

INTERNATIONAL GLACIOLOGICAL SOCIETY

INTERNATIONAL SYMPOSIUM ON SNOW SCIENCE

Moscow, Russia
3–7 September 2007



CO-SPONSORED BY

Institute of Geography, Russian Academy of Sciences
Moscow State University

Russian Fund of Basic Research

"Antistikhlya" Center of the Ministry of the Russian Federation for Civil Defence,
Emergencies and Elimination of Consequences of Natural Disasters
"Apatit" JSC

The Swiss Federal Institute for Snow and Avalanche Research
IUGG Commission for the Cryospheric Sciences

THIRD CIRCULAR & PROGRAM

August 2007

Registered Charity

INTERNATIONAL GLACIOLOGICAL SOCIETY

PRESIDENT: A. Ohmura

VICE PRESIDENTS: E. Brun, E. Wolff, I. Allison

IMMEDIATE PAST PRESIDENT: E.M. Morris

INTERNATIONAL SYMPOSIUM ON SNOW SCIENCE

The International Glaciological Society will hold an International Symposium on Snow Science in 2007. The symposium will be held in Moscow, Russia, with registration on 2 September and sessions from 3 to 7 September 2007.

SYMPOSIUM ORGANIZATION

Magnús Már Magnússon (International Glaciological Society)

LOCAL ARRANGEMENTS COMMITTEE

V.M. Kotlyakov (chairman), S.A. Sokratov (co-chairman), A.N. Bozhinskii, V.R. Bolov, A.F. Glazovskii, M.Yu. Gnedovskaya, S.A. Dobrolyubov, N.S. Kasimov, N.I. Osokin, P.A. Chernous, A.L. Shnyparkov

SCIENCE STEERING AND EDITORIAL COMMITTEE

M. Schneebeli and J.B. Johnson (Chief Editors) E. Adams, C. Ancey, P. Bartelt, K. Birkland, A. Bozhinskii, R. Essery, M. Eglit, P. Gauer, A. Glazovskii, F. Nicot, M. Parlange, P. Satyawali, A. Sato, S. Sokratov, V. Stöckli.

INFORMATION ABOUT THE SYMPOSIUM MAY BE OBTAINED FROM:

International Glaciological Society, Scott Polar Research Institute,
Lensfield Rd, Cambridge CB2 1ER, UK.

Tel: +[44] (0)1223 355 974

Fax: +[44] (0)1223 354 931

Email: igsoc@igsoc.org

Web: <http://www.igsoc.org/symposia/>

Registration:

<http://www.onlinereg.ru/igs>

A local symposium web site <http://www.igs-moscow.org> provides additional information and can also be accessed from the symposium navigation page on the IGS website.

LOCAL INFORMATION

The symposium will take place in the building of the Presidium of the Russian Academy of Sciences, at the Moscow river bank close to the city centre (Leninskii prospect 32A), Moscow State University, and Gorky park.

Registration will be open in the foyer of symposium venue from 10:00 on Sunday 2 September and will be open each day from then until 7 September.

Ice Breaker will take place at the same location in the evening

There will be a map included in every symposium bag.

THEME

Snow is a complex and short-lived sediment with many effects on its surroundings. The emphasis will be on the internal processes and external interactions of snow with natural and man-made systems.

A better understanding of the interfacial properties of snow is required to define exchange mechanisms that drive chemical, ecological and hydrological processes in many regions of the world. The snow interface also determines how roads, buildings, ski-pistes and other man-made systems are designed and used. How atmospheric interactions contribute to the formation of snow avalanches and other cold-region natural hazards will be a further conference topic, as will be snow in motion and modelling snow under static and dynamic loadings, since these are key issues in engineering problems. We hope to bring together researchers working on the physical properties of snow with scientists working on ecological, hydrological and engineering problems in which the understanding snow processes plays a key role. Snow will be examined at all scales - from the microscale of snow structure to the megascale of remote sensing. The conference theme is to pay homage to the International Polar Year 2007–2008.

TOPICS: The suggested topics include:

1. Observing and modelling of snow at different scales:
 - a) Snow cover distribution and variability
 - b) Snow and its stratigraphy
 - c) Snow microstructure
 - d) Scaling issues
2. Snow as a component of climate and of landscape:
 - a) Snow-atmosphere interactions
 - b) Snow-ground interaction
 - c) Perennial snow cover in the Arctic, Antarctic and mountains
3. Snow physics and -chemistry
 - a) Snow metamorphism- heat and mass transfer
 - b) Snow chemistry and metamorphism
 - c) Heat and mass transfer in snow
 - d) Physical and mechanical properties of snows
4. Snow in motion
 - a) Snow avalanches
 - b) Snow drift
 - c) Snow tribology
5. Snow engineering
 - a) Avalanche engineering and warning
 - b) Architecture and constructions in snowy regions
6. Snow and biosphere
 - a) Vegetation
 - b) Wildlife

SESSIONS AND POSTERS

Oral sessions are all located in the building of the Presidium of the Russian Academy of Sciences. Posters will be displayed on the 6-st floor of Symposium Venue. Poster session itself starts at 14.00 on 06.09.07. Posters could be hang up from 12.00.

Oral presentations:

Oral presentations will be allowed 20 minutes *inclusive* of time for discussion. The session chairs will be asked to ensure that every presentation starts and finishes according to the schedule.

Presentations will be given in modern lecture theatres. An overhead projector, video and DVD players, and a PC running MS PowerPoint and Acrobat Reader 7.0 are available for presentations. Presentations should be uploaded from CD/DVD or USB memory stick/flash drive. **Please bring your presentation, on CD/DVD or USB memory stick/flash drive, to Sunday registration, as this is the ideal opportunity to upload presentations to the lecture theatre server.**

Poster presentations

Poster introductions will be allowed 2 minutes and *one overhead*. PowerPoint presentations etc. are discouraged due to the additional time required.

The mounting boards for posters are A0 portrait (84cm x 118.8 cm). Velcro will be provided.

PUBLICATION

Final papers, based on presentations at the Symposium, which have been submitted and accepted by the Editorial Board following review, will be published in English in the *Annals of Glaciology* (Vol. 49). Final, revised versions of papers must be submitted by **15 October 2007**. Timely publication of the *Annals of Glaciology* will depend upon strict adherence to deadlines.

LAST DATE FOR RECEIPT OF REVISED PAPERS: 15 October 2007

SOCIAL PROGRAMME

- 02.09.07 - Excursion to Novodevichy Convent
- 03.09.07 - Excursion to Diamond Fund
- 03.09.07 - Excursion to the Cathedral of Christ the Savior
- 04.09.07 - Excursion to The Kremlin
- 04.09.07 - Excursion to Pushkin Museum of Fine Arts
- 05.09.07 - City tour
- 07.09.07 - Excursion to Diamond Fund
- 07.09.07 - City tour

In addition to the mid-week excursion in Moscow, a 2-3 days post symposium tour to St. Petersburg will be organized. Details are provided at <http://www.onlinereg.ru/igs>

BANQUET

The IGS banquet will be held in the building of the Presidium of the Russian Academy of Sciences, in Fountain Hall. It will start on Thursday evening, at 19:00.

ACCOMPANYING PERSON'S PROGRAMME

The accompanying person's registration fee includes the icebreaker, the banquet, and the mid-week excursion. The travel agency managing registration will be able to assist accompanying persons to make further arrangements.

LOCATION AND WEATHER

The symposium will take place in the building of the Presidium of the Russian Academy of Sciences, at the Moscow river bank close to the city centre (Leninskii prospect 32A), Moscow State University, and Gorky park.

The long-term mean temperature in Moscow in September is +11°C, normally varying from +7 up to +16°C, though the absolute minimum of -5°C was recorded in 1976 and the absolute maximum of 29°C was recorded in 1992. In recent years the September temperature has been slightly higher than the long-term mean. Mean humidity is 79%. Normally half days in this month are rainy and most are cloudy or partly cloudy.

TRAVEL AND ACCOMMODATION

Citizens of most countries need a visa to enter Russia.

CREDIT CARDS

Almost all restaurants and shops readily accept Credit Cards. In Downtown and in every large shop, hotel etc there are accessible ATM's (Automated Teller Machines) where one can get cash from a Credit Card

IMPORTANT DATES

Deadline for partial refund	03 Aug 07
Registration	02 Sep 07
Conference starts	03 Sep 07
Post-symposium tour starts	08 Sep 07
Final revised papers due	15 Oct 07

A map showing the location of the Symposium Venue:



Also there will be a map included in every Symposium bag.



Moscow State University



The Presidium of Russian Academy of Science

INTERNATIONAL SYMPOSIUM ON SNOW SCIENCE

PROGRAMME OF SESSIONS

Please note that the programme may change if authors do not attend the Symposium.

Corrections will be posted outside the auditorium each day.

Numbers in the third column refer to the last three digits of the abstract numbers

MONDAY, 3 September 2007	
09:00	Registration
10:00	Opening of Symposium
	Professor Atsumu Ohmura, President of the IGS
	Academician Vladimir Kotlyakov, Chairman, Local Organizing Committee
	Martin Schneebeli, Annals Chief Editor
	Sergey Sokratov, co-Chairman, Local Organizing Committee

Refreshment

Chairman: Atsumu Ohmura			
Red room		Session 1: Plenary session	
11:00	A. N. Bozhinskiy	020	Modelling of snow avalanche dynamics: influence of model parameters
11:20	V.S. Kulibaba, M.E. Eglit	046	Numerical modeling of an avalanche impact against an obstacle with account of snow compressibility.
11:40	Wolfgang Payer Markus Trenker	019	Enhanced evaluation of snowfences using numerical simulation methods
12:00	Lunch		

Chairman:			
Red room		Session 2: Plenary session	
14:00	Gleb E. Glazirin	012	Evaluation of snow cover characteristics in mountains under climate change
14:20	Jerome B. Johnson H. P. Marshal M Schneebeli	148	A first snow classification using data from the SnowMicroPen (SMP)
14:40	Shiqiao ZHOU, Shichang KANG, Zhiyuan CONG	082	Microscale spatial variability of snowpack - Isotopic and chemical heterogeneity of a firn pack at Mt. Everest
15:00	Tobias Jonas Christoph Marty Manfred Stähli	102	The relationship between snow density, snow depth, and snow water equivalent in the Swiss Alps
15:20	Hendrik Huwald, John S. Selker, Scott W. Tyler, Marc C. Bracons, Marc B. Parlange	137	Air movement in the snow pack using carbon monoxide as a transport tracer
15:40	Refreshments		

Chairman:			
Red room		Session 3: Plenary session	
16:10	Martin Schneebeli Jerome B. Johnson Mark A. Hopkins	150	Geometrical localization of bonds in snow
16:30	Konosuke SUGIURA, Tetsuo OHATA	075	Large-scale characteristics of blowing snow sublimation distribution
16:50	Mark Christopher Fuller	163	Parameterization of Snow Cover Characteristics in a Discontinuous Snow Covered Region using Active Polarimetric Microwave Remote Sensing
17:10	B. M. Chiaia, P. Cornetti, B. Frigo	027	A Fracture Mechanic models for snow avalanche release
17:30	A. Pozdnoukhov, R.S. Purves, M. Kanevski	097	Applying Machine Learning Methods to Avalanche Forecasting

19:30 Meeting for members of IGS Council in Hotel Sputnik

TUESDAY, 4 SEPTEMBER 2007			
			Chairman:
Red room	Session 4a: Snow and biosphere/Snow in motion		
09:00	Petrushina Marina	101	Landscape dynamics in zones of avalanche activity
09:20	D. Brossard, M. Naaim F. Naaim	002	Snow resuspension by powder snow avalanches
09:40	Perry Bartelt Othmar Buser Katharina Platzer	138	The nature of steady state in finite-sized granular avalanches
10:00	Michael Bacher, M. Naaim, T. Faug, H. Bellot	024	Investigating snow rheology with a large-scale coaxial rheometer
10:20	Refreshments		

				Chairman:
Blue room	Session 4b: Observing and modelling of snow at different scales			
09:00	Glen E. Liston Christopher A. Hiemstra	005	Using High-Resolution Atmospheric and Snow Modeling Tools to Define Spatially-Variable Snow Distributions	
09:20	A.B. Shmakin, L. Holko, Z. Kostka, S.A. Sokratov, M.A. Petrov	008	Evaluation of primordial snow physics using a parameterization scheme suitable for incorporation into climate models	
09:40	E. Zege, I. Katsev, A. Malinka, A. Prikhach	013	New algorithm to retrieve the effective snow grain size and pollution amount from satellite data	
10:00	Ignacio López Moreno Stéphane Goyette Martin Beniston	022	Impacts of climate change on snow pack in the Pyrenean subalpine belt	
10:20	Refreshments			

				Chairman:
Red room	Session 5a: Snow in motion			
10:40	Yuri. Seliverstov, Tatiana Glazovskaya, Alexander Shnyparkov, Yana Vilchek, Ksenia Sergeeva	105	Estimation of influence of snow avalanches on activity of the person	
11:10	Bulat Mavlyudov	072	Water-snow streams on Spitsbergen glaciers	

11:30	Hiroyuki Hirashima Kouichi Nishimura Satoru Yamaguchi Osamu Abe	060	Avalanches on landslide slopes collapsed by Niigata Chuetsu earthquake
11:50	Stefano BAGGI, Jürg SCHWEIZER	095	Characteristics of wet snow avalanche activity: 20 years of observations from a high alpine valley (Dischma, Switzerland)
12:10	Lunch		

Chairman:			
Blue room	Session 5b: Observing and modelling of snow at different scales		
10:40	Tao CHE, Xin LI, Rui JIN, Richard ARMSTRONG, Tingjun ZHANG	033	Snow depth derived from passive microwave remote sensing data in China
11:10	Ruzica Dacic, Javier G. Corripio, Paolo Burlando	037	Annual mass balance estimates for Haut Glacier d'Arolla from 2000-2006 using a distributed mass balance model and DEM's
11:30	Katsushi Iwamoto Satoru Yamaguchi Sento Nakai Takeshi Sato	065	Snow-cover prediction using numerical weather-prediction and snow-cover models in Japan
11:50	Luca EGLI	068	Spatial variability of new snow amounts derived from a dense network of Alpine automatic stations
12:10	A. Prokop, M. Schirmer, M. Rub, M. Lehning, M. Stocker	123	A comparison of measurement methods: terrestrial laser scanning, tachymetry and snow probing, for the determination of the spatial snow depth distribution on slopes
12:30	Lunch		

Red room	Session 6 – Chairman:
14:00	Round table discussion: Snow science in International Polar Year

15:15	Refreshments
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Red room	Session 7 – Chairman:
15:45 - 17:00	Round table discussion: Snow cover of northern Eurasia in currently changing climate

WEDNESDAY, 5 SEPTEMBER 2007			
			Chairman:
Red room	Session 8a: Snow engineering		
09:00	I. Kamisi, H. Hirashima, S. Yamaguchi, A. Sato, S. Inoue, T. Fujii, Y. Nishita, M. Yamamoto, T. Machida, N. Hayakawa	071	Damage and Restoration of the Snow avalanche control Structures hit by the 2004 Mid Niigata Earthquake at Niigata, Japan
09:20	Marina Vikulina	099	Estimation and mapping of avalanche activity, hazard and risk of Khibiny Mountains (Russia)
09:40	Tsutomu Kokawa	161	Ice Shell as Seasonal Structure
10:00	J. Simaityte, D. Bocchiola, J. Augutis, R. Rosso	162	Use of a snowmelt model for weekly flood forecast for a major reservoir in Lithuania
10:20	Refreshments		

			Chairman:
Blue room	S 8b: Observing and modelling of snow at different scales		
09:00	J. Schweizer, A. Heilig, S. Bellaire, C. Fierz	086	Variations of snow cover properties at the snowpack, the slope and the basin scale
09:20	Vladimir Golubev, Marina Petrushina, Denis Frolov	092	Winter regime of temperature and precipitation as a factor of snow cover distribution and its stratigraphy
09:40	Weiping Li Shufen Sun Yong Luo Kun Xia	098	Simulations of snow process sensitivities to cloud and radiation
10:00	Rune Solberg R.B.Huseby H. Koren E. Malnes	106	A new approach fusing optical and SAR data for snow cover area mapping
10:20	Refreshments		

			Chairman:
Red room	Session 9a: Snow in motion		
10:40	I. Reiweger, J. Schweizer, J. Dual, H. J. Herrmann	132	Modelling snow failure with a fibre bundle model
11:10	Emanuela Bianchi Janettia, Elisa Gorni, Betty Sovilla, Daniele Bocchiolab	001	Regional snow depth estimates for avalanche calculations using a 2D model with snow entrainment
11:30	Dieter Issler and Peter Gauer	130	Exploring the significance of the fluidised flow regime for avalanche hazard mapping
11:50	Marc Christen Julia Kowalski Perry Bartelt	141	The snow avalanche module in RAMMS
12:10	Lunch		

Chairman:			
Blue room	Session 9b: Observing and modelling of snow at different scales		
10:40	Zhonghe PANG Zhongqin LI Yaning CHEN	112	Isotope composition of event-based precipitation samples near the Urumqi glacier no. 1 in eastern Tianshan
11:10	A. P. Dimri and A. Ganju	127	Impact of Subgrid Scale Scheme on Topography and Landuse for better regional scale simulation of meteorological variables over Western Himalayas
11:30	S.A. Sokratov, V.N. Golubev M.N. Petrushina K.G. Rubinshtein	135	Snow cover classification as representation of snow cover in large-scale climate models
11:50	Bernhard Hynek, Wolfgang Schöner	136	Spatial and temporal variability of snow density and snow temperature at high mountain sites (Austrian Alps)
12:10	Andrey N. Salamatin, Vladimir Ya. Lipenkov	023	Simple relations for the close-off depth and age in dry snow densification
12:30	Lunch		

13:30

Moscow State University: mini-SYMPOSIUM

THURSDAY, 6 SEPTEMBER 2007

Chairman:

Red room	Session 10a: Snow physics and -chemistry		
09:00	R K Aggarwal P S Negi	119	A new density-based thermal conductivity equation for snow
09:20	T. A. Neumann, M. R. Albert, R. Lomonaco, C. Engel, Z. Courville, F. Perron	050	Experimental determination of snow sublimation rate and stable isotopic exchange
09:40	Shichang KANG, Jie HUANG, Yanwei XU	051	Changing in ionic concentrations and $\delta^{18}\text{O}$ in the snowpack of Zhadang Glacier on Mt. Nyainqentanglha, Southern Tibetan Plateau
10:00	Li Zhongqin, Wenbin Wang, Feiteng Wang, Huilin Li	053	Characteristics of ionic concentration and $\delta^{18}\text{O}$ and their variability in dry season and wet season snow on Urumqi Glacier No. 1 in eastern Tianshan, China
10:20	Refreshments		

Chairman:

Red room	Session 11b: Snow physics and -chemistry		
10:40	Huilin LI, Zhongqin LI, Feiteng WANG, Wenbin WANG, Lin WANG	057	Depositional characteristics of NH_4^+ on Urumqi Glacier No. 1, eastern Tianshan, China
11:10	Satoru Yamaguchi Atsushi Sato	064	A study of the unsaturated hydraulic conductivity of snow
11:30	PK Satyawali, AK Singh, SK Dewali, Praveen Kumar, Vinod Kumar	113	Time dependence of snow microstructure and associated effective thermal conductivity
11:50	IGS Annual General Meeting		
12:30	Lunch		

Chairman:

Red Room		Poster Session 1. Short presentations	
14:00	Maria Ananicheva Nina Kononova	011	Comparative characteristics of air temperature, precipitation, snow conditions and glacier mass balance with circulation process in the Polar Ural and NE Siberia
14:02	E.A. Cherenkova, M.M. Chernavskaya	016	Climatic extreme combination of cold season over the Russian territory at the 20-th century last decades
14:04	Pedro Carrera-Gómez Marcos Valcárcel-Díaz V́ctor Valcárcel-Juárez Augusto Pérez-Alberti	017	Subnival pressures originated by the slow displacement of a seasonal, late-lying snowpatch, Ancares Sierra, northwestern Spain
14:06	Alexandr Krenke, Margarita Chernavskaya	018	Diagnostic approach to the evaluation of extreme snow storage according to the climate scenarios
14:08	Viktor Blagovechshensky, Olga Silina	026	The study of a snow cover quality for winter recreation in the Zailiyskiy Alatau range (Kazakhstan)
14:10	N.K. Kononova	034	Tendencies of fluctuation of the macrocirculation processes duration causing formation and preservation of a snow cover in different regions of Eastern Siberia
14:12	Douglas R. MacAYEAL, Katherine LEONARD, L.- Bruno TREMBLAY, Ronald ROSS, Jonathan E. THOM	042	Blowing Snow as a Source of Ice-Shelf Rift-Filling M'elange: Results of a 4-Month Study Using an Automated Camera System
14:14	N.V. Pimankina	044	Some features of winter season in kazakhstan at the end of xx century
14:16	Chen Yaning, Xu Changchun, Chen Yapeng	045	Snow cover response to climate change in the mountainous region of the Tarim River basin over the past four decades
14:18	Jose VERGARA	049	Heavy rainfall events associated with avalanches hazard in the Andes mountains
14:20	Kun XIA Weiping LI Yong LUO Shufen SUN	052	Sensitivities of Snow Processes to Atmospheric Conditions at Forest and Open Sites
14:22	Zhongqin Li Feiteng Wang Huilin Li Wenbin Wang	055	Characteristics of snow cover the Empty Cirque basin at the headwaters of Urumqi River, eastern Tianshan, China
14:24	Masaaki Ishizaka Satoru Yamaguchi	067	Zhongqin Li Feiteng Wang Huilin Li Wenbin Wang
14:26	He Yuanqing Li Zongxing	090	Changing features of the Glacier Hailuogou caused by climatic warming in recent 100 Years, Mt. Gongga, China

14:28	Yuri Seliverstov	091	Circulation conditions of avalanching
14:30	Jose VERGARA	109	Climate change and snowfall over the Chilean Andes mountain
14:32	Vladimir N. Golubev	118	The effect of intraannual temperature variations in metamorphism of perennial snow
14:34	Christine Wesche Reinhard Drews Wolfgang Rack Daniel Steinhage	140	Precise surface topography in Dronning Maud Land, Antarctica, based on ground based kinematic GPS measurements
14:36	Katherine C. Leonard Douglas R. MacAyeal Jonathan Thom L. Bruno Tremblay	142	Near threshold Antarctic snowdrift measurements: a sensor intercomparison study
14:38	N. Osokin, A. Sosnovsky	144	The influence of snow cover thermal resistance on soil freezing
14:40	Poliakov Sergey Ivanov Boris Kluchnikov Gennadii Martjanov Vjacheslav	031	Physic-mechanical properties of a snow cover of "Vostok" station runway
14:42	Hiroyuki Hirashima Kouichi Nishimura Toshiichi Kobayashi Kenji Kosugi	062	Snow road condition forecasting on a mountain highway in Japan
14:44	Pavel Chernous Yuri Fedorenko Nikolay Barashev Evgeny Mokrov	066	Seismicity-induced snow instability and avalanche release
14:46	J. B. Johnson A. Gelvin G. Schaefer	143	The use of an electronic snow water equivalent (SWE) sensor to reduce precipitation and SWE measurement errors
14:48	WANG Feiteng, LI Zhongqin, LI Huilin, WANG Wenbin, WANG Lin	058	Development of depth hoar and its effect on stable oxygen isotopic content in snow-firn stratigraphy on Urumqi Glacier No. 1, Eastern Tianshan, China
14:50	Sun, Shufen Shi Xueli	063	A simplified snow model on physical base
14:52	Masaaki Ishizaka Satoru Yamaguchi Atsushi Sato	069	Evaluations of feasibility of detecting weak layers caused by graupels and snow crystals in a snow pack with an automated monitoring system for identifying types of falling snows
14:54	A. Sosnovsky	074	Mathematical modelling of salt exchange at melting of salty firn.
14:56	Xi JIANG Ninglian WANG Jianchen PU Jianqiao HE	083	A Preliminary study of albedo on July 1st Glacier at Qilian Mountains in China during the summer ablation period
14:58	Sepp Kipfstuhl Johannes Freitag Sérgio H. Faria	087	Microstructure mapping of polar firn

15:00	J. Freitag, S. Kipfstuhl and S. H. Faria	088	3D- X-ray micro tomography and 2D- microstructure mapping of polar firn– a comprehensive picture by two complementary methods?
15:02	P K Satyawali, A K Singh	164	Dependence of thermal conductivity of snow on microstructure
15:04	Refreshments		

Chairman:			
Red Room	Poster Session 2. Short presentations		
15:30	Alexander Kashtanov	160	Definition area for artificial snowgenerating system using of GIS-analysis and two-dimensional thermo-mechanical finite element model
15:32	Pavel Groisman Richard W. Knight Vyacheslav N. Razuvaev Olga N. Bulygina	003	State of the ground: climatology and changes during the past 70 Years over northern Eurasia for a rarely used measure of snow cover and frozen land
15:34	Andrey Shmakin Dmitry Turkov Andrey Mikhailov	006	Testing a model of heat/water exchange in the snow taking into account its metamorphism
15:36	Lev Kitaev, Alexandr Krenke, Tatiana Titkova	010	Changes of snow storage over the Northern Eurasia in XXI century according to model scenarios of winter air temperatures and precipitation
15:38	J. Ignacio López-Moreno and J. Latron	021	Spatial heterogeneity in snowpack induced by forest canopy in a mixed beech-fir stand in the Pyrenees
15:40	Eleri Evans, Richard Essery and Richard Lucas	032	Changing snowcover and the net mass balance of Storglaciären, Northern Sweden
15:42	Douglas R. MacAYEAL, Katherine LEONARD, L.- Bruno TREMBLAY, Ronald ROSS, Jonathan E. THOM	042	Blowing Snow as a Source of Ice-Shelf Rift-Filling M'elange: Results of a 4-Month Study Using an Automated Camera System
15:44	Bogdan GADEK, Jan LESZKIEWICZ	047	Alpine snow cover influence on ground surface temperature in the zone of sporadic permafrost occurrence, Tatra Mts., Poland/Slovakia
15:46	Bogdan Gadek Stanislaw Kedzia	048	Metamorphosis of snow cover in the zone of sporadic permafrost occurrence in Tatra Mountains, Poland

15:48	Huilin LI, Zhongqin LI, Feiteng WANG, Wenbin WANG, Lin WANG	056	Primary study on heat regime in snowpack on Urumqi Glacier No. 1: a simple model to tracing heat storage in snowpack in non-melting season
15:50	WANG Feiteng, LI Zhongqin, LIU Baozhong, LI Huilin, WANG Wenbin, WANG Lin	059	Characteristics and evolution of snow stratigraphy in the percolation zone of the Glacier No.1 at Urumqi River, Eastern Tianshan, China
15:52	Pavel Chernous Alexander Bozhinsky Nikolay Barashev Yuri Fedorenko	061	Statistical structure of snow characteristics on mountain slopes and validity of snow stability evaluation
15:54	Alexey A. Ekaykin Vladimir Ya. Lipenkov Sergey V. Popov Yury A. Shibaev	079	Accumulation and properties of snow along the Vostok ice-flow line, East Antarctica
15:56	Elisabeth Troshkina Evgenij Mokrov Yuri Seliverstov Pavel Chernous	107	Dynamics of snowiness and avalanching in the north of Russia
15:58	Sveta Berezovskaya Glen E. Liston Douglas L. Kane	111	Snow cover distribution on Alaska's Arctic Slope: modelling under changing climate
16:00	Atsushi Sato Yasushi Kamata	114	Depth hoar growth observed by a time-lapse motion picture
16:02	Dan Singh, Amreek Singh and Ashwagosha Ganju	117	Site specific analog weather forecast system for Northwest Himalaya in India
16:04	LEI Jun FANG Zhi-fang	126	Comparison study on snow cover of the conventional meteorological observations and its variational tendency over Qinghai region
16:06	R.Mott, F. Faure, G. Koboltschnig, M. Lehning, H. Löwe, G. Michlmayr, A. Prokop, W. Schöner	131	Simulation of seasonal snow cover development and seasonal snow cover distribution for glaciated sites (Sonnblick, Austrian Alps) with the ALPINE3D model
16:08	Daniel Binder, Bernhard Hynek, Wolfgang Schöner	134	Analysis of snow cover by ground penetrating radar
16:10	O. V. Nagornov Yu. V. Kononov	139	The Gregoriev Ice Cap front flow according to 2D ice flow line model for various climatic scenarios in the future
16:12	Natalia M. ZVERKOVA, Tatiana E. KHROMOVA, Olga S.KRYUKOVA, Ludmila P. CHERNOVA	146	Changes in the distribution and volumes of Russian and Canadian snow storages in the last third of twentieth century
16:14	Yang Chengfang Zhou Bing Chen Youkuan	149	Mesoscale analysis of cold flow snowstorm
16:16	Peter Höller Reinhard Fromm Georg Leitinger	100	Snow forces on forest plants due to creep and glide
16:18	Tobias JONAS,1 Flavia GEIGER,1 Hannes JENNY	103	Mortality rates of the Alpine Chamois: the influence of snow-meteorological factors

16:20	Thierry Faug, Benoit Chanut, Mohamed Naaim and Bertrand Perrin	030	Influence of a dam on avalanche flows: studying the coupling between deposition upstream of the dam and a hydrodynamic-type wave
16:22	Takeshi Sato Kenji Kosugi Masaki Nemoto Shigeto Mochizuki	036	Wind tunnel measurements of snow surface erosion by drifting snow
16:24	Katsuhisa Kawashima Kaoru Izumi Tsutomu Iyobe Mototsugu Nozaki	054	Hydrological backgrounds that cause slushflow events in the temperate heavy-snow region of Japan
16:26	Masaki NEMOTO Takeshi SATO Kouichi NISHIMURA	085	Diffusivity of suspended grains in blowing snow
16:28	Tatiana Glazovskaya Sofja Gavrilova Dmitry Evteev Alla Sedova	096	Geoinformation technologies for snow avalanches studying. Well-known techniques in new interpretation
16:30	François-Xavier Cierco, Mohamed Naaim & Florence Naaim-Bouvet	108	Experimental study of particle concentration fluctuations in a turbulent steady flow
16:32	Dieter Issler, Alessia Errera, Stefano Priano, Hansueli Gubler, Bernardo Teufen4, and Bernhard Krummenacher	129	Inferences on flow mechanisms from snow avalanche deposits
16:34	POSTERS		

BANQUET in the Fountain Hall of the Presidium of the Russian Academy of Sciences

FRIDAY, 6 SEPTEMBER 2007**Chairman:**

Red room	Session 12: Snow physics and -chemistry		
09:00	Kate Sinclair and Shawn Marshall	125	Postdepositional Modification of Winter Snowpacks in the Canadian Rocky Mountains
09:20	Frédéric FLIN and Jean-Bruno BRZOSKA	128	The temperature gradient metamorphism: vapour diffusion model and validations using microtomographic images
09:40	Sergey A. Sokratov	133	Relating snow microstructure to physical properties of snow
10:00	Bernd Pinzer Martin Schneebeli	151	Thermal conductivity of metamorphosing snow: measurement and geometry based modelling
10:20	Refreshments		

Red room	Session 13: Snow as a component of climate and of landscape		
10:40	Lev Kitaev Nina Kononova	009	Seasonal variations of snow storage over Northern Eurasia: dependence from regional fluctuation of the atmospheric circulation
11:10	V. Blagovechshensky, O. Berman, I. Kondrashov	025	The Interannual Variability of Snowiness and Avalanche Activity in the Zailiyskiy Alatau Range (The Northern Tien Shan, Kazakhstan)
11:30	Vyacheslav. N. Razuvaev Olga N. Bulygina	070	Changes in snow cover characteristics over the Russian territory in recent decades
11:50	Yukari TAKEUCHI, Yasoichi ENDO, Shigeki MURAKAMI	084	High correlation between winter precipitation and air temperature in heavy-snowfall areas in Japan
12:10	V. Yu. Timofeev , D.G. Ardyukov	147	Snow-ice fields motion at Baikal Lake by geodimeter and GPS observation
12:30	Closing		

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