

Peer-reviewed Publications in 2011

- Bernasconi, S. M., Bauder, A., Bourdon, B., Brunner, I., Bünemann, E., Christl, I., Derungs, N., Edwards, P., Farinotti, D., Frey, B., Frossard, E., Furrer, G., Gierga, M., Göransson, H., Gülland, K., Hagedorn, F., Hajdas, I., Hindshaw, R., Ivy-Ochs, S., Jansa, J., Jonas, T., Kiczka, M., Kretzschmar, R., Lemarchand, E., Luster, J., Magnusson, J., Mitchell, E. A., Olde Venterink, H., Plötze, M., Reynolds, B., Smittenberg, R. H., Stähli, M., Tamburini, F., Tipper, E. T., Wacker, L., Welc, M., Wiederhold, J. G., Zeyer, J., Zimmermann, S., and Zumsteg, A. (2011). Chemical and Biological Gradients along the Damma Glacier Soil Chronosequence, Switzerland. *Vadose Zone Journal*, 10(3):867–883.
- Dalban-Canassy, P., Bauder, A., Dost, M., Fäh, R., Funk, M., Margreth, S., Müller, B., and Sugiyama, S. (2011). Hazard assessment investigations due to the recent changes in Triftgletscher. *Nat. Hazards Earth Syst. Sci.*, 11:2149–2162.
- Faillettaz, J., Funk, M., and Sornette, D. (2011a). Icequakes coupled with surface displacements for predicting glacier break-off. *Journal of Glaciology*, 57(203):453–460.
- Faillettaz, J., Sornette, D., and Funk, M. (2011b). Numerical modeling of a gravity-driven instability of a cold hanging glacier: reanalysis of the 1895 break-off of Altelsgletscher, Switzerland. *Journal of Glaciology*, 57(205):817–831.
- Farinotti, D., Bauder, A., Boes, R. M., Huss, M., Jouvét, G., and Widmer, F. (2011a). Future glacier evolution and impact on the runoff regime in the catchments of Alpine reservoirs: The Aletsch area, Switzerland. In *Dams and Reservoirs under Changing Challenges*, pages 449–458. CRC Press, Taylor & Francis Group.
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- Hoelzle, M., Darms, G., Lüthi, M., and Suter, S. (2011). Evidence of accelerated englacial warming in the Monte Rosa area, Switzerland/Italy. *The Cryosphere*, 5(1):231–243. doi:10.5194/tc-5-231-2011.
- Jouvét, G., Huss, M., Funk, M., and Blatter, H. (2011a). Modelling the retreat of Grosser Aletschgletscher, Switzerland, in a changing climate. *Journal of Glaciology*, 57(206):1033–1044.
- Jouvét, G., Picasso, M., Rappaz, J., Huss, M., and Funk, M. (2011b). Modelling and numerical simulation of the dynamics of glaciers including local damage effects. *Math. Model. Nat. Phenom.*, 6(5):263–280.
- Keller, A. and Hutter, K. (2011). On the thermodynamic consistency of the equivalence principle in continuum damage mechanics. *Journal of the Mechanics and Physics of Solids*, 59(5):1115–1120.
- Magnusson, J., Farinotti, D., Jonas, T., and Bavay, M. (2011). Quantitative evaluation of different hydrological modelling approaches in a partly glacierized Swiss watershed. *Hydrological Processes*, 25:2071–2084.

- Margreth, S., Faillettaz, J., Funk, M., Vagliasindi, M., Diotri, F., and Broccolato, M. (2011). Safety concept for hazards caused by ice avalanches from the Whymper hanging glacier in the Mont Blanc Massif. *Cold Regions Science and Technology*, 69:194–201.
- Raymond, M. and Gudmundsson, H. (2011). Bayesian estimation of basal conditions on Rutford Ice Stream, West Antarctica, from surface data. *Journal of Glaciology*, 57(202):315–324.
- Riesen, P., Strozzi, T., Bauder, A., Wiesmann, A., and Funk, M. (2011). Short-term surface ice motion variations measured with a ground-based portable real aperture radar interferometer. *Journal of Glaciology*, 57(201):53–60.
- Schaepli, B. and Huss, M. (2011). Integrating point glacier mass balance observations into hydrologic model identification. *Hydrol. Earth Syst. Sci.*, 15:1227–1241. doi:10.5194/hess-15-1227-2011.
- Vieli, A. and Nick, F. (2011). Understanding and modelling rapid dynamic changes of tidewater outlet glaciers: issues and implications. *Surveys in Geophysics*, doi 10.1007/s10712-011-9132-4.

Not Peer-reviewed Publications in 2011

- Bauder, A., Huss, M., and Lüthi, M. (2011). Klimaschwankungen und Gletscherveränderungen. *Geosciences Actuel*, 2:25–28.
- Bauder, A. and Ryser, C., editors (2011). *The Swiss Glaciers 2005/06 and 2006/07*, volume 127/128 of *Glaciological Report*. Cryospheric Commission (EKK) of the Swiss Academy of Sciences (SCNAT).
- Farinotti, D., Bauder, A., and Funk, M. (2011a). Gletscherrückgang - Bleibt noch genügend Wasser für die Wasserkraftnutzung? *Natur und Mensch*, 4:21–23. Quo vadis Wasserkraft.
- Farinotti, D., Bauder, A., and Funk, M. (2011b). Veränderung der Gletscher und ihrer Abflüsse 1900-2100 - Fallstudien Gornergletscher und Mattmark. *Wasser Energie Luft*, 103(4):273–277.
- Farinotti, D., Bauder, A., Huss, M., Juvet, G., Widmer, F., and Boes, R. (2011c). Future glacier evolution and impact on the runoff regime in the catchments of Alpine reservoirs: the Aletsch area, Switzerland. In *Dams in Switzerland - Source for Worldwide Swiss Dam Engineering*, pages 283–289. Swiss Committee on Dams.
- Paul, F., Bauder, A., Marty, C., and Nötzli, J. (2011). Schnee, Gletscher und Permafrost 2009/10. *Die Alpen*, 87(7/2011):46–52.
- Riesen, P. (2011). Variations of the surface ice motion of Gornergletscher during drainages of the ice-dammed lake Gornensee. Technical Report 216, Mitteilungen der Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie der ETH Zürich. ETH PhD no. 19642.