Regional Climate Change



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A new web portal on sea ice for public and science - an example for an outreach activity within REKLIM

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The sea ice of the Polar Regions, the Arctic and Antarctica, covers more than approximately 7 percent of our planet, an area, larger than Europe. Yet, these 7 percent have a comparatively large influence on the global climate. Sea ice drives especially the heat exchange and fresh water exchange of the polar oceans and plays, therefore, a decisive role in the climate system of the Earth. Structure, volume and surface area of sea ice are extraordinarily differentiated and variable.



is an initiative of the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research in cooperation with the University of Bremen (Institute for Environmental Physics) with the goal to make all important and current information about the subject of sea ice available to the public. The portal offers extensive background information on sea ice, processed data, as well as the direct access to the database.



is planned as an open portal and will in the future be available as a platform for all scientific groups to distribute and provide information of their actual sea ice research results.



offers the great advantage for all users, to get a direct access to different data from sea ice observation and research.

Information portal:

Provides various background information about different sea ice aspects.

Covering questions are: How is sea is formed?, Which role plays sea ice for global climate?, or How is sea ice measured?

Includes as well a user feedback form for questions and comments.



Sea ice maps:

Provides daily sea ice maps for the Arctic and Antarctic and an archive going back in time for 10 years at the moment.

Furthermore, monthly mean values maps, animations of sea ice variability, etc. are available.

More maps e.g. for Polarstern expeditions, buoys positions or airborne activities will be provided in future.



Data portal:

Provides all sea ice data used for map projections as downloads for further usage or individual processing.

Enables the opportunity for access on sea ice modeling data via the C3Grid architecture (Collaborative Climate Community Data and Processing Grid) and connects several data archives at German climate research centers. Through C3Grid, diagnostic workflows for data analysis and distinct data exploitation is possible.

