

Bathymetric topography of glacial lake in Bhutan Himalaya

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The profile of dam shape and lake water volume are essential information to consideration of glacial lake outburst possibility and evaluation of flood potential. Currently, dam shape and lake water volume are speculated from surrounding slope topography. Our project carried out bathymetric survey in the upper stream of Mangde Chu river, northern central Bhutan. As the result, the deepest part at the upper end and shallow area at lower part of the lakes which were reported by previous study are identified. Furthermore, some bathymetric maps show submerged threshold sills. Considered from surrounding topography, these thresholds are part of end moraine of each glacier. In this presentation, method of survey, actual profile of lake and lake shape classification including bathymetric information will be introduced.

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