

## ICARP III Activity - Reporting Template



<b>Title of activity</b> Planning for MOSAiC – the Multidisciplinary drifting Observatory for the Study of Arctic Climate		
<b>Type of activity</b> Coordination	<b>Date</b> Ongoing	<b>Place</b> Various
<b>Main organizer(s) (name and/or organization) and additional partners</b> Matthew Shupe, University of Colorado/NOAA, USA Klaus Dethloff, Alfred Wegener Institute, Germany		
<b>Abstract<sup>1</sup></b>  <p>MOSAIC is an international initiative designed to obtain a showcase atmosphere-ice-ocean-biosphere observational data set in the central Arctic Basin that will foster needed interdisciplinary process research, motivate coordinated modeling studies at multiple scales, and support advances in sea-ice prediction and Arctic weather and climate modeling. The initiative will include comprehensive interdisciplinary observations over a full annual cycle from an icebreaker drifting with the ice pack, distributed measurements designed to capture spatial variability on model gridbox scales, and coordinated modeling activities targeting process understanding and regional system dynamics. Over the past few years, dedicated workshops, conducted with the support and coordination of IASC, have helped to outline and develop the science plans and priorities for MOSAiC. This type of major Arctic research activity requires substantial international coordination on science, infrastructure, and funding. ICARPIII support has helped, and will continue to help, facilitate this process via three overarching activities: 1) Finalizing the MOSAiC science plan; 2) Solidifying and formalizing coordination with the WWRP Polar Prediction Project’s Year of Polar Prediction (PPP-YOPP); and 3) Starting preliminary implementation planning. Over the past year a draft science plan was published on the MOSAiC web page and distributed for public comment. Numerous comments and input have been received and are being integrated into the document to finalize the full Science Plan. MOSAiC representatives have attended YOPP planning meetings, have commented on YOPP science and implementation plans, and have ensured that strong linkages between these activities are outlined in respective plans. Preliminary implementation coordination has also occurred, specifically targeting the <i>Polarstern</i> as the icebreaker to serve as a central facility for the observational program. Initial planning meetings have identified requirements needed to secure and support this platform. A high-level coordination meeting is set for ASSW 2015 wherein key representatives of different countries and agencies will discuss their roles and support of MOSAiC. Lastly, an implementation planning workshop has been set for early June 2015 in Potsdam to start developing a formal MOSAiC implementation plan that will serve to guide research activities to address the key science objectives and priorities.</p>		

<sup>1</sup> Provide a short summary of the activity

### **Main contributions to ICARP III<sup>2</sup> in terms of the ICARP III priorities<sup>3</sup>**

ICARP III support of this activity has helped to identify, document, and facilitate scientific priorities for the MOSAiC Initiative, which cuts across multiple disciplines and is grounded on science priorities identified by IASC working groups, international modeling centers, and other key partners. Travel and meeting support has been, and will be, used to coordinate the MOSAiC science plan with other international research activities and their science plans, as well as to start developing a MOSAiC implementation plan for addressing those scientific objectives. Appropriate planning now will help to maximize the benefit of MOSAiC to broader community priorities. Thus, this activity serves the ICARP III objectives of 1) identifying Arctic science priorities for the next decade, and 2) coordinating various Arctic research agendas.

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<sup>2</sup> List a few key statements (findings, priorities, recommendations) that you would like to see reflected in the overarching ICARP III products

<sup>3</sup> ICARP III priorities:

- identify Arctic science priorities for the next decade
- coordinate various Arctic research agendas
- inform policy makers, people who live in or near the Arctic and the global community
- build constructive relationships between producers and users of knowledge