

Alpine Glaciological Meeting, 6 and 7 March, 2008, Chamonix.

Thursday, 6 March:

The meeting will be held in a room in the Majestic Hotel in Chamonix, close to the Tourism office. The room is lent by Chamonix town.

The oral presentations will last 15 minutes followed by 5 minutes for questions.

9:00 Welcome.

9:30-9:50 How important is glacier melt in the water balance?

(U. Strasser, M. Weber & M. Prasch). Department of Geography, University of Munich
Luisenstr. 37, D-80333 München, Germany. u.strasser@lmu.de

9:50-10:10 Embedded grid-modelling of 500 glaciers in the upper Danube basin

(M. Prasch, M. Weber & U. Strasser), Department of Geography, University of Munich
Luisenstr. 37, D-80333 München, Germany. u.strasser@lmu.de

10:10-10:40: Coffee break

10:40-11:00 Debris-cover mapping in the Sikkim Himalayas using ASTER imagery and terrain modelling.

Adina Racoviteanu
Dept. of Geography and Institute of Arctic and Alpine Research
Adina.Racoviteanu@Colorado.EDU

11:00-11:20 Diurnal variability of the glacial drainage system:

A series of tracer injection over 24 hours

Mauro Werder and Martin Funk, VAW, ETH Zurich, VA f. Wasserbau/Hydrologie/Glaziologie
CH-8092 Zürich
werder@vaw.baug.ethz.ch

11:20-11:40 Interplay between frictional sliding and cracking in a block-spring model of large ice masses instabilities J. Faillettaz¹, D. Sornette², M. Funk¹

1 Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zurich, 8092 Zurich, Switzerland
2 Department of Management, Technology and Economics, ETH Zurich, 8092 Zurich,
Switzerland
faillettaz@vaw.baug.ethz.ch

11:40-12:00 Foliation and folds on Gornergletscher

Dr. Martin Lüthi luethi@vaw.baug.ethz.ch
VAW Glaciology <http://www.glaciology.ethz.ch>
ETH Zürich <http://people.ee.ethz.ch/~luthi>

12:00-14:00 Lunch

14:00-14:20 Historical glacier variations in the western and central Alps – pictorial documents meet neural networks Daniel Steiner, Heinz J. Zumbühl, Samuel U. Nussbaumer, University of Bern, Switzerland. daniel.steiner@phzh.ch

14:20-14:40 Numerical simulation of the dynamics of a glacier using a "volume-of-fluid" formulation. H. Blatter (1), G. Jouvet (2), M. Picasso (2), J. Rappaz (2)
(1) Institute for Atmospheric and Climate Science, ETHZ, CH-8092 Zurich,
(2) Institut d'analyse et calcul scientifique, EPFL, CH-1015 Lausanne

14:40-15:10 Poster presentations

15:10-16:10 Poster session with coffee.

16:10-16:30 Modelling the energy balance of a tropical glacier in the Cordillera Blanca and the implications for regional water resources. Javier G. Corripio, Georg Kaser and Irmgard Juen, Faculty of Geo- and Atmospheric Sciences, University of Innsbruck
Innrain, 52, A-6020 Innsbruck
email: Javier.Corripio@uibk.ac.at

16:30-16:50 Comparing the Hydrological and Geodetic mass balances of Zongo Glacier -Bolivia
Soruco, A., Vincent, C., Francou, B. Lab of Glaciology, Grenoble, IRD, CNRS, UJF

16:50-17:10 Air temperature and glacier melting in different climates: Bolivian Tropics, French Alps and North Sweden. Jean Emmanuel Sicart¹, Regine Hock² and Delphine Six³

¹ Great Ice – IRD, Université Montpellier II, 34 095 Montpellier Cedex 5, France, sicart@msem.univ-montp2.fr

² Department of Earth Sciences, Uppsala University, Villavägen 16, 75236 Uppsala, Sweden

³ Laboratoire de Glaciologie et Géophysique de l'environnement – Grenoble

17:10-17:30 Dynamics of an advancing glacier: Taku Glacier, Alaska

by Martin Truffer and Roman Motyka., truffer@gi.alaska.edu

Geophysical Institute, University of Alaska

currently on sabbatical at ETH Zurich

17:30-17:50 A new method to estimate the ice volume and the ice thickness distribution of alpine glaciers.

Daniel Farinotti, Matthias Huss, Andreas Bauder and Martin Funk
danielfa@student.ethz.ch

18:30 Aperitif: At the end of the talks, the Chamonix city invite us to have an aperitif at the exhibition room “Des glaciers et des Hommes” close to the meeting room.

Friday, 7 March

8:30-8:50 Physical basis of the temperature-index approach in snow- and icemelt models Ludwig Braun. Académie des Sciences de Bavière. Munich

ludwig.braun@lrz.badw-muenchen.de

8:50-9:10 The future of Alpine glaciers as simulated by a regional climate model

Sven Kotlarski (Max Planck Institute for Meteorology, Hamburg, Germany) –

Frank Paul (Department of Geography, University of Zurich, Switzerland)

Daniela Jacob (Max Planck Institute for Meteorology, Hamburg, Germany)

sven.kotlarski@zmaw.de

9:10-9:30 Age and history of ice on Kilimanjaro

Georg Kaser, Institut fuer Geographie, Innrain 52, A-6020 INNSBRUCK

AUSTRIA georg.kaser@uibk.ac.at

9:30-10:00 Coffe break, poster session.

10:00-10:20 Measuring surface displacements of a debris-covered glacier by comparing multi-temporal laser scanner surveys. An application to the Belvedere Glacier (Monte Rosa, Macugnaga, Italy)

A. Tamburini (1) (2), D.C.G. Martelli (1), W. Alberto (1), P. Federici (3) & D. Godone (4)

(1) Imageo S.r.l. – via Valperga Caluso 35 – 10125 Torino – Italy

(2) CGI - Comitato Glaciologico Italiano – Torino - Italy

(3) CESIRICERCA S.p.A. - Via Rubattino 54 - 20134 Milano – Italy

(4) Università di Torino, Facoltà di Agraria, DEIAFA Sez. Topografia - Via L. da Vinci 44
-10095, Grugliasco (TO) - Italy

imageo@unito.it

10:20-10:40 The role of sublimation for the mass balance of tropical glaciers

Michael Winkler, Tropical Glaciology Group, Faculty of Earth and Atmospheric Sciences

University of Innsbruck, Innrain 52, A-6020 Innsbruck

Austria, michael.winkler@uibk.ac.at

10:40-11:00 Glacier flow perturbation during the drainage of Gornersee, Valais, Switzerland

Patrick Riesen and Martin Funk, riesen@vaw.baug.ethz.ch

Patrick Riesen PhD Student, Laboratory of Hydraulics, Hydrology and Glaciology (VAW), ETH Zurich

11:00-11:20 Determination of snow cover duration: interpolated snow stake observations, satellite observations or model results?

Gernot Koboltschnig (Interpraevent, Klagenfurt, Austria) and Wolfgang Schöner (ZAMG, Vienna, Austria), International Research Society INTERPRAEVENT

Abt. 18 Wasserwirtschaft - Dept. for Watermanagement , Amt der Kärntner Landesregierung - Provincial Government of Carinthia ,Mießtalerstraße 1 ,9020 Klagenfurt
Austria gernot.koboltschnig@ktn.gv.at

11:20-11:40 Detection and adjustment of inhomogenities in mass balance series in the Alps.

Bernhard Hynek, Reinhard Böhm, Christine Kroisleitner, Wolfgang Schöner:

Dr. Wolfgang Schöner, Department of Climatology, Central Institute of Meteorology and Geodynamics - ZAMG ,A-1190 Vienna, Hohe Warte 38

wolfgang.schoener@zamg.ac.at

11:40-12:00 25 years of glacier mass balance monitoring in the Sonnblick region (Austrian Alps),

Wolfgang Schöner, Reinhard Böhm, Bernhard Hynek, Gernot Koboltschnig, Christine Kroisleitner, Gernot Weyss:

Dr. Wolfgang Schöner

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homepage: <http://www.zamg.ac.at>

12:00-14:00 Lunch

14:00-14:20 Asymmetry of local glaciers even in the Arctic; new results from Spitsbergen.

evans@durham.ac.uk

Dr. Ian S. Evans

<http://www.dur.ac.uk/geography/>

14:20-14:40 GlobGlacier: A new ESA project to map the worlds glaciers and ice caps from space

Frank Paul, Department of Geography

University of Zurich, Switzerland, fpaul@geo.unizh.ch

14:40-15:00 The use of Reanalysis data for glacier mass balance reconstructions in the Cordillera Blanca (Peru),

Marlis Hofer, Georg Kaser, University of Innsbruck, Institute of Geography

marlis.hofer@student.uibk.ac.at

15:00-15:30 Coffee Break

15:30-15:50 About the tide oscillations and icebergs motion recorded at Jakobshavn isbrae during summer 2007 using high resolution digital camera, Icefjord, West Greenland.

Eric Rignot, Professor Earth System Science, NASA Jet Propulsion Laboratory (CA, USA).

Jean Michel Friedt, SENSeOR, Besançon (France),

Luc Moreau, Edytem CNRS, Chamonix-glaciologie, Expedition Inlandsis 2007, (France).

15:50-16:10 Distributed snow and ground models over a 67% glacierized basin in Bolivia (Zongo Glacier,

tropical Andes) to study melting processes and to simulate water discharge.

LEJEUNE1 Yves, WAGNON2 Patrick, ETCHEVERS1 Pierre, CHAZARIN2 Jean-Philippe,
MARTIN Eric1, SORUCO2 Alvaro,

1 Centre de tude de la neige (CEN), Météo-France, Grenoble, France

2 IRD-Great Ice, LGGE, Grenoble, France

16:10-1630: Retreat and thinning of the Cook Ice Cap (Kerguelen Island) since 1965

Etienne Berthier, Raymond Le Bris, Laurent Testut, Frédérique Rémy

[etienne.berthier@legos.obs-mip.f](mailto:etienne.berthier@legos.obs-mip.fr)

Saturday, 8 march 2008:

Field Trip:

Vallée Blanche skiing

or

Argentiere bedrock visit through tunnels excavated in rock beneath the glacier for hydropower installation of Emosson Company.

Posters AGM 6 and 7 March, 2008.

Recent glaciological studies at the Elbrus Mountain (the Caucasus Mountains); AWS installation, radio-echo sounding and shallow ice-core drilling and at 5150 m a.s.l.

Mikhailenko, V.N.(1); Kutuzov, S.(1); Lavrentiev, I.I.(1,2); Kunakhovich, M.G.(1) presenting author is underlined
(1) The Institute of Geography Russian Academy of Sciences
(2) The Lomonosov Moscow State University
Stanislav Kutuzov

Rutor glacier recent evolution: volume variation and morphologic analysis"

Villa F., Tamburini A., DeAmicis M., Maggi V.:
Dipartimento di Scienze dell'Ambiente e del Territorio
Università degli Studi di Milano-Bicocca
Piazza della Scienza, 1
20126 Milano
fabio.villa@unimib.it

Monitoring of the Weißbrunnferner (Fontana Bianca) and the Langenferner (Vedretta Lunga), Ortles-Cevedale-Group, Province of Bozen (Bolzano), Italy.

Rainer Prinz, Roberto Dinale, Christoph Oberschmied
R. Prinz: Institute of Geography, University of Innsbruck, Austria
R. Dinale, C. Oberschmied: Hydrographic Office of the Autonomous Province of Bolzano, Italy
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Institute of Geography
University of Innsbruck
and
Department of Geography
Universitiy of Zurich

Analysis of snow cover by Ground Penetrating Radar (-GPR)

D.Binder¹, E.Brückl¹, K.H.Roch¹, B.Hynek², W.Schöner²
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² Central Institute for Meteorology and Geodynamics (ZAMG), Vienna
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PERSON - Permafrostmonitoring Sonnblick,
Christine Kroisleitner , Wolfgang Schöner, Gernot Weyss
Mag. Christine Kroisleitner
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1190 Wien
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A scientific approach to the ice of frozen waterfalls : first results.

Benjamin CINQUIN-LAPIERRE, Maurine MONTAGNAT RENTIER, Jérôme WEISS
Laboratoire de Glaciologie et géophysique de l'environnement. CNRS/UJF ; Grenoble.

Glacier change in the southern Coast Mountains of British Columbia: the role of size, gradient and aspect.

evans@durham.ac.uk
Dr. Ian S. Evans
<http://www.dur.ac.uk/geography/>

A new glacier Inventory for Lombardy region (Italy) as a contribution to knowledge about Alpine glacier changes

by Simona Rosazza, Carlo D'Agata, Guglielmina Diolaiuti, Claudio Smiraglia, Gianbartolomeo Siletto
Dipartimento di Scienze della Terra A. Desio , via Mangiagalli 34 ,20133 Milano
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The CARIPANDA project as a tool to investigate the runoff of Adamello glaciers by CARIPANDA TEAM (Politecnico di Milano, Università di Milano, Università di Brescia, Arpa Lombardia, ENEL, Parco Naturale dell'Adamello)

Guglielmina Adele Diolaiuti
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The 2005 glacier inventory of Aosta Valley Region: new results to understand Alpine glacier variations

by Marco Vagliasindi(1), Fabrizio Diotri (1), Carlo D'Agata (2), Elena Ferrari (2), , Guglielmina Diolaiuti (2), , Claudio Smiraglia (2),
(1) Fondation Montagne sure, Région Autonome Vallée d'Aoste, Italie
(2) Dipartimento di Scienze della TErra "Ardito Desio" - Université de Milan - Italie
Fondation Montagne sure
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Fifteen centuries of lead contamination from the Colle Gnifetti firn/ice core (4450 m asl, M. Rosa group, Swiss-Italian Alps).

Jacopo Gabrieli ^{a,b}, Carlo Barbante ^a, Margit Schwikowski ^c, Claude Boutron ^d
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^b Environmental Protection Agency of Veneto (ARPAV), Department of Belluno, Italy
^c Paul Scherrer Institut, Villigen PSI, Switzerland
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Le traitement d'images numériques comme outil de reconstitution de l'évolution de la couverture détritique d'Estelette (Val Veny, Italie).

Romain Mazué et P. Deline Edytem
romlmazue@hotmail.com

Snow cover simulations with CROCUS on the Hintereisferner.

Gunther Kolar, University of Innsbruck

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**Extreme snow accumulation at the bottom of a rock face - example of the Ice Chapel,
Berchtesgadener Alps**

Tobias Rödder 1,2;
Prof. Dr. Hans-Joachim Fuchs 1;
Dr. Ludwig Braun 2;
Dr. Christoph Mayer 2
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1 Department of Chemistry, Pharmaceutics and Geoscience, Institut of Geography, University of Mainz, Germany

2 Commission for Glaciology of the Bavarian Academy of Sciences and Humanities, Munich, Germany

Fiber Optic Distributed Temperature Sensing for high-resolution temperature profiles in a polythermal glacier, Gornergletscher, Valais (Switzerland)

H. Huwald (1), P. Riesen (2), A. Bauder (2), M. Lüthi (2), M. Funk (2)
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Temporal and spatial distribution of supraglacial temperatures at Debris- Covered Miage Glacier (Mont Blanc, Italy)

by Claudia Mihalcea, Carlo D'Agata, Guglielmina Diolaiuti & Claudio Smiraglia
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Supraglacial meteorology from Automatic Weather Stations (AWSs) on some representative Italian glaciers

by Guglielmina Diolaiuti and the METEO staff,
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