



ICG2022-432, updated on 29 May 2023

<https://doi.org/10.5194/icg2022-432>

10th International Conference on Geomorphology

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## New insights into the Last Glacial Maximum in the Maritime Alps from paleoglacier reconstructions and $^{10}\text{Be}$ surface exposure dating

Lukas Rettig<sup>1</sup>, Sarah Kamleitner<sup>2</sup>, Susan Ivy-Ochs<sup>2</sup>, Giovanni Monegato<sup>3</sup>, Paolo Mozzi<sup>1</sup>, Adriano Ribolini<sup>4</sup>, Brice R. Rea<sup>5</sup>, Lucy Ashpitel<sup>5</sup>, and Matteo Spagnolo<sup>5</sup>

<sup>1</sup>Dipartimento di Geoscienze, Università degli studi di Padova, Padova, Italy (lukas.rettig@phd.unipd.it)

<sup>2</sup>Laboratory of Ion Beam Physics, ETH Zürich, Zurich, Switzerland

<sup>3</sup>CNR IGG, Padova, Italy

<sup>4</sup>Dipartimento di Scienze della Terra, Università di Pisa, Pisa, Italy

<sup>5</sup>Department of Geography & Environment, University of Aberdeen, Aberdeen, United Kingdom

The valleys of the Maritime Alps (SW European Alps) host a variety of glacial sediments and landforms, and several well-defined moraine ridges have been ascribed to advances that occurred during the Last Glacial Maximum (LGM). Utilising these moraines to reconstruct paleoglacier 3D geometries and their associated Equilibrium Line Altitudes (ELAs) is an excellent method to estimate paleoclimatic parameters, especially if integrated into a solid geochronological framework. Previous studies have been focusing mostly on the catchments of the Gesso and the Stura rivers with other areas receiving less attention. Particularly, chronologically constrained reconstructions of relatively small LGM valley glaciers (in the order of 1-10 km<sup>2</sup>) are largely lacking, but due to their shorter response times can prove crucial for a better understanding of local and regional paleoclimatic patterns, such as the influence of the proximal Mediterranean Sea on moisture supply during the LGM.

Here, we present new insights into the dynamics of some LGM valley glaciers in the Maritime Alps from three different catchments. These catchments hosted glaciers of varying sizes, aspects, and elevation ranges and are located both on the Italian and French side of the mountain range. Chronological control is provided by 15 new  $^{10}\text{Be}$  surface exposure dates, for which samples were taken from boulders on lateral and frontal moraine ridges. Results show that glaciers remained at an advanced position up until around 19 ka. This indicates that climatic conditions, favourable for glacier growth, continued to prevail in the south-western Alps into the latter part of the LGM. Chronologies, reconstructed glacier geometries, and associated ELAs, are presented along with the implications of the findings for our understanding of the LGM paleoclimate.