The spatial distribution of northeast arctic cod (Gadus morhua) with respect to size at age

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Northeast Arctic cod is commercially speaking the most important species in the Barents Sea. This species has a wide geographic distribution that varies with changes in the climate. Potentially, geographic and environmental effects can affect population characteristics such as growth. The questions are: Is Northeast Arctic cod geographically structured with respect to size at age? If yes, is this structure following the expected north-south/east-west gradients? If a structure exists, is it consistent over years? If inconsistent, is it affected by climatic signals? The Institute of Marine Research in Bergen has made a database available with survey data for the years 1985-1998. With this data a spatially structured ANOVA will be performed to try to answer the mentioned questions. If significant results are obtained, then this must be included in the model currently being developed by the ADN project.