

## Appendix 1

### Results of infrared optically stimulated luminescence (IR-OSL) dating and radioactivity data on sand samples from the Naglis dune and Vingis dune sites

No.	Locality	Depth, metres below surface	Lab. No	Field No	U [ppm]	Th [ppm]	K [%]	IR-OSL age [ka]
1	Naglis dune	0.5	RLQG 2102-112	Kopos-1	0.01	0.86	0.66	2.2 ± 0.2
2	-“-	0.5	RLQG 2103-112	Kopos-2	0.20	0.93	0.64	1.7 ± 0.2
3	-“-	0.5	RLQG 2104-112	Kopos-3	0.96	1.82	0.77	1.4 ± 0.1
4	-“-	0.5	RLQG 2105-112	Kopos-4	0.22	1.29	0.79	1.3 ± 0.1
5	-“-	0.5	RLQG 2106-112	Kopos-5	0.82	1.92	0.80	1.1 ± 0.1
6	Vingis dune	0.5	RLQG 2107-112	Kopos-6	0.08	1.47	0.75	2.8 ± 0.2
7	-“-	0.5	RLQG 2108-112	Kopos-7	0.25	0.55	0.74	2.4 ± 0.2
8	-“-	0.5	RLQG 2110-112	Kopos-8	0.36	0.59	0.82	2.3 ± 0.2
9	-“-	0.5	RLQG 2109-112	Kopos-9	0.31	0.82	0.73	2.3 ± 0.2
10	-“-	0.5	RLQG 2111-112	Kopos-10	0.66	1.03	0.86	2.2 ± 0.2

U, Th, K are the uranium, thorium and potassium content in sediments;  
uncertainties: U determination: ±2–3%; Th determination: ±3–4%; K determination: ±1–2%; gamma irradiation:  
±3–5%

to avoid the effect of heavy minerals on dose-rate determination, we dated the quartzose sand immediately overlying four heavy mineral horizons