

Topographical survey of end moraine and dead ice area at Imja Glacial Lake in 2001 and 2002

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Abstract

A survey was carried out at the end moraine and the dead ice area of the Imja Glacial Lake in October 2001 and in April 2002 using a digital theodolite with a laser distance meter and differential Global Positioning System (d-GPS). The survey points covered the whole dead ice area and end moraine of the Imja Glacier, and map contours were produced at 5-m intervals. This topographical map will be a significant means to analyze the time variation of the dead ice area and end moraine in future re-mapping. Changes in the lake level and the spillway on the dead ice area since 1994 were also analyzed in comparison with the measurements in 1994 by Watanabe *et al.* (1995).