



Unprecedented 21st century glacier changes?

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The monitoring of glacier fluctuations has been internationally coordinated since the late 19th century. Since then, the World Glacier Monitoring Service (WGMS) and its predecessor organizations have been compiling and disseminating standardized data on glacier changes in length, area, volume, and mass. The currently prepared Volume X (2005-2010) of the 'Fluctuations of Glaciers' series completes the publication of available data for the first decade of the 21st century.

In this presentation we provide an overview on the available dataset including more than 38,000, 4,000, and 1,000 observations in front variation, direct glaciological as well as geodetic mass balances, respectively. Based on this comprehensive dataset, we present the latest findings in glacier length changes, compare the results from the direct glaciological and from the geodetic mass balances, and discuss if the glacier changes of the 21st century are unprecedented as compared to the ones since the end of the so-called Little Ice Age.