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The Greenland Norse and the little ice age: large scale climate changes to a small scale society

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The remains of the medieval Greenland Norse provide a unique biological anthropological material for the investigation of human and environmental interaction. As a population, they were generally secluded from much of the contemporary European medieval society, and land suitable for their way of life was limited in Greenland. The archaeological and historical record is excellent, clearly establishing the 500-year period of colonisation. In other words: the Greenland Norse represent a relatively isolated population, constrained in both space and time. Living in an environment with very little buffering capacities, climate and ecological changes immediately had repercussions. It seems that the Norse in Greenland responded to the general temperature decrease during the 'Little Ice Age', although inside "cultural" limits. Our stable isotope studies confirm shifts in climate (Oxygen) and diet (Nitrogen and Carbon). Demographic modelling indicates that emigration may account for the final abandonment of the settlements. A changing climate thus seems to have driven the Greenland Norse out of Greenland. The presentation will focus on an integrative approach to the study of past populations, focusing on inter alia stable isotope data, climate data and paleodemographics.