

Error margin calculations for time-depth data discussed in Berendsen et al. (2007, Netherlands Journal of Geosciences 86, pp. 333-354). Original data published by Jelgersma (1961), Van de Plassche (1982), Van Dijk et al. (1991) and Berendsen & Stouthamer (2001), see Table 1 in Berendsen et al. (2007) for details.

Note: the compaction factors applied in this study are 2.5 (for the base of the sample) and 3.5 (for the top of the sample), instead of 1.5 and 2.5, respectively, as mentioned in the text of the paper. For instance, a 2-cm-thick sample, taken at 3 cm above the dune surface, was 'decompacted' to 7.5 - 17.5 cm above the dune surface. These higher compaction factors are still within a realistic range and do not impact the validity of the conclusions reached in the paper.

Lab. nr.	Age	Std dev	Cal age ± 1σ	Cal age ± 2σ	x-y coordinates	Name	Upward/downward errors						Upward corrections			Total vertical ranges				Lower limit	Mat.		
							A Top depth (cm rel. to OD)	B Base depth (cm rel. to OD)	C Surface elevation (cm)	D Depth in core (cm)	E Compaction (cm)	F Water depth (cm)	G=√(C²+D²+E²+F²) Total vertical elevation 1σ (cm)	H=2xG Total vertical elevation 2σ (cm)	I Correction water level (cm)	J Correction compaction max. (top) (cm)	K Correction compaction min. (base) (cm)	L=A+G+I+J Min. depth top 1σ (cm rel. to OD)	M=B-G+I+K Max. depth base 1σ (cm rel. to OD)			N=A+H+I+J Min. depth top 2σ (cm rel. to OD)	O=B-H+I+K Max. depth base 2σ (cm rel. to OD)
GrN-01140	5030	70	3910-3750 cal BC	3990-3670 cal BC	±097.300-431.600	Barendrecht VI	-428	-430	2	2	10	20	11	23	10	18	8	-389	-424	-378	-435	-435	Fenwood peat
GrN-01144	4640	70	3490-3290 cal BC	3570-3190 cal BC	±097.300-431.600	Barendrecht VIII	-340	-345	2	2	10	20	11	23	10	25	8	-294	-339	-282	-350	-350	Fenwood peat
GrN-01145	5970	80	4950-4750 cal BC	5050-4650 cal BC	±097.300-431.600	Barendrecht IV	-616	-621	2	2	10	20	11	23	10	25	8	-570	-615	-558	-626	-626	Fenwood peat
GrN-01146	4270	55	2970-2810 cal BC	3030-2730 cal BC	±097.300-431.600	Barendrecht VII	-319	-324	2	2	10	20	11	23	10	25	8	-273	-318	-261	-329	-329	Fenwood peat
GrN-01147	3900	70	2470-2270 cal BC	2570-2170 cal BC	±097.300-431.600	Barendrecht X	-263	-267	2	2	10	20	11	23	10	23	8	-219	-261	-208	-272	-272	Fenwood peat
GrN-01148	3480	50	1870-1730 cal BC	1930-1670 cal BC	±097.300-431.600	Barendrecht XII	-192	-197	2	2	10	20	11	23	10	25	8	-146	-191	-134	-202	-202	Fenwood peat
GrN-01151	5580	60	4490-4350 cal BC	4550-4290 cal BC	±097.300-431.600	Barendrecht V	-565	-572	2	2	10	20	11	23	10	30	8	-514	-566	-502	-577	-577	Fenwood peat
GrN-01160	5945	90	4930-4710 cal BC	5050-4610 cal BC	±097.300-431.600	Barendrecht I	-580	-585	2	2	10	20	11	23	10	25	8	-534	-579	-522	-590	-590	Fenwood peat
GrN-07830	3930	60	2510-2330 cal BC	2590-2250 cal BC	093.535-441.250	Hillegersberg H1	-252	-254	1	2	10	20	11	22	10	8	2	-223	-254	-212	-265	-255	Fen peat
GrN-07831	4245	40	2910-2790 cal BC	2950-2730 cal BC	093.535-441.250	Hillegersberg H2	-282	-286	1	2	10	20	11	22	10	13	2	-248	-286	-237	-297	-287	Fen peat
GrN-07832	4390	50	3130-2970 cal BC	3190-2890 cal BC	093.535-441.250	Hillegersberg H3	-303	-307	1	2	10	20	11	22	10	13	2	-269	-307	-258	-318	-308	Fen peat
GrN-07833	4525	40	3290-3170 cal BC	3350-3110 cal BC	093.535-441.250	Hillegersberg H4	-332	-336	1	2	10	20	11	22	10	13	2	-298	-336	-287	-347	-337	Fen peat
GrN-07834	4500	60	3290-3110 cal BC	3370-3030 cal BC	093.535-441.250	Hillegersberg H5	-369	-371	1	2	10	20	11	22	10	8	2	-340	-371	-329	-382	-372	Fen peat
GrN-07835	4655	55	3490-3330 cal BC	3550-3250 cal BC	093.535-441.250	Hillegersberg H6	-398	-400	1	2	10	20	11	22	10	8	2	-369	-400	-358	-411	-401	Fen peat
GrN-07838	4925	40	3770-3670 cal BC	3810-3630 cal BC	093.535-441.250	Hillegersberg H7	-443	-447	1	2	10	20	11	22	10	13	2	-409	-447	-398	-458	-448	Fen peat
GrN-07840	5070	40	3914-3826 cal BC	3954-3782 cal BC	093.535-441.250	Hillegersberg H8	-480	-484	1	2	10	20	11	22	10	13	2	-446	-484	-435	-495	-485	Fen peat
GrN-07841	5275	45	4150-4030 cal BC	4210-3990 cal BC	093.535-441.250	Hillegersberg H9	-523	-527	1	2	10	20	11	22	10	13	2	-489	-527	-478	-538	-528	Fen peat
GrN-07842	5490	80	4410-4230 cal BC	4510-4150 cal BC	093.535-441.250	Hillegersberg H10	-542	-544	1	2	10	20	11	22	10	8	2	-513	-544	-502	-555	-545	Fen peat
GrN-07843	5420	45	4310-4210 cal BC	4340-4150 cal BC	093.535-441.250	Hillegersberg H11	-569	-571	1	2	10	20	11	22	10	8	2	-540	-571	-529	-582	-572	Fen peat
GrN-07844	5440	35	4310-4234 cal BC	4350-4198 cal BC	093.535-441.250	Hillegersberg H12	-571	-575	1	2	10	20	11	22	10	13	2	-537	-575	-526	-586	-576	Fen peat
GrN-07845	5400	40	4290-4190 cal BC	4310-4130 cal BC	093.535-441.250	Hillegersberg H13	-585	-589	1	2	10	20	11	22	10	13	2	-551	-589	-540	-600	-590	Fen peat
GrN-07846	5560	40	4442-4358 cal BC	4482-4314 cal BC	093.535-441.250	Hillegersberg H14	-590	-594	1	2	10	20	11	22	10	13	2	-556	-594	-545	-605	-595	Fen peat
GrN-07848	5685	35	4570-4494 cal BC	4606-4454 cal BC	093.535-441.250	Hillegersberg H15	-610	-613	1	2	10	20	11	22	10	10	2	-579	-613	-568	-624	-614	Fen peat
GrN-07849	5560	30	4538-4474 cal BC	4570-4442 cal BC	093.535-441.250	Hillegersberg H16	-644	-648	1	2	10	20	11	22	10	13	2	-610	-648	-599	-659	-649	Fen peat
GrN-07850	5830	110	4830-4570 cal BC	4950-4450 cal BC	093.535-441.250	Hillegersberg H17	-684	-686	1	2	10	20	11	22	0	8	2	-665	-696	-654	-707	-687	Wood peat
GrN-07852	6810	40	5742-5674 cal BC	5778-5642 cal BC	093.535-441.250	Hillegersberg H18	-1005	-1008	1	2	10	20	11	22	0	10	2	-984	-1018	-973	-1029	-1009	Wood peat
GrN-07853	6665	40	5622-5554 cal BC	5658-5522 cal BC	093.535-441.250	Hillegersberg H19	-1030	-1034	1	2	10	20	11	22	0	13	2	-1006	-1044	-995	-1055	-1035	Wood peat

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GrN-07855	6835	40	5766-5698 cal BC	5798-5662 cal BC	093.535-441.250	Hillegersberg H20	-1035	-1039	1	2	10	20	11	22	0	13	2	-1011	-1049	-1000	-1060	-1040	Wood peat
GrN-07856	6850	40	5778-5705 cal BC	5810-5674 cal BC	093.535-441.250	Hillegersberg H21	-1071	-1075	1	2	10	20	11	22	0	13	2	-1047	-1085	-1036	-1096	-1076	Wood peat
GrN-07857	6920	45	5842-5762 cal BC	5882-5726 cal BC	093.535-441.250	Hillegersberg H22	-1112	-1115	1	2	10	20	11	22	0	10	2	-1091	-1125	-1080	-1136	-1116	Wood peat
GrN-07859	7105	40	6006-5930 cal BC	6046-5894 cal BC	093.535-441.250	Hillegersberg H23	-1176	-1180	1	2	10	20	11	22	0	13	2	-1152	-1190	-1141	-1201	-1181	Wood peat
GrN-08431	3455	35	1814-1726 cal BC	1858-1682 cal BC	098.475-433.775	Bolnes 4	-178	-180	1	2	10	20	11	22	0	8	2	-159	-190	-148	-201	-181	Wood peat
GrN-08432	3530	80	1970-1750 cal BC	2090-1670 cal BC	098.475-433.775	Bolnes 5	-198	-201	1	2	10	20	11	22	0	10	2	-177	-211	-166	-222	-202	Wood peat
GrN-08433	3510	90	1970-1730 cal BC	2070-1610 cal BC	098.475-433.775	Bolnes 6	-235	-238	1	2	10	20	11	22	0	10	2	-214	-248	-203	-259	-239	Wood peat
GrN-08434	3820	90	2390-2130 cal BC	2510-2010 cal BC	098.475-433.775	Bolnes 7	-260	-262	1	2	10	20	11	22	0	8	2	-241	-272	-230	-283	-263	Wood peat
GrN-08798	2700	45	930-810 cal BC	970-750 cal BC	098.475-433.775	Bolnes 1	-150	-150	1	2	10	20	11	22	0	3	2	-136	-160	-125	-171	-151	Alder roots
GrN-08799	2985	30	1246-1166 cal BC	1282-1130 cal BC	098.475-433.775	Bolnes 2	-150	-150	1	2	10	20	11	22	0	3	2	-136	-160	-125	-171	-151	Oak roots
GrN-08916	6245	35	5234-5150 cal BC	5270-5106 cal BC	098.450-433.300	Bolnes 14	-794	-798	1	2	10	20	11	22	0	13	2	-770	-808	-759	-819	-799	Wood peat
GrN-08917	6325	45	5330-5230 cal BC	5370-5170 cal BC	098.450-433.300	Bolnes 15	-834	-836	1	2	10	20	11	22	0	8	2	-815	-846	-804	-857	-837	Peat
GrN-08927	6670	70	5650-5530 cal BC	5710-5470 cal BC	098.450-433.450	Bolnes 11	-955	-957	1	2	10	20	11	22	0	8	2	-936	-967	-925	-978	-958	Wood peat
GrN-08928	6670	35	5622-5562 cal BC	5654-5534 cal BC	098.450-433.450	Bolnes 10.2	-906	-910	1	2	10	20	11	22	0	13	2	-882	-920	-871	-931	-911	Wood peat
GrN-08929	6495	40	5478-5406 cal BC	5514-5370 cal BC	098.450-433.450	Bolnes 10.1	-904	-906	1	2	10	20	11	22	0	8	2	-885	-916	-874	-927	-907	Wood peat
GrN-08930	6550	40	5526-5454 cal BC	5562-5422 cal BC	098.450-433.450	Bolnes 9	-851	-854	1	2	10	20	11	22	0	10	2	-830	-864	-819	-875	-855	Wood peat
GrN-08931	6320	35	5310-5234 cal BC	5346-5194 cal BC	098.450-433.450	Bolnes 8	-780	-783	1	2	10	20	11	22	0	10	2	-759	-793	-748	-804	-784	Wood peat
GrN-09558	4150	60	2810-2630 cal BC	2890-2550 cal BC	110.962-426.939	Wijngaarden 2	-246	-250	1	2	10	20	11	22	10	23	8	-202	-244	-191	-255	-255	Sandy peat
GrN-09559	4480	70	3290-3070 cal BC	3370-2970 cal BC	110.961-426.940	Wijngaarden 3	-288	-292	1	2	10	20	11	22	10	23	8	-244	-286	-233	-297	-297	Sandy peat
GrN-09560	4670	70	3530-3350 cal BC	3590-3230 cal BC	110.979-426.941	Wijngaarden 4	-325	-330	1	2	10	20	11	22	10	25	8	-279	-324	-268	-335	-335	Sandy peat
GrN-09561	4990	70	3870-3710 cal BC	3930-3630 cal BC	110.971-426.940	Wijngaarden 5	-366	-370	1	2	10	20	11	22	10	23	8	-322	-364	-311	-375	-375	Sandy peat
GrN-09562	5140	100	4050-3830 cal BC	4170-3730 cal BC	110.976-426.944	Wijngaarden 6	-415	-420	1	2	10	20	11	22	10	25	8	-369	-414	-358	-425	-425	Sandy peat
GrN-09563	5340	80	4250-4070 cal BC	4350-3990 cal BC	110.969-426.950	Wijngaarden 7	-450	-455	1	2	10	20	11	22	10	25	8	-404	-449	-393	-460	-460	Sandy peat
GrN-09564	3400	70	1790-1610 cal BC	1870-1530 cal BC	110.963-426.937	Wijngaarden 1	-171	-175	1	2	10	20	11	22	10	23	8	-127	-169	-116	-180	-180	Amorphous slightly clayey peat on humic clay
GrN-10096	5320	80	4230-4050 cal BC	4330-3970 cal BC	110.950-426.962	Wijngaarden 8	-505	-510	1	2	10	20	11	22	10	25	8	-459	-504	-448	-515	-515	Sandy peat
GrA-04181	5000	80	3890-3710 cal BC	3970-3650 cal BC	097.379-431.472	Barendrecht 4	-428	-430	1	2	10	20	11	22	0	13	5	-405	-437	-393	-448	-433	Terrestrial bot. macrofossils
GrA-04182	5430	90	4370-4150 cal BC	4430-4030 cal BC	097.373-431.468	Barendrecht 7	-520	-521	1	2	10	20	11	22	0	28	15	-481	-517	-470	-528	-531	Terrestrial bot. macrofossils
GrA-04183	5810	90	4770-4550 cal BC	4850-4450 cal BC	097.368-431.466	Barendrecht 10	-603	-604	1	2	10	20	11	22	0	13	6	-579	-609	-568	-621	-608	Terrestrial bot. macrofossils
GrA-04308	4470	60	3290-3050 cal BC	3350-2970 cal BC	097.387-431.476	Barendrecht 1	-341	-345	1	2	10	20	11	22	0	15	3	-315	-353	-304	-365	-347	Terrestrial bot. macrofossils

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GrA-04315	1290	50	682-782 cal AD	650-846 cal AD	097.312-431.620	Barendrecht 23	-160	-163	1	2	10	20	11	22	0	15	5	-134	-170	-123	-181	-166	Terrestrial bot. macrofossils
GrA-05207	5930	50	4850-4742 cal BC	4914-4690 cal BC	097.367-431.465	Barendrecht 13	-711	-712	1	2	10	20	11	22	0	8	3	-692	-720	-681	-731	-714	Terrestrial bot. macrofossils
GrA-05208	6660	60	5634-5538 cal BC	5678-5494 cal BC	097.356-431.458	Barendrecht 22	-990	-991	1	2	10	20	11	22	0	10	5	-969	-998	-958	-1009	-994	Terrestrial bot. macrofossils
GrA-05215	6360	50	5390-5290 cal BC	5450-5250 cal BC	097.361-431.461	Barendrecht 19	-891	-892	1	2	10	20	11	22	0	10	5	-870	-899	-859	-910	-895	Terrestrial bot. macrofossils
GrA-05237	6200	50	5230-5070 cal BC	5290-5010 cal BC	097.365-431.463	Barendrecht 16	-797	-800	1	2	10	20	11	22	0	10	2	-776	-810	-765	-821	-801	Terrestrial bot. macrofossils
GrA-05326	5550	60	4450-4330 cal BC	4510-4290 cal BC	097.305-431.623	Barendrecht 27	-290	-293	1	2	10	20	11	22	0	10	2	-269	-303	-258	-314	-294	Terrestrial bot. macrofossils
GrA-06511	5300	60	4210-4050 cal BC	4270-3990 cal BC	108.214-430.565	Oud Alblas 3	-518	-520	1	2	10	20	11	22	0	8	2	-499	-530	-488	-541	-521	Terrestrial bot. macrofossils
GrA-06512	5920	60	4850-4710 cal BC	4930-4650 cal BC	108.222-430.573	Oud Alblas 5	-634	-635	1	2	10	20	11	22	0	5	2	-618	-645	-607	-656	-636	Terrestrial bot. macrofossils
GrA-06513	6280	60	5330-5170 cal BC	5370-5070 cal BC	108.264-430.605	Oud Alblas 8	-812	-813	1	2	10	20	11	22	0	5	2	-796	-823	-785	-834	-814	Terrestrial bot. macrofossils
GrA-06514	6090	60	5070-4890 cal BC	5190-4830 cal BC	108.227-430.578	Oud Alblas 6	-677	-679	1	2	10	20	11	22	0	10	3	-656	-687	-645	-698	-681	Terrestrial bot. macrofossils
GrA-07113	5770	70	4710-4530 cal BC	4770-4450 cal BC	108.218-430.569	Oud Alblas 4	-576	-578	1	2	10	20	11	22	0	13	5	-552	-585	-541	-596	-581	Terrestrial bot. macrofossils
GrA-07114	5730	70	4670-4490 cal BC	4730-4410 cal BC	097.368-431.466	Barendrecht 10/B	-598	-599	1	2	10	20	11	22	0	25	14	-562	-597	-551	-608	-608	Terrestrial bot. macrofossils
GrA-07122	3490	310	2220-1440 cal BC	2600-1100 cal BC	108.211-430.561	Oud Alblas 1	-379	-382	1	2	10	20	11	22	0	10	2	-358	-392	-347	-403	-383	Terrestrial bot. macrofossils
GrA-07123	5090	90	3970-3770 cal BC	4070-3690 cal BC	108.212-430.561	Oud Alblas 2	-454	-459	1	2	10	20	11	22	0	15	2	-428	-469	-417	-480	-460	Terrestrial bot. macrofossils
GrA-07124	3720	70	2230-2010 cal BC	2330-1910 cal BC	108.204-430.555	Oud Alblas 9	-205	-208	1	2	10	20	11	22	0	33	15	-161	-204	-150	-215	-218	Terrestrial bot. macrofossils

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GrA-07125	4500	80	3330-3070 cal BC	3410-2950 cal BC	108.206-430.559	Oud Alblas 10	-291	-294	1	2	10	20	11	22	0	10	2	-270	-304	-259	-315	-295	Terrestrial bot. macrofossils
GrA-07126	5830	100	4790-4550 cal BC	4910-4450 cal BC	097.368-431.466	Barendrecht 10/O	-607	-609	1	2	10	20	11	22	0	8	2	-588	-619	-577	-630	-610	Terrestrial bot. macrofossils
GrA-07128	6120	80	5170-4930 cal BC	5250-4830 cal BC	108.237-430.588	Oud Alblas 7	-733	-735	1	2	10	20	11	22	0	15	6	-707	-740	-696	-751	-739	Terrestrial bot. macrofossils
GrA-07129	5010	70	3890-3730 cal BC	3970-3670 cal BC	097.379-431.472	Barendrecht 4/B	-423	-425	1	2	10	20	11	22	0	25	12	-387	-425	-376	-436	-433	Terrestrial bot. macrofossils
GrA-07134	5050	90	3950-3750 cal BC	4030-3670 cal BC	097.379-431.472	Barendrecht 4/O	-434	-436	1	2	10	20	11	22	0	8	2	-416	-446	-404	-457	-437	Terrestrial bot. macrofossils
GrA-13683	3380	40	1730-1630 cal BC	1770-1570 cal BC	097.311-431.620	Barendrecht 24	-189	-195	1	2	10	20	11	22	0	28	8	-150	-199	-139	-210	-200	Terrestrial bot. macrofossils
GrA-13685	3790	40	2290-2150 cal BC	2350-2090 cal BC	097.306-431.622	Barendrecht 26	-252	-258	1	2	10	20	11	22	0	18	2	-223	-268	-212	-279	-259	Terrestrial bot. macrofossils