

Supplementary material to: Morphostratigraphy and chronology of depositional and erosional events at the Järve scarp (Saaremaa, Western Estonia) over the past 2000 years

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Table S1. Luminescence sample information and sediment radioisotopic composition data. Lab id – code in the OSL dating report by the Lund Luminescence Laboratory from 20.05.2025; SE – sample elevation in the EH2000 system; WC – sample water content; composition of radioisotopes ²³⁸U, ²³²Th (part per mille) and ⁴⁰K (per cent)

Short code	Lab id	Latitude	Longitude	SE (m)	Grain size (µm)	WC (%)	²³⁸ U (ppm)	²³² Th (ppm)	⁴⁰ K (%)
L1	25003	58°11'53"	22°17'14"	1.78	90–180	12	0.80±0.21	37.5±0.69	1.62±0.06
L2	25004	58°11'53"	22°17'14"	2.31	90–180	8	1.32±0.29	2.08±0.93	1.60±0.07
L3	25001	58°11'25"	22°16'16"	5.13	180–250	8	0.83±0.25	4.35±0.82	1.39±0.06
L4	25002	58°11'25"	22°16'16"	5.57	180–250	8	0.73±0.22	2.75±0.73	1.43±0.06

Table S2. Luminescence (quartz) dates (Age, CE). SE – sample elevation; CAM – Central Age Model (weighted mean) age; MD – mean dose; n, a/t. – number of aliquots (accepted/total); Dose rate; Age (CE) – age converted to Common Era (CE)

Short code	Lab id	SE (m)	CAM age (ka)	MD (Gy)	n, a/t.	Dose rate (Gy/ka)	Age (CE)
L1	25003Q	1.78	1.28±0.07	2.54±0.07	27/48	1.98±0.10	750 ±70
L2	25004Q	2.31	1.06±0.08	2.23±0.11	23/39	2.06±0.12	970 ±80
L3	25001Q	5.13	1.44±0.12	2.65±0.16	17/24	1.86±0.10	590 ±120
L4	25002Q	5.57	0.39±0.31	0.69±0.05	21/48	1.78±0.10	1630 ±310

Table S3. Feldspar ages calculated based on mean dose according to IR50 and PIRIR225 protocol; n, a/t. – number of aliquots (accepted/total)

Short code	Lab id	Signal	Mean Age (ka)	Mean dose (Gy)	n, a/t.	Dose rate (Gy/ka)	g-value (%/dec.)	Residual (Gy)
L1	25003F	IR50	2.02±0.17	5.01±0.13	6/6	2.49±0.20	2.52±0.25	0.8
		pIRIR225	3.53±0.32	8.78±0.36	5/6		1.93±0.10	3.2
L2	25004F	IR50	1.89±0.18	4.85±0.24	5/6	2.57±0.21	2.41±0.40	0.4
		pIRIR225	3.14±0.29	8.07±0.37	6/6		1.44±0.04	1.1
L3	25001F	IR50	1.82±0.15	4.87±0.24	5/6	2.67±0.17	2.29±0.31	2.9
		pIRIR225	2.55±0.24	6.81±0.47	5/6		2.07±0.25	7.6
L4	25002F	IR50	0.73±0.06	1.89±0.10	5/6	2.60±0.17	1.01±0.37	0.9
		pIRIR225	1.25±0.12	3.25±0.23	5/6		0.27±0.98	2.4