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Multiple prehistoric landslides at Köfels (Austria): Timing by cosmogenic ^{10}Be

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The giant landslide of Köfels (Austria) has been radiocarbon dated using compressed wood pieces found under the debris of the toe of the landslide. This rare opportunity made it a prime site for the determination of cosmogenic nuclide surface production rates. Boulders on top of Tauferberg (landslide toe) were used to determine the cosmogenic ^{10}Be production rate [1]. In the meantime, we have measured ^{10}Be concentrations in samples from boulders strewn along the Fundus Crest ridge, the head scarp of the slide. The exposure ages calculated for those boulders are several thousand years younger than the timing of the main event indicating a history of multiple large landslides.

[1] P.W. Kubik and S. Ivy-Ochs, Nucl. Instr. and Meth. B 223-224 (2004) 618-622