

Metadata Details

Title

Ice dynamics of the glaciers from Broggerbreen Peninsula based on the glaciological studies on Vestre Broggerbreen Glaciers, Svalbard, Arctic

Science Keywords

Category	Cryosphere
Topic	Glaciers/Ice Sheets
Expedition Year	2019-2020
ISO Topic	Meteorology

Summary

Abstract

Granulometric analysis (weight percentage of sand, silt, clay and pebbles specially dropstones) and statistical parameters (mean grain size, sorting, skewness etc) helps in providing environment of sediment transportation and deposition) The surface morphology under scanning electron microscopy provides information on sediment dynamics and depositional environment. Foraminifera indicate very precisely about any fluctuation in the marine climatic conditions. Foraminifera can be used to infer about the ancient shorelines and track global ocean temperature changes during the ice ages. OSL dating of sediments will help in establishing the chronology in different events. Search for terrace deposits will be undertaken and core samples using Auger drill will be collected for comprehensive dating by OSL and C14 for determining paleo strand line and its antiquity.

Purpose

Granulometric analysis (weight percentage of sand, silt, clay and pebbles specially dropstones) and statistical parameters (mean grain size, sorting, skewness etc) helps in providing environment of sediment transportation and deposition) The surface morphology under scanning electron microscopy provides information on sediment dynamics and depositional environment. Foraminifera indicate very precisely about any fluctuation in the marine climatic conditions. Foraminifera can be used to infer about the ancient shorelines and track global ocean temperature changes during the ice ages. OSL dating of sediments will help in establishing the chronology in different events. Search for terrace deposits will be undertaken and core samples using Auger drill will be collected for comprehensive dating by OSL and C14 for determining paleo strand line and its antiquity.

Data Center