Figure S1. Quartz, feldspar dose rates within the studied LPS.

Figure S2. Dose response and decay curves obtained for different aliquots of quartz sample HU110119 at the depth of 840 cm.

Figure S3. Dose response and decay curves obtained for different aliquots of quartz sample HU110135 at the depth of 670 cm.

Figure S4. Dose response and decay curves obtained for different aliquots of quartz sample HU110139 at the depth of 610 cm.

Figure S5. Dose response and decay curves obtained for different aliquots of quartz sample HU110147 at the depth of 520 cm.

Figure S6. Dose response and decay curves obtained for different aliquots of quartz sample HU110165 at the depth of 340 cm.

Figure S7. Dose response and decay curves obtained for different aliquots of quartz sample HU110169 at the depth of 300 cm.

Figure S8. Dose response and decay curves obtained for different aliquots of polymineral pIRIRSL290 samples I.

Figure S9. Dose response and decay curves obtained for different aliquots of polymineral pIRIRSL290 samples II.

Figure S10. Dose response and decay curves obtained for different aliquots of polymineral pIRIRSL290 samples III.

Table S1. Age differences between modelled dates of Sümegi et al. (2020) (Model 1) and the present study (Model 2).

Table S2. Calibrated and modelled ages and calculated per sample age-depth intervals.

Table S3. Comparison of 14C and quartz OSL dates.

Table S4. Comparison of 14C, feldspar pIRIRSL50 and pIRIRSL290 dates.

Table S5. Water contents, radionuclide contents relevant to OSL and IRSL ages.