



Reconstruction of CFC inventories from hydrographic data

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In recent years, changes in the chlorofluorocarbon (CFC) inventories of Labrador Sea Water (LSW) have been successfully analyzed with respect to inferring changes in the formation of LSW. Compared to existent tracer data sets, much more hydrography-only profiles are available. We investigate to what degree CFC inventories of LSW can be reconstructed from hydrographic data. This is done by analyzing multi-parameter fits between CFC contents and hydrographic properties of LSW. Focus is on the years 1997-2003, since the tracer data set from these years is most extensive. The respective already existent tracer inventories serve as control fields to assess uncertainties in the reconstructions.