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The DYNAFLUX / DYNACOLD Network: Dynamics, Fluxes, Stability, Succession and Landscape Formation in Cold Environments

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Within Europe there is a wide array of high-latitude and high-altitude landscapes, covering a significant proportion of the total land area. These cold climate landscapes represent a variety of stages of deglaciation history and landscape formation. We find landscapes at different levels of postglacial stabilization providing the unique possibility to study the interactions between geo-, bio-, social and socio-economic systems at the land surface.

The DYNAFLUX / DYNACOLD Network (2004 -) bridges across geo-, bio-, social and socio-economic sciences in order to investigate the complex dynamics of stabilization, succession and landscape formation during and after ice retreat and under human impact.

DYNAFLUX / DYNACOLD provides a multidisciplinary forum where research groups come together. The integrated approach provides - in addition to newly generated disciplinary knowledge - the qualitative and quantitative linkages of findings from geo-, bio- and socio-work groups to develop a systems-based holistic level-of-understanding about the dynamics of environmental fluxes in high-latitude and high-altitude geo-ecosystems and landscapes. This knowledge can be used to assess the risks and potentials of the future development with reference to land use intensity / changes and climatic dynamics.

DYNAFLUX / DYNACOLD is since 2004 linking and integrating a number of networks and programmes and creates an umbrella programme and a forum for sharing knowledge.

The focus of the Network is relevant for different end users, including risk and vulnerability assessment, sustainable land use, land management and conservation. Also questions with regards to Global Change are addressed (hazards, permafrost degradation, loss of biodiversity, etc.).