

Name of research institute or organization:

**Institute for Isotope Geology and Mineral Resources, Swiss Federal
Institute of Technology**

Title of project:

Production systematics of in situ produced cosmogenic nuclides on the Earth's surface

Project leader and team:

Peter Oberholzer, project leader
Dr. Heinrich Baur
Dr Jörg Schäfer
Prof. Rainer Wieler

Project description:

Surface exposure dating using in situ produced cosmogenic nuclides are an important tool for absolute dating of various geomorphic processes. A major source of uncertainty are the production rates and their variation with geomagnetic latitude and elevation. To improve production rates and their scaling, we have exposed artificial targets at various latitudes and elevations for up to two years. By measuring the number of cosmogenic nuclides produced in this timespan, we will be able to determine production rates accurately.

Key words

cosmogenic nuclides, production rate determination, production rate scaling

Collaborating partners/networks:

Dr. Jörg Schäfer, Lamont-Doherty Earth Observatory, Columbia University, New York

Scientific publications and public outreach 2001:

(none this year; measurements have not been completed yet)

Address:

Institute for Isotope Geology and Mineral Resources
ETH Zürich
NO CO 61.7
Sonneggstrasse 5
CH-8092 Zürich

Contacts:

Peter Oberholzer Tel. +41 1 632 0732 e-mail: peter.oberholzer@erdw.ethz.ch
URL: http://www.erdw.ethz.ch/institutes/iimr/Halliday/halliday_intro.html