



Modeling heatflux and freshwater transport through Fram Strait

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A coupled ocean - sea ice model with a horizontal resolution of 1/12 degree and 50 vertical levels is run for the Arctic / Subarctic domain north of 50 deg.N. A hindcast integration starts 1990 with an analysis period between 1995 and 2002. The model experiment is part of the ASOF-N project and supports field work and interpretation of mooring data in Fram Strait. The high resolution allows a much better simulation of the local recirculation in Fram Strait than previous versions of the model.

We focus on heat and fresh water transports through Fram Strait. Ice export and variability of Arctic sea ice growth and pathways are of special interest. We analyse different types of processes on both sides of Fram Strait and study the relation of larger scale patterns with measurements in Fram Strait on time scales from several days to seasons.