Geophysical Research Abstracts Vol. 12, EGU2010-9767, 2010 EGU General Assembly 2010 © Author(s) 2010



Snow creep: A new and simple observation method and first calculations

Reinhard Fromm and Peter Höller

BFW, Department of Natural Hazards and Timberline, Innsbruck, Austria (reinhard.fromm@uibk.ac.at, ++43 512 573933 5250)

This study is focused on the slow movement of snow on an inclined slope. The motion consists of glide on the bed surface and creep due to settlement (vertical component) and shear deformation (downhill displacement).

A simple observation technique will be shown which does not destroy the snow sample. Tracer in a snow pit are used to register the movement of the snowpack. Additional data concerning the properties of each snow layer were collected. The data acquisition was performed in a desired temporal resolution and represents a point information. The procedure of calculating velocities uses the snow density of each layer, the deduced viscosity and the slope angle.

Some preliminary results and the related parametrisation will be shown.