



Variability of the Greenland Sea convection during 1980-2006

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The variability of the convection in the Greenland Sea is analyzed based on a set of historical conductivity-temperature-depth observations. The evolution of the hydrographic conditions over the period 1980-2006 is reconstructed and used to estimate a typical convection index over the same period. The sensitivity of this estimate to the method parameters is also evaluated.

Results obtained from the above observational data set are compared and interpreted with the help of a numerical simulation of the Arctic-North Atlantic domain forced by the ECMWF ERA40 reanalysis. Some conclusions are drawn on the relation between the convection intensity and the atmospheric forcing.