

## Geoarchaeology of Paalliq 1 Valley, Kuuvik Bay, Nunavik (Québec)

Héloïse Barbel (1,2), Najat Bhiry (1,2), Dominique Todisco (2,3)

(1) Department of geography, Université Laval, Québec, Canada (heloise.barbel.1@ulaval.ca), (2) Centre for Northern Studies, Université Laval, Québec, Canada (Najat.Bhiry@cen.ulaval.ca), (3) Department of geography, Université de Rouen, Rouen, France (dominique.todisco@univ-rouen.fr)

Given its cultural interest for the community of Akulivik, the Kuuvik Bay, Nunavik (Québec) presents an excellent opportunity for archaeologists, geoarchaeologists and paleo-environmentalists to study the significant archaeological and environmental features of Kuuvik Bay. In this research project, we seek to expand our knowledge of the human-environment relationship in Nunavik in the context of climate change. Our focus is on the changes in Dorset and Thule land occupation in the environmental context (especially during the winter) at the Kuuvik Bay which is located about 100 km north from Akulivik. Intra-site and extra-site geoarchaeological studies have been performed at Structure 10 on the Kuuvik 1516 site as well as in the valley in which it is situated (Paalliq 1 Valley). Many of the multifamily subterranean sod houses recorded at the Kuuvik 1516 site were the first to be inventoried at Nunavik. They had already been observed in Labrador (Eastern Canada), but the modalities of their appearance from the 17th Century continue to be studied. Multifactorial climatic and historical factors have been identified.

Our research focuses on the following question:

What factors contributed to such an important gathering of archaeological structures in the same site and to the appearance of multifamily subterranean sod houses?

Combining extra-site and intra-site approaches, this geoarchaeological study aims to: 1) document the geomorphological context in which the Dorset and Thule occupied the Paalliq 1 Valley, especially in relation to postglacial marine regression (as linked to isostatic rebound), 2) identify processes of cultural and natural formation (biopedologic and sedimentary), and 3) identify the eventual reuse or reorganization phases of Dorset sites by the Thule.