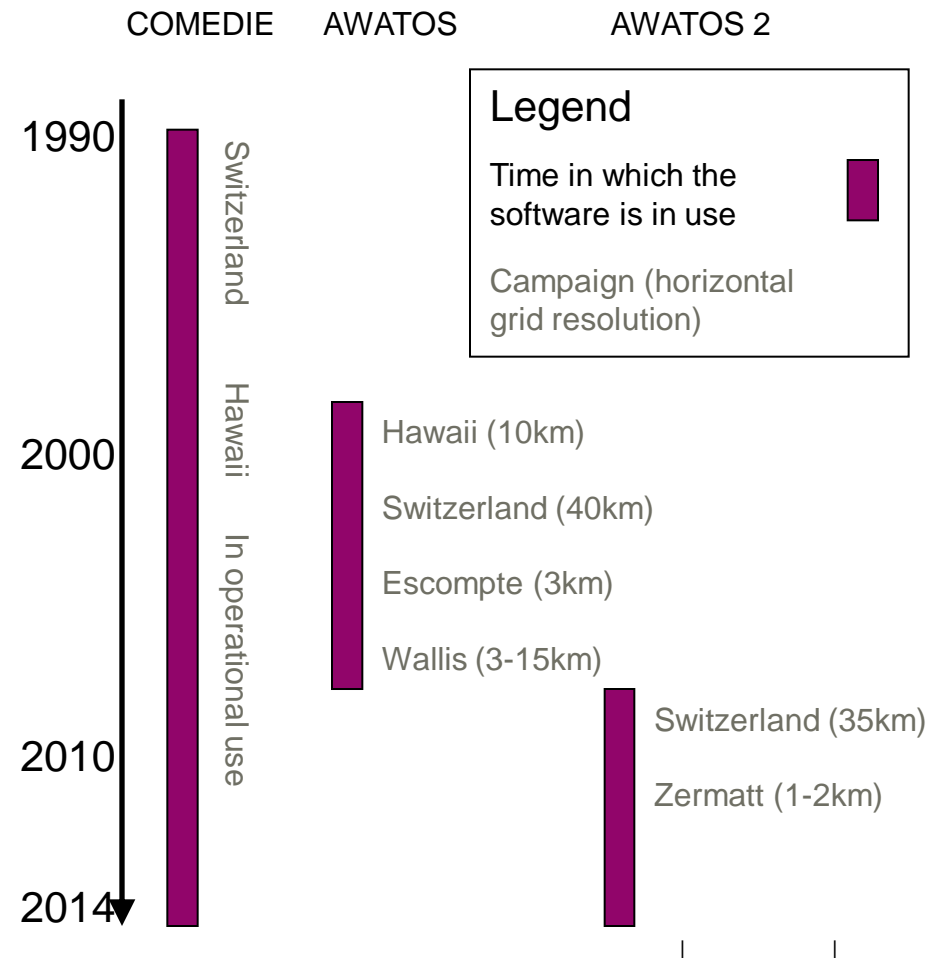
Zenith Total Delays and Differences for station ZIMM in [m/mm]

Repro swisstopo
Repro CODE

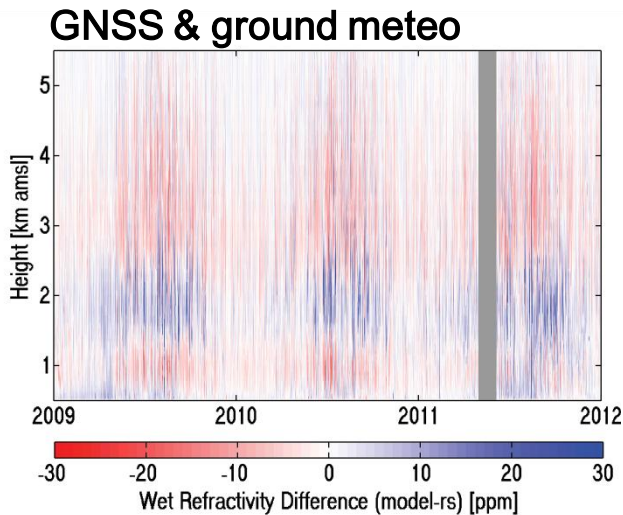
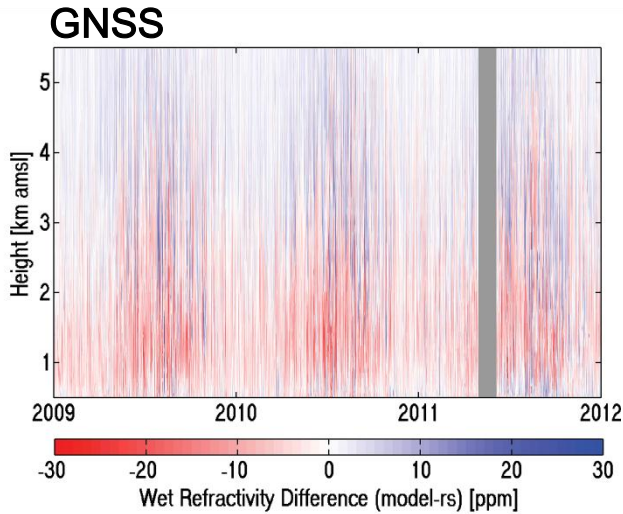


GNSS-Meteorology: Research activities at the Institute of Geodesy and Photogrammetry

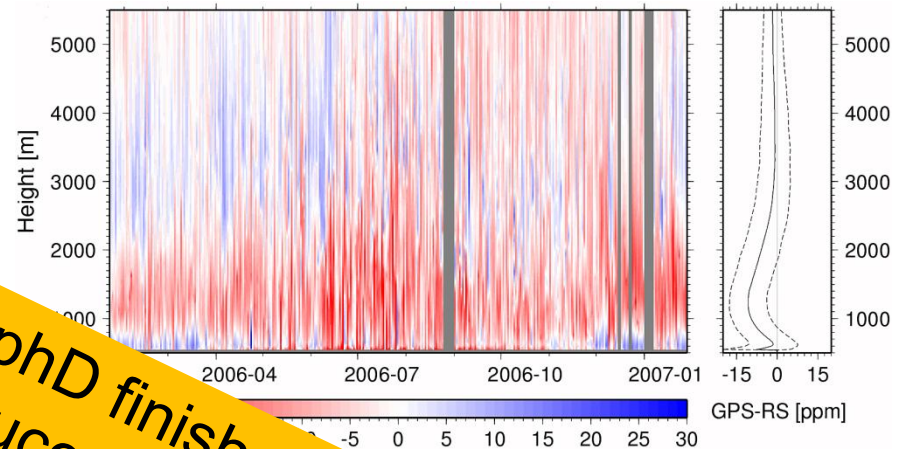
- COMEDIE: Stochastic and deterministic interpolation and screening of meteorological data and for estimation of zenith path delays.
- AWATOS: GPS tomography software using least square technique
- AWATOS 2: Successor of AWATOS using parameterization and Kalman filter. It includes a sophisticated simulation framework.



Collocation vs Tomography (comparison with RS)



Tomography by [Perler2011]



phD finished recently,
successor not yet started

GNSS-Meteorology: Research activities at the Institute of Geodesy and Photogrammetry

- Investigations on the use of stocastic/deterministic approach (COMEDIE) versus tomography (AWATOS2)
- COMEDIE reveals good and stabler results. Inclusion of ground meteo data → even better
- Inclusion of occultations possible
- Investigation of errors of sondes with respect to pathdelay/refractivity

- Fabian Hurter, Termination of PhD
- STSM Sept/Okt/Dec Karina Wilgan (Bosy, Rohm)