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Greenland Ice Sheet Project: Collaboration of local specialisations on global problems

THE STUDY OF THE CLIMATE SYSTEM is one of the fields of modern research that is the most global in nature, but the methods of climate study have been perceived under particular, local circumstances. The success of one particular branch of climate research — the study of Greenland ice cores — has been highly dependent on the collaboration of local research groups with diverse expertises in the analysis of ice cores, to extract as much information on past climate from the ice as possible.

In the early 1970's the first international collaboration on the retrieval and analysis of Greenland ice cores was established as the Greenland Ice Sheet Project, GISP. The participating nations were Denmark, Switzerland and the United States. Using a contextual approach I will discuss how this collaboration was established, and why and how two small European countries participated as equal partners in the collaboration.

Trying to answer these questions requires a look into the political circumstances of glaciological research in Greenland – the fact that Greenland is Danish territory and that the United States had great military interests in Greenland because of its strategic significance during the Cold War. Also the economic and technological aspects of ice core research were important in the development of GISP. Especially I will discuss how the differences in research organisation in Europe and in the US played an important role in the failure to develop an American ice drill and the success of a Danish drill. Finally I will look into how the different scientific approaches to the study of ice cores have complemented each other and enriched our understanding of the changing climate.

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