



ICG2022-533, updated on 06 Jun 2023

<https://doi.org/10.5194/icg2022-533>

10th International Conference on Geomorphology

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## On the impact of Saharan dust addition to sedimentary units

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Annual emission of mineral dust from Saharan sources can be set into the range of 1-5 billion tons per year. Besides several other climatic and environmental effects, fine-grained dust addition to clastic sedimentary units (aeolinites, loess-paleosol sequences, sand sheets) has a definite impact on the granulometric properties of these deposits. Interpretation of grain size data is greatly affected if all these factors are ignored.

Here we present an overview of Saharan dust addition to loess-paleosol sequences with special attention to interglacial paleosols. According to our findings on modern Saharan dust events and dust deposition in Central Europe, the mass accumulation of North African dust is around 3-5 g/m<sup>2</sup>/year. Stratigraphic and sedimentary data of loess-paleosol sequences allowed the determination of the relative contribution of Saharan dust to interglacial paleosols. Saharan dust material represents 20-30% of the clay- and fine silts-sized population of peodogene units of loess sections.

Support of the National Research, Development and Innovation Office (Hungary) under contract NKFIH FK138692 is gratefully acknowledged.