Workshop Report

Quantitative analysis of sedimentary fluxes and budgets in changing cold climate environments: Scaling issues, new techniques, modelling and data management

SEDiment BUDgets in cold environments (SEDIBUD) Fourth Workshop; Queen’s University, Biological Station, Kingston, Ontario, Canada, 13-16 October 2009

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The I.A.G./A.I.G. Working Group SEDIBUD (SEDiment BUDgets in cold environments), founded in 2005, includes about 400 scientists worldwide interested in high-latitude and high-altitude sedimentary fluxes and budgets and Holocene environmental change. The major aim of SEDIBUD is to better understand Earth surface systems processes and modification in relation with climate change, through the observation and quantification of past and contemporary weathering, erosion, transport and deposition of sediments and fluxes.

From October 13 to 16, 2009, 18 scientists from 8 different countries met during a Workshop held at the Biological Station of Queen’s University, Kingston, Canada. The Workshop was hosted by Queen’s University, Department of Geography and organised by Scott F. Lamoureux. It was composed of paper and poster sessions covering studies on sedimentary fluxes and budgets in a wide range of different cold climate environments as well as extended working group discussions and a field excursion. The following central issues were addressed during the workshop discussions:
(i) Scaling issues within sediment budget studies,
(ii) The application of new techniques within sediment budget studies,
(iii) Modelling, and
(iv) Data management.

Decisions on a number of forthcoming activities were taken:
- The SEDIBUD Hypotheses will be critically reviewed and, if needed, revised
- A Second Edition of the SEDIBUD Fact Sheets Volume will be prepared and published (first edition June, 2008)
- The SEDIBUD Key Test Site Database will be updated and extended
- A Database with SEDIBUD related publications by SEDIBUD members will be established
- In addition to annual data, high-resolution data (precipitation, temperature, runoff, solute and suspended sediment concentrations and yields) will be collected and compiled from selected SEDIBUD Key Test Sites
- Individual projects and scientific papers developed within SEDIBUD (using datasets from SEDIBUD Key Test Sites and aiming at SEDIBUD key questions will be encouraged
- A Special Issue to an international journal with contributions from the Fourth SEDIBUD Workshop in Kingston will be published
The Fifth SEDIBUD Workshop will take place in Iceland in September 2010.

Further information on the Workshop (Abstract Volume) and on the SEDIBUD programme can be found at [http://www.geomorph.org/wg/wgsb.html](http://www.geomorph.org/wg/wgsb.html).

Workshop’s participants during field trip