



Bachelor thesis/ Master thesis

Grow Artificial Frazil Ice

Background:

Sea ice in the Antarctic region has an impact on the global climate and ecosystem. Nevertheless, the sea ice in the marginal ice zone of the Antarctic is less researched than the ice in the Arctic. Every year, a sea ice area of about 15 million km² freezes and thaws in the Antarctic. The first ice to form in this annual cycle is called frazil ice. For frazil ice to form, the water must be supercooled and under turbulent conditions.

The aim is to investigate the growth of frazil ice and the influence of salinity, temperature, and turbulence on it. The first step will be to design a frazil ice container to grow artificial frazil ice. The second step will be experiments with the designed container. The experiments will take place in the new polar laboratory in Essen.

Further information: www.uni-due.de/sea_ice/



Tasks:

- Design of frazil ice container
- Influence of salinity, temperature and turbulence on frazil ice volume

Start

Asap

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