




PERSONAL INFORMATION

Claudia Flohrer (née Urschl)

-  Federal Agency for Cartography and Geodesy (BKG), 60598 Frankfurt am Main, Germany
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WORK EXPERIENCE

09/2019 – now

Research scientist

Federal Agency for Cartography and Geodesy (BKG), Frankfurt am Main, Germany

- Support for establishment of an inter-technique combination center at BKG, development of new methods for estimation and validation of a combined global geodetic referene frame
- Support of BKG's activities related to ESA's Genesis mission
- Representation of BKG in international bodies and support of UN activities related to the GGRF
- Public relations

10/2011 – 08/2019

GNSS expert

PosiTim UG, Germany (working as contractor for the Navigation Support Office (HSO-GN) at ESOC/ESA)

- Support to navigation system improvements in the areas of GNSS orbit modelling, precise orbit and clock determination algorithms
- Modelling of various observation types of Earth-orbiting satellites (GNSS and LEO satellites), orbit dynamics, gravitational and non-gravitational forces acting on a satellite
- GNSS data processing and analysis
- Combined processing of space-geodetic techniques: GNSS, SLR, DORIS, VLBI
- Support to ESA activities on GNSS Space Service Volume Extension
- Support to ESA and 3rd party projects (ATV mission support, Proba-3 proposal)
- Operational support as member of the GRAS GSN operations team at OPS-GN
- Software development as member of the NAPEOS Software development team, in particular enhancement for VLBI processing capabilities
- Support for NAPEOS software training course

10/2008 – 09/2011

Internal Research Fellowship

in the Navigation Support Office (HSO-GN) at ESOC/ESA

- Performance of precise orbit and clock determination for LEO satellites combining GPS, DORIS, and SLR measurements using ESOC's NAPEOS software, generation of long time series of precise and homogenous orbits for the altimetry satellites Jason-1 and Jason-2
- Significant contributions to NAPEOS software developments for high-rate clock determination
- Improvement of the NAPEOS processing capabilities for precise orbit determination of LEO satellites (integer ambiguity resolution strategy for LEO point positioning)
- contribution to HSO-GN proposal for Proba-3 mission

12/2001 – 09/2007

Research associate and PhD candidate

Astronomical Insitute of the University of Bern, Switzerland

- Preparation of PhD thesis
- Performance and supervision of daily routine operation support activities for the International Laser Ranging Service ILRS (generation of orbit predictions for GNSS satellites) at the Center for Orbit Determination in Europe (CODE)
- Software development as member of the Bernese GNSS Software team,
- GNSS data processing and orbit determination using the Bernese GNSS Software
- Student education and training in Earth rotation
- Lectures and support for the Bernese GNSS Software

08/2000 – 10/2000

Research internship

Astronomical Institute of the University of Bern, Switzerland

- Support of the menu development of the Bernese GNSS Software

12/1998 – 04/2001

Student assistant

Institute of Planetary Geodesy at the Dresden University of Technology, Germany

- Development of the International Database of the SCAR Epoch Crustal
- Movement Campaigns

EDUCATION

2001 – 2007

PhD, Dr. phil.-nat.

Astronomical Institute of the University of Berne, Switzerland

- PhD thesis on GNSS orbit modelling and validation techniques

1996 – 2001

Diplom-Ingenieurin Geodäsie (equivalent to Master degree)

Dresden University of Technology, Germany

- Geodesy studies
- Advanced courses in planetary geodesy and geodynamics
- Advanced courses in geodetic surveying