

NATALIA HASLER, PH.D.

22 Fiske St

Worcester, MA 01602-2937

hasler.natalia@gmail.com

Highlights of qualification

- Research consultancy work building Matlab interfaces to analyze flux-tower measurements across regions as a result of extreme climate events (for University of Maryland, Baltimore County), or to analyze radiation and temperature data from different data structure (for Colorado University).
- Synthesis research project analyzing the evapotranspiration fluxes in the Amazon basin based on a set of height different flux towers from the Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA).
- Ph.D. and post-doctoral research in atmospheric sciences modeling, studying land-use impacts on the hydroclimate, at regional (Spain and Amazon) as well as global scales.
- Strong interpersonal and communication skills: successful in sharing scientific ideas to expert and non-expert audiences of any age; skilled in graphical presentation (poster award) and concise writing.
- Experienced in independent and team work, as team member or leader.

Education

Ph.D. EPFL (École Polytechnique Fédérale de Lausanne), Atmospheric Sciences, 2002.

M.S. EPFL, Environmental Engineering, 1995.

Work history

- Clark University, Graduate School of Geography, research staff, 2010
impacts analysis of extreme weather and climate events on ecosystem carbon and water fluxes
- University of Maryland, Baltimore County, research consultant, 2008
Matlab interface set-up for flux-tower data analysis associated with extreme climate events.
- Colorado State University, research scientist, 2007
radiation and temperature data analysis in the context of global change.
- National Center for Atmospheric Research, visiting scientist, 2005-2006
global climate modeling using CCSM, tropical deforestation sensitivity experiments.
- Duke University, research associate, 2002-2006
mesoscale atmospheric modeling and eddy-covariance flux analysis
model validation, sensitivity experiments & surface fluxes analysis (Spain & Amazon).

- EPFL, graduate research assistant, 1999-2002
PhD research using RAMS on impact of land-use on precipitation in semi-arid Spain, laboratory webmaster, and group counselor.
- EPFL, research and teaching assistant, 1997-1999
project leader for an environmental impact assessment study (land consolidation project).
- University of Lausanne (Switzerland), research and teaching assistant, 1995-1997
Geographical Information System (GIS) conception for the regional land-use planning board.
- BEE Architecture Inc. (Switzerland), GIS expert, 1995-1996
- Swiss Foundation for Cystic Fibrosis, database manager, 1993-2001

Awards

Research fellowship of the Swiss National Science Foundation for 2003-2004.

Award as best student poster in its category of the Global Change Open Science Conference 2001.

Publications

- Williams, C.A., Reichstein M, Buchmann N., Baldocchi D., Beer C., Schwalm C., Wohlfahrt G., Hasler N., Bernhofer C., Foken T., Papale D., Jung M., Schymanski S. and K. Schaefer, 2012. Climate and vegetation controls on the surface water balance: synthesis of evapotranspiration measured across a global network of flux towers, *Water Resour. Res.*, **48**, W06523.
- Hasler N., Werth D., and R. Avissar, 2009. Effects of Tropical Deforestation on Global Hydroclimate: A Multimodel Ensemble Analysis, *J. Clim.*, **22**, 1124-1141.
- Hasler, N. and R. Avissar, 2007. What controls evapotranspiration in the Amazon basin? *J. Hydrometeorol.*, **8**, 380-395.
- Hasler N., Avissar R. and G.E. Liston, 2005. Issues in Simulating the Annual Hydrometeorology of a Semi-Arid Region in Central Spain. *J. Hydrometeorol.*, **6**, 409-422.
- Hasler N., 2002. Interactions between Landscape Structure and Regional Climate: a Numerical Experiment over Central Spain. Ph.D. dissertation #2628, EPFL, Lausanne, 142 pp.
- Hasler N., Iorgulescu I., Martilli A., Liston G.E. and R. Schlaepfer, 2002. Local climate and water availability changes due to landscape modifications: a numerical experiment over southeastern Spain. in Beniston, M. (ed.), *Climatic Change: Implications for the Hydrological Cycle and for Water Management*, Kluwer Academic Publishers, Dordrecht and New York, pp. 301-328.
- Hasler N., Iorgulescu I., Martilli A., Liston G.E. and R. Schlaepfer, 2001. Local climate change due to landscape modifications: impacts on water cycle (case study in southeastern Spain). *Global Change NewsLetter*, **47**, 23.

Conference contributions (first author)

- 2005 10th Annual CCSM workshop, Breckenridge, CO (USA), Poster, 2005 June 21-23.
- 2004 AGU Fall meeting, San Francisco CA (USA), 2004 Dec. 13-17.
III LBA Scientific Conference, Brasilia (B), 2004 July 27-29.
- 2003 54. Deutscher Geographentag, Bern (CH), 2003 Sep. 28-Oct. 4.
- 2002 Workshop on Forest and Drinking Water, Lausanne (CH), 2002 Nov. 26.
- 2001 International Workshop on Climatic Change, Wengen (CH), 2001 Sep. 19-21.
Global Change Open Science Conference, Amsterdam (NL), Poster, 2001 July 10-13.
- 2000 International Workshop on Climatic Change, Wengen (CH), 2000 Sep. 27-29.
4th RAMS Users Workshop, Rutgers University NJ (USA), 2000 May 22-24.
EGS General Assembly, Nice (F), 2000 April 25-29.

Computer skills

- Fortran and Matlab programming
- Global (CCSM) and Regional (RAMS) Atmospheric Modeling
- GIS and statistical software, Adobe and Microsoft products, on Windows, Mac, Linux and Unix operating systems.

Languages

English (spoken, read, written), **French** (mother tongue), **Italian** (spoken, read, fairly written), **German** (read, fairly spoken & written), **Spanish** (read, basic writing & speaking).

Miscellaneous

Professional Affiliation at the **American Geophysical Union**

Past volunteer-based work as **President** of the departmental scientific staff (EPFL), and **Communication manager** at “Ingénieurs du Monde” (engineering association for cooperation projects with developing countries), President of the chamber music association, and Database manager of a fundraising run (raising \$100,000 per event).