



## **More Evidence for Post Miocene Uplift in the eastern Alps: A Geomorphic Map for the Gurktal Alps**

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Modern geomorphic studies document a long wavelength, post-Miocene surface uplift event at the eastern end of the Alps, the extent of which is as yet unknown. In order to explore the westward extension of this event we mapped the morphology in the Gurktal region, which is the westernmost region that remained ice-free during the glaciation periods. At this time the Gurktal region was a 40 x 20 km sized ice-free oasis that was almost completely surrounded by the ice fields of the Mur and Drau glaciers. As such, glacial carving in the Gurktal Alps is absent and its geomorphic record preserves landforms that may be a record of the Miocene and post-Miocene landscape forming processes. Here, we present a geomorphic map of the Gurktal Alps that places particular focus on mapping planation surfaces that may be correlated with those recognized further east at the Alps-Pannonian Basin transition.

Our mapping results show that several of these levels may indeed be recognized. In particular, we recognise extended planation surfaces in the middle Gurk and the upper Wimitz valleys that are located approximately 200-300 m above the local ground water level and about 200-250 m above the “Niederterrasse” level and propose correlations with planation levels some 100 km further east. Our mapping results suggest that a Post Miocene surface uplift may extend substantially further west than previously thought.