

PROGRAM

40th Liège Colloquium – NATO ARW

May 5 2008

9:00 – 10:00 Registration – Coffee

Session 1

Chair **Nihoul Jacques C.J.**

10:00 – 10:45 Nihoul J.C.J.
General Introduction and a word of caution regarding the role of the atmosphere in Global Warming effects

10:45 – 11:30 Fagel N., Maccali J. and Simon Q.
Reconstruction of oceanic circulation using mineralogical and isotopical signatures of deep sea sediments. The case study of the northern North Atlantic... and some perspectives for the Arctic

11:30 – 12:15 Ikeda M., Yamaguchi H. and Yamada Y.
Contribution of the Pacific-to-Atlantic pathway to sea ice cover and water characteristics in the Arctic Ocean

Session 2

Chair **Ikeda M.**

14:00 – 14:45 Pokrovsky O.M.
A coherency between the North Atlantic non-linear trend, the Eastern Arctic ice extent drift and change in the atmospheric circulation regimes over the northern Eurasia

14:45 – 15:30 Prinsenbergh S., Hamilton J. and Peterson I.
Observing, simulating and interpreting the seasonal variability of the oceanographic fluxes passing through Lancaster Sound of the Canadian Arctic Archipelago

15:30 – 16:00 Coffee Break, Poster display

16:00 – 16:45 Bringham L.W. et al.
Arctic Sea Ice Changes and Future Access for Marine Operations

16:45 – 17:30 Seminar¹

17:30 Official Reception and convivial evening

¹ Key Lecture: Presentation by key speaker (45min)

Seminar: related short presentations, case studies analyses, discussion, Press Gallery conversation
Coffee break, Poster display: coffee served in poster's exhibition room with authors available to answer questions

Working groups: Editorial and drafting groups, special sessions, preparation of documents by rapporteurs and secretariat

May 6 2008

Session 3

Chair **Overland J.**

- 09:15 – 10:00 Iversen E.
Climatic change and its possible effects on the breeding, migration and conservation of Arctic breeding shorebirds
- 10:00 – 10:45 Kostianoy A., Sirota A., Ginzburg A., Sheremet N., Lebedev S. and Vignudelli S.
Coastal zone meteorology in the Barents and White seas as derived from in-situ and satellite altimetry data in 1992-2007
- 10:45 – 11:15 Coffee break, Poster display
- 11:15 – 12:00 Gordeev V.V. and Kravchishina M.D.
River flux of total organic carbon to the Arctic Ocean:
What are the consequences of the global changes?

Session 4

Chair **Kostianoy A., Nihoul J.C.J.**

- 14:00 – 14:45 Moralès Maqueda M.A., Willmott J. and Walkington A.
Investigation of wind-driven, coastal polynya dynamics with a mass and momentum conserving, one-dimensional model
- 14:45 – 15:30 Sirota A., Kostianoy A. and Ermakov P.
Seasonal and interannual variability of the Ice Cover in the Barents and Kara Seas
- 15:30 – 16:00 Coffee break, Poster display
- 16:00 – 16:45 Zonn I.S.
Socio-economic, legal and political issues of the Russian Arctic
- 16:45 – 17:30 Tasch J.
Frozen Lines, Melting Ice : Russian Claims to Northern Territory

May 7 2008

Session 5

Chair

Delhez E.

- 09:15 – 10:00 Goosse H., Driesschaert F., Fichefet T. and Loutre M.F.
Information on the early Holocene climate constrains and the summer sea ice projections for the 21st century.
- 10:00 – 10:45 Crespin E., Goosse H., Fichefet T. and Mann M.E.
Simulating the Climate of the Arctic during the last millennium in a coupled climate model including data assimilation
- 10:45 – 11:15 Coffee break, Poster display
- 11:15 – 12:00 Steiner N. and Denman K.
A 1-D model for DMS and Sulphur cycling in the upper ocean

Session 6

Chair

Beckers J.-M.

- 14:00 – 14:45 Lietaer O., Bouillon S., Fichefet T. and Legat V.
A finite element sea-ice model to resolve the Canadian Arctic Archipelago
- 14:45 – 15:30 Vancoppenole M., Fichefet T. and Goosse H.
Causes of recent Arctic Sea Ice variability investigated with a large scale ice-ocean model
- 15:30 – 16:00 Coffee break, Poster display
- 16:00 – 16:45 Bouillon S., Fichefet T., Moralès Maqueda M., Legat V.
The elastic-viscous-plastic sea ice model on different grid types
- 16:45 – 17:30 Berline L., Spitz Y.H., Zhang J.
Impact of arctic sea-ice cover reduction on the planktonic ecosystem
- 19:30 for 20:00 Colloquium Diner at the "Château de Colonster"

May 8 2008²

Session A

Chair **Legendre L.**

- 09:15 – 10:00 Fortier L.
What do we know about the rapidly changing Arctic and Sub-arctic
- 10:00 – 10:45 Kostianoy A.G., Nihoul J.C.J. and Rodionov V.B.
Physical Oceanography of frontal zones in the Sub-arctic Seas
- 10:45 – 11:15 Coffee break, Poster Display

Session B

Chair **Fichefet Th.**

- 11:15 – 12:00 Funder S. and Mikkelsen N.
Past climatic variations around the Arctic on millennial to multi-decadal scales : marine and terrestrial evidence

Session C

Chair **Wiseman J.**

- 14:00 – 14:45 Mitnik L. M.
Mesoscale atmospheric vortices in the Okhotsk and Bering Seas : results of satellite multisensor study
- 14:45 – 15:30 Overland J. and Moore S.
The recent Arctic Tipping Point and biological consequences
- 15:30 – 16:00 Coffee break, Poster Display

Session D

Chair **Rachold V.**

- 16:00 – 16:45 Brigham L. W.
Marine transport scenarios in the Arctic Marine Shipping Assessment of the Arctic Council
- 16:45 – 17:30 Seminar: General Discussion : Social, Economic, Political Problems
Moderators: Zonn I.S., Tasch J., Rachold V.
- 17:30 – 18:00 Working Groups

² Code ARW

Key Lecture: Presentation by key speaker (45min)

Seminar: related short presentations, case studies analyses, discussion, Press Gallery conversazione

Coffee break, Poster display: coffee served in poster's exhibition room with authors available to answer questions

Working groups: Editorial and drafting groups, special sessions, preparation of documents by rapporteurs and secretariat

May 9 2008

Session E

Chair Fortier L.

- 09:15 – 10:00 Melnikov I.A.
Recent Sea Ice ecosystems in the Central Arctic Ocean
- 10:00 – 10:45 Rivkin R., Legendre L.
Marine microbial interactions in an evolving polar environment
- 10:45 – 11:15 Coffee break, Poster Display

Session F

Chair Rivkin R.

- 11:15 – 12:00 Romankevich E.A. and Vetrov A.A.
Carbon cycle in the Russian Arctic Seas

Session G

Chair Funder S.

- 14:00 – 14:45 Rachold V.
Arctic Coastal Processes
- 14:45 – 15:30 Iversen E.
Stresses on Arctic nesting birds from past and present human activities in the Arctic and the new problem of global warming in the nesting grounds
- 15:30 – 16:00 Coffee break, Poster Display
- 16:00 – 16:45 Wiseman W.J., Jeffries M.O., Pantzke C., Wiese F.
Two US Programs during IPY
- 16:45 – 17:30 Rachold V.
Who is Who - An overview of international Arctic organizations and their role in circum-Arctic science and science policy

May 10 2008

Session H

Chair

Kostianoy A.G.

09:15 – 10:00

Tremblay J.E.

The role of light, vertical stability and nutrient supply on the productivity of Arctic waters: a perspective on climate change

10:00 – 10:45

Kostianoy A.G.

What don't we know about the Arctic and Sub-arctic – General Discussion

Coffee Break

11:15 – 12:00

Smith J.A.

NATO Security through Science Program