



Marine Working Group Meeting

Arctic Ocean Science Board (AOSB)

23 April 2015

14.00-17.30

(Lunch 12.30-14.00, Coffee Break 16.10-16.30)

Toyama, Japan

Toyama International Conference Centre

Draft Agenda

Participants:

WG MEMBERS PRESENT:

BERT RUDELS - FINLAND, CHAIR
JINPING ZHAO - CHINA, VICE CHAIR
GERHARD HERNDL - AUSTRIA
OLEG DITRICH - CZECH REPUBLIC
NAJA MIKKELSEN - DENMARK
MORTEN HØLTEGAARD NIELSEN - DENMARK
KARI STRAND - FINLAND
HEIDI KASSENS - GERMANY
MICHIEL RUTGERS VAN DER LOEFF - GERMANY
STEINGRIMUR JÓNSSON - ICELAND
GUDRUN MARTEINSDOTTIR - ICELAND
K.P. KRISHNAN - INDIA
STEFANO ALIANI - ITALY
KOJI SHIMADA - JAPAN
HAJIME YAMAGUCHI - JAPAN
SUNG-HO KANG - KOREA
BAEK MIN KIM - KOREA
RANDI INGVALDSEN - NORWAY
MARIT REIGSTAD - NORWAY
WALDEMAR WALCZOWSKI - POLAND
MONIKA KĘDRA - POLAND
MIQUEL CANALS - SPAIN

FRANCISCO GORDILLO - SPAIN
PAULINE SNOEIJNS LEIJONMALM - SWEDEN
ANITA BUMA - THE NETHERLANDS
JEREMY WILKINSON - UK
SHELDON BACON - UK
LEE COOPER - USA

GUESTS AND OBSERVERS:

JACQUELINE GREBMEIER
NATHALIE MORATA
ALEXEY PAVLOV

WG MEMBER NOT PRESENT:

HUMFREY MELLING - CANADA
MARY-LOUISE TIMMERMANS - USA

SECRETARIAT

HIEKE MIDLEJA (IASC SECRETARIAT)
EMILY CHOY (IASC FELLOW)
PAUL SUPRENAND (IASC FELLOW)
KRISTINA BROWN (IASC FELLOW)
JANE LEE (KOPRI SUPPORT)

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1 OPENING AND REPORTING (14.00-14.10)

1.1 WELCOME AND INTRODUCTIONS BERT RUDELS

1.2 REPORT FROM THE CHAIR BERT RUDELS

1.3 APPROVAL OF THE MINUTES OF THE LAST MEETING HEIKE MIDLEJA

- The minutes of the 2013 meeting is given in ANNEX 1.3

1.4 ADOPTION OF THE AGENDA BERT RUDELS

2 MAIN ISSUES (14.10-16.10)

2.1 REPORTS ON MWG ACTIVITIES

2.1.1 TOWARDS A SEASONALLY ICE COVERED ARCTIC OCEAN BERT RUDELS

The workshop, "Towards a seasonal ice covered Arctic Ocean" was held on 20 - 21 October 2014 in Woods Hole Oceanographic Institution (WHOI), USA. This workshop was a spinoff from the previous IASC MWG workshop, "Internal Mixing Processes in the Arctic Ocean," held before the FAMOS (Forum of Arctic Modelling and Observational Syntheses) annual meeting in Woods Hole in October 2013. 40 invited participants attended the workshop of whom eighteen received travel support from IASC. The workshop was organized thematically with introductions by invited speakers, presenting different processes present in the Arctic Ocean.

- The workshop report is given in ANNEX 2.1.1.

2.1.2 INTERNATIONAL WORKSHOP ON THE ECOLOGY OF ARCTIC COD LEE COOPER

The workshop was held on 8-9 April 2014, Copenhagen, Denmark, aiming to bring together experts from around the circumpolar North to share knowledge about Arctic cods from the Pacific and Atlantic regions, to synthesize current information, and to plant the seed for future comparative analyses. The workshop was attended by over 60 scientists from 10 countries and featured 10 poster presentation on Tuesday evening and 17 oral presentations on Wednesday. The goal of the workshop was to bring together scientists from around the circumpolar Arctic to focus exclusively on the ecology of Arctic gadids.

- The workshop report is given in ANNEX 2.1.2.

2.1.3 DISTRIBUTED BIOLOGICAL OBSERVATORY (DBO) JACQUELINE GREBMEIER

The second DBO data workshop was held successfully at the NOAA Pacific Marine Environmental Laboratory (PMEL) in Seattle on 29 - 31 October 2014. The meeting brought together scientists and associated project data sets collected during the 2010 - 2014 DBO pilot effort. The purpose of the meeting was to discuss the results, share data sets, develop an international data policy for this observing effort, and organize collaborative publications. A report on the workshop will be provided and the MWG will discuss its continued involvement in the DBO effort.

- The workshop report is given in ANNEX 2.1.3.

2.1.4 GREENLAND ICE SHEET/OCEAN INTERACTION (GROCE) MICHIEL RUTGERS VAN DER LOEFF

The mass loss from the Greenland ice sheet has increased rapidly over the last few decades. One candidate for the ice sheet mass loss is the dynamics of marine terminating outlet glacier, which have a direct link to warming ocean waters. Uniting national and disciplinary studies towards better understanding the interaction between Greenland ice sheet and ocean will therefore be one challenge of future Arctic research. This will be the theme of a workshop held in Bremerhaven 8 – 9 December, 2014, supported in the framework of ICARP III.

- The workshop report is given in ANNEX 2.1.4.

2.1.5 THE BIG BLACK BOX (BBB) BERT RUDELS (INPUT FROM ROLF GRADINGER)

The BBB workshop was held in Tromsø, Norway on 19 – 20 January 2015. This two day workshop gathered an international group of experts to develop a white paper on the existing winter ecology knowledge of Arctic marine organisms, to identify the most critical knowledge gaps, and to prepare a proposal for a new international initiative/program focusing on polar night ecology and winter processes.

- The workshop report is given in ANNEX 2.1.5.

2.2 UPDATES ON UPCOMING ACTIVITIES

2.2.1 ATMOSPHERE-OCEAN-ICE INTERACTIONS AND ASPECTS RELATED TO A FUTURE, SEASONALLY ICE FREE ARCTIC OCEAN – ICARP III SESSION B7 BERT RUDELS

2.3 REVIEW OF IASC ACTIVITIES RELATED TO THE MWG

2.4 OTHER MARINE ACTIVITIES EXTERNAL TO IASC

2.4.1 PACIFIC ARCTIC GROUP (PAG) SUNG-HO KANG

An update on Pacific Arctic Group (PAG) activities will be given.

- The workshop report is given in ANNEX 2.4.1

2.4.2 ARCTIC IN RAPID TRANSITION (ART) ALEXEY PAVLOV

The ART (Arctic in Rapid Transitions) Science Plan was approved by the Marine WG in 2010 and the Implementation Plan in 2011. In October 2013, ART committees were restructured: New members were welcomed in the Executive Committee while some of the founding generation members joined the Scientific Advisory Board. ART is planning its first official ART scientific project “TRANSSIZ” (Transitions in the Arctic Seasonal Sea Ice Zone), which will take place onboard the RV Polarstern in May/June 2015. ART has also been very



active in meetings and workshops. ART organized its first ART science symposium in October 2012 in Sopot, Poland in cooperation with the Association of Polar Early Career Scientists (APECS), which led to the submission of papers for a special issue to the journal Polar Research. The second ART-led science workshop “ISTAS” (Integrating spatial and temporal scales in the changing Arctic System: towards future research priorities) was held in October 2014 in Brest, France, with a major outcome in form of a set of priority sheets on future Arctic research which contribute to the ICARP III process. Furthermore, ART was present at the Arctic Observing Summit week in Vancouver in April 2013 and successfully organized a session at the Ocean Science Meeting in Honolulu in February 2013. ART is one of the organizer of the scientific conference at the Arctic Frontiers Conference in 2017 in Tromsø, Norway. Finally ART is putting together a proposal application for an EU Innovative Training Network, to bring PhD researchers into the ART framework and carry out research from upcoming cruises under the second “active research” phase of ART implementation plan.

2.5 REVIEW OF WG FOCI

BERT RUDELS

The Scientific Foci of the Working Group had been discussed and agreed upon at the first WG meeting in Potsdam (Germany) in January 2011. Under this agenda item, the WG is asked to revisit these foci and to discuss possible changes or additions.

2.6 PROPOSED ACTIVITIES

2.6.1 NEW ACTIVITIES/TASKS PROPOSED BY THE MEMBERS OF THE MWG

Under this agenda item, new suggestions and proposals on WG activities will be brought forward by members of the Working Groups. This will include short presentations followed by a discussion.

2.6.1.1 INTERNATIONAL WORKSHOP ON THE TRANSPOLAR SYSTEM OF THE ARCTIC OCEAN

MICHEL VAN DER LOEFF

2.6.1.2 ICARP III FOLLOW UP ACTIVITIES

BERT RUDELS

In the preceding the ICARP III conference the MWG has been active in identifying relevant, future research topics. However, it is also important to further develop these insights and ideas and to make them known to a larger audience. For this travel funds are required, and this proposal requests the MWG to support travel and participation in the upcoming meeting and workshops to promote and develop the MWG work.

- The Proposal is given in ANNEX 2.6.1.2.

2.6.1.3 POLAR MARINE DIATOM WORKSHOP SUNG-HO KANG

The next Polar Marine Diatom workshop is to be held in Salamanca, Spain from 19-24 July 2015, hosted by Maria Angeles Barcena. This workshop will provide the international community of polar diatom specialists and students with a unique opportunity to interact and discuss topical issues and new results that bear on recent and future research activities in the Polar Regions.

- The Proposal is given in ANNEX 2.6.1.3.

2.6.1.4 SYMPOSIUM ON THE ROLE OF ICE IN THE SEA LEE COOPER

This symposium will be held as part of the ESSA (Ecosystem Studies of Sub-Arctic Seas) Annual Meeting in Seattle, Washington, in 15 -17 June 2015. The symposium is to be held at the University of Washington for the participation of interdisciplinary scholars who will be prepared to discuss their research in the sub-arctic North Atlantic, sub-arctic North Pacific, and the Arctic Ocean that bears on the issue of how changes in the sea ice are likely to affect these marine ecosystem. A publication of a special issue on the role of ice is anticipated.

- The Proposal is given in ANNEX 2.6.1.4.