



DIVERSITAS
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of biodiversity science

Global network of alpine LTER sites

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Mountain LTER workshop, Col du Lautaret, 14-16 Sept. 2011



GMBA-DIVERSITAS conference • Chandolin, 27.–30. 7. 10

Functional significance of mountain biodiversity



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Swiss Agency for Development
and Cooperation SDC



Mountain Partnership



2010 International Year of Biodiversity



Alpine LTER network

Nucleus of core sites that will use common protocols to ensure comparability of data.

Niwot Ridge, Rocky Mountains USA
Sierra Nevada, Spain
Aosta valley, Italy
Lautaret, Grenoble, France
Tyrol, Austria
Furka region, Switzerland.

GMBA can provide the framework and coordination, funding for workshops and data management systems have to be raised separately.



Alpine LTER network

Information management

Databases document project history, cross-site studies that require communication among the parties involved and the integration of their data.

Data collected by the network will be publicly available and also analysed and published in peer-reviewed journals.

LTER Furka, Switzerland



LTER Furka, Switzerland



50% of alpine flora present in 1 km² around station (260 plant sp.)

ILTER Furka, Switzerland



ALPFOR Research station on Furka Pass (3 houses, 50 beds, labs)

LTER Furka, Switzerland

(A) Intensive monitoring (daily)

Climate, meteo; N-deposition; phenologie (plants, insects, mammals, birds)

(B) Seasonal monitoring (yearly)

Water quality and quantity; biomass production, fauna and flora

(C) Inventories (every 10 years)

Land use history; soils; aquatic systems, flora inventory, fauna inventory

Mapping: GIS Analysis and modelling, ecosystem processes on landscape level (bush encroachment, erosion, 'exceedance of critical N loads')

(D) Specific research projects (3-4 years)

Processes: *geo-hydro-ecological processes (N, C, P)*

Global Change effects