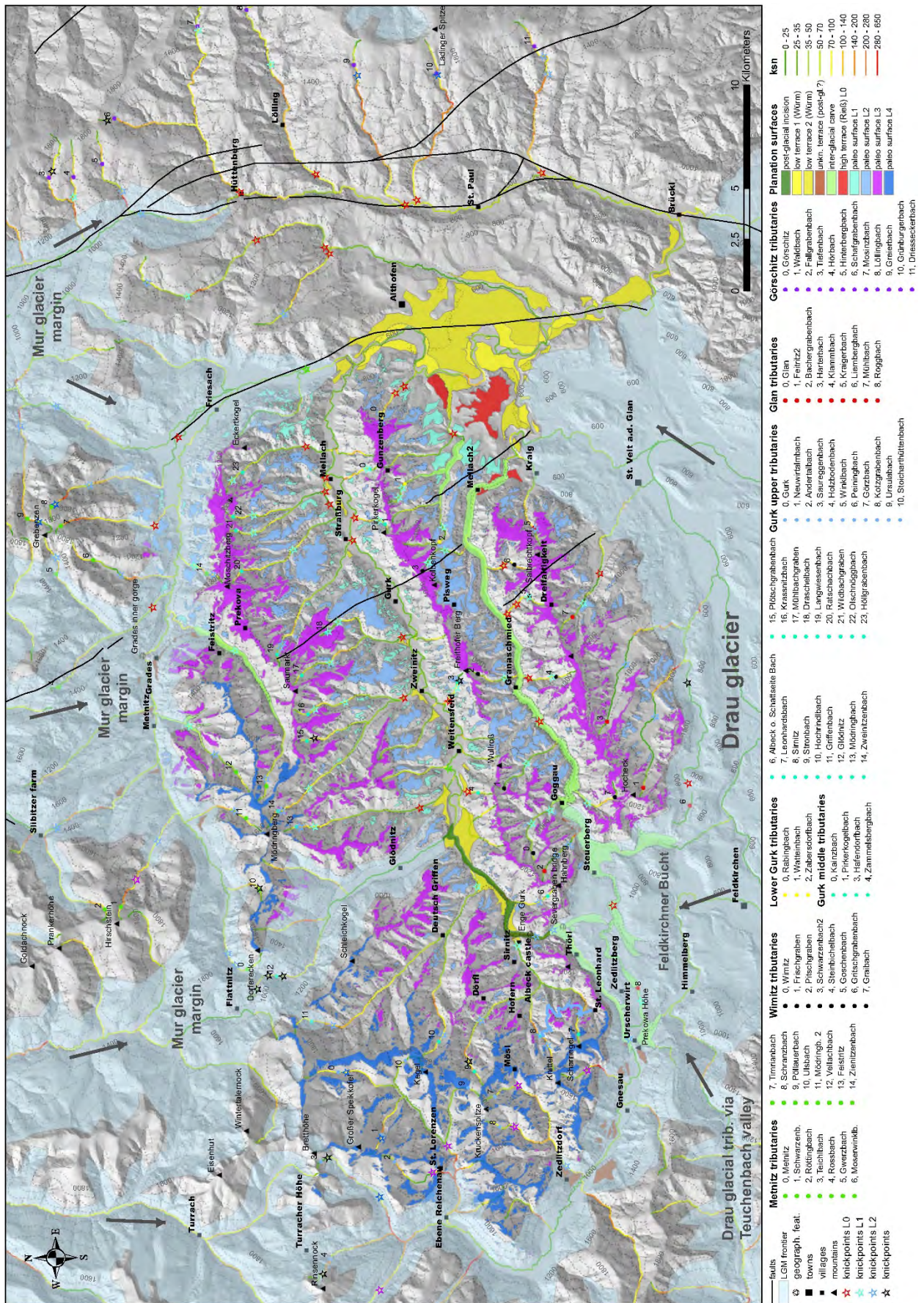


A Geomorphic Map for the Gurktaler Alps: Evidence for pre-Pleistocene Landforms

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The Gurktaler Alps are the westernmost region of the Eastern Alps that escaped glacial reshaping in the Pleistocene. Its morphology therefore preserves evidence of older landforms in closer proximity to the central part of the range than any other region in the Alps (Text-Fig. 1). The region is therefore useful to document aspects of the geomorphological evolution for the Eastern Alps during both, the Pleistocene glaciations and the earlier uplift history. Here, we present a geomorphological map for the region that was derived from a combination of field work and numerical analysis of the digital elevation model for the region. Channel analysis and the distribution of Pleistocene gravel terraces suggest that the main trunk of the Gurk River was diverted from the Wimitz valley in the Rissian. Importantly, our mapping results document four planation surfaces located roughly at about 1,500 m, 1,200 m, 900 m and about 750 m above sea level. We correlate these levels with well-known planation surfaces from the eastern end of the Alps and suggest that they can be interpreted in terms of more than 800 m of surface uplift in the last six million years.



Text-Fig. 1: Geomorphological map of the Gurktaler Alps in the region that escaped the Pleistocene glaciations. The four paleosurfaces mapped here correlate with well-known paleosurfaces in the Grazer Bergland.