

Name of research institute or organization:

Swiss Federal Institute for Snow and Avalanche Research SLF

Title of project:

Permafrost in the Jungfrau East Ridge

Project leader and team:

Dr. Marcia Phillips

Project description:

Borehole temperatures are measured automatically in two 20 m boreholes in the the North and South sides of the Jungfrau East ridge, at an altitude of 3590 m ASL. The measurements deliver valuable information on the state of high alpine permafrost in rock walls. These react rapidly to climate change and if warming occurs, melting of the ice in the cracks and fissures of the rock can lead to rock wall instability. The boreholes are part of the PERMOS network (Permafrost Monitoring Switzerland), which includes boreholes in scree slopes, rock walls and rock glaciers at different altitudes in alpine permafrost terrain. The boreholes in the Jungfrau were drilled in 1995.

Key words:

Mountain permafrost, active layer depth, frozen rock walls, borehole measurements

Scientific publications and public outreach 2007:

Data books and reports

Vonder Mühl et al. (2007) Permafrost in Switzerland. Glaciological Report (Permafrost) No. 4/5. 107p.

Magazine and Newspapers articles

PERMOS (2007). Permafrost in den Schweizer Alpen 2004/05-2005/06. Die Alpen, 9/2007, 26-33.

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