

Curriculum Vitae

Zischg, Andreas Paul (PD Dr.)

Personal information

Italian, 01.01.1973, ORCID ID: 0000-0002-4749-7670

Website <http://www.mobiliarlab.unibe.ch/>

1. Current position

2014-present Lecturer and principal investigator at Mobiliar Lab for Natural Risks, Oeschger Centre for Climate Change Research and Institute of Geography, University of Bern, Switzerland

2. Education, academic qualifications and positions

PD 2019 University of Bern, Switzerland. Private lecturer

CAS 2017 University of Bern, Switzerland. Certificate of Advanced Studies in Higher Education (19.5 ECTS)

Ph.D. 2005 University of Innsbruck, Austria. Faculty of Geo- and Atmospheric Sciences

Mag.rer.nat. 2000 University of Innsbruck, Austria. Studies in Geography

3. Employment history

2014-present Principal investigator at Mobiliar Lab for Natural Risks, Oeschger Centre for Climate Change Research and Institute of Geography, University of Bern, Switzerland

2005-2014 Co-founder, member of executive board, consultant at Abenis AG, Chur, Switzerland and Abenis Alpinexpert GmbH/srl, Bolzano, Italy (www.abenis.it)

2000 – 2005 Founder, managing director, consultant of start-up company “Geo Information Management”, Bolzano, Italy

4. Research projects as leading investigator (>100kCHF)

2018-2020 Impact-based flood early warning system for Switzerland

2017-2018 Surface water floods in Switzerland

2014-2018 Model chain Atmosphere-Floods-Impacts in the Aare River Basin, Switzerland

2017-2018 Visualization of 3D and 4D flood simulations

2017-2018 Flood risk dynamics

2016-2017 Vulnerability of moveable properties to floods

2016-2017 Simulation of Woody Debris Dynamics during Floods

2015-2017 Nationwide overview of flood-exposed buildings in Switzerland

2014-2016 Evaluation of flood prevention projects

2011-2014 ClimOpt – Optimization of the management of climate-induced risks. Budget: 0.6 Mio. €. Funding: EU-EFRE.

2011-2014 DIVERSICOLTURA – Biodiversity in cultural landscapes. Budget: 1.1 Mio. €. Funding agency: EU-EFRE.

2009-2011 IRKIS – Interregional cross-border early warning system for hydrological risks. Budget: 0.9 Mio. €. Funding: EU-EFRE.

2008-2011 PermaNET – Long-term Permafrost Monitoring Network. Budget: 3.3 Mio. €. Funding: EU-EFRE

2004-2006 “Merging remote sensing (satellite based radar interferometry) and GIS modelling techniques for natural hazard assessment” EU SME R&D fund

5. Supervision of Early Stage Researchers

Total number of supervised PhD students and PostDoc scientists: 7.

6. Teaching activities (selected)

Total number of supervised master students: 24

Total number of supervised bachelor students at the University of Bern: 9

Courses:

2018, 2019 Seminar “Geodata analysis and modelling” (20 Students), University of Bern, 5 ECTS.

- 2018, 2019 "Climate Sciences Workshop II" (30 Students), University of Bern, 0.5 ECTS.
- 2015-2018 "Hydrology I: Principles", "Hydrology I: Exercises", (50 Students), University of Bern, 3 ECTS
- 2016, 2017 Graduate School of the Humanities: "Introduction to QGIS". (12 Students), University of Bern, 2 ECTS.
- 2016, 2017 Proseminar in hydrology "Global water balances on river basin scale". (25 Students), University of Bern, 3 ECTS.
- 2015 "International Summer School on Geomorphology Kaunertal, Austria". (40 PhD students and PostDocs). Universities of Bonn, Giessen and Vienna
- 2014-2016 "Research practice in hydrology". (30 Students), University of Bern, 10 ECTS.
- 2014-2016 "Field practice in hydrology". (30 Students), University of Bern, 10 ECTS.
- 2002-2003 Land use planning and landscape management. (25 Students), University of Innsbruck, 5 ECTS

7. Prizes, awards, fellowships

- 2019 Venia Docendi (Habilitation) in Hydrology. University of Bern, Switzerland. Habilitation thesis: "Spatio-temporal dynamics and drivers of flood risk change. Perspectives of coupled component models."
- 2019 Shortlisted for professorship in Geomorphodynamics at the University of Copenhagen, Denmark
- 2018 Shortlisted for professorship in Hydrology at the University of Bern, Switzerland
- 2016 SNF-funded Visiting Fellow at the University of Bristol, United Kingdom
- 2002 Research prize from the Regional Government of Tyrol, Austria
- 1999 Research prize "Interdisciplinary approaches in research - contest of the Körber Foundation" (Germany) – "Deutscher Studienpreis"

8. Governing activities

- 2016-2017 Participation in various institute and faculty commissions as mid-staff representative, University of Bern
- 2015-2016 Member of institute commission on the establishment of research clusters, Institute of Geography, University of Bern, Switzerland
- 2014-2016 Member of the institute board of the Institute of Geography, University of Bern, Switzerland
- 2009-2014 Member of the Platform on Natural Hazards of the Alpine Convention (PLANALP)

9. Scientific reviewing activities

Journal reviews

Nature Sustainability, Science of the Total Environment, Water Resources Research, Hydrology and Earth System Sciences, Journal of Hydrology, Natural Hazards and Earth System Sciences, Earth Surface Processes and Landforms, Water, Water International, International Journal of Disaster Risk Reduction, Physical Geography, Hydrology, Natural Hazards, Geosciences, Sustainability, International Journal of Environmental Research and Public Health, AIMS Environmental Science, disP - The Planning Review, Journal of Mountain Science

Grant evaluations

Austrian Climate Research Programme (ACRP)

10. Organization of conferences

- 2011 Mid-term and final conference of international project "PermaNET – Long-term Permafrost Monitoring Network"

11. Outreach and knowledge transfer

- 2019 Climate Change Impacts on Swiss Forests. Maps at geo.admin.ch <https://s.geo.admin.ch/8197e5ba10>
- 2018 www.schadenpotenzial.hochwasserrisiko.ch, www.risikodynamik.hochwasserrisiko.ch
- 2013 Alpine strategy for adaptation to climate change in the field of natural hazards. Developed by the Platform on Natural Hazards of the Alpine Convention PLANALP. Alpine Convention.
- 2011 Permafrost Long-term Monitoring Network for the European Alps. Synthesis Report. International Research Society INTERPRAEVENT.
- 2011 Auswirkungen der landwirtschaftlichen Bewirtschaftung auf die Naturgefahren. Nationale Plattform für Naturgefahren PLANAT, Bern.
- 2001-2019 > 20 articles in journals and newspapers

Published Data and Models:

- Zischg, Andreas Paul. (2019). High resolution maps of climatological parameters for analyzing the impacts of climatic changes on Swiss forests [Data set]. Zenodo. <http://doi.org/10.5281/zenodo.3245891>
- Bernet, D.B., Stawicki, M., Zischg, A.P., Prasuhn, V., Weingartner, R., 2018. Observational data of surface water flood events. mendeley Data, v2. <http://dx.doi.org/10.17632/v8z6kwh8kw.2>
- Galatioto, N., Zischg, A.: LWDsimR: Simulation of Woody Debris Dynamics during Floods. 2018. Zenodo. <http://doi.org/10.5281/zenodo.1296733>.
- Zischg, A.: LWDsimR - Simulation of large wood dynamics during an extreme flood in the Aare River upstream of Bern, Switzerland. 2018. <http://dx.doi.org/10.17632/kchsr5tjw5.1>
- Zischg, A., Mosimann, M.: Validation of an uncalibrated flood inundation model (BASEMENT v2.7) with insurance claims. 2018. <http://doi.org/10.5281/zenodo.815136>
- Zischg, A.: IBER flood loss model. <https://github.com/zischg/IBERfloodlossmodel>
- Zischg, A.: FloodVulnerabilityFunctions. <https://github.com/zischg/FloodVulnerabilityFunctions>
- Zischg, A.: LWDsimAare. Simulation of large wood dynamics during an extreme flood in the Aare River upstream of Bern, Switzerland. <https://github.com/zischg/LWDsimAare>
- Zischg, A., Horton, P., Ramierez, J. Python scripts and models developed by the students and lecturers in the seminar on “geodata analysis and modelling” in spring semester of 2018, University of Bern. <https://github.com/unibe-geodata-modelling>

12. Research career breaks

2000-2014 Working as a consultant in private economy and industry.