

1st TopoNorge workshop
NGU, Trondheim, March 6th-7th 2006

Organizers: Dr. M. Smelror and Dr. C. Pascal (NGU)
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Venue

The 1st TopoNorge workshop will be hosted by NGU (Geological Survey of Norway). NGU is located at **Leiv Eirikssons vei, 39 Trondheim, Norway** (www.ngu.no). From downtown Trondheim NGU can be easily reached by:

- taxi
- citybus (www.team-trafikk.no): take bus 3 or 4 at *Munkegata M1* bus stop, exit at *Ringve Skole* and follow the route indicated on the map below (10 min walk)



Accommodation

Participants are requested to arrange themselves their own accommodation. NGU has special agreements with the following hotels:

Rica Nidelven Hotel

Havnegt. 1-3 NO-7400 Trondheim

Tel.: +47 73 56 80 00

Fax: +47 73 56 80 01

E-mail: rica.nidelven.hotel@rica.no

Quality Hotel Augustin

Kongensgt 26 NO-7011 Trondheim

Tel.: (+47) 73547000

Fax: (+47) 73547001

E-mail: hotel-augustin@hotel-augustin.no

In case you wish to book a room in one of these hotels, do not forget to mention that you are visiting NGU. More info on Trondheim can be found at www.trondheim.no.

Lunch

NGU will take care of lunch during the course of the workshop. **Please do not forget to fill the form enclosed and to return it before February 15th.**

Schedule

Monday 6th

9:00-10:00 Welcome and registration

10:00 Introduction to the TopoNorge Core Programme
Morten Smelror

10:20 TopoNorge in the light of the TopoEurope initiative: the geoscience of coupled lithosphere-surface processes. (key-note)
Roy H. Gabrielsen, Sierd Cloetingh and the TopoEurope Team

Session 1: Deep structure and uplift (chair:NN)

10:50 SE1.1: The Sognefjord deep-drilling project
Christophe Pascal, Peter Japsen et al.

11:10 SE1.2: Jan Inge Faleide

11:30 SE1.3: Onshore – offshore fault correlation: a multidisciplinary approach.
John-Are Hansen, Karsten Eig, Steffen G. Bergh, O.S. Kløvjan, T. Henningsen, Odleiv Olesen and Tore O. Vorren

11:50 SE1.4: Crustal structure of the Lofoten Ridge and offshore shelf exemplified by brittle faults and fractures: controlling effect on glacial landscape and drainage patterns.
Steffen G. Bergh, John-Are Hansen, Karsten Eig, T. Henningsen, O.S. Kløvjan, Odleiv Olesen, Geoff D. Corner and Tore O. Vorren

12:15: lunch

(chair:NN)

13:00 SE1.5: Surface wave tomography of the European Arctic.
Christian Weidle, Anatoli Levshin, Johannes Schweitzer, Nils Maercklin, Nikolai Shapiro, and Michael H. Ritzwoller

13:20 SE1.6: Upper mantle studies using long-period seismological data in Southern Norway.
Valérie Maupin, Christian Weidle and Laurent Guillot

13:40 SE1.7: Seismological and gravity evidence for a crustal root beneath the highlands of Southern Norway and tectonic implications.
Niels Balling, Lasse Svenningsen, Bo H. Jacobsen and Rainer Kind

14:00 SE1.8: An overview of gravity and seismic studies of the Scandes.
Jörg Ebbing and Odleiv Olesen

14:20 SE1.9: Constraining the rate and extent of mantle serpentinization from seismic and petrological data: implications for tectonic uplift processes.
Alasdair Skelton

14:40 SE1.10: Is the Neogene uplift of the circum-Atlantic margin caused by serpentinisation of the lithospheric mantle?

Odleiv Olesen, Alasdair Skelton, Jörg Ebbing, Laurent Gernigon, Christophe Pascal and Jan-Reidar Skilbrei

15:00 coffee break, poster session

(chair:NN)

15:20 SE1.11: Dynamic topography in the North Atlantic and Scandinavia.

Bernhard Steinberger

15:40 SE1.12: The land uplift in Scandinavia: the search for a neotectonic component in the post-glacial uplift.

Willy Fjeldskaar

16:00 SE1.13: Topographic Evolution of Rift Zones, Passive Margins and their Flanking regions: Control of Lithospheric Rheological Stratification.

Ritske S. Huismans

16:20 SE1.14: New fission-track laboratory at the Department of Earth Science, Bergen.

Joachim Jacobs

16:40 SE1.15: West Greenland: Late Neogene uplift along a rifted margin 50 m.y. after rifting.

Peter Japsen, Johan M. Bonow, Peter F. Green, James A. Chalmers and Karna Lidmar-Bergström

17:00 General discussion

Reception at NGU

Tuesday 7th

Session 2: Surface processes and landscape evolution

(chair:NN)

9:00 SE2.1: Relief production in glaciated regions: a case study of the Norwegian Atlantic margin.

Eiliv Larsen, Achim Beylich, Johan Bonow, Marc-Henri Derron, Ola Fredin, Clas Hättestrand, Krister Jansson, Johan Kleman, Jochen Knies, Karna Lidmar-Bergström, Knut Stalsberg and Arjen Stroeven

9:20 SE2.2: Palaeolandscapes and glaciations on the Varanger Peninsula, Northern Norway.

Jakob Fjellanger, Leif Sørbel, Johan P. Nystuen and Henriette Linge

9:40 SE2.3: Cold-based versus warm-based ice sheets: implications for landscape evolution.

Svein Olaf Dahl

10:00 SE2.4: The role of rock glaciers and slope processes for strandflat development.

Ivar Berthling, Bernd Etzelmüller, and Johan L. Sollid

10:20: Coffee break, poster session

(chair:NN)

10:40 SE2.5: Topography, glacial landforms and climate, exemplified by ice flow patterns in Central East Norway

Bjørn A. Follestad and Ola Fredin

11:00 SE2.6: Speleogenesis, speleochronology and landform development in North Norway

Stein-Erik Lauritsen

11:20 SE2.7: Deep-weathering in Norway – constraints on past landscape development and climate change, potential and problems.

Ola Fredin, Marc-Henri Derron, Eiliv Larsen and Lars Olsen

11:40 SE2.8: Estimating ages of landforms using cosmogenic ¹⁰Be concentrations in rock surfaces.

Henriette Linge

12:00 SE2.9: Uplift events in south central Norway interpreted by stepped palaeosurfaces and incised valleys.

Johan M. Bonow

12:20 lunch

(chair:NN)

13:00 SE2.10: The search for impact structures in Norway.

Svein O. Krøgli, Henning Dypvik and Bernd Etzelmüller

13:20 SE2.11 Simple and effective morphometry-based classification and analysis of digital elevation models (DEM) to characterize large-scale topographic patterns and erosion.

Bernd Etzelmüller and Bård Romstad

13:40 SE2.12: Projects in numerical modelling of landscape evolution.

Marc-Henri Derron, Ola Fredin, Lars Harald Blikra and Oddvar Longva

14:00 SE2.13: Past and current valley-to-fjord sediment transport - The SEDITRANS project, western Norway.

Knut Stalsberg, Valentin Burki, Marc-Henri Derron, Raymond Eilertsen, Ola Fredin, Louise Hansen, Eiliv Larsen, Astrid Lyså and Jan F. Tønnesen

14:20 SE2.14: Extraction of surface movement patterns by post-processing of PS-INSAR data.

Marc-Henri Derron and John Dehls

15:00 General discussion and closing

Posters

(on display March 6th and 7th)

SE2.15: The European Science Foundation (ESF) Network Sedimentary Source-to-Sink-Fluxes in Cold Environments (SEDIFLUX).

Achim A. Beylich and the SEDIFLUX Team

SE2.16: Coupling of slope and fluvial sediment transport systems in Vinstradalen, Oppdal.

Ivar Berthling, Achim Beylich and Geir Vatne

SE2.17: The search for impact structures in Norway.

Svein O. Krøgli, Henning Dypvik and Bernd Etzelmüller

List of participants

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