

Sediment Fluxes and Sediment Budgets in Changing High-Latitude and High-Altitude Cold Environments

SEDIMENT BUDGETS in cold environments (SEDIBUD) Third workshop; Mountain Research Station, INSTAAR, Boulder, Colorado, 9-13 September 2008

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The I.A.G./A.I.G. working group SEDIBUD (SEDIMENT BUDGETS in Cold environments), founded in 2005, gathers over 350 researchers interested in high-latitude and high-altitude sedimentary fluxes and budgets, and Holocene environmental change. The aim of SEDIBUD is to better understand Earth surface systems modification in relation with climate change, through the observation and quantification of past and present-day erosion, transport and deposition of sediments and fluxes.

From September 9 to 13, 2008, 23 participants met during a workshop held at the Niwot Ridge Mountain Research Station of the University of Colorado at Boulder, USA. The workshop was hosted by INSTAAR and locally organised by Nel Caine and Irina Overeem. Additional sponsorship was provided by the Community Surface Dynamics Modeling System (CSDMS). The workshop was composed of paper and poster sessions covering a wide range of different cold climate environments as well as extended working group discussions and a field excursion. Nine countries were represented and 14 research institutes, both from the northern and southern hemisphere. The SEDIBUD working group addressed central issues during this workshop, concerning (i) an updated version of the published SEDIFLUX Manual (Eds. Beylich & Warburton) that establish common methods and standards for data collection in the field, enabling comparison from various cold environments; (ii) further to the presentation of the SEDIBUD Key Sites Fact Sheet Volume (Eds. Lamoureux, Decaulne & Beylich), that gathers characteristics from 23 SEDIBUD sites, a second edition has been decided with more key sites covering wider cold environments; the aim is to reach 45 well defined key sites. (iii) a clear protocol was defined during the workshop, addressing prerequisites for each SEDIBUD sites (data are requested with regard to the basin boundary conditions, the catchment and slopes), the collected data feeding the SEDIBUD metadata database; (iv) the extension of the existing SEDIBUD key test site database (Laute, Gintz & Beylich), including key annual data (see protocol) from each SEDIBUD key test site, (v) the potential link between CSDMS (<http://csdms.colorado.edu>) and SEDIBUD, that can offer interesting modelling possibilities for scientific issues and student training.

The next SEDIBUD workshop will be held in fall 2009 at Queens's University, Kingston, Canada. Further information on the workshop and on the SEDIBUD program can be found at <http://www.geomorph.org/wg/wgsb.html>.