

IASC PRGRESS

State of the Arctic Coast 2010

New international report on the state of the circumpolar Arctic coast

The *State of the Arctic Coast 2010 – Scientific Review and Outlook* has been released. The Report takes a social-ecological approach that explores the implications of change for the interaction of humans with nature. It is aimed to be a first step towards a continuously updated coastal assessment and to identify key issues seeking future scientific concern in an international Earth system research agenda.



PHOTO: LAURA MORSE

The coast is a key interface in the Arctic environment. It is a locus of human activity, a rich band of biodiversity, critical habitat, and high productivity, and among the most dynamic components of the circumpolar landscape.

The Arctic coastal interface is a sensitive and important zone of interaction between land and sea, a region that provides essential ecosystem services and supports indigenous human lifestyles; a zone of expanding infrastructure investment and growing security concerns; and an area in which climate warming is expected to trigger landscape instability, rapid responses to change, and increased hazard exposure.

Critical zone of environmental change

The circumpolar Arctic coast is arguably one of the most critical zones in terms of the rapidity and the severity of environmental change and the

implications for human communities dependent on coastal resources.

Initiated by the Land-Ocean Interactions in the Coastal Zone (LOICZ) Project, the International Permafrost Association (IPA), the Arctic Monitoring and Assessment Programme (AMAP) and IASC, the assessment is an international and cross-disciplinary science initiative.

The report is the outcome of the collaborative effort of an international writing team including 47 lead and contributing authors from ten nations including all those bordering the Arctic coast and others with Arctic interests. *State of the Arctic Coast 2010* grew from a recommendation by the Workshop on Arctic Coastal Zones at Risk, convened in Tromsø, Norway, in October 2007. The report was peer-reviewed and released in draft form for open public review in 2010.

www.arcticcoasts.org



PHOTO: ANDREAS AHLSTROM

New IASC website

It is still the same address, but a different site: www.iasc.info has been renewed. On the latest version of the IASC website you can find all the information about IASC, its Working Groups, upcoming activities and more.



PHOTO: ALLEN POPE

Save the dates ASSW 2012/13

Please mark the dates for the 2012 and 2013 Arctic Science Summit Weeks: The ASSW 2012 will be held in Montreal, Canada on **20-22 April 2012**, in conjunction with the IPY 2012 Montreal Conference.

The ASSW 2013, including a Science Symposium, will be held in Krakow, Poland on **14-20 April 2013**.



PHOTO: JEFF BOWMAN

IASC Bulletin 2011

Each year IASC reports on its activities and highlights international Arctic science initiatives. The 2011 Bulletin is now available for download on the IASC website. You can find the yearbook and other publications under the „Service - Media“ section.

The Arctic: New Frontier for Global Science

The Arctic Science Summit Week (ASSW) 2011 held last March in Seoul, Republic of Korea, exceeded expectations with 334 registered participants from over twenty countries. The week in the south Korean capital combined business

meetings, a science symposium, side-meetings and workshops. It created excellent opportunities to strengthen international networks and collaboration.

A total of 208 abstract were submitted for the

science symposium: *The Arctic: New Frontier for Global Science* of which 157 were presented in Seoul. With 92 talks and 65 posters there was a good balance in science presentations.

Early career awards

Early career scientists were well represented and awards for best poster and talk in this category were presented by the Association of Polar Early Career Scientists (APECS) and IASC. The award for the best oral presentation went to Gijs de Boer from Lawrence Livermore Labs, in Berkeley, California, USA for his presentation entitled "The Arctic Atmosphere in CCSM4: Evaluation of key variables". The decision on the best poster was so difficult that the selection committee decided to present two awards. One went to Kazutoshi Sato from Hiroaki University, Japan for his presentation entitled "Change in cloud-base height over the ice-free Arctic Ocean during autumn" and the other to Hye Min Kim from the Korea Polar Research Institute for her presentation on "Microbial Diversity of the Active Layer Soil from the Canadian High Arctic".

All awardees will receive free registration for the next ASSW Science Symposium in Krakow.

www.assw2011.org



Members of the organizing committee, scientific steering committee, session chairs and keynote speakers at the opening ceremony of the ASSW 2011.
PHOTO: KOPRI

IPY Education, Outreach and Communication Catalogue is online

The IPY Education, Outreach and Communication (EOC) Assessment Project has launched a catalogue presenting over 500 IPY education and outreach programs and activities. The catalogue provides access to a wide range of activities varying from large-scale international outreach projects to IPY inspired classroom projects.

Since the closure of IPY in the spring of 2010, the coordinators of the project, Jennifer Provencher and Jenny Baeseman, have been collecting information on education, outreach and communication projects that occurred during IPY 2007-2008. They collected survey responses from over 200 activities and have information on more than 500 education and outreach programs. All these efforts are now assembled in the online catalogue.

Visitors can browse and search the catalogue, allowing those interested in certain topics, target audiences, activities, certain countries etc. to

narrow down the results to reflect their interest. The catalogue is an important outcome of the "Education and Outreach Lessons from IPY" project that was awarded by the International Council for Science (ICSU). It is an APECS initiated and coordinated project with support from the Scientific Committee on Antarctic Research (SCAR) and IASC.

The searchable database is available online under: <http://apecs.is/education-outreach/ipy-outreach-assessment/catalogue>

Polar Research Urgencies and ICSU's Grand Challenges

A two day symposium will be held in the historic city of Siena, Tuscany, on 23 and 24 September 2011 to explore and address research priorities in the polar regions and their linkage to the ICSU grand challenges. The symposium will address all aspects of polar science, with a focus on the functioning of the Earth System in the Arctic and Antarctic, the major drivers of pervasive change and the as yet unaddressed research issues in these regions.

Identifying and acting on the grand challenges for 'global sustainability' research and transferring scientific outputs into reliable short-medium term advice for decision makers will be increasingly

critical over the coming decades. Invited speakers will outline the major current global challenges and changes in terrestrial and oceanic domains in the polar regions and highlight how these are linked to the ICSU Grand Challenges in Global Sustainability. A Panel Session, involving representatives of a range of ICSU bodies, will discuss the relevance of polar urgencies to their organisations research priorities, and to the overall ICSU strategy.



City of Siena, location of the symposium on Research urgencies in the Polar Regions and their links to the ICSU Grand Challenges.
PHOTO COURTESY CITYPICTURES

Research Urgencies in the Polar Regions and their Links to the ICSU Grand Challenges in Global Sustainability

Siena, Italy 23-24 September 2011

Sponsored by the ICSU organisations SCAR, IASC and IACS

www.mna.it/english/News/ICSU_symposium/

Bipolar Action Group II ready to put focus on science cooperation

The Joint IASC/SCAR Bipolar Action Group on Science Cooperation (BipAG II) is now complete and consists of nine members and two ex-officio's. The members represent different countries and fields of expertise. The BipAG II group was formed after the two-year mandate for the Action Group was prolonged last year.

The original Bipolar Action Group (BipAG) was initiated in 2008 by SCAR and IASC. The Action Group explores options for effective cooperation concerning bipolar issues and the development of mechanisms to nurture the International Polar Year legacy. In its current form BipAG II will concentrate first and foremost on bipolar scientific opportunities of cooperation.

More information on BipAG I and II, and the final report of the first group can be found on the IASC website under Groups / Action Groups.

Member	Country	Expertise
Cynan Ellis-Evans - Chair	UK	Biology
Francisco Navarro	Spain	Ice sheets
Detlef Damaske	Germany	Geology
Sung-Ho Kang	Korea	Marine
Alexander Klepikov	Russia	Oceanography / Climate
Thamban Meloth	India	Ice cores
Gail A. Fondahl	Canada	Social Sciences
Mark Parsons	USA	Data
Jenny Baeseman	Norway	APECS
Volker Rachold (ex officio)	Germany	IASC Executive Secretary
Mike Sparrow (ex officio)	UK	SCAR Executive Director

Members of the Joint IASC/SCAR Bipolar Action Group on Science Cooperation (BipAG II).



Presentation of the Summary Report. From left to right editors: David Hik, Ian Allison, Volker Rachold and Colin Summerhayes.
PHOTO: KOPRI

The report *Understanding Earth's Polar Challenges* was presented at the ASSW 2011 in Seoul. The summary prepared by ICSU and the World Meteorological Organization (WMO) Joint Committee for the IPY showcases the findings from the International Polar Year 2007-2008.

Compiled by some 300 authors and reviewers,

IPY Summary Report presented in Seoul

the summary reveals how research established large-scale baseline data sets that can be used to assess and predict future change in in polar environments and oceans, biodiversity and ecosystem processes. The authors also conclude that the latest IPY advanced coordinated satellite observations of polar ice sheets and new measurement systems for permafrost and polar atmospheric research.

In the social and human sciences field, polar research will provide long-term benefits to many stakeholders, including polar residents and indigenous people. The IPY increased understanding of how indigenous knowledge can be combined

with instrumental data in monitoring the changes in polar ice, snow and vegetation cover, marine and terrestrial animal migrations, behavioral patterns of polar animals, birds, and fishes.

Last, but not least, the IPY trained a new generation of scientists and leaders who are determined to carry this legacy into the future. It offered an inspiring window into the capabilities of modern interdisciplinary and international science.

The full report can be viewed online under: www.arcticportal.org/ipy-joint-committee



The three partners around the table. From left to right: David Hik (IASC), Joan Nymand Larsen (IASSA) and Lars Kullerud (UArctic).
PHOTO: SERGY PRIAMIKOV

Stronger partnership with Uarctic and IASSA

The University of the Arctic (UArctic), the International Arctic Social Sciences Association (IASSA) and IASC have formalized their partnership in a Letter of Agreement (LoA). All three organizations recognize that there are many common interests regarding international and multi-disciplinary cooperation in Arctic research, education and outreach. Increased cooperation between the organizations is expected to be of mutual benefit, and contribute to enhancing the legacies of the IPY. The LoA was signed at a WMO organized workshop on the International Polar Decade (IPD) in St. Petersburg, Russia.

A copy of the LoA can be downloaded on the IASC website under IASC partnerships / formal agreements.

Registration open for ICASS VII

Registration has opened for the Seventh Congress of the International Arctic Social Sciences (ICASS VII). The Congress will take place in Akureyri, Iceland from June 22-26, 2011 and is titled: *Circumpolar Perspectives in Global Dialogue: Social Sciences beyond the International Polar Year*. The Congress will be hosted by the University of Akureyri, the town of Akureyri and the Stefansson Arctic Institute. The 7th ICASS Host Organizing Committee consists of members representing the University of Akureyri, Stefansson Arctic Institute, Town of Akureyri, Arctic Portal, Akureyri Travel, and the Icelandic Centre for Research.

www.iassa.org/icass-vii

LoA recognizes joint effort in promoting health research in the Arctic

The International Network for Circumpolar Health Research (INCHR) and IASC have signed a Letter of Agreement in which they recognize their common interests in scientific research in the polar regions. Both organizations view that there is much to be gained from developing a synergy between INCHR and IASC in promoting health research in the Arctic.

Following the success of the IPY where researcher teams with expertise in health, natural, and social sciences collaborated with Arctic residents in a variety of multidisciplinary projects, INCHR and IASC agreed to seek new opportunities to combine

their efforts for activities related to health sciences in the Arctic.

The INCHR is a network of individual researchers, research trainees, and supporters of research based in academic research centres, Indigenous people's organizations, regional health authorities, scientific/professional associations, and government agencies, who share the goal of improving the health of the residents of the circumpolar regions through international cooperation in scientific research.

www.inchr.com

A copy of the LoA can be downloaded on the IASC website under IASC partnerships / formal agreements.

Partnership with SCAR reconfirmed and renewed

With a renewed Letter of Agreement IASC and SCAR again confirm and underline the importance of synergy between both organization in polar and bipolar research.

The first LoA, signed in July 2006, was designed to enable the two organizations to make a more effective contribution than they might otherwise make to the success of the International Polar Year. SCAR and IASC agreed to combine their

to raise the level of impact of both organizations in terms of making scientific advances and of advising policy makers - for example of the likelihood and likely effects of climate change -, as well as to avoid duplication.

With the present letter SCAR and IASC agree to continue this partnership, taking into account the development of both organizations during the last five years and the lessons learned from the IPY 2007/2008.

www.scar.org



PHOTO: CARLOS FURTADO

A copy of the LoA can be downloaded on the IASC website under IASC partnerships / formal agreements.

IASC Council

Country

Organization

Representative

Canada	Canadian Polar Commission	David Hik President
China	Chinese Arctic and Antarctic Administration	Huigen Yang
Denmark/Greenland	The Commission for Scientific Research in Greenland	Naja Mikkelsen Vice-President
Finland	Delegation of the Finnish Academies of Science and Letters	Kari Laine
France	Institute Polaire Français	Gérard Jugie
Germany	Deutsche Forschungsgemeinschaft	Karin Lochte
Iceland	RANNÍS, The Icelandic Centre for Research	Thorsteinn Gunnarsson
Italy	National Research Council of Italy	Carlo Brabante
Japan	Science Council of Japan, National Institute of Polar Research	Hiroshi Kanda
The Netherlands	The Netherlands Organization for Scientific Research	Louwrens Hacquebord
Norway	The Research Council of Norway	Susan Barr Vice-President
Poland	Polish Academy of Sciences, Committee on Polar Research	Jacek Jania
Russia	The Russian Academy of Sciences	Vladimir I Pavlenko
Republic of Korea	Korea National Committee on Polar Research	Byong-Kwon Park Vice-President
Spain	Comite Polar Espanol	Manuel Catalan
Sweden	The Swedish Research Council	Magnus Friberg
Switzerland	Swiss Committee on Polar Research	Martin Lüthi
United Kingdom	Natural Environment Research Council	Cynan Ellis-Evans
USA	Polar Research Board	Jackie Grebmeier Vice-President