



## Atlantic Water in, Overflow Water out

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The Nordic Seas contribute fundamentally to the Atlantic Meridional Overturning Circulation. In the present climate, a net Atlantic inflow of about 6 Sv to the Nordic Seas is balanced at depth by an overflow of denser water back to the Atlantic proper. A brief review of processes involved in transforming the Atlantic Water (AW) to Overflow Water (OW) will be given. A pathway of the AW-in-OW-out-loop is deduced, including the associated buoyancy fluxes to the atmosphere and the Nordic Seas interior. The description is based on observational and model data from a state of the art hydrographic data base and from a high resolution regional ocean model.