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The Finow soil – a stratigraphic marker or just a pedologic horizon?

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Palaeosoils indicate periods of landscape stability, and therefore warmer periods during the cold climate conditions of the Late Pleistocene, when pedogenic processes can shape the surface. Therefore, in Late Pleistocene glacial and periglacial deposits, palaeosoils are widely used as chronostratigraphic markers. However, in contrast to limnic archives the records in terrestrial sediments are often discontinuous or ambiguous. The so called Finow soil is commonly found as 5 to 15 cm thick and fossilized horizon, characterized by brunification and the illuviation of clay in the sandy deposits of Northern Central Europe. We present a micromorpological approach together with OSL ages, that contradicts the stratigraphic potential of the Finow soil and also questions the suitability of soil horizons formed by clay illuviation as stratigraphic markers.