



March 2017

Dear colleagues from the sea-ice community,

We invite you to a Workshop on

Improved satellite retrievals of sea-ice concentration and sea-ice thickness for climate applications

from 9-11 October 2017 in Hamburg, Germany.

This workshop is jointly organized by the Integrated Climate Data Center (ICDC), Universität Hamburg, and the Max-Planck Institute for Meteorology (MPI-M), Hamburg, aiming at both experts for sea-ice remote sensing and sea-ice modelling. See below for further details.

This is a pre-announcement. The call for workshop contributions is planned to be submitted in April.

We might be able to provide financial support to the travel and accommodation costs of some workshop participants. We cannot give any definite statement at the current stage of planning, though. Please get in touch if you require further details at this point in time.

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Scope of the workshop:

New sensors and new algorithms have over the past few years allowed for sometimes significant progress in our ability to estimate sea-ice concentration and sea-ice thickness from space. In addition to existing sensors such as CryoSat-2, SMOS, AMSR2 and ASCAT, the launch of new sensors such as ICESat-2 and additional Sentinels will further widen our capabilities to ever more accurately measure the state of sea ice from satellites.

We invite experts both for remote sensing and for large-scale modeling to discuss and outline the most promising opportunities and best practices in the use of existing and future satellite sensors for the remote sensing of sea-ice concentration and thickness, and the use of such data in large-scale modeling applications.

Tentative agenda:

Day 1 - afternoon: Understanding each other

- An introduction to current practices in using and simulating sea-ice concentration and thickness in large-scale models
- An introduction to current practices in the retrieval of sea-ice concentration and thickness from remote sensing observations

Day 2 - morning: Understanding and reducing errors

- Limitations and possibilities in remote sensing and modeling
- Sensitivities
- Setting and understanding of priorities in retrieval and modeling
- Optimization of approaches, improvement of products, reduction of product uncertainties

Day 2 - afternoon: Quantification of uncertainties and product evaluation

- General differences between retrieval and modeling
- How are uncertainties derived?
- How reliable / valid are these?
- What are the current best practices to evaluate products and their uncertainties? What can be improved?
- Who takes which information out of which source? What are the user groups for uncertainties and validation results?

Day 3 - morning: Harvesting the fruit: The scope of final products

- Summary of the previous days' results
- Parameters to be included in product of sea-ice concentration and sea-ice thickness: must have / valuable add-on / nice-to-have / irrelevant
- Review of current products
- Recommendations for future products (taking into account foreseen technical progress)
- Planning for a possible joint paper/workshop report