

Johannes Brenner

Ph.D. Candidate / Geoecology

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Professional career

2014–2016

Junior Research Assistant, *EURAC, Institute for Alpine Environment*, Bozen/Bolzano.

eco-hydrological simulations with GEOtop and SWAT, eco-hydrologic climate impact studies at catchment scale, data management, organisation/realisation of field work (LTsER site Matsch/Mazia).

Education | Academic Training

2016

Ph.D. Candidate, *Helmholtz Centre for Environmental research - UFZ, Department of Computational Hydrosystems*, Leipzig. Model verification with cosmic ray neutron sensing and eddy covariance data in semi-arid regions". Supervision: Sabine Attinger, Luis Samaniego, Martin Schrön

2015

SummerSchool, “Facing Natural Hazards”, Potsdam.

hosting institutions: IASS, PIK, GFZ, AWI, University of Potsdam

2015

MasterClass, “Climate Services”, European Academy (EURAC), Bozen/Bolzano. organized within the EUPORIAS project.

2011–2014

Scientific Assistant, *Institute of Earth and Environmental Science, Working Group Hydrology and Climatology*, University of Potsdam.

installation and maintenance of a micro-rain radar (Sölden, Austria), contribution to an open source library for processing weather radar data (wradlib), data analysis (R), literature review (Mendeley).

2011–2014

Master’s programme Geoecology, *Institute of Earth and Environmental Science*, University of Potsdam, Graduation with distinction (1.2).

Thesis: “Spatial variability and temporal trends of soil moisture and evapotranspiration in an inneralpine dry catchment”. Supervision: Prof. Dr. Axel Bronstert & Dr. Giacomo Bertoldi.

2011

Internship, *Potsdam Institute for Climate Impact Research (PIK)*, Potsdam.

Processing and analysis of climate and land use data as input for the Dynamic Global Vegetation Model LPJ with the statistic computing language R. Supervision: Dr. Kirsten Thonike.

2010

Field Work, *Nacimiento*, Chile.

Determining soil hydraulic (e.g. hydraulic conductivity), terrain and vegetation characteristics in a forest catchment for parametrisation of the hydrological model WASA-Sed.

2009

Tutor “mathematics for Geoecologists”, *Institute of Earth and Environmental Science*, University of Potsdam.

2007–2011

Bachelor’s programme Geoecology, *Institute of Earth and Environmental Science*, University of Potsdam.

Thesis: “Modelling of sediment transport in a deforested catchment with WASA-Sed (Nacimiento, Chile)”. Supervision: Prof. Dr. Axel Bronstert & Dr. Christian Mohr. Funded by DAAD scholarship “Thesis abroad”.

Skills

IT applications and development

HydroModels	mHM, GEOtop, SWAT, WASA-Sed	Geoinfo	QGIS, GRASS, SAGA, ArcGIS
DataAnalysis	R, Python	Programming	Fortran
Operating Systems	GNU/Linux (Ubuntu, RedHat), Apple Mac	Tools	SVN, GitHub, Mendeley
Office	LibreOffice, MicrosoftOffice, Inkscape	Edition	L ^A T _E X, Markdown

Languages

German	Native	<i>Mother Tongue</i>
English	Fluent	<i>Daily practice, scientific writing</i>
French	B1 Level	<i>Studied 5 years in school</i>
Italian	A2 Level	<i>Lived 3 years in South Tyrol (Italy)</i>

Participation in Research Projects

2014

MONALISA, “*Monitoring key environmental parameters in the alpine environment involving science, technology and application*”.

Junior Researcher responsible for eco-hydrological modeling for different land uses (apple orchards, Alpine grassland - meadow and pasture), data management and analysis.

2014

HiResAlp, “*An innovative framework for the integration of multi-source data to determine soil moisture and evapotranspiration at high resolution in Alpine regions*”.

Junior Researcher responsible for field activities and point-scale/distributed eco-hydrological modeling in the LTsER site Mazia/Matsch.

2013–2014

HydroAlp, “*Modelling the interactions between water cycle, vegetation and climate in Alpine Environments*”.

Master Student responsible for climate change impact assessment with the hydrological model GEOtop, results available via WEB-GIS.

Publications & Conference Proceedings

2015

Bertoldi G, Brenner J, Notarnicola C, Greifeneder F, Nicolini I, Della Chiesa S, Niedrist G, Tappeiner U, *Monitoring soil moisture patterns in alpine meadows using ground sensor networks and remote sensing techniques.*, Geophysical Research Abstracts, Vol. 17, 2015, European Geosciences Union, General Assembly 2015 - Vienna, Austria, 12–17 April 2015 (poster).

2014

Brenner J, Bertoldi G, Della Chiesa S, Niedrist G, Tappeiner U, Bronstert A, *Modellazione degli impatti del cambiamento climatico sulla distribuzione spaziale dell’evapotranspirazione, dell’umidità del terreno e del manto nevoso in una vallata alpina*, Atti del XXXIV Convegno Nazionale di Idraulica e Construzioni Idrauliche, Bari, 07–10 Sept 2014.

2014

Brenner J, Bertoldi G, Della Chiesa S, Niedrist G, Tappeiner U, Bronstert A, *Modeling impacts of climate change on evapotranspiration and soil moisture spatial patterns in an alpine catchment*, Geophysical Research Abstracts, Vol. 16, 2014, European Geosciences Union, General Assembly 2014, Vienna, Austria, 27 April–2nd May 2014 (talk).

References

- 1 **Prof. Dr. Axel Bronstert**, *University of Potsdam*, Institute of Earth- and Environmental Sciences, Axel.Bronstert@uni-potsdam.de.
- 2 **Dr. Giacomo Bertoldi**, *European Academy Bozen/Bolzano*, Institute for Alpine Environment, Giacomo.Bertoldi@eurac.edu.