



Towards a glacial chronology of the central Dinaric Alps using cosmogenic ^{36}Cl dating

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Glacial chronology of the Dinaric Alps is largely understudied and therefore still not well-understood if compared with other Mediterranean mountains. Few attempts of dating glacial deposits have been made recently in the southern Dinaric Alps, suggesting at least four major glacial advances in the Late Quaternary. However, a more precise timeframe of glaciations in the Dinaric Alps is needed for a better understanding of the (a)synchrony of glacier advances in the Mediterranean during the Late Quaternary cold stage climates. The aim of this study is to reconstruct the glacial history of three carbonate mountain massifs in the central Dinaric Alps by means of geomorphological investigation and surface exposure dating of glacial boulders. Different generations of moraines and other glacial landforms in the Čvrsnica (2226 m), Velež (1969 m) and Crvanj (1920 m) Mountains in Bosnia and Herzegovina were mapped and used as morphometrical markers for estimating the extent and thickness of former glaciers. A peculiarity of the studied moraines is their magnitude in relation to the glacier's hinterland and high preservation potential related to the karst environment with almost absent fluvial reworking. These well-preserved moraines hosting carbonate blocks on the crests are excellent sampling sites for cosmogenic ^{36}Cl dating. Thirty-two boulders from some of the outermost hummocky, lateral and terminal moraines from the three mountains were sampled for cosmogenic ^{36}Cl surface exposure dating. Analytical processes of these samples are still in progress.