New OSL ages from last glacial loess in Silesia, Poland

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Loess from the last glaciation (Weichselian) in Silesia, southwest Poland, was deposited relatively close to the maximum ice advance. Therefore, periglacial features such as ice wedging, thermokarst, and gelification are well present in several exposures, but also interstadial soil formations or soil complexes. Our present research focusses on the transition from the Middle Pleniglacial to the Upper Pleniglacial. We present first OSL dating results from the loess sections Zapreczyn and Bialy Kosciol north and south from Wroclaw bracketing the interstadial L1S1 (Gi/LMd) soil complex. The different distance of these two sections from the maximum ice advance apparently caused some regional differences in the stratigraphy and the typology of the L1S1 soil complex which spans a considerable time due to repeated reworking and/or erosion of soil material under periglacial conditions. Whereas no ice-wedging is recorded from the “lower younger loess” at Bialy Kosciol, at Zapreczyyn the loess containing a buried ice-wedge network is now evidently coeval with the lower younger loess and the upper younger loess is represented in a small “greda” containing sand stripes.

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