



On the Age of Deep Glacial Erosion in the Alps

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Overdeepened basins and valleys are known from several areas within the Alps, in particular from Switzerland and northern Italy (e.g. Schlüchter, 1979). It is furthermore remarkable that glacial erosion partly left remains of older deposits in lateral valley positions such as Gnadentalterrasse of Inn Valley (Fliri et al., 1973), Austria, or Thalgut in Aare Valley (Schlüchter, 1989), Switzerland, that represent former valley bottoms. Several of the deep basins and relics contain complex sedimentary sequences that indicate deposition much before the last glaciation of the Alps (Würmian). Recent results from palynology and luminescence dating indicate a complex deposition history for such sediments, for example for the complex sequence of Meikirch, Aare Valley (Preusser et al., 2005), which will be reviewed in this presentation. The available data implies that deep erosion and shaping of the present subsurface occurred throughout several phases during the Quaternary.

References

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