

Meeting Programme

Sunday, October 29th, 2006

13:30 – 17:00

ESF SEDIFLUX Steering Committee Meeting (NGU Møterom 1)

17:00 – 19:00

Registration of Workshop participants (Registration desk at NGU Foyer)

18:00

Reception for Workshop participants (with pizza, beer and softdrinks) (NGU Foyer)

Monday, October 30th, 2006

08:00 – 09:00

Registration of Workshop participants (Registration desk at NGU Foyer)
(Morning Coffee will be served)

09:00 – 09:15

Opening of Fourth ESF SEDIFLUX and First I.A.G./A.I.G. SEDIBUD
Workshop and Welcome to Trondheim (**Achim A. Beylich**) (NGU Møterom 2)

09:15 – 09:40

Overview of SEDIFLUX and SEDIBUD Objectives,
Report from ESF Steering Committee Meeting and
Aims for this Workshop (**Achim A. Beylich**) (NGU Møterom 2)

Paper Presentations (NGU Møterom 2):

09:40 – 10:20

Invited Keynote Lecture:

Olav Slaymaker (Vancouver): Source-to-Sink and Sediment Budget Studies
in Cold Environments under the influence of Global Change

10:20 – 10:50

*Review of the SEDIFLUX Process (2004 – 2006) by **Olav Slaymaker***

10:50 – 11:15

Coffee (Outside Møterom 2)

Paper Session 1

Chairs: Jukka Käyhkö and Karl-Heinz Schmidt

11:15 – 11:30

Thomas Geist (Innsbruck): Monitoring surface elevation and volume changes in glacial and periglacial environments with laser scanning technology

11:30 – 11:45

Niels Nygaard (Uppsala) & Else Kolstrup (Uppsala): Detailed geomorphological mapping: a potential with sediflux assessment

11:45 – 12:00

Vladimir R. Belyaev (Moscow): Impact of long-range pipeline construction and exploitation on geomorphic processes in cold environments

12:00 – 12:15

Andreas Kellerer-Pirklbauer (Graz), Gerhard Karl Lieb (Graz) & Michael Avian (Graz): Supraglacial debris entrainment by the Pasterze Glacier, Austria

12:15 – 12:30

Bernd Etzelmüller (Oslo): Permafrost as a governing factor for sediment availability and transport in mountainous regions – a conceptional frame work

12:30 – 12:45

Samuel Etienne (Clermont-Ferrand), Denis Mercier (Paris) & Olivier Voldoire (Clermont-Ferrand): Paraglacial evolution of Conway glacier complex foreland, Northwestern Spitsbergen, Svalbard

12:45 – 13:00

Emil M. Gachev: Starting a Programme for the analysis and monitoring of sediment transfer processes in the periglacial zone of Bulgaria (Bulgarian Periglacial Programme)

13:00 – 13:50

Lunch (NGU Kantine)

13:50 – 14:30

Invited Keynote Lecture:

Ulf Molau (Göteborg): On the interface between ecology and geomorphology

14:30 – 15:00

Experiences with ITEX and Comments on the SEDIFLUX Handbook by **Ulf Molau**

15:00 – 15:30

Coffee (Outside Møterom 2)

15:30 – 17:45

Working Group Session 1 (Møterom 1, 2, 3)

19:00

Dinner (Restaurant in central Trondheim)

Tuesday, October 31st, 2006

08:30 – 09:10

Invited Keynote Lecture:

Scott Lamoureux (Kingston): Watershed sediment and related fluxes: a perspective from the Canadian Arctic

09:10 – 09:45

Discussion on the development of contacts and collaborations between earth scientists in Europe and North America

Paper Session 2:

Chairs: Fiona S. Tweed and Jeff Warburton

09:45 – 10:00

Ilona Bärlund (Helsinki), J. Koskiahio (Helsinki), Sirkka Tattari (Helsinki), A. Lepistö (Helsinki) & T. Huttula (Helsinki): Utilising spatially distributed monitoring data in model based sediment transport studies – a case study from south-west Finland

10:00 – 10:15

Willibald Kerschbaumsteiner (Vienna), W. Gattermayr (Innsbruck) & H. Habersack (Vienna): Temporal and spatial variability of suspended and bedload transport and their relevance for monitoring in an highly glaciated alpine catchment in Tyrol, Austria

10:15 – 10:30

Geir Vatne (Trondheim), Øyvind Takøy Naas (Trondheim), Achim A. Beylich (Trondheim) & Ivar Berthling (Trondheim): Bed load transport in a steep mountain stream, Vinstradalen, Norway

10:30 – 11:00

Coffee (Outside Møterom 2)

11:00 – 11:15

Lena Rubensdotter (Trondheim) & Gunhild Rosqvist (Stockholm): The significance of geomorphological setting and fluvial redeposition on sediment accumulation and composition in pro-glacial lakes

11:15 – 11:30

Richard M. Johnson (Lancashire), Jeff Warburton (Durham) & Alona Armstrong (Leeds): Spatial and short-term sediment budget dynamics of a mountain torrent

11:30 – 11:45

Ivar Berthling (Trondheim), Espen Fadnes (Trondheim), Reidun Onsøien (Elverum), Achim A. Beylich (Trondheim) & Geir Vatne (Trondheim): Sediment fluxes from debris flows, Vinstradalen, Oppdal, Norway

11:45 – 12:00

Ola Magne Sæther (Trondheim), Tor Erik Finne (Trondheim), Belinda Flem (Trondheim), Eiliv Steinness (Trondheim) & Gøran Åberg (Kjeller): Estimation of anthropogenic and geogenic lead in podzolic soils using isotopes of lead

12:00 – 12:15

Marc-Henri Derron (Trondheim) & Achim A. Beylich (Trondheim): Chemical denudation in Erdalen (Nordfjord, Norway), first estimations and numerical modelling

12:15 – 12:30

John C. Dixon (Arkansas), Colin E. Thorn (Illinois), Robert G. Darmody (Illinois) & Charles E. Allen (Santa Cruz): Spatial scale and chemical weathering in Kärkevagge, Swedish Lapland: Influences on landscape evolution

12:30 – 13:15

Lunch (NGU Kantine)

13:15 – 14:00

Poster Session (Outside Møterom 2)

Chairs: Achim A. Beylich, Hugues Lantuit and Þorsteinn Sæmundsson

Achim A. Beylich (Trondheim): Sediment transfers and sediment budgets in five small catchments situated in different cold environments in Iceland, Swedish Lapland, Finnish Lapland and Norway

Achim A. Beylich (Trondheim), Samuel Etienne (Clermont-Ferrand), Bernd Etzelmüller (Oslo), Vyacheslav V. Gordeev (Moscow), Jukka Käyhkö (Turku), Hugues Lantuit (Potsdam), Andrew J. Russell (Newcastle), Þorsteinn Sæmundsson (Saudarkrokur), Karl-Heinz Schmidt (Halle/S.), Fiona S. Tweed (Stoke-on-Trent) & Jeff Warburton (Durham): The European Science Foundation (ESF) Network – Sedimentary Source-to-Sink-Fluxes in Cold Environments – (SEDIFLUX, 2004-2006)

Achim A. Beylich (Trondheim) and the SEDIBUD Team: The I.A.G./A.I.G. Working Group SEDIBUD – Sediment Budgets in Cold Environments: Introduction and Overview

Achim A. Beylich (Trondheim), Ulf Molau (Göteborg) & Carina Keskitalo (Umeå): Dynamics and Landscape Formation in Cold Environments

Robert G. Björk (Göteborg), Mats P. Björkman (Göteborg), Mats X. Andersson (Frederiksberg) & Leif Klemetsson (Göteborg): Temporal pattern of CO₂, CH₄ and N₂O fluxes and soil microbial structure from snow-covered Alpine plant communities

Marie Chenet (Paris): The slope development in South-East of Iceland: a comparison between two recently deglaciated slopes around the Skaftafellsjökull Glacier

Armelle Decaulne (Clermont-Ferrand) & Þorsteinn Sæmundsson (Saudarkrokur): Reconstructing spatio-temporal patterns of snow-avalanche activity, and related debris transfer, using dendrogeomorphological analysis – preliminary results from northern Iceland

Regula Frauenfelder (Oslo): Debris transport by rockglaciers – a quantitative estimate for a small Alpine study site

Kari Grøsfjeld (Trondheim) & Jochen Knies (Trondheim): Modern dinocysts reflecting the influence of the Gulf Stream System in the Barents Sea, offshore Spitsbergen

Louise Hansen (Trondheim), Valentin Burki (Trondheim), Knut Stalsberg (Trondheim), Marc-Henri Derron (Trondheim), Raymond Eilertsen (Trondheim), Ola Fredin (Trondheim), Eiliv Larsen (Trondheim), Astrid Lyså (Trondheim), Atle Nesje (Bergen) & Jan Fredrik Tønnesen (Trondheim): Towards a quantification of long-term valley-fill accumulation of a deglaciated fjord-valley system, Nordfjord, Norway

Helgi Páll Jónsson (Turku): Annually laminated sediments studies from lake Pohjajärvi, Eastern Finland

Andrzej Kostrzewski (Poznan), Andrzej Mizgajski (Poznan) & Zbigniew Zwolinski (Poznan): Typology of cross-boundary fluxes of mineral matter between geoecosystems of Ebbadalen, Central Spitsbergen

Hugues Lantuit (Potsdam), N. Couture (Montréal) & Paul Overduin (Potsdam): ACD II – Arctic Coastal Dynamics II – New project, new ambitions and possible connections with SEDIFLUX

Malgorzata Mazurek (Poznan), Renata Paluszkiewicz (Poznan) & Zbigniew Zwolinski (Poznan): The geoecosystem of small tundra lakes on terrace levels of the Petunia Bay coast (Billefjorden, Central Spitsbergen)

Hanna Ridefelt (Uppsala): Spatial variability in solifluction processes in the Abisko region, northern Sweden

Erwan Roussel (Clermont-Ferrand): Post Little Ice Age changes in the proglacial fluvial pattern of the Morsarjökull (South of Iceland, Vatnajökull)

Inger-Lise Solberg (Trondheim), Louise Hansen (Trondheim) & Marc-Henri Derron (Trondheim): Long-term erosion of a Norwegian fjord-valley dominated by marine deposits

Witold Szczucinski (Poznan), Georg Schettler (Potsdam) & Marek Zajackowski (Sopot): Sediment accumulation rates, geochemistry and provenance in a complex high Arctic fjord, Hornesund, Svalbard

Ola Magne Sæther (Trondheim) & Gøran Åberg (Kjeller): Strontium isotope systematics in the Oppstryn drainage basin, western Norway

Susan Wache (Halle/S.) & Achim A. Beylich (Trondheim): Investigations on the dynamics and sediment budget of a braided river system in Erdalen, Nordfjord, Western Norway

Paper Session 3

Chairs: Samuel Etienne and Bernd Etzelmüller

14:00 – 14:15

Etienne Cossart (Paris) & Monique Fort (Paris): Consequences of landslide dams on alpine river valleys: examples and typology from the French Southern Alps

14:15 – 14:30

Monique Fort (Paris): How does the scale of landslide dams affect the sediment budgets? A perspective from the Himalayas

14:30 – 14:45

Valentin Burki (Trondheim) & Eiliv Larsen (Trondheim): Glacially reworked sediments in Børdalen, western Norway

14:45 – 15:00

Witold Szczucinski (Poznan), Jan Scholten (Monaco) & Marek Zajaczkowski (Sopot): Impact of glaciers retreat on sediment accumulation rates in fjords – changes following "Little Ice Age" in Billefjorden, Svalbard

15:00 – 15:15

Jukka Käyhkö (Turku), Petteri Alho (Turku), Elina Haapala (Turku) & Eini Puoskari (Turku): Reconstruction of the largest Holocene jökulhlaup within Jökulsá á Fjöllum, NE Iceland, based on hydraulic modelling and sedimentary field evidence

15:15 – 15:30

Dag Ottesen (Trondheim) and Leif Rise (Trondheim): Volume calculations for glacial erosion in MidNorway during the last 3 million years and large-scale depositional pattern of the corresponding shelf

15:30 – 15:50

Coffee (Outside Møterom 2)

15:50 – 17:15

Working Group Session 2

17:15 – 18:15

Conclusions and discussion from the Fourth ESF SEDIFLUX and First I.A.G./A.I.G. SEDIBUD Workshop:
*Comments and recommendations by **Invited Guests, Experts and Keynote Speakers***

18:15 – 18:30

Closure of the Meeting by Steering Committee Chair (**Achim A. Beylich**)

20:00

Conference Dinner (Restaurant in central Trondheim)

Wednesday, November 01st, 2006

09:00 – 16:00

Excursion (including Lunch at 12:00 at Tyholt Tower):

Trondheim and Surrounding Areas

Field Guides:

Lars Olsen (Excursion Organiser) (NGU)

Harald Sveian (NGU)

Geir Vatne (NTNU, Department of Geography)