Title
Coordinated Arctic Acoustic Thermometry Experiment
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Theme
Sub-Theme 2: Implementing and Optimizing a pan-Arctic Observing System
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Poster title (brief)
Coordinated Arctic Acoustic Thermometry Experiment (CAATEX)
Abstract - text box
Moored multipurpose acoustic networks have been implemented in a sequence of year-long research experiments in the Fram Strait and in the Beaufort Sea. The technological readiness level is high, while the data management of passive acoustics and acoustic thermometry is not very well developed. The acoustic data has not yet been included in the common data repositories because standards and formats have been missing. This is currently addressed and under development within the INTAROS project (Integrated Arctic Observation System). The previous experiments have all been implemented in the Marginal Ice Zone, but new initiatives for establishing acoustic networks in the interior of the Arctic have begun. Recently the Research Council of Norway and Office of Naval Research funded the Coordinated Arctic Acoustic Thermometry Experiment (CAATEX). The primary objective of CAATEX is to use acoustic thermometry to estimate the heat content of the Arctic Ocean to benchmark how warm the Arctic Ocean is and to improve our

understanding of uncertainties in ocean heat content estimates from climate models. The CAATEX experiment will start in September 2019 and recovered in 2020 as part of the MOSAIC program.