



ENVIRONMENTAL HAZARDS

Last glacial atmospheric environment of the Carpathian Basin

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Nowadays, atmospheric particulate matter, and in particular PM₁₀ and PM_{2.5}, are considered to be priority air pollutants and are associated with very significant health risks. Environmental research has focused on the main anthropogenic sources, but research on natural sources of particulate matter, which are highly differentiated in space and time, has been overshadowed in this respect. This is particularly true for dust storms in the geological past, which are completely free of anthropogenic influences.

Aeolian dust deposits with appropriate stratigraphic data, in particular chronostratigraphic data and granulometric information, provide a unique opportunity to estimate the atmospheric dust volume of the last few hundred thousand years. In the case of the Carpathian Basin loess-paleosol series, we have sufficiently accurate data for the last glacial period to contribute to a better understanding of past atmospheric conditions in relation to the atmospheric dust concentration in the late Pleistocene.

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