

**ACIA International Scientific Symposium on Climate Change in the Arctic
Nordica Hotel, Reykjavik, Iceland, 9 - 12 November, 2004**

Programme

Monday, 8 November

15:00 - 18:00	Early registration Nordica Hotel
18:00 - 19:30	Ice-breaker reception at City Hall (bus leaves Nordica Hotel 17:50)

Tuesday, 9 November (Day 1)

08:00 - 09:00	Registration Nordica Hotel
08:45 - 10:00	Welcoming words by the Minister of the Environment Opening statements by: - Yuri Tsaturov (Deputy Head, Roshydromet) - Representative of the Permanent Participants - Samantha Smith (Director, WWF Arctic Programme)
10:00 - 10:30	Arctic Climate Impact Assessment (ACIA): Introduction and official release of documents (Robert Corell) Chair: Pål Prestrud
10:30 - 11:00	Coffee break (and press conference)
11:00 - 12:30	Plenary Session 0: Presentation of the Main Results, Conclusions and Recommendations from the Arctic Climate Impact Assessment (ACIA) Chair: Pål Prestrud
12:30 - 13:30	Lunch
13:30 - 18:15 (15:30 - 16:00 coffee break)	Plenary Session 0 (continued): Presentation of the Main Results, Conclusions and Recommendations from the Arctic Climate Impact Assessment (ACIA) Chairs: Helgi Jensson and Kent Wohl (before break); Lars-Otto Reiersen and María Victoria Gunnarsdóttir (after break)

Wednesday, 10 November (Day 2)

08:30 - 12:30 (10:30 - 11:00 coffee break)	Session 1: Past, Present and Future Changes in Physical Systems Chairs: John Walsh and Inger Hanssen-Bauer	Session 2: Past, Present and Future Changes in Biological Systems Chairs: Terry Callaghan and Frederick Wrona
12:30 - 13:30	Lunch	
13:30 - 16:00 (15:00 - 15:20 coffee break)	Session 3: Possible Feedbacks on the Global Climate System Chairs: Gunter Weller and Vladimir Kattsov	Session 4: Impacts on Wildlife and Conservation / Policy issues Chairs: Michael Usher and David Klein
16:00 - 17:45 (16:00 - 16:45 short oral introductions to posters; 16:45 - 17:45 poster viewing)	Poster Session A on topics from sessions 1, 5 and 2 (posters are on view throughout the symposium) Chairs: Glenn Juday and Marybeth Long Martello	Mini-panel: Achieving Environmental Protection in the Arctic: Is there Common Ground? Panelists: David Klein, Michael Usher, Samantha Smith, Chris Paci
Evening (19:30 -)	Conference Dinner at Perlan	

Thursday, 11 November (Day 3)

08:30 - 12:30 (10:30 - 11:00 coffee break)	Session 5: Past, Present and Future Changes in Physical Systems (continued) Chairs: Harald Loeng and Gordon McBean	Session 6: Impacts on Human Activities Chairs: Shari Fox Gearheard and Chris Furgal
12:30 - 13:30	Lunch	
13:30 - 16:00 (15:00 - 15:20 coffee break)	Session 7: Arctic-Global Connections and Assessing Impacts of Change Chairs: Grete Hovelsrud-Broda and Robert Corell	Session 8: Past, Present and Future Changes in Social Systems Chairs: Jan-Idar Solbakken and John Crump
16:00 - 17:45 (16:00 - 16:45 short oral introductions to posters; 16:45 - 17:45 poster viewing)	Poster Session B on topics from sessions 3, 4, 6, 7 and 8 (posters are on view throughout the symposium) Chair: Arne Instanes and Vitaly Kimstach	Mini-panel: Indigenous Perspectives on Climate Change in the Arctic Panelists: Pavel Sulyandziga, Geir Tommy Pedersen, Ed Schultz

Friday, 12 November (Day 4)

08:30 - 10:30	Plenary Session 9: Science Panel - Looking to the Future Conveners: Lars-Otto Reiersen (AMAP) and Patricia Anderson (ACIA Secretariat) Panelists and Keynote Speakers: Bob Corell (IASC); Cynan Ellis-Evans (BAS/IPY); Alexander Klepikov (AARI), Kristjan Kristjansson (IASC); Mike MacCracken (ACIA); Peter Schlosser (US SEARCH); Jan-Idar Solbakken (ACIA Permanent Participants liason); Kent Wohl (CAFF)
10:00 - 10:30	Coffee break
10:30 - 12:30	Stakeholder Panel - Looking to the Future Convener: Pål Prestrud (ACIA Vice-Chair) Panelists: Robert Corell (ACIA Chair); Alister Doyle (Reuters); Siv Fridleifsdottir (Member of the Icelandic Parliament and former Minister for the Environment); Jennifer Morgan (Director, WWF Climate Change Programme); Geir Tommy Pedersen (President, Saami Council); Klaus Töpfer (United Nations Environment Programme)
12:30 - 13:00	Summary of meeting results by the symposium conveners
13:00	End of meeting* Post-symposium press conference
14:00	Local excursion, leisure time, etc.

* Note: Lunch on Friday is not included in the Symposium arrangement

List of Presentations

Session/ Paper	Title – <i>Author(s)</i>	Presented by*
Plenary Session 0: Tuesday 9 November		
Oral Presentations: Main Results, Conclusions and Recommendations from the Arctic Climate Impact Assessment (ACIA)		
0.1	The Arctic Climate: – Past and Present (ACIA Chapter 2) <i>G.A. McBean, G. Alekseev, D. Chen, E. Førland, J. Fyfe, P.Y. Groisman, R. King, H. Melling, R. Vose and P.H. Whitfield</i>	G.A. McBean
0.2	Indigenous Perspectives on the Changing Arctic (ACIA Chapter 3) <i>Henry P. Huntington and Shari Fox (Lead authors)</i>	Shari Fox Gearheard
0.3	Future Changes of Climate: Modelling and Scenarios for the Arctic Region (ACIA Chapter 4) <i>Vladimir Kattsov and Erland Källén (Lead authors)</i>	Vladimir Kattsov
0.4	Ozone and Ultraviolet Radiation (ACIA Chapter 5) <i>Elizabeth Weatherhead, Aapo Tanskanen and Amy Stevermer (Lead authors)</i>	Elizabeth Weatherhead
0.5	Cryospheric and Hydrologic Variability (ACIA Chapter 6) <i>John E. Walsh (Lead author)</i>	John E. Walsh
0.6	Climate Change and UV-B Impacts on Arctic Tundra and Polar Desert Ecosystems (ACIA Chapter 7) <i>Terry V. Callaghan, Lars Olof Björn, Yuri Chernov, Terry Chapin, Torben R. Christensen, Brian Huntley, Rolf A. Ims, Margareta Johansson, Dyanna Jolly, Sven Jonasson, Nadya Matveyeva, Nicolai Panikov, Walter Oechel, Gus Shaver, Sibyll Schaphoff, Stephen Stach and Christoph Zöckler</i>	Terry V. Callaghan
0.7	Freshwater Ecosystems (ACIA Chapter 8) <i>Fred J. Wrona, Terry D. Prowse and Jim D. Reist (Lead authors)</i>	Fred J. Wrona
0.8	Marine Systems: The Impact of Climate Change (ACIA Chapter 9) <i>Harald Loeng (Lead author)</i>	Harald Loeng
0.9	Principles of Conserving the Arctic's Biodiversity (ACIA Chapter 10) <i>Michael B. Usher (Lead author)</i>	Michael B. Usher
0.10	Management and Conservation of Wildlife in a Changing Arctic (ACIA Chapter 11) <i>David R. Klein (Lead author)</i>	David R. Klein
0.11	Hunting, Herding, Fishing and Gathering: Indigenous Peoples and Renewable Resource Use in the Arctic (ACIA Chapter 12) <i>Mark Nuttall (Lead author)</i>	Mark Nuttall
0.12	Fisheries (ACIA Chapter 13) <i>Hjálmar Vilhjálmsson and Alf Håkon Hoel (Lead authors)</i>	Hjálmar Vilhjálmsson
0.13	Boreal Forest and Agricultural Responses to Climate Warming (ACIA Chapter 14) <i>Glenn Patrick Juday, Valerie A. Barber, Eugene Vaganov and Steven Sparrow</i>	Glenn Patrick Juday
0.14	Climate Change and Health in the Circumpolar North: Findings from the Arctic Climate Impact Assessment (ACIA Chapter 15) <i>James Berner and Chris Furgal</i>	Chris Furgal, James Berner
0.15	Climate Change and Arctic Infrastructure (ACIA Chapter 16) <i>Arne Instanes (Lead author)</i>	Arne Instanes
0.16	Climate Change in the Context of Multiple Stressors and Resilience (ACIA Chapter 17) <i>James J. McCarthy and Marybeth Long Martello (Lead authors)</i>	Marybeth Long Martello
0.17	A Brief Summary and Synthesis of the Arctic Climate Impact Assessment (ACIA) (ACIA Chapter 18) <i>Gunter Weller (Lead author)</i>	Gunter Weller

Session 1: Wednesday 10 November

Oral Presentations: Past, Present and Future Changes in Physical Systems

1.1	The Changing Arctic Climate: Historical Observations and Recent Explanations <i>James E. Overland</i>	James E. Overland
1.2	Spatial and Temporal Mapping of Temperature Variability in Iceland since the 1870's <i>Halldór Björnsson and Trausti Jónsson</i>	Halldór Björnsson
1.3	Joint Roles of the Panarctic Shelf Break and Retreating Summer Ice in Arctic Warming <i>Eddy Carmack, William Williams, Fiona McLaughlin and David Chapman</i>	Harald Loeng
1.4	The Ob River: Is there Arctic Inflow Increase? <i>L. Agafonov</i>	L. Agafonov
1.5	Linkage between Sea-ice Distribution and Snow-precipitation may considerably affect Terrestrial Ecosystems in Future High Arctic Climates <i>Jørgen Hinkler, Birger U. Hansen, Mikkel P. Tamstorf and Hans Meltofte</i>	Jørgen Hinkler
1.6	Climate Records from Temperate Ice Caps in Iceland: Pilot Studies on Hofsjökull <i>Th. Thorsteinsson, O. Sigurdsson, T. Jóhannesson, G. Larsen and H. Oerter</i>	Th. Thorsteinsson
1.7	Thermokarst Development in a Changing Climate <i>Larry D. Hinzman, Horacio A. Toniolo, Kenji Yoshikawa, Jeremy B. Jones</i>	Larry D. Hinzman
1.8	A Climatic Perspective on Observed Arctic Permafrost Changes <i>Ole Humlum</i>	Ole Humlum
1.9	Response of Glaciers in Iceland to Climate Change <i>Tómas Jóhannesson, Guðfinna Aðalgeirsdóttir, Helgi Björnsson, Finnur Pálsson and Oddur Sigurðsson</i>	Tómas Jóhannesson
1.10	Establishment of Decadal-scale UV Climatologies for High-latitude Ecosystems Studies <i>Georg Hansen, Ola Engelsen, Kåre Edvardsen, Jean Verdebout, Ralf Meerkötter, Luca Bugliaro and Angel Borja</i>	Georg Hansen

Session 2: Wednesday 10 November

Oral Presentations: Past, Present and Future Changes in Biological Systems

2.1	Marine Ecosystem Responses to the Warming of 1920s and 1930s <i>Kenneth F. Drinkwater</i>	Kenneth F. Drinkwater
2.2	Biological Implications of Arctic Change <i>Jackie M. Grebmeier and Lee W. Cooper</i>	Jackie M. Grebmeier
2.3	Ecosystem Changes in High Arctic Marine Ecosystems <i>Søren Rysgaard</i>	Søren Rysgaard
2.4	Anadromous Arctic Fishes and Impacts of Climate Change <i>Jacquelynne R. King and Richard J. Beamish</i>	Jacquelynne R. King
2.5	Char as a Model for Assessing Climate Change Impacts on Arctic Fishery Resources <i>James D. Reist, Michael Power and J. Brian Dempson</i>	James D. Reist
2.6	Trend Coincidence of Pink Salmon Catch Dynamics among the Odd-years and Even-years Populations as an Evidence of Large-scale Physical Factors Effect <i>Vladimir I. Radchenko</i>	Vladimir I. Radchenko
2.7	Palaeolimnological Evidence for Recent Climate Change in Lakes from the Northern Urals, Arctic Russia <i>Nadia Solovieva, Vivienne J. Jones, Larisa Nazarova, Stephen J. Brooks, H. J. B. Birks, John-Arvid Grytnes, Peter G. Appleby, Tommi Kauppila, Boris Kondratenok, Ingemar Renberg, and Vasily Ponomarev</i>	Nadia Solovieva
2.8	Climate, Snow and Hydrology in Tundra Ecosystems: Patterns, Processes, Feedbacks and Scaling Issues <i>Bob Baxter, Brian Huntley, Richard J Harding, Terry V. Callaghan, Philip A Wookey, Andrew M Fox, Colin R Lloyd, David R Sayer, James G Cook and Andrew J Wiltshire</i>	Bob Baxter
2.9	Responses of Tundra Ecosystems to Environmental Change: Observational and Experimental Results from the International Tundra Experiment (ITEX) <i>Greg H.R. Henry</i>	Ulf Molau

2.10	Climatogenic Dynamics of Biota within the Current Distributions of Organisms and their Communities in the Arctic and their Implications for Response to Climate Change <i>Nadezhda V. Matveyeva</i>	Nadezhda V. Matveyeva
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Session 3: Wednesday 10 November

Oral Presentations: Possible Feedbacks on the Global Climate System

3.1	Integrated Carbon Balance Studies for European Arctic Catchments <i>Peter Kuhry, Lauri Arvola, Kapitolina Bobkova, Juha Heikkinen, Eeva Huitu, Pertti Martikainen, Galina Mazhitova, Kari Mikkola and Tarmo Virtanen</i>	Peter Kuhry
3.2	Effects on the Carbon Balance of High-Arctic Tundra: Entire Growing Season Warming Versus Heat Wave Exposure <i>Fleur Marchand, Ivan Nijs and Louis Beyens</i>	Fleur Marchand
3.3	Land Surface Radiation Budget Response to Global Warming: Case Study for European and Asian Radiometric Network <i>O.M. Pokrovsky, E.L. Makhotkina, I.O. Pokrovsky, L.M. Ryabova</i>	O.M. Pokrovsky
3.4	Possible Feedbacks on Arctic Cloud Formation: Can the Arctic Biosphere Affect the Melting of the Ice? <i>Caroline Leck and Michael Tjernström</i>	Caroline Leck
3.5	How Good is the Surface Energy Balance in Current Atmospheric Climate Models? <i>Michael Tjernström, Mark Žagar and Gunilla Svensson</i>	Michael Tjernström

Session 4: Wednesday 10 November

Oral Presentations: Impacts on Wildlife and Conservation / Policy issues

4.1	Climate Change, Sea Ice Conditions, and Effects on Marine Birds in Arctic Canada <i>H. Grant Gilchrist, Anthony J. Gaston and Mark J. Mallory</i>	H. Grant Gilchrist
4.2	Climate Change and Goose Grazing on Svalbard's Tundra <i>Elisabeth Cooper, Ingibjörg Svala Jónsdóttir, Dominique Chaput, Dries Kuijper, Maarten Loonen, Astrid Pahud, Sofie Sjögersten, Richard Ubels, René van der Wal, Sarah Woodin and Ad Huiskes</i>	Elisabeth Cooper
4.3	Vulnerability of Arctic Shorebirds to Climate Variability and Change <i>Hans Meltofte, Theunis Piersma, Hugh Boyd, Brian McCaffery, Viktor V. Golovnyuk, Katherine Graham, R.I.G. Morrison, Erica Nol, Doug Schamal, Hans Schekkerman, Mikhail Y. Soloviev, Pavel S. Tomkovich, Diane Tracy, Ingrid Tulp and Liv Wennerberg</i>	Hans Meltofte
4.4	Modeling the Response of Parasites in Arctic and Sub-arctic Ungulates to Climate Change <i>Susan Kutz, Eric Hoberg and Lydden Polley</i>	Susan Kutz
4.5	Mercury in the Arctic Ecosystem: Understanding Pathways of Contamination through Atmosphere and Biosphere <i>Noelle Eckley Selin, Daniel J. Jacob and Rokjin J. Park</i>	Noelle Eckley Selin
4.6	Biodiversity of Arctic Sea Ice Biota and Possible Effects of Oil Spills during Oil Transportation <i>Johanna Ikävalko and Birte Gerdes</i>	Johanna Ikävalko

Session 5: Thursday 11 November

Oral Presentations: Past, Present and Future Changes in Physical Systems (cont.)

5.1	Why Do Global Climate Models Project So Different Climates for the Arctic? <i>Gunilla Svensson and Thorsten Mauritsen</i>	Gunilla Svensson
5.2	The Sensitivity of Arctic Climate Projections to Natural Variability <i>Asgeir Sorteberg, Helge Drange, Tore Furevik and Nils Gunnar Kvamstø</i>	Asgeir Sorteberg
5.3	Long-term Climate Stability in the Québec-Labrador (Canada) Region: Evidence from Paleolimnological Studies <i>Reinhard Pienitz, Émilie Saulnier-Talbot, Marie-Andrée Fallu, Tamsin Laing, Karin Ponader, Kerrie Swadling and Ian Walker</i>	Reinhard Pienitz

5.4	Climate Change and Hydrology of the Large Siberian Rivers <i>Vitaly Kimstach, Lars-Otto Reiersen and Vladimir Grouzinov</i>	Vitaly Kimstach
5.5	Variations in Arctic Sea-Ice <i>Ignatius G. Rigor and John M. Wallace</i>	Ignatius G. Rigor
5.6	Polynya Variability in Arctic Shelf Areas as Inferred from Passive Microwave Imagery and Numerical Modeling <i>S. Kern and I. Harms</i>	S. Kern
5.7	On the Recent Time History and Forcing of the Inflow of Atlantic Water to the Arctic Mediterranean <i>Jan Even Ø. Nilsen, Hjálmar Hátún, Anne Britt Sandø, Ingo Bethke, Olivier Laurantin, Yongqi Gao, Helge Drange and Tore Furevik</i>	Jan Even Ø. Nilsen
5.8	Sensitivity to Climate Change in the Canadian High Arctic: Ellesmere Island Lakes, Fiords and Ice Shelf Ecosystems <i>Warwick F. Vincent, Patrick Van Hove, Derek R. Mueller and Martin O. Jeffries</i>	Warwick F. Vincent
5.9	Multivariate Statistical Analysis of Icelandic River Flow Series and Variability in Atmospheric Circulation <i>Jóna Finndís Jónsdóttir, Cintia B. Uvo and Árni Snorrason</i>	Jóna Finndís Jónsdóttir
5.10	Empirically Based Modelling of Variability and Trends in Local Snow Conditions <i>Inger Hanssen-Bauer</i>	Inger Hanssen-Bauer

Session 6: Thursday 11 November

Oral Presentations: Impacts on Human Activities

6.1	Variations in Climatic Constraints on Living Conditions in the Nordic Arctic, 1900-2050 <i>Eirik J. Førland and Inger Hanssen-Bauer</i>	Eirik J. Førland
6.2	Climate, Water and Renewable Energy in the Nordic Countries <i>Árni Snorrason and Jóna Finndís Jónsdóttir</i>	Árni Snorrason
6.3	Changing Marine Access in the Arctic Ocean - A Strategic View for the 21 st Century <i>Lawson W. Brigham</i>	Lawson W. Brigham
6.4	Have Recent Biological Changes in Newfoundland Capelin (<i>Mallotus villosus</i>) occurred because of Physical Changes in the Arctic? <i>J. E. Carscadden, B. S. Nakashima and F. K. Mowbray</i>	J. E. Carscadden
6.5	Climate Change and Arctic Fisheries: Assessing the Economic and Social Impact in Iceland <i>Ragnar Arnason, Sveinn Agnarsson</i>	Ragnar Arnason
6.6	Scenarios of Social Response to Climate Change Impacts on Two Subsistence Resources in Interior Alaska: An Analysis of Resilience and Vulnerability <i>Chanda Meek, Alison Meadow, Anna Godduhn and Sherri Wall</i>	Chanda Meek
6.7	Vulnerability Assessment: The Role of Indigenous and Local Communities and Place-Based Assessments in Contributing to a Sustainable Arctic Future <i>David N. Roddick</i>	David N. Roddick
6.8	Indigenous Perspectives on Environmental Change in the Canadian Arctic: Community-based Vulnerability Assessment <i>Barry Smit, Johanna Wandel and James Ford</i>	Barry Smit
6.9	Physical, Biological and Human Coupling in a Traditional Ecological Knowledge-based Climate Change Model - Theory, Formalism and Interpretation <i>Raphaela Stimmelmayer</i>	Raphaela Stimmelmayer
6.10	Never-ending Perfect Circle of Seasons – SnowChange, Indigenous Knowledge and Education for a Post-Colonial Arctic <i>Elina Helander and Tero M. Mustonen (SnowChange Project, Finland)</i>	Tero M. Mustonen
6.11	On the Effect of Sea Ice on Icelanders' Lives from 1850 to the Present Day: Combining Historical Analysis and Remote Sensing through Geographical Information Systems <i>Ingibjörg Jónsdóttir</i>	Ingibjörg Jónsdóttir

Session 7: Thursday 11 November

Oral Presentations: Arctic-Global Connections and Assessing Impacts of Change

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| 7.1 | ArcticNet: A Newly Funded Network of Centres of Excellence of Canada to Conduct the Integrated Natural/ Human health/Social study of the Changing Coastal Canadian Arctic
<i>Louis Fortier and Martin Fortier</i> | Martin Fortier |
| 7.2 | The National Oceanic and Atmospheric Administration (NOAA) Arctic Climate Change Studies: A U.S. Contribution to Arctic Council Response to the ACIA
<i>John Calder, Taneil Uttal, James Overland, Jackie Richter-Menge, Ignatius Rigor and Kathleen Crane</i> | John Calder |
| 7.3 | Assessing Climate Change Vulnerabilities in the Barents Region through Integrated Regional Impact Studies
<i>Manfred A. Lange (and the BALANCE Consortium)</i> | Manfred A. Lange |
| 7.4 | Kola Peninsula Climate Change in the Kola Saami Traditional Ecological Knowledge and Hydrometeorological Data
<i>Sergey Zavalko, Alina Pisareva and Kyrill Zavalko</i> | Sergey Zavalko |
| 7.5 | Observational Evidence on Changes in the Thermohaline Coupling between the Arctic Mediterranean and the World Ocean
<i>Bogi Hansen, Svein Østerhus and William R. Turrell</i> | Bogi Hansen |
| 7.6 | Assessing Vulnerabilities: A New Strategy for the Arctic
<i>Bull, K.S., Corell, R.W., Eira, I.G., Eira, N.I., Eriksen, S., Hanssen-Bauer, I., Hovelsrud-Broda, G.K., Mathiesen, S.D., McCarthy, J.J., Long Martello, M., Nellemann, C., Oskal, N., Polsky, C., Reinert, E., Storeheier, P.V., Tyler, N.J.C. and Turi, J.M.</i> | K.S Bull |
| 7.7 | Long-term Observations of Cloudiness, Radiation and Aerosols with Permanent Atmospheric Observatories
<i>Taneil Uttal, Shelby Frisch, Xuanji Wang and Jeffrey Key</i> | Taneil Uttal |

Session 8: Thursday 11 November

Oral Presentations: Past, Present and Future Changes in Social Systems

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| 8.1 | Putting the Human Face on Climate Change through Community Workshops: Inuit Knowledge, Partnerships, and Research
<i>Chris Furgal, Scot Nickels, Mark Buell (and communities of the regions of Labrador, Nunavik, Nunavut and the Inuvialuit Settlement Region)</i> | Chris Furgal |
| 8.2 | “It’s Not That Simple”: Bringing Together Inuit, Iñupiat and Scientists to Understand the Complexities of Changing Sea Ice and Its Uses in the North American Arctic
<i>Shari Fox Gearheard, Geela Tigullaraq and Ilkoo Angutikjuak</i> | Shari Fox Gearheard |
| 8.3 | Climate Change Impacts and Athabaskan Peoples: the Denendeh Environmental Working Group, an Update on Activities.
<i>C.D. James Paci</i> | C.D. James Paci |
| 8.4 | Vulnerability and Adaptive Capacity in Forestry, Fishing and Reindeer-Herding Systems in Northern Europe
<i>E. Carina H. Keskitalo</i> | E. Carina H. Keskitalo |
| 8.5 | Harnessing Technologies for Sustainable Reindeer Husbandry in the Arctic
<i>Nancy G. Maynard, Boris Yurchak, Johan Mathis Turi and Svein Mathiesen</i> | Nancy G. Maynard |
| 8.6 | Local and Traditional Knowledge in Assessing Climate Changes impacts on Sustainable Development: Russian and Circumpolar Perspectives
<i>Tatiana K. Vlassova</i> | Tatiana K. Vlassova |
| 8.7 | Impacts of Climate Change on the Health of Northern Indigenous People
<i>Keith Maguire and C. Dickson</i> | K. Maguire |

Plenary Session 9: Friday 12 November

Oral Presentations: Looking to the Future (Keynote Speakers)

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| 9.1 | Coordinated Studies of the Russian Arctic During the International Polar Year 2007/2008
<i>A.V. Klepikov, A. I. Danilov, V. G. Dmitriev and M. Yu. Moskalevsky</i> | A.V. Klepikov |
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Poster Session A: Wednesday 10 November

Poster Presentations: Past, Present and Future Changes in Physical Systems

A1.1 [#]	The Interannual Variability of Arctic Ocean Temperature and Salinity Fields for Fifties-Eighties Derived by Assimilation of the Irregular Spaced Data <i>Oleg M. Pokrovsky and Leonid A. Timokhov</i>	Oleg M. Pokrovsky
A1.2 [#]	An Updated Estimation of Ground Ice Volume for Richard's Island in the Mackenzie Delta and an Assessment of Potential Thaw Sensitivity to Climate Change <i>Gregory P. De Pascale, Hugues Lantuit and Wayne H. Pollard</i>	Hugues Lantuit
A1.3 [#]	Why Is the Arctic Warming? Do Changes in the Mid-latitude Circulation Have Any Impact on the Arctic Surface Air Temperature Trend? <i>Rune G. Graversen, Michael Tjernström and Erland Källén</i>	Rune G. Graversen
A1.4 [#]	The Nordic Seas: Observed Changes <i>Svein Østerhus and Tore Furevik</i>	Svein Østerhus
A1.5	Fluctuations in the East Greenland Current during the Medieval Warm Period and Little Ice Age <i>Karin G. Jensen, Antoon Kuijpers and Simon R. Troelstra</i>	Antoon Kuijpers
A1.6	Determining Sea Ice Extent from Ice Core Records <i>Jocelyne C. Bourgeois, Roy M. Koerner and Bea T. Alt</i>	Jocelyne C. Bourgeois
A1.7 [#]	Russian Arctic Meteorological Dataset for ACIA Program Development <i>V.E. Lagun</i>	V.E. Lagun
A1.8	The Analysis of Climatic Changes of Southwest Yakutia for the Centenary Period <i>Olga Yu. Rozhkova</i>	Olga Yu. Rozhkova
A1.9	History of Sea Ice in Icelandic waters <i>Thor Edward Jakobsson</i>	Thor Edward Jakobsson

Poster Presentations: Past, Present and Future Changes in Biological Systems

A2.1	Structure of the Plant Communities of Spruce Open Woodland of Different Ages on the Taiga-Tundra Boundary in the East European Part of Russia <i>Adrian E. Katenin</i>	Adrian E. Katenin
A2.2 [#]	Environmental Changes in the North Atlantic Region: SCANNET as a Collaborative Approach for Documenting, Understanding and Predicting Changes <i>T.V. Callaghan, M. Johansson, O.W. Heal, N. R. Sælthun, L.J. Barkved, N. Bayfield, O. Brandt, R. Brooker, H.H. Christiansen, M. Forchhammer, T.T. Høye, O. Humlum, A. Järvinen, C. Jonasson, J. Kohler, B. Magnusson, H. Meltofte, L. Mortensen, S. Neuvonen, I. Pearce, M. Rasch, L. Turner, B. Hasholt, E. Huhta, E. Leskinen, N. Nielsen and P. Siikamäki</i>	T.V. Callaghan
A2.3	UV Irradiation of Tundra Soil Microorganisms Varies with Plant Cover <i>Kevin A. Hughes, Kerstin Scherer, Trond Svenøe, Petra Rettberg, Gerda Horneck and Pete Convey</i>	Kevin A. Hughes
A2.4	The Effect of Climatic Change on Growth of Sub-arctic Birch Woodlands in Iceland <i>Thorbergur H. Jónsson</i>	Thorbergur H. Jónsson
A2.5	The Distribution Areas of Mountain Birch in the North Atlantic Region May Respond Differently to Climatic Warming than Cooling of the Climates <i>Thorbergur H. Jónsson</i>	Thorbergur H. Jónsson
A2.6 [#]	The Bering Sea is Shifting from an Arctic Ecosystem to a Subarctic Ecosystem <i>James E. Overland, Jennifer Boldt, Phyllis J. Stabeno and S. Lyn McNutt</i>	James E. Overland
A2.7 [#]	Bioclimatic mapping in Finnmark, Northern Norway, using Landsat TM/ETM+ land cover data <i>Bernt Johansen, Stein Rune Karlsen, and Arve Elvebakk</i>	Stein Rune Karlsen
A2.8 [#]	Life History Traits of Arctic Charr and Environmental Factors: Local Variability and Latitudinal Gradients <i>Hilmar J. Malmquist</i>	Hilmar J. Malmquist
A2.9	The Problem of Study and Preservation of Bioresources of Reserves in the Russian Far East <i>Ludmila A. Melnikova</i>	Ludmila A. Melnikova

A2.10 [#]	Using Integrated Management and GIS Analysis to Understand Impacts and Adaptation to Climate Change for Fish and Marine Mammals in the Canadian Beaufort Sea <i>Magdalena A K Muir and Jennifer A Shea</i>	Magdalena A K Muir
A2.11 [#]	Using Migration Counts from Eastern Canada to Assess Productivity of Arctic-breeding Shorebirds in Relation to Climate <i>R. I. Guy Morrison</i>	R. I. Guy Morrison
A2.12	Long-Term UV-B Exposure Study on Peatland Ecosystem in Northern Finland <i>Mörsky, S., Haapala, J., Rinnan, R., Saarnio, S., Silvola, J., Martikainen, P.J. and Holopainen, T.</i>	S. Mörsky
A2.13 [#]	The Influence of UVB Radiation on Lake Ecosystems of the Canadian High Arctic <i>Sofia L. Perin and David R.S. Lean</i>	Sofia L. Perin
A2.14 [#]	Intense Feeding of <i>Calanus hyperboreus</i> on Arctic Autumn Bloom Propagated by a Record Minimum Sea Ice Extent in 2004 <i>Stig Falk-Petersen, Anette Wold, Anders Røstad, Eva Leu, Henrik Nygård, Bjørn Gulliksen, Jørgen Berge, Essi Keskinen, Jonas Gjaldbæk Thormar and Slawomir Kwasniewski</i>	Stig Falk-Petersen
A2.15 [#]	Sustainable Use of Mountain Birch Forests in a Changed Climate <i>Oddvar Skre, Kari M. Laine, Frans E. Wielgolaski, Staffan Karlsson, Seppo Neuvonen, Alison Hester, Dietbert Thannheiser, Hans Tømmervik and Soffia Arnthorsdottir</i>	Kari M. Laine
A2.16	UV Radiation and Photoprotective Pigments in Scots Pine Saplings (<i>Pinus sylvestris</i> L.) <i>Minna Turunen, Françoise Martz, Marja-Liisa Sutinen, Kirsti Derome, Satu Huttunen, Gunnar Wingsle, Riitta Julkunen-Tiitto, Kaisa Lakkala</i>	Minna Turunen
A2.17	UV-B Radiation and Timberline Plants <i>Minna Turunen and Kirsi Latola</i>	Minna Turunen
A2.18	Influence of Climatic Factors on the Nitrogen Fixation Activity in High Arctic Vegetation <i>Matthias Zielke, Rolf A. Olsen, and Bjørn Solheim</i>	Matthias Zielke
A2.19	Climate-Driven Regime Shifts in Arctic Lake Ecosystems <i>Atte Korhola, Sanna Sorvari, John P. Smol, Alexander P. Wolfe, H. John B. Birks, Marianne S.V. Douglas, Vivienne J. Jones, Reinhard Pienitz, Kathleen Rühland, Dermot Antoniades, Stephen J. Brooks, Marie-Andrée Fallu, Mike Hughes, Bronwyn Keatley, Tamsin Laing, Neal Michelutti, Larisa Nazarova, Marjut Nyman, Andrew M. Paterson, Bianca Perren, Roberto Quinlan, Milla Rautio, Émilie Saulnier-Talbot, Susanna Siitonen, Nadia Solovieva and Jan Weckström</i>	Atte Korhola
A2.20	Climate Change and Tree Line Dynamics in Northwest Siberia: Tree Ring Reconstruction for the Last 7000 Years <i>Rashit M. Hantemirov and Alexander Y. Surkov</i>	L. Agafonov
A2.21	The Tundra-Taiga Interface <i>Terry V. Callaghan, Robert M.M. Crawford, Annika Hofgaard, Matti Eronen, Serge Payette, Gareth Rees, Oddvar Skre, Bjartmar Sveinbjörnsson and Tatiana Vlassova</i>	Bjartmar Sveinbjörnsson
A2.22	Some Correlation the High Rate of Mortality of the Sea Otter's Population with Average Sunspot Numbers, Volcanic Activity and Natural Regulation at Some Part of the Pacific Ecosystem <i>Konstantin Sidorov, Mihail Pereladov and Vladimir Sevostianov</i>	

Poster Session B: Thursday 11 November

Poster Presentations: Possible Feedbacks on the Global Climate System

B3.1 [#]	Russian Arctic Methane Fluxes Study: Measurements and Modelling <i>Jagovkina S.V., Karol I.L., Reshetnikov A.I., Paramonova N.N., Lagun V.E.</i>	S.V Jagovkina
B3.2 [#]	Arctic Sea Ice, Climate Change and Related Climate Feedback Mechanisms <i>S. Gerland, D.K. Perovich, J. Haapala, I. Harms, B.V. Ivanov, C.A. Pedersen, C. Haas, E. Hansen, M.J. Karcher, G. Magnusdottir, M.G. McPhee, J. Morison, J-G. Winther and B. Njåstad</i>	S. Gerland
B3.3	Estimation of the Carbon Cycle in Forest Ecosystems of the Pechora River Basin (Northeast European Russia) <i>Bobkova K., Tuzhilkina V., Galenko E. and Kuzin S.</i>	P. Kuhry

B3.4	Carbon Sequestration of East European Tundra Landscape <i>Juha E.P. Heikkinen and Pertti J. Martikainen</i>	P. Kuhry
B3.5	The Runoff and Concentrations of Nutrients in the Rivers Utsjoki (N. Finland) and Khosedayu (N.E. European Russia) <i>Eeva-K Huitu and Lauri M. Arvola</i>	P. Kuhry
B3.6 [#]	Soil Carbon Database for the Usa River Basin, Northeast European Russia <i>G. Mazhitova, P. Kuhry and T. Virtanen</i>	P. Kuhry
B3.7	Modelling Treeline and Phytomass Changes in European Arctic Catchments <i>Tarmo Virtanen, Kari Mikkola and Ari Nikula</i>	P. Kuhry
B3.8 [#]	Spatial Variability of Atmospheric DMS and its Implication of Cloud Formation in the High Arctic -A Model Study <i>Jenny Mattsson, Caroline Leck and Gunilla Svensson</i>	Jenny Mattsson
Poster Presentations: Impacts on Wildlife and Conservation / Policy issues		
B4.1	The Combined Effects of Climate Change, Acid Rain and Ultraviolet Radiation (UVR) on Mercury Contamination of Arctic Ecosystems <i>David Lean, Nazafarin Lahoutifard, Sofia Perin, Melissa Sparling, Lisa Loseto, Susannah Scott, Parisa Ariya, Marc Amyot Steven Siciliano and Nelson O'Driscoll</i>	David Lean
B4.2	Lead-210 Concentration in Ground-Level Air in Finland – Correlation with the State of the North Atlantic Ocean <i>J. Paatero, J. Hatakka, R. Mattsson, V. Aaltonen and Y. Viisanen</i>	J. Paatero
B4.3 [#]	Evidence and Implications of Dangerous Climate Change in the Arctic <i>Lynn D. Rosentrater, Mark New, Jed O. Kaplan, Josefino C. Comiso, Sheila Watt-Cloutier, Terry Fenge, Paul Crowley, and Tonje Folkestad</i>	Tonje Folkstad
B4.4	Heavy Metals and Persistent Organic Pollutants in Air and Precipitation in Iceland <i>Elin B. Jonasdottir and Johanna M. Thorlacius</i>	Elin B. Jonasdottir
B4.5	Global Emission Estimates for GHG within the EU EVERGREEN project (EnVisat for Environmental Regulation of GREENhouse gases) <i>J.M. Pacyna, S. Mano, A. Luekewille, D. Panasiuk, S. Wilson and F. Steenhuisen</i>	F. Steenhuisen
Poster Presentations: Impacts on Human Activities		
B6.1 [#]	Storms and Coastal Impacts in the Mackenzie Delta Region of the Beaufort Sea, Northwest Territories and Yukon, Canada <i>Steven Solomon, Gavin Manson, David Atkinson, Don Forbes</i>	Steven Solomon
B6.2 [#]	The Economic Implications of a Shortened Winter Exploration Season on the North Slope of Alaska <i>Sherri L. Wall</i>	Sherri L. Wall
Poster Presentations: Arctic-Global Connections and Assessing Impacts of Change		
B7.1 [#]	Climate Change Research at the Royal Swedish Academy of Sciences Abisko Scientific Research Station, Northernmost Sweden <i>Terry V. Callaghan, Christer Jonasson, Torben R. Christensen and Margareta Johansson</i>	Terry V. Callaghan
B7.2	ITEX in Iceland: Responses of Two Contrasting Plant Communities to Experimental Warming <i>Borgþór Magnússon, Ingibjörg Svala Jónsdóttir, Jón Guðmundsson and Hreinn Hjartarson</i>	Borgþór Magnússon
B7.3 [#]	Freshwater Ecosystems and Global Change: A Brief Introduction to EURO-LIMPACS <i>Jón S. Ólafsson</i>	Jón S. Ólafsson
B7.4 [#]	Zackenbergs Basic: Monitoring of Ecosystem Dynamics in High-Arctic Northeast Greenland <i>Morten Rasch, Birger U. Hansen, Hans Meltofte, Dorthe Petersen, Søren Rysgaard, Mikkel P. Tamstorf</i>	Morten Rasch
B7.5 [#]	Recent Progress towards Establishing an Arctic Ocean Observing System: A NOAA Contribution to the Study of Environmental Arctic Change (SEARCH) <i>Ignatius G. Rigor, Jacqueline A. Richter-Menge and John Calder</i>	Ignatius G. Rigor
B7.6 [#]	Global Terrestrial Network for Permafrost (GTN-P) – A Contribution to Improved Understanding of the Arctic Climate System <i>S.L. Smith, M.M. Burgess, V. Romanovsky, G.D. Clow, F.E. Nelson, J. Brown</i>	S.L. Smith

B7.7 [#]	Arctic Change Detection in the Post-ACIA Period <i>Nancy N. Soreide, John Calder, James E. Overland and Florence Fetterer</i>	Nancy N. Soreide
B7.8	The Swedish Icebreaker Oden as a Research Platform: The Arctic Ocean Experiment 2001 <i>Michael Tjernström and Caroline Leck</i>	Michael Tjernström
B7.9	Development of the Archive of Historical Ice Charts of the Arctic Region for the XX Century and Statistical Parameters Describing Variability of Ice Conditions <i>V.M. Smoljanitsky</i>	V.M. Smoljanitsky
B7.10	The AARI Oceanographic Database and Its Use in Investigations of the Arctic Ocean <i>V.T. Sokolov, V.Yu Karpiy and N.V. Lebedev</i>	V.T. Sokolov
B7.11 [#]	Climate Change in the Arctic: Information Support of the Problem <i>V. Rykova</i>	

Poster Presentations: Past, Present and Future Changes in Social Systems

B8.1 [#]	Climate Change and Health among Women of Labrador <i>Sandra Owens and Christopher Furgal</i>	Christopher Furgal
B8.2 [#]	Interactive Poster – “When the Weather is Uggianaqtuq: Inuit Observations of Environmental Change” <i>Shari Fox Gearheard and Inuit from the communities of Baker Lake and Clyde River, Nunavut</i>	Shari Fox Gearheard
B8.3	Climatic Changes Associated with Societal Changes Produce New Combination of their Direct Impacts on Health <i>Juhani Hassi</i>	Juhani Hassi
B8.4	Impacts of Climate Change on the Health of Northern Indigenous People (see Session 8 abstract) <i>Keith Maguire and C. Dickson</i>	

* Provisional

Posters where authors have requested or indicated that they may wish to present a short (3-minute) oral introduction to their posters. These presentations will be made at the start of the poster sessions.

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