

Category

OS Ocean, Sea Ice

Session Number

OS-4

Session Title

Sea ice modeling and prediction

Session Description

We solicit contributions on the past, present and future evolution of Arctic and Antarctic sea ice, based on model simulations, on observations, or on a combination of both. These include studies that make use of new data that have recently become available for sea-ice research through the CMIP6 suite of model simulations, through large ensemble simulations, and through new observational data sets and algorithms. We also specifically invite contributions that examine the relationship of sea ice and iceberg model simulations and operational products such as ice charts.

In addition to the analysis of the evolution of sea ice over the 20th and 21st century, we invite submissions that provide an in-depth analysis of the relationship between individual models, individual observational data sets and between models and observational data, including products from operational ice services. The time scales of these studies may range from a few days for direct navigational use to centuries for understanding long-term climate evolution. In addition, studies examining the role of internal variability for the comparison of sea ice simulations with observations and with other model simulations and for sea ice projections are also encouraged.

Regarding new observational records, we in particular invite studies that use satellite data for ice detection and classification (ice class, thickness, drift, stage of development, etc.) and for manual and automated production of ice charts.

Keywords: Arctic, Antarctic, sea ice, iceberg, modeling, data

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