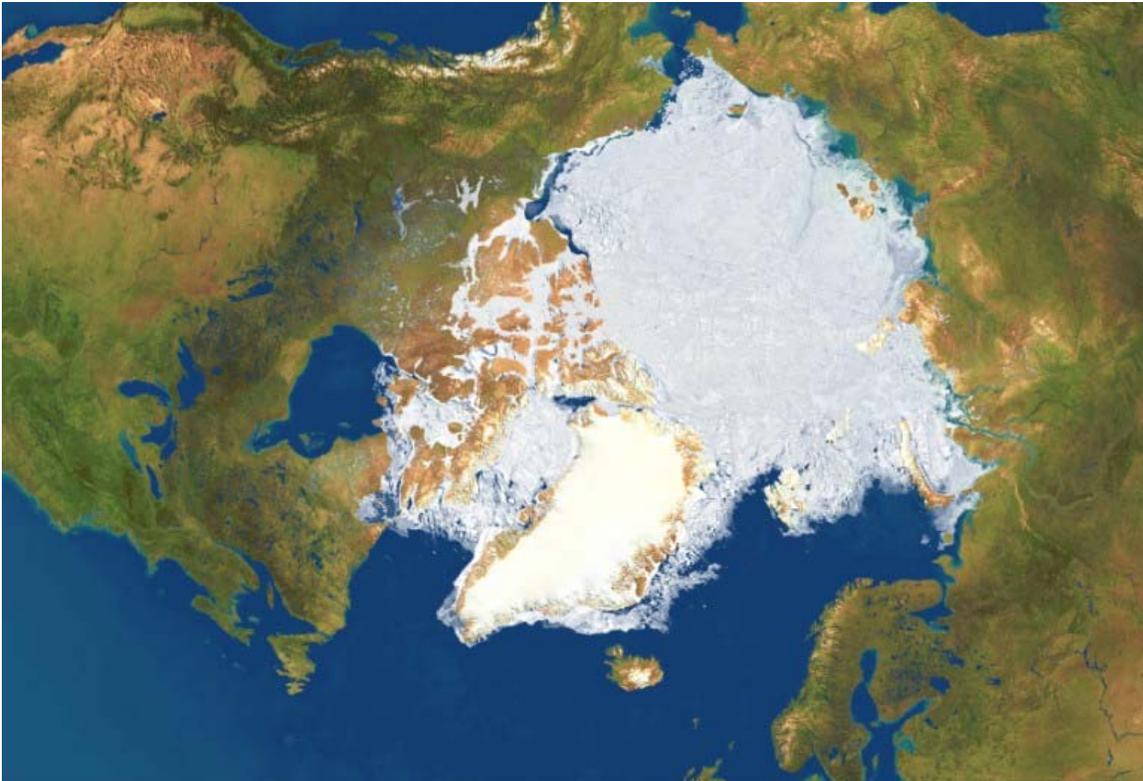


Undersøgelse af klimasignal
i perioden 1245-1851
ud fra havsaltssignalet i NGRIP-iskernen

Study of the Climate Signal in Sea Salt from the NGRIP Ice Core
in the Period 1245-1851



Bachelorprojekt udført ved
Københavns Universitet, Geofysisk Afdeling af:

Louise Wedderkopp Bjerrum
Héðinn Björnsson
Thomas Bjerring Kristensen

Vejledere: Katrine Krogh Andersen,
Marie Louise Siggaard-Andersen

3. maj 2004

Abstract

This bachelor project is divided into two parts:

In the first part we extract the sea salt signal from the NGRIP ice core for the period 1245-1851. From this seasonal signal we construct an annual signal in a way which avoids splitting the winter period, since sea salt is mostly deposited during winter.

The second part treats the analysis of how this annual sea salt signal, a constructed temperature index for the south of Greenland, a NAO-index and local temperature-, precipitation-, and dust signals are interconnected. In the analysis we have used correlations to search for general linear connections between these series.

Through our work we have found no connection between the sea salt deposition and regional climate signals, but some weak interactions with the local climate signals. This is probably because the regional climate signal is too small to be significantly seen in sea salt from one Holocene ice core alone. The geographic variation in sea salt deposition will have to be reduced by the construction of a regional sea salt signal for a more conclusive result on the climate variations in sea salt from the Holocene-period.