



1. Title

Micromorphological Answers to Palaeopedological and Polypedogenetic Questions

2. Type

Divisional Symposium

3. Organizer(s) & Convener

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4. Rationale

Specific micromorphological properties observed in paleosols and polygenetic soils may serve as valuable indicators of past environments. It is however essential that such micromorphological observations are appropriately interpreted in order to obtain reliable reconstructions of palaeo-environments. Thus, this session focuses on the interpretation and use of micromorphological palaeo-environmental indicators.

5. Objectives

Objectives will be to identify micromorphological properties of paleosols and polygenetic soils that can be used as indicators of palaeo-environmental conditions.

6. Description

Soil development and soil properties depend on environmental conditions in which soils have formed. Hence, paleosols are archives of past environments. Micromorphological analysis is particularly valuable for identifying soil properties on a micro-scale that are indicative for specific environmental conditions. This tool is also extremely valuable for identifying the polygenetic nature of surface soils because even if the major part of the solum has responded to a changing environment and has approached a new equilibrium corresponding to the present environment, micromorphological analysis may still identify some relict features that can be only explained by different former environmental conditions. Contributions presenting such micromorphological indicators for various types of environmental conditions are welcome. In addition, examples of palaeo-environmental reconstructions of particular regions based on such indicators may be presented.

