

Decrease of glacier area in the Stubai Alps and the Ötztal Alps between 1991 and 2016

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The mountain area of the Stubai and Ötztal Alps is part of the European Alps in Austria just at the border to Italy. It is a well-known skiing and mountaineering area and several known peaks and glaciers are located there. Therefore, it is well studied and glacier area is inventoried for many different time steps available via the GLIMS webpage. Since the last decades, severe decrease of glacier area and volume are monitored in this area as in several other parts of the European Alps. This study focuses on the last 25 years and compares glacier area development of several time steps. Data from the GLIMS database as data mapped from remote sensing products (Landsat 7 and 8) is used. Climate and climate forcing variables as temperature and precipitation are analyzed to especially explain rapidly changes in glacier area.