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Hydrographic changes in the northern North Atlantic in recent decades

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Isopycnally gridded hydrographic data from the northern North Atlantic are presented. Data density allows a time resolution of 5 years for most of the data set. Large amounts of freshwater have been added to the northern North Atlantic Ocean since the mid-1960s. We estimate that the Nordic and Subpolar Seas were diluted by an extra 19,000 +/- 5,000 km3 of freshwater input between 1965 and 1995. Fully half of that additional freshwater f about 10,000 km3 f infiltrated the system in the late 1960s at an approximate rate of 2,000 km3 yr-1. The freshening occurred both north and south of the Greenland-Scotland Ridge. Evolution in heat content (which is not comparatively systematic) as well as in density are also presented.