

MOSAiC Implementation Workshop

22-24 July 2015

Venue:

Wissenschaftsetage (WIS) im Bildungsforum

Am Kanal 47

14467 Potsdam

Near to Mercure hotel -> ca. 400m

Workshop Objectives:

- Start building an implementation plan to accomplish the MOSAiC Science Plan.
- Identify specific logistics requirements to support science activities.
- Identify specific roles and scientific contributions
- Maintain tight coupling between observational and modeling activities.
- Focus primarily on core MOSAiC activities, while also identifying opportunities for broader connections and collaborations.

22 July (Wednesday)

13:00-14:45 Plenary Session 1:

Welcome and Overview

- IASC → V. Rachold
- Local arrangements → K. Dethloff, S. Helbig
- Observations: Needs and possibilities for MOSAiC → M. Shupe
- Modelling approaches for MOSAiC → K. Dethloff
- RV Polarstern: a unique base for a transpolar drift station: options and requirements → R. Knust

14:45-15:00 Break

15:00-18:15 Plenary Session 2:

Overview of proposed MOSAiC activities: Atmosphere, Ocean, Ice, and Ecosystem perspectives

We invite the following participants, if desired, to briefly explain within 5 minutes and not more than 5 slides potential contributions to the MOSAiC project from the group you are representing, with a strong focus on implementation

Atmospheric focus

O. Persson
M. Tjernström
C. Lüpkes, U. Wacker
A. Rinke
I. Skolnik
A. Macke

G. Heinemann
I. Brooks, S. Arnold
G. de Boer
J. Pelon, J. Thomas
F. Taketani
R. Neuber, A. Herber, J. Hartmann
B. Kim
M. Wendisch
X. Zhang
S. Yuan
J. Inoue

16:30-16:45 Break

Oceanic Focus

T. Kanzow
R. Gerdes, B. Rabe
W. Maslowski
C. Prevost
J. Haapala
S.-H. Kang

Ice Focus

D. Perovich
M. Nicolaus
S. Gerland
D. Notz
C. Haas
S. Hudson

Ecosystem Focus

H. Steen
I. Peeken
E. Damm
B. Loose, E. Durbin
D. Nomura
H.-C. Shin
J. He
K. Kitazawa

18:15 End

18.30-21:30 Icebreaker Wissenschaftsetage

23 July (Thursday)

09:00-10:30:

Parallel Breakout Sessions for Atmosphere, Sea ice, Ocean, and Ecosystem (self select)

- Atmosphere (Shupe, Dethloff)
- Ocean (Kanzow, Lee)
- Sea Ice (Perovich, Nicolaus)
- Ecosystem (Loose, Peeken)

Session objectives:

- Outline specific activities and their implementation needs.
- Consider different scales: Central Observatory, local measurements, distributed network, large-scale
- Identify needs/requirements for specific platforms: Lab space, deck space, winches, sea-containers, on ice, unmanned systems, helicopter operations, sample storage, etc.
- Document ideas: Which measurements are needed, groupings/systems, who can/will take the lead on different aspects, logistical requirements.

10:30-11:00 Break

11:00-12:30 Parallel Breakout Sessions continued

12:30-13:30 Lunch

13:30-15:00 Plenary Session 3:

Disciplinary Reports from breakout discussions (15 min each)

Presentation of disciplinary implementation requirements

15:00-15:30 Break

15:30-18:00 Plenary Session 4:

Interdisciplinary plans for observing and modelling the coupled system

W. Maslowski, A. Rinke: Modelling the coupled system within MOSAiC (30 min)

O.Persson: Observing the coupled A-O-I system (15 min)

Discussion Topics:

- Bridging disciplines to address the coupled system
- Coordinated observational design
- Support for coupled-system modelling and data assimilation
- Role of satellite observations and coordinated activities

18:00 End

24 July (Friday)

09:00-10:30 Parallel Breakout Sessions:

Develop coordinated plans for specific resources (self select)

- Activities on POLARSTERN
- Local (<2km), on-ice activities
- Airborne (Planes and helicopters) activities
- Distributed networks (buoys, etc.)
- Coordinated ship activities and transects during refueling

Session Objectives: Map cross-disciplinary plans/requirements onto specific resources to develop overarching coordinated plans and requirements

10:30-11:00 Break

11:00-13:00 Plenary Session 5:

Funding, Large Infrastructure Challenge, and Workshop Summary

N. Biebow: EU Call for Large Infrastructure

M. Shupe, K. Dethloff: Future MOSAiC Plans for Funding

Discussion Topics:

- Major infrastructure: Polarstern requirements (fuel, crew change frequency, etc.); Implementing re-supply and crew change; On-ice runway?
- Funding considerations
- Connections with YOPP and partner activities
- Data access and management
- Documenting Implementation plan

13:00 End