

A study on the glacial dynamics in central Karakorum

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The regions of high-mountains are frequently called "water towers" for the lowlands and a precise knowledge of the characteristics is required for their proper management. The glaciers provide water by melt down not only to the people living close to the mountains but also contribute runoff to the lowlands and recharge the river fed aquifers and finally effect the global sea level change. After Alaska and Arctic regions, the Karakorum-Himalaya (K-H) area constitutes the second largest glacial cover of the Earth. The Karakoram glaciers are fed by precipitation and avalanche. Based on previous studies, surges and slight gain in the mass of central Karakorum glaciers has been reported. The surges of individual glaciers are generally out of phase, indicating a limited climatic control on their dynamics. In the present research, the focus is to observe the effect of seasons and earthquake events on the glacial dynamics, in this region.

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