



Dr. SEBASTIAN WOLF

Senior Scientist

ETH Zurich (Switzerland)

Zurich, Switzerland

Phone: +41 44 632 8196

Email: sewolf@ethz.ch

Web: <http://nature.berkeley.edu/~sewolf>

Personal Information

Citizenship: German
Date of Birth: 25 December 1978, Dresden (Germany)

Research Interest

My research is focused on the biosphere-atmosphere exchange of carbon dioxide, water vapour and energy in terrestrial ecosystems, and the interactions with climate, land use and ecophysiology. I am specifically interested in the effects of drought and climate change on carbon sequestration, and on ecosystem processes such as photosynthesis and transpiration. Further interests include the partitioning of ecosystem fluxes, carbon-water interactions, and the upscaling of ecosystem fluxes.

In order to answer these questions, I use the eddy covariance technique, chamber based measurements, and modelling approaches across various climates and scales. Current and past projects include ecosystem flux studies in tropical (Sardinilla, Panama), subtropical (Tonzi Ranch, California) and temperate climates (Switzerland), and syntheses at regional (Swiss FluxNet), continental (US) and global scale (FLUXNET).

Apart from the biosphere-atmosphere exchange in terrestrial ecosystems, I have worked on the effects of land-use change on soil erosion and landscape fragmentation using modelling techniques and GIS, the detection of Mountain Pine Beetle infestations using remote sensing, and mapping expeditions to remote areas.

Education

- | | |
|-------------|--|
| 2006 – 2010 | Ph.D. , ETH Zurich (Switzerland), Institute of Plant, Animal and Agroecosystem Sciences
Thesis: " <i>Carbon dioxide and water vapour fluxes of tropical pasture and afforestation: seasonal variations of net ecosystem exchange and carbon sequestration potentials</i> "
Ph.D. Program in Plant Sciences, Plant Science Center (PSC) |
| 1999 – 2006 | M.Sc. in Geography , Dresden University of Technology (Germany)
Thesis: " <i>Effects of changing land-use patterns on soil erosion in the Saxon Switzerland National Park Region</i> ", in collaboration with the Leibniz Institute of Ecological and Regional Development
Specialisations: <i>Physical Geography, Cartography, Remote Sensing, Computer Science, Geographic Information Systems (GIS)</i>
Research topics: <i>Soil erosion modelling, landscape fragmentation, thematic mapping in remote areas</i> |
| 1992 – 1997 | High School , Johann-Andreas-Schubert Gymnasium, Dresden (Germany) |
| 1985 – 1992 | Secondary School , 137th Polytechnic, Dresden (Germany) |

Professional Experience

- since 11/2015 **Senior Scientist**, ETH Zurich (Switzerland), Department of Environmental Systems Science
- 1/2015 – 10/2015 **Marie Curie Research Fellow**, ETH Zurich (Switzerland), Department of Environmental Systems Science
Projects: ECOWAX, 2012 US Drought, Global Energy Fluxes
- 11/2011 – 12/2015 **SNF & Marie Curie Research Fellow**, University of California, Berkeley (USA), Department of Environmental Science, Policy and Management, Biometeorology Lab
Projects: FLUXNET, Flux Partitioning, ECOWAX, 2012 US Drought, Global Energy Fluxes
- 12/2010 – 10/2011 **Postdoc**, ETH Zurich (Switzerland), Institute of Agricultural Sciences; *Projects GHG-Europe and Swiss FluxNet*
- 2007 – 2010 **Visiting Scientist**, Smithsonian Tropical Research Institute (STRI), Panama City (Panama)
Extensive fieldwork at the Sardinilla research site
- 11/2006 – 11/2010 **Research Assistant**, ETH Zurich (Switzerland), Institute of Plant, Animal and Agroecosystem Sciences
Installation and maintenance of two flux towers in Panama: Processing and analysing of meteorological & eddy flux data
- 10/2003 – 09/2005 **Teaching Assistant**, Dresden University of Technology, Institute of Geography (Germany)
04/2001 – 07/2002 *Preparation for undergraduate and graduate courses; Marking of essays; Leading and preparing geographical excursions*
- 10/2004 – 02/2005 **Teaching Assistant**, Dresden University of Technology, Institute of Photogrammetry & Remote Sensing (Germany)
10/2002 – 02/2004 *Teaching and course preparation for undergraduate and graduate level in Remote Sensing; Maintaining systems and data; Revision of e-learning platform*
- 11/2002 – 05/2003 **Research Assistant**, Simon Fraser University, Department of Geography, Burnaby / Vancouver (Canada)
Research project on the early detection of Mountain Pine Beetle infestation using airborne remote sensing; Editorial assistance for the 'International Journal of Remote Sensing'
- 08-09/2002 **Leader & Organizer of scientific mapping expedition**, Dresden University of Technology, Institute of Cartography (Germany)
Leading and organising of scientific mapping expedition to Tien Shan Mountains (Kyrgyzstan)
- 02-03/2002 **Participant of scientific mapping expedition**, Dresden University of Technology, Institute of Cartography (Germany)
Participating in scientific mapping expedition to Ojos del Salado (Atacama Desert, Chile)
- 09/2001 **Leader & Organizer of scientific surveying expedition**, Dresden University of Technology, Institute of Cartography (Germany)
Leading and organising of scientific surveying expedition to Dachstein South Face Cave (Austrian Alps)
- 10/2000 – 07/2002 **Teaching Assistant**, Dresden University of Technology, Institute for Software & Multimedia Technology (Germany)
Undergraduate teaching for application software
- 03/1998 – 04/1999 **Civilian Service**, German Multiple Sclerosis Society, Dresden
Care for handicapped people
- 10/1997 – 12/1997 **Internship**, Saxony National Association of the German Alpine Association (Germany)
Thematic mapping of rock formations

Community Service

Reviewer	Agricultural and Forest Meteorology, Global Change Biology, Global Ecology and Biogeography, Biogeosciences, Journal of Geophysical Research (Biogeosciences & Atmospheres), Nature, Nature Climate Change, Plant and Soil, Ecological Applications, Hydrology and Earth System Sciences, Die ERDE
Session Convener	AGU Fall Meeting 2011–2015 (San Francisco, USA)
Poster Liason	AGU Fall Meeting 2011, 2012, 2014, 2015 (San Francisco, USA)
Poster Award Organizer	Greenhouse Gas Management in European Land Use Systems 2013 (Antwerp, Belgium)
Workshop Organizer	AmeriFlux Annual PI Meeting 2014 – ‘Data synthesis: making the whole more than the sum of the parts’ (Potomac MD, USA)
since 2015	Delegate VMUSYS , Departmental Conference at ETH Zurich
2012 – 2015	Coordinator , FLUXNET group at ResearchGate
since 2009	Leader , FLUXNET Young Scientist Network (YSN) <i>Coordinating activities for >400 people from 50 countries</i>
2011 – 2014	Organizer , GHG-Europe Young Scientist Network
since 2005	Federal Education Team , German Alpine Association <i>Teaching instructor of youth guides</i>
2003 – 2008	Executive Board , Saxony National Association of the German Alpine Association <i>Fundraising, mentoring, advanced training of youth guides</i>
since 1995 & 2004	Youth Guide & Instructor for Alpine Climbing , Saxony Mountaineering Federation of the German Alpine Association <i>Instructor of children, teenager and adults; public relations, fundraising, editorial work, organisation of events</i>

Awards

2014	GEWEX Poster Award 7th International Scientific Conference on the Global Water and Energy Cycle, The Hague (The Netherlands)
2012	Marie Curie International Outgoing Fellowship (MC-IOF), European Commission (FP7, PEOPLE) Postdoctoral research at UC Berkeley (USA) & ETH Zurich (Switzerland), 11-2012 to 10-2015
2011	Fellowship for Prospective Researchers, Swiss National Science Foundation (SNF) Postdoctoral research at UC Berkeley (USA), 11-2011 to 10-2012
2010	Travel grant, Huber-Kudlich Foundation AGU Fall Meeting, San Francisco (USA) Scholarship by ETH Zurich For doctoral studies Travel grant, Fonds Agro-Alimentaire (D-AGRL) Fieldwork with STRI in Panama
2009	Travel grant, Huber-Kudlich Foundation Fieldwork with STRI in Panama Travel grant, Association Suisse de Géographie EGU conference, Vienna (Austria) Travel grant, Prof. Dr. Zerweck-/ Cassella-Foundation EGU conference, Vienna (Austria)
2008	Travel grant, Huber-Kudlich Foundation BART Flux course at UMBS, Pellston, Michigan (USA) Travel grant, Huber-Kudlich Foundation EGU conference, Vienna (Austria)

Teaching

- 09/2015 **Interdisciplinary Topics in Earth and Environment**, Guest Lecturer, Wageningen University (The Netherlands)
- 08/2015 **NFZ-Summer School 2015 FORESCALE, Climate change impacts on forest ecosystems**, Swiss Federal Institute for Forest, Snow and Landscape Research (WSL) – in collaboration with ETH Zurich (Switzerland)
- 06/2015 **Micrometeorological Field Course**, University of Bern, Institute of Geography – in collaboration with ETH Zurich (Switzerland)
- 03/2015 **Botanical Lecture Series**, University of Basel (Switzerland)
- 2010 – 2011 **Organizing Seminar Current Topics in Grassland Sciences**, ETH Zurich, Institute of Agricultural Sciences (Switzerland)
- 2010 **M.Sc. thesis supervision**, ETH Zurich (Switzerland), Sonja Majorek – *“Effects of land-use change from pasture to afforestation on ecosystem evapotranspiration in Panama”*
- 2008 **Tutoring Term paper in Biogeochemistry and Pollutant Dynamics**, ETH Zurich (Switzerland), Supervision of Nora Spiess – *“Carbon budgets of tropical ecosystems using eddy covariance measurements”*
- 2001 – 2005 **Seminars Basics of Remote Sensing & Applied Image Interpretation**, Dresden University of Technology (Germany)
- 2001 – 2005 **Excursions in Physical Geography**, Dresden University of Technology (Germany)
- 2003 – 2004 **Seminar Climatology**, Dresden University of Technology (Germany)
- 2000 – 2002 **Seminar Introduction to Application Systems**, Dresden University of Technology (Germany)

Languages

German:	Native Speaker	French:	Conversant
English:	Fluent	Russian:	Basic Knowledge
Spanish:	Conversant		

Professional Memberships

American Geophysical Union (AGU), since 2008
American Meteorological Society (AMS), since 2014
European Geosciences Union (EGU), since 2015
German Academic International Network (GAIN), since 2011
FLUXNET Young Scientist Network (YSN), since 2009, Leader
FLUXNET, since 2007

Interests besides Science

Rock climbing, skiing, whitewater kayaking

Publications

Accepted / in press

Submitted/ in revision

- Wolf S**, Keenan TF, Fisher JB, Baldocchi DD, Desai AR, Richardson AD, Scott RL, Law BE, Litvak ME, Brunsell NA, Peters W, van der Laan-Luijkx IT (in revision) Warm spring reduced carbon cycle impact of the 2012 US summer drought
- Tramontana G, Jung M, Camps-Valls G, Ichii K, Raduly B, Reichstein M, Schwalm CR, Arain MA, Cescatti A, Kiely G, Merbold L, Serrano-Ortiz P, Sickert S, **Wolf S**, Papale D (in review) Predicting carbon and energy fluxes across global FLUXNET sites with regression algorithms
- Verma M, Fisher JB, Mallick K, Ryu Y, Kobayashi H, Guillaume A, Moore G, Ramakrishnan L, Hendrix V, **Wolf S**, Sikka M, Kiely G, Wohlfahrt G, Gielen B, Roupsard O, Toscano P, Arain MA (in revision) Global Daily Surface Net-radiation at 5 km from MODIS
- Yang J, Tian H, Ren W, Lu C, **Wolf S**, Desai AR, Pan S, Tao B, Zhang B, Gough CM, Blanken PD, Torn MS (in revision) Current and future sensitivity of ecosystem productivity to precipitation in the humid United States
- Yao Y, Liang S, Li X, Liu S, Chen J, Jia K, Xie X, Munier S, Lindroth A, Varlagin A, Raschi A, Noormets A, Pio C, Wohlfahrt G, Sun G, Domec JC, Montagnani L, Lund M, Eddy M, Blanken PD, Grünwald T, **Wolf S** (in revision) Assessment and simulation of global terrestrial latent heat flux by merging CMIP5 climate models and surface eddy covariance observations

In preparation

- Wolf S**, Yin D, Roderick ML (in prep.) Using radiative signature to diagnose the cause of warming associated with the Californian Drought
- Wolf S**, Paul-Limoges E, Baldocchi D (in prep.) Subcanopy Flux Measurements in Forest Ecosystems
- Wolf S**, Stoy P, Reichstein M, Cescatti A, Baldocchi DD (in prep.) Global Patterns of Biosphere-Atmosphere Energy Fluxes in Terrestrial Ecosystems
- Wolf S**, Baldocchi D (in prep.) Flux Partitioning of Water Vapor and Carbon Dioxide in a Californian Oak Savanna
- Paul-Limoges E, **Wolf S**, Hörtnagl L, Eugster W, Buchmann N (in prep.) Contributions of understory and overstory to ecosystem CO₂ fluxes in a temperate mixed forest in Switzerland
- Ma S, Baldocchi DD, **Wolf S**, Verfaillie J (in prep.) Beyond interannual variability: unexpected events hidden in the 15-year time series of ecosystem CO₂ fluxes at an oak-grass savanna in California

Peer reviewed

- Parazoo NC, Barnes E, Worden J, Harper AB, Bowman KW, Frankenberg C, **Wolf S**, Litvak ME, Keenan TF (2015) Influence of ENSO and the NAO on terrestrial carbon uptake in the Texas-northern Mexico region. *Global Biogeochemical Cycles*, 29(8): 1247-1265
- Wolf S**, Eugster W, Ammann C, Häni M, Zielis M, Hiller R, Stieger J, Imer D, Merbold L, Buchmann N (2013) Contrasting response of grassland versus forest carbon and water fluxes to spring drought in Switzerland. *Environmental Research Letters* 8(3): 035007
- Sprenger M, Oelmann Y, Weihermüller L, **Wolf S**, Wilcke W, Potvin C (2013) Tree species and diversity effects on soil water seepage in a tropical plantation. *Forest Ecology and Management* 309(0): 76-86
- Wolf S**, Eugster W, Majorek S, Buchmann N (2011) Afforestation of tropical pasture only marginally affects ecosystem-scale evapotranspiration. *Ecosystems* 14(8): 1264-1275
- Wolf S**, Eugster W, Potvin C, Turner BL, Buchmann N (2011) Carbon sequestration potential of tropical pasture compared with afforestation in Panama. *Global Change Biology* 17(9): 2763-2780
- Schneebeli M, **Wolf S**, Kunert N, Eugster W, Mätzler C (2011) Relating the X-Band opacity of a tropical tree canopy to sapflow, rain interception and dew formation. *Remote Sensing of Environment* 115(8): 2116-2125

- Wolf S**, Eugster W, Potvin C, Buchmann N (2011) Strong seasonal variations in net ecosystem CO₂ exchange of a tropical pasture and afforestation in Panama. *Agricultural and Forest Meteorology* 151(8): 1139–1151
- Potvin C, Manzilla L, Buchmann N, Monteza J, Moore T, Murphy M, Oelmann Y, Scherer-Lorenzen M, Turner B, Wilcke W, Zeugin F, **Wolf S** (2011) An ecosystem approach to biodiversity effects: Carbon pools in a tropical tree plantation. *Forest Ecology and Management* 261(10): 1614-1624
- Wolf S**, Walz U, Kleber A (2009) Effects of land-cover change on soil erosion in the Saxon Switzerland National Park Region. *Die ERDE* 140(2): 155-174
- Schneebeli M, Mätzler C, **Wolf S**, Eugster W (2008) X-band opacity of a tropical tree canopy and its relation to intercepted rain, eddy fluxes and other meteorological variables. *Microwave Radiometry and Remote Sensing of the Environment, MICRORAD 2008*. doi: 10.1109/MICRAD.2008.4579514

Book chapters, Monographs and Reports

- Wolf S** (2010) Carbon dioxide and water vapour fluxes of tropical pasture and afforestation: seasonal variations of net ecosystem exchange and carbon sequestration potentials. *DISS. ETH NO. 19415*, ETH Zurich, 163 p
- Wolf S**, Eugster W, Buchmann N (2009) Effects of Land Use on Carbon Cycling of Tropical Ecosystems in Panama. In: Tielkes E (ed.): *Tropentag 2009, Biophysical and Socio-economic Frame Conditions for the Sustainable Management of Natural Resources*, Hamburg
- Walz U, **Wolf S**, Neubert M (2008) Impact of Landscape Change on Landscape Functions in the Saxon Switzerland. In: Csaplovics E, Wagenknecht S, Seiler U (eds.): *Spatial Information Systems for Transnational Environmental Management of Protected Areas and Regions in the Central European Space*. Rhombus, Berlin. pp 105-117
- Wolf S**, Walz U (2007) Auswirkungen einer veränderten Landnutzungsstruktur auf die Bodenerosion. In: Strobl J, Blaschke TH, Griesebner G (Hrsg.): *Angewandte Geoinformatik 2007. Beiträge zum 19. AGIT-Symposium Salzburg*. Wichmann, Heidelberg, pp 867-872
- Wolf S** (2006) Bodenerosion als Funktion veränderter Landnutzungsstruktur – Modellierung der Entwicklung am Beispiel der Nationalparkregion Sächsische Schweiz. *Diploma / Masters thesis*, Dresden University of Technology, Institute of Geography, 177 p
- Wolf S** (2004) Landschaftszerschneidung – Grenzüberschreitende Untersuchung der Entwicklung und ihrer Auswirkungen für das Gebiet der Sächsisch-Böhmischen Schweiz. *Studienarbeit (Research Assignment)*, Dresden University of Technology, Institute of Geography, 40 p
- Roberts A, Dragicevic S, Northrup J, **Wolf S**, Li Y, Coburn C (2003) Mountain Pine Beetle Detection and Monitoring - Remote Sensing Evaluations. *Forestry Innovation Investment Operational Report*, 45 p
- Roberts A, Northrup J, **Wolf S**, Li Y (2003) Mountain Pine Beetle Detection and Monitoring - Interpretation and Evaluation of Airborne Imagery. *West Fraser Sawmills Report*, 22 p

Miscellaneous

- Wolf S** (2013) Insight: forests use water more efficiently during spring drought. *EnvironmentalResearchWeb*. environmentalresearchweb.org/cws/article/news/54686
- Wolf S**, Koteen L, Tomelleri E (2012) Networking among Young Scientists. *iLEAPS Newsletter: Future land-atmosphere observation platforms* 12: 27-29
- Wolf S**, Koteen L, Zeeman MJ (2011) Growing the FLUXNET Community: The Young Scientists Network. *FluxLetter* 4(1): 4-5
- Wolf S**, Eugster W, Buchmann N (2009) What happens with the carbon? *Newsletter of Smithsonian Tropical Research Institute*, 13.11.2009: 4
- Wolf S**, Eugster W, Buchmann N (2009) CO₂ fluxes of tropical ecosystems with different land-use in Panama. *FluxLetter* 2(3): 14-16
- Vargas R, **Wolf S**, Zeeman M (2009) FLUXNET Young Scientists Network. *FluxLetter* 2(3): 9

- Wolf S**, Walz U (2005) Grenzüberschreitende Untersuchung der Landschaftszerschneidung in der Sächsisch-Böhmischen Schweiz. *Mitteilungen des Landesvereins Sächsischer Heimatschutz e.V.* 14(3): 33-39
- Wolf S** (2003) Tien Shan Mountains, mapping expedition. *American Alpine Journal* 77: 346-347
- Wolf S** (2003) Kartierungsexpedition ins Himmelsgebirge. *Der neue Sächsische Bergsteiger* 14(1): 50-52
- Wolf S** (2002) Kartieren in Eis, Geröll und hohen Bergen. *Dresdner Universitätsjournal* 13(16): 3
- Wolf S** (2002) Topographische Kartierung am höchsten Vulkan der Erde. *Der neue Sächsische Bergsteiger* (13)2: 48-49
- Wolf S** (2001) Expedition Dachstein-Südwandhöhle 2001. *Der neue Sächsische Bergsteiger* 12(4): 47-48

Presentations

Talks

- Wolf S *et al.* (16.12.2015) Subcanopy Flux Measurements in Forest Ecosystems. AGU Fall Meeting 2015, San Francisco (USA)
- Wolf S (02.09.2015) Biosphere-atmosphere Interactions and the Impact of Drought on Ecosystem Carbon and Water Fluxes. Interdisciplinary Topics in Earth and Environment, Wageningen University (The Netherlands) – *invited*
- Wolf S & Eugster W (25.08.2015) Biosphere-Atmosphere Exchange of Ecosystems – The Eddy-Covariance Method. NFZ-Summer School 2015 FORESCALE, Climate change impacts on forest ecosystems. Fafleralp (Switzerland)
- Wolf S (21.04.2015) Einfluss von Frühlingstrockenheit 2011 auf den Kohlenstoff- und Wasserhaushalt von Grasland und Wald. Informationsabend ETH-Forschungsstation Chamau (Switzerland)
- Wolf S *et al.* (15.04.2015) Warm Spring Reduced Impact of Summer Drought on Carbon Cycling. EGU General Assembly 2015, Vienna (Austria)
- Wolf S (12.03.2015) Biosphere-atmosphere Interactions and the Impact of Drought on Ecosystem Carbon and Water Fluxes. Botanical Lecture Series, University of Basel (Switzerland) – *invited*
- Wolf S (16.02.2015) Warm Spring Reduced Impact of Summer Drought on Carbon Cycling. Grassland Seminar, ETH Zurich (Switzerland)
- Wolf S *et al.* (15.12.2014) Warm Spring Reduced Impact of Summer Drought on Carbon Cycling. AGU Fall Meeting 2014, San Francisco (USA)
- Wolf S *et al.* (13.05.2014) Large-scale reductions in gross primary productivity and evapotranspiration caused by the 2012 US drought. 31th Conference on Agricultural and Forest Meteorology/2nd Conference on Atmospheric Biogeosciences (AMS meeting), 12.-15.05.2014, Portland OR (USA)
- Wolf S (05.05.2014) Synthesis of the 2012 U.S. drought: Impact on ecosystem fluxes and implications for the future. AmeriFlux Annual PI Meeting, 04.-05.05.2014, Potomac MD (USA) – *invited*
- Wolf S (12.03.2014) Impact of the 2012 US drought on ecosystem carbon and water fluxes. Biometeorology lab meeting, University of California, Berkeley (USA)
- Wolf S *et al.* (09.12.2013) Impact of the 2012 US drought on ecosystem carbon and water fluxes. AGU Fall Meeting 2013, San Francisco (USA) – *invited*
- Wolf S, Tomelleri E (19.09.2013) GHG-Europe Young Scientists. GHG-Europe Project Meeting, Antwerp (Belgium)
- Wolf S (12.09.2013) Biosphere-atmosphere interactions and the impact of drought on ecosystem fluxes. University of Montreal, Department of Geography, Montreal (Canada)
- Wolf S (22.08.2013) FLUXNET Young Scientist Network (YSN). Joint AsiaFlux / HESSS / KSAFM Meeting, Seoul National University, Seoul (South Korea), remote talk – *invited*
- Wolf S (18.04.2013) Carbon Sequestration of Tropical Pasture and Afforestation in Panama. Lecture in ESPM Seminar, University of California, Berkeley (USA)

- Wolf S *et al.* (26.03.2013) Contrasting response of grassland versus forest carbon and water fluxes to spring drought in Switzerland. Science Talkshop, Institute of Agricultural Sciences, ETH Zurich (Switzerland)
- Wolf S, Baldocchi D (06.12.2012) Flux Partitioning of Water Vapour and Carbon Dioxide in a Californian Oak Savanna. AGU Fall Meeting 2012, San Francisco (USA)
- Wolf S *et al.* (06.08.2012) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. Land-Climate Interactions Group Seminar, Institute for Atmospheric and Climate Science, ETH Zurich (Switzerland)
- Wolf S *et al.* (25.06.2012) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. Biometeorology and Soil Physics Group lab meeting, University of British Columbia, Vancouver (Canada)
- Wolf S *et al.* (20.06.2012) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. Biometeorology lab meeting, University of California, Berkeley (USA)
- Wolf S *et al.* (31.05.2012) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. 30th Conference on Agricultural and Forest Meteorology/First Conference on Atmospheric Biogeosciences (AMS meeting), Boston (USA)
- Wolf S, Eugster W, Buchmann N (09.12.2011) Seasonal variability of CO₂ and H₂O fluxes in tropical pasture and afforestation. AGU Fall Meeting 2011, San Francisco (USA) – *invited*
- Wolf S *et al.* (06.12.2011) Impact of spring drought on ecosystem carbon and water dynamics in Switzerland. AGU Fall Meeting 2011, San Francisco (USA)
- Wolf S (08.06.2011) Turbulente Ökosystemflüsse von CO₂ und H₂O in tropischer Weide und Aufforstung in Panama. Geographisches Kolloquium, Dresden University of Technology (Germany) – *invited*
- Wolf S, Eugster W, Buchmann N (14.12.2010) Ecosystem carbon-water interactions of tropical pasture and afforestation. AGU Fall Meeting 2010, San Francisco (USA)
- Wolf S (26.11.2010) Carbon dioxide and water vapour fluxes of tropical pasture and afforestation: seasonal variations of net ecosystem exchange and carbon sequestration potentials. PhD defence, ETH Zurich (Switzerland)
- Wolf S, Eugster W, Buchmann N (20.11.2010) Ecosystem carbon budgets of tropical pasture versus afforestation. Swiss Geoscience Meeting, Fribourg (Switzerland)
- Wolf S (15.11.2010) Carbon and water fluxes of pasture and afforestation in Panama. Seminar Current Topics in Grassland Sciences, ETH Zurich (Switzerland)
- Wolf S (01.02.2010) Carbon cycling of two tropical ecosystems. Bambi Seminar, Smithsonian Tropical Research Institute (STRI). Barro Colorado Island (Panama)
- Wolf S, Eugster W, Buchmann N (07.12.2009) Land use and carbon cycling of tropical ecosystems in Panama. Colloquium in Plant Sciences, ETH Zurich (Switzerland)
- Wolf S, Eugster W, Buchmann N (08.10.2009) Land use and CO₂ fluxes of tropical ecosystems in Panama. Institute of Soil Sciences (IFB), University of Hamburg (Germany)
- Wolf S, Eugster W, Buchmann N (07.10.2009): Effects of Land Use on Carbon Cycling of Tropical Ecosystems in Panama. Tropentag 2009, University of Hamburg (Germany)
- Wolf S, Plath M (08.09.2009) How reforestation could improve small farmers' livelihood in the tropics. North-South Centre Progress Forum 2009, ETH Zurich (Switzerland)
- Wolf S (12.06.2009) Carbon cycling of two tropical ecosystems in Panama. Tropical Field Biology course of Butler University, Smithsonian Tropical Research Institute (STRI). Gamboa (Panama)
- Wolf S (05.05.2009) Net ecosystem exchange of two tropical ecosystems in Panama. Seminar Current Topics in Grassland Sciences, ETH Zurich (Switzerland)
- Wolf S (07.04.2009): Net ecosystem exchange of two tropical ecosystems in Panama. Center for Tropical Forest Research (CTFS) science meeting, Smithsonian Tropical Research Institute (STRI). Panama City (Panama)
- Wolf S, Eugster W, Schneebeil M, Buchmann N (25.03.2009) Sustainable agroforestry for carbon sequestration to improve small farmers' livelihood in the tropics - Plant productivity and carbon sequestration potentials. Project Meeting Panama, Georg-August-University Göttingen (Germany).
- Wolf S, Wyrsh I, Schmid S, Rupitak Q, Schmid M (28.10.2008) The global low temperature treeline phenomenon, Bolivia - the world's highest treeline. PSC Colloquium Challenges in Plant Sciences, ETH Zurich (Switzerland)

- Wolf S (17.06.2008) Eddy covariance measurements - lessons learned about breathing of the terrestrial biosphere. Center for Tropical Forest Research (CTFS) science meeting, Smithsonian Tropical Research Institute (STRI). Panama City (Panama) – *invited*
- Wolf S (06.05.2008) Effects of land use on carbon sequestration potentials in Panama. Seminar Current Topics in Grassland Sciences, ETH Zurich (Switzerland)
- Wolf S, Buchmann N, Eugster W, Schneebeli M (14.01.2008) Sustainable agroforestry for carbon sequestration to improve small farmers' livelihood in the tropics - Plant productivity and carbon sequestration potentials. Project Meeting Panama, Johannes Gutenberg University Mainz (Germany)
- Wolf S (11.12.2007) Land-atmosphere interactions of ecosystems – Partitioning of ecosystem fluxes using $\delta^{13}\text{C}$. Seminar Stable Isotope Ecology of Terrestrial Ecosystems, ETH Zurich (Switzerland)
- Wolf S, Walz U (06.07.2007) Auswirkungen einer veränderten Landnutzungsstruktur auf die Bodenerosion. AGIT-Symposium, Salzburg (Austria)
- Wolf S (22.01.2007) Plant productivity and carbon sequestration potentials in Panama. Seminar Current Topics in Grassland Sciences, ETH Zurich (Switzerland)
- Wolf S (23.08.2006) Effects of land use change on soil erosion. Biogeochemical Model-Data Integration Group, Max Planck Institute for Biogeochemistry. Jena (Germany)
- Wolf S (14.12.2005) Bodenerosion als Funktion veränderter Landnutzungsstruktur – Modellierung der Entwicklung am Beispiel der Nationalparkregion Sächsische Schweiz. Geographisches Kolloquium, Dresden University of Technology (Germany)
- Wolf S, Walz U (13.12.2004) Landschaftszerschneidung – Grenzüberschreitende Untersuchung für das Gebiet der Sächsisch-Böhmischen Schweiz. Workshop Langzeituntersuchung von Flächennutzungsentwicklungen, Leibniz Institute of Ecological and Regional Development. Dresden (Germany)

Posters

- Wolf S *et al.* (2015) Global Patterns of Biosphere-Atmosphere Energy Fluxes in Terrestrial Ecosystems, 16th Swiss Global Change Day, 01.04.2015, Bern (Switzerland)
- Wolf S *et al.* (2014) Global Patterns of Biosphere-Atmosphere Energy Fluxes in Terrestrial Ecosystems, 7th International Scientific Conference on the Global Water and Energy Cycle, 14.-17.07.2014, The Hague (The Netherlands) – *Poster Award*
- Wolf S *et al.* (2013) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. Greenhouse Gas Management in European Land Use Systems, 16.-19.09.2013, Antwerp (Belgium)
- Wolf S *et al.* (2013) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. Climate Extremes and Biogeochemical Cycles 2013, 02.-05.04.2013, Seefeld (Austria)
- Wolf S *et al.* (2013) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. 12th Berkeley Atmospheric Sciences Symposium, 08.02.2013, Berkeley (USA)
- Wolf S *et al.* (2013) Response of ecosystem carbon and water dynamics to spring drought in Switzerland. 4th NACP All-Investigators Meeting, 04.-07.02.2013, Albuquerque (USA)
- Sprenger M, Wolf S, Buchmann, Eugster W, Weihermüller L, Wilcke W, Oelmann Y (2012) Tree species effects on seepage fluxes in soil in a tropical afforestation. 4th EUROSIL Conference, 02.-06.06.2012, Bari (Italy)
- Sprenger M, Wolf S, Buchmann, Eugster W, Weihermüller L, Wilcke W, Oelmann Y (2012) Der Effekt von Baumarten auf die Versickerungsraten auf einer tropischen Aufforstung. Tag der Hydrologie, 22.-23.03.2012, Freiburg (Germany)
- Wolf S, Eugster W, Buchmann N (2011) Carbon dioxide and water vapour fluxes of tropical pasture and afforestation. 3rd iLEAPS Science Conference, 18.-23.09.2011, Garmisch-Partenkirchen (Germany)
- Wolf S, Merbold L, Eugster W, Buchmann N (2011) Swiss FluxNet. 3rd iLEAPS Science Conference, 18.-23.09.2011, Garmisch-Partenkirchen (Germany)
- Wolf S, Buchmann N, Eugster W (2009) Land-use change and its effects on carbon cycling in the tropics. 8th NCCR Climate Summer School, 30.08.-04.09.2009, Grindelwald (Switzerland)

- Wolf S, Buchmann N, Eugster W (2009) Contrasting ecosystem-scale fluxes from pasture and native tree plantation in Panama. European Geosciences Union (EGU) General Assembly, 19.-24.04.2009, Vienna (Austria)
- Wolf S, Buchmann N, Eugster W (2009) Net ecosystem exchange of two tropical ecosystems in Panama. European Geosciences Union (EGU) General Assembly, 19.-24.04.2009, Vienna (Austria)
- Wolf S, Buchmann N, Eugster W (2008) Net ecosystem exchange of tropical ecosystems in Panama. 6th CarboEurope-IP Project Meeting, 29.09.-03.10.2008, Jena (Germany)
- Wolf S, Buchmann N, Eugster W (2008) Effects of land use on carbon sequestration potentials in Panama. 7th NCCR Climate Summer School, 31.08.-05.09.2008, Monte Verità, Ascona (Switzerland)
- Wolf S, Buchmann N, Eugster W (2008) Land use effects on carbon sequestration potentials in tropical Panama. European Geosciences Union (EGU) General Assembly, 13.-18.04.2008, Vienna (Austria)
- Wolf S, Buchmann N, Eugster W (2008) Land use effects on carbon sequestration potentials in tropical Panama. 9th Swiss Global Change Day, 01.04.2008, Bern (Switzerland)
- Schneebeli M, Wolf S, Eugster W, Mätzler C (2008) X-Band Opacity Measurements of Tropical Tree Canopies in Panama and its Link to Intercepted Rain, Eddy Fluxes and Other Meteorological Variables. 9th Swiss Global Change Day, 01.04.2008, Bern (Switzerland)
- Schneebeli M, Wolf S, Eugster W, Mätzler C (2008) X-Band Opacity Measurements of Tropical Tree Canopies in Panama and its Link to Intercepted Rain, Eddy Fluxes and Other Meteorological Variables. Microwave Radiometry and Remote Sensing of the Environment, 11.-14.03.2008, Florence (Italy)
- Wolf S, Buchmann N, Eugster W (2007) Land use and carbon sequestration potentials in Panama. Latsis Symposium - Research Frontiers in Environment and Sustainability, 17.-19.09.2007, ETH Zurich (Switzerland)
- Wolf S (2007) Land use and carbon sequestration potentials in Panama. 6th NCCR Climate Summer School, 26.-31.08.2007, Grindelwald (Switzerland)
- Wolf S, Walz U, Kleber A (2006) Effects of landscape change on soil erosion in the National Park Region of Saxon Switzerland. Nature Protection GIS - International Symposium on Geoinformatics in European Nature Protection Regions. 13.-14.11.2006, Dresden (Germany)
- Wolf S, Walz U (2006) Landschaftszerschneidung der Sächsisch-Böhmischen Schweiz - grenzüberschreitende Untersuchung der Entwicklung seit 1900. Nature Protection GIS - International Symposium on Geoinformatics in European Nature Protection Regions. 13.-14.11.2006, Dresden (Germany)
- Wolf S (2006) Berücksichtigung von Fließbarrieren bei der Erosionsmodellierung. 32. Jahrestagung des Arbeitskreises Geomorphologie der Deutschen Geographischen Gesellschaft. 04.-07.10.2006, Dresden (Germany)