

Metadata Details

Title

Terminal Moraines in Grautfatet, Humboldt Mountain, East Antarctica Indicators of Rate of Glacier Recession.

Science Keywords

Category	Cryosphere
Topic	Glaciers/Ice Sheets
Expedition Year	1989-1990
ISO Topic	Geodesy

Summary

Abstract

Grautfatet is a vast, morainal flat within the Humboldt Mountain. The Somovken glacier branching into the Grautfatet and Humboldt glaciers has controlled the deposition of terminal moraines in this flat. The disposition of the two sets of terminal moraines, along with the relief pattern of the surrounding ridges have been used to decipher an ice level lowering of 350 to 400 metres and a retreat of Somovken glacier by 7.5 km since the last peak ice condition. This recession, in conjunction with the inferred age of last peak ice condition, indicates an average retreat rate of 75 metres per 100 years for Somovken glacier.

Purpose

Humboldt mountains and adjacent nunataks constitute a group of disjointed, irregularly shaped hills showing variations of height from 1800 m above m.s.l. in the north to over 2700 m above m.s.l. in the south. The ground level varies from about 1500m to about 1900 m above m.s.l. Grautfatet, located within the Humboldt mountain is a vast amphitheatrical morainal flat bounded by ridges in northern, eastern, southern and southwestern margins with wide opening towards west.

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