Remote sensing monitoring of high mountain lakes within Pamir area

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Report describes method on using remote sensing data to determine important characteristics for potentially dangerous mountain lakes: area, volume and maximal discharge of outburst wave. Empirical formulae for computation lake volume as function its area and mean depth were obtained on the base of initial data for 141 lakes distributed onto four groups. Maximal discharges of outburst wave by Costa formula were determined for set of lakes located in the Gunt river basin. These lakes could be the source of mudflows or flash floods which are potentially dangerous for Horog city and other settlements.