



Variability of the volume and thickness of sea ice in the Bay of Bothnia

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In our study, we want to quantify the variability of sea ice volume and thickness in the Bay of Bothnia and to introduce the drivers of the observed variability. There has been similar studies, but only for fast ice. We use various different data sets: in-situ ice thickness data, remote sensing data, model data and ice charts. In-situ data is from the regular monitoring stations in the coastal fast ice zone and from field campaigns. The remote sensing data is helicopter-borne and ship-borne electromagnetic data. The models we use are HELMI and NEMO-Nordic. We analyze the different data sets and compare them to each other to solve the inter-annual variability and to discuss the ratio of level and deformed ice.