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PII: S0921-8181(17)30199-6
DOI: doi:10.1016/j.gloplacha.2017.11.011
Reference: GLOBAL 2677

To appear in: *Global and Planetary Change*

Received date: 24 April 2017
Revised date: 8 November 2017
Accepted date: 10 November 2017

Please cite this article as: Raimo Sutinen, Eija Hyvönen, Maarit Middleton, Meri-Liisa Airo , Earthquake-induced deformations on ice-stream landforms in Kuusamo, eastern Finnish Lapland. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Global(2017), doi:10.1016/j.gloplacha.2017.11.011

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Key words: LiDAR, fluting, Pulju moraine liquefaction, landslide, Finland

Abstract

Kuusamo in eastern Finnish Lapland is characterized by ice-streamlined landforms as well as clusters of historical and recent earthquakes (M_w<4). Since recent earthquakes are often found to be located on the traces of postglacial faults (PGFs) within the Fennoscandian shield we postulate that some part of the ice-stream landforms have been deformed by the past earthquakes in Kuusamo. Airborne LiDAR (Light Detection And Ranging) DEMs (digital elevation models) revealed significant numbers of postglacial deformations, such as liquefaction