

Abstract Details

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★ Abstract title:

Pioneering glaciological research by scientists and artists in the 18th/19th century – examples from the European Alps

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During the Little Ice Age, the attractiveness of glacier landscapes and the easy accessibility made various glaciers desirable objects of study for scientists, artists, and tourists. In this presentation, we give examples of pioneering glaciological research in the European Alps.

Probably for the first time in history of glaciology, the advancing of ice masses was measured at the Upper Grindelwald glacier (Swiss Alps) in 1773 by a shepherd boy and not a savant. The glacier advance culminating in 1778/79 is documented impressively on a big panorama painting by Caspar Wolf. Thanks to the unique collection of oil paintings by Wolf, probably the most famous artist of Alpine landscapes at that time, the advances of several Alpine glaciers are richly documented.

At the same time, Horace Bénédict de Saussure set a milestone with his work “Voyages dans les Alpes”. These volumes contain first descriptions of moraine ridges, length fluctuations of the Mont Blanc glaciers, and statements by local people. Since the end of the 18th century, also landscape artist Jean-Antoine Linck was highly interested in glacier phenomena. Linck depicted glacier changes in the Mont Blanc area in great detail.

James David Forbes carried out further pioneering glaciological research in the Mont Blanc area. Forbes' scientific map of the Mer de Glace from 1842 is, together with the map by Johannes Wild and Louis Agassiz of Unteraar glacier (Swiss Alps), one of the earliest detailed glaciological maps. Systematic observations on Unteraar glacier began with the fieldwork of naturalist Franz Josef Hugi between 1827 and 1831.