Papers


- Schneegrenze steigt um 500 Meter, C Marty, M Bavay, Alpen, 6, pp50-51, 2012


- Climate change effects on snow melt and discharge of a partly glacierized watershed in Central Switzerland (SoilTrec Critical Zone Observatory), F Kobierska, T Jonas, J Magnusson, M Zappa, M Bavay, T Bosshard, F Paul, ..., Applied Geochemistry, 2011


- Understanding snow-transport processes shaping the mountain snow-cover, R. Mott, M. Schirmer, M. Bavay, T. Grunewald, M. Lehning, Cryosphere (2010), 4 (4), DOI: 10.5194/tc-4-545-2010


Abstracts

- Numerical snow models and imperfect radiation measurements, M Bavay, E Schmucki, C Fierz, M Lehning, Davos Atmosphere and Cryosphere Assembly, 2013
- Snow cover runoff and stream discharge modelling during snow melt in Alpine terrain, N Wever, C Fierz, M Bavay, M Lehning, Davos Atmosphere and Cryosphere Assembly, 2013
- Improving stream flow discharge modelling during snow melt, N Wever, C Fierz, C Mitterer, M Lehning, M Bavay, EGU General Assembly 2013
- Application of large-scale computing infrastructure for diverse environmental research applications using GC3Pie, S Maffioletti, N Dawes, M Bavay, S Sarni, M Lehning, EGU General Assembly 2013
- Comparison of hydrologic response between a conceptual and a travel time distribution model for a snow-covered alpine catchment using Alpine3D, F Comola, M Lehning, M Bavay, R Mutzner, B Schaefl, A Rinaldo, M Parlange, EGU General Assembly 2013
- Permafrost simulations in the Dolomites using Alpine3D, W Steinkogler, M Bavay, M Lehning, EGU General Assembly 2012
- From sensor networks to connected analysis tools, N Dawes, M Bavay, T Egger, S Sarni, A Salehi, A Davison, H Jeung, K Aberer, EGU General Assembly 2012
- Automated Model-driven Simulation and Visualization of Field Sensor Data, T Papaioannou, S Sarni, K Aberer, M Bavay, M Lehning, S Simoni, M Parlange, EGU general assembly 2011
- Modeling the climate change impact on snow and runoff in the alpine space, M Bavay, T Grünewald, J Magnusson, M Lehning, EGU general assembly 2011
- Typical errors when calculating snow ablation in mountains, R Mott, M Bavay, M Lehning, EGU general assembly 2011
- Climate change effects on snow melt and discharge of a partly glacierized watershed in Central Switzerland, F Kobierska, T Jonas, J Magnusson, M Zappa, M Bavay, T Bosshard, S Bernasconi, EGU general assembly 2011
- Modeling the climate change impact on snow and runoff in the alpine space, M. Bavay, T. Grünewald, J. Magnusson, M. Lehning, AGU general assembly 2011
- *Swiss Experiment: Design, implementation and use of a cross-disciplinary infrastructure for data intensive science*, N Dawes, A Salehi, A Clifton, M Bavay, K Aberer, MB Parlange, M Lehning, AGU Fall Meeting 2010

- *Climate change effects on snow melt and discharge of a partly glacierized watershed in Central Switzerland*, T Jonas, J Magnusson, F Kobierska, D Farinotti, M Zappa, M Bavay, AGU Fall Meeting 2010

- *Swiss Experiment: Providing diverse snow research data sets when and where they are required*, N. Dawes, M. Lehning, K. Aberer, M. Parlange, M. Bavay, M. Berne, International Snow Science Workshop 2009


- *Studying the impact of climate change on the discharge of an Alpine headwater catchment with a process-based modeling approach*, M. Bavay, M. Lehning, AGU fall meeting 2010


- *Swiss Experiment: Application of a collaborative research platform to spatial interpolation validation*, M. Bavay, N. Dawes, M. Lehning, K. Aberer, M. Parlange, ICAM2009


Papers and proceedings before SLF


- **Compact Pulsed-Current Generator with Single Switch for Material EOS and Magnetic Diffusion Studies**, Ch. Mangeant, F. Lassalle, J. Petit, M. Bavay, International Conference on Megagauss Magnetic field Generation and Related Topics, Moscow, Russia, 7-14/07/2002

- **The Magnetic Flux Compression in the sub-microsecond regime for the generation of Very High Pressure and intense X-rays**, M. Bavay, P. L'Eplattenier, Ch. Mangeant, F. Hamann, Ph. Monjaux, F. Lassalle, M. Mazarakis, G. Avrillaud, B. Lalle, Power Modulator Conference, Hollywood, USA, 30/06-03/07/2002 see also the paper
Projects

- **Swiss Ex**, proposal, 1 year full time postdoc, then simple participant
- **Swiss Ex II**, participant
- **KTI Boschung**, 2 years, 1 year full time alone on the project, then just waiting for the next winter
- **Swiss Multi-Science Computing Grid (SMSCG)**, proposal, WP leader for 2.5 years
- **smscg II**, WP leader for 0.5 year
- **Hydrosys**, 3 years, participant
- **CLISP**, 1.5 years, participant in charge of a deliverable
- **Veneto Permafrost project**, assisting for a few months
- **IRKIS**, 2 years, operational nowcasting & forecasting of snow hydrology over the area of Davos

Proposals

- **Swiss Ex**, significant funding, heavy involvement - passed
- **Swiss Ex II**, significant funding, light involvement
- **ALPS**, significant funding, light involvement - failed
- **Hydrosys**, significant funding, light involvement - passed
- **Rosti**, significant funding, heavy involvement - passed
- **RoadRunner (Gebert Ruff)**, medium funding, heavy involvement - failed
- **On The Road Again**, no funding (but collaboration), light involvement - failed
- **smscg**, significant funding, heavy involvement - passed
- **smscg II**, light funding, light involvement - passed
- **Chinese collaboration**, multiple proposals, including 3x2 months full time paid by the Chinese Academy of Sciences - waiting