

## Recent variations of glacial lakes in Issyk-Kul Basin, the northern Tien Shan

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Several large drainages from glacial lakes occurred in the Issyk-Kul Basin (Kyrgyzstan), the northern Tien Shan. Although glacial lakes are small size, large drainages have caused serious damages to resident areas near the mountain sites. We investigated the current state of glacial lakes distributed in the Issyk-Kul Basin. Several satellite images were analyzed taken in 2013-2016, and classified the situations of glacial lakes of each year according to their variation pattern. We classified lakes into three types, continuous, recurring, transient. Our results showed that glacial lake of recurring type has a temporal ice-dam blockage of the drainage channel and high risk to drainage in this region.

Keywords: glacial lake, ALOS satellite data, Tien Shan