

Glaciers eroded mountains faster

December 11 2005

U.S. researchers have have documented how fast glaciers eroded the topography of the Coast Mountains of British Columbia, Canada.

University of Michigan, California Institute of Technology and Occidental College researchers used a new geochemical tool to quantify the rates and magnitude of glacial erosion across a major valley.

They found that glaciers radically altered the landscape around 1.8 million years ago -- about the time that Earth began to experience a number of ice ages.

The erosion rates documented in the study suggest that glaciers eroded the mountains six times faster than rivers and landslides had before glaciation began. The researchers also found that glaciers scraped at least about 1.2 miles of rock from the mountains.

"These results are exciting, because they clearly document that glaciers are the most efficient method for sculpting the topography of the range," said Todd Ehlers of University of Michigan.

The findings are published in Science.

Copyright 2005 by United Press International

Citation: Glaciers eroded mountains faster (2005, December 11) retrieved 18 April 2024 from

<https://phys.org/news/2005-12-glaciers-eroded-mountains-faster.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.