



## **Implementation and Testing of Ice Ridging Equations in an Operational Ocean Model for the Baltic Sea**

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The possibility of year-round navigation is very important for the countries surrounding the Baltic Sea. Sea ice may be of great hindrance to ships passing through ice-infested waters, especially ridged ice. This presentation describes the implementation and testing of empirical ice ridging equations into HIROMB, which is an operational ocean model for the Baltic Sea. The new ice variables include ridged ice thickness, ridge density (number of ridges per km), and ridge sail height. The model results are compared with field campaign measurements of ridge density and ridge sail height. It is concluded that the modelled ridge density is somewhat low and the ridge sail height is somewhat high. The work has been conducted within the EU-funded FP 5 project IRIS (Ice Ridging Information for Decision Making in Shipping Operations).