Denudation rates and geomorphic evolution of the Cape Mountains determined through cosmogenic nuclide dating using $^{10}$Be and $^{21}$Ne in quartz

T. Scharf$^1$, A. Codilean$^2$, M.J de Wit$^3$, S. Niedermann$^4$

1. AEON-University of Cape Town, South Africa, taryns1@gmail.com; Earth Surface Geochemistry, GFZ, Potsdam, Germany, scharf@gfz-potsdam.de
2. Earth Surface Geochemistry, GFZ, Potsdam, Germany, codilean@gfz-potsdam.de
3. AEON-University of Cape Town, South Africa, maarten.dewit@uct.ac.za
4. Inorganic and Isotope Geochemistry, GFZ, Potsdam, Germany, nied@gfz-potsdam.de
Project Outline

Figure A: Map of the southern African coastline showing the distribution of the Cape Fold Belt.

Figure B: Location of sampling sites throughout the Langeberg and Swartberg mountain ranges.

Figure C: Sampling sites within Tradouw Pass.
Study Area

Figure D: Benches of possible fluvial origin, sampled within Tradouw Pass.

Figure E: Alluvial terraces preserved above the surrounding landscape.