

Supplement 1: 10Be/9Be ratio, 10Be-concentrations, 9Be-concentrations measured in Nordic Seas and Arctic cores... (1/2)

Core	Sediment Depth [cm]	Sample Name	Lat [°N]	Lon [°E]	Water depth [m]	9Be [at/g]	Uncertainty 9Be (%)	10Be [at/g]	Uncertainty 10Be (%)	10Be/9Be	uncertainty 10Be/9Be [%]	230Thxs extrema used in Fig. 1
GIK23065-3	63.5	GIK23065_63.5cm	68.495	0.83166	2802	2.46E+15	5	23069617.2	2.770395503	9.37642E-08	5.716213016	
GIK23065-3	73.5	GIK23065_73.5cm	68.495	0.83166	2802	3.27E+15	5	61976280	2.424512057	1.89408E-08	5.556820918	
GIK23065-3	80.5	GIK23065_80.5cm	68.495	0.83166	2802	3.18E+15	5	42060201.5	2.520525208	1.32298E-08	5.599379191	
GIK23065-3	97.5	GIK23065_97.5cm	68.495	0.83166	2802	2.87E+15	5	36198244.4	2.616005342	1.26251E-08	5.643003097	
GIK23065-3	116.5	GIK23065_116.5cm	68.495	0.83166	2802	2.7E+15	5	-	-	-	-	
GIK23065-3	116.5	GIK_116.5cm	68.495	0.83166	2802	5.96E+15	5	104369662	2.754648187	1.75079E-08	5.708597607	
GIK23065-3	134.5	GIK23065_134.5cm	68.495	0.83166	2802	2.21E+15	5	48471424.6	2.974628162	2.197E-08	5.817938871	
GIK23065-3	142.5	GIK23065_142.5cm	68.495	0.83166	2802	1.78E+15	5	40063822.6	2.202806997	2.25203E-08	5.463731204	
GIK23065-3	152.5	GIK23065_152.5cm	68.5	0.83166	2802	5.31E+15	5	94919019	2.211743723	1.7888E-08	5.467340331	
GIK23065-3	158.5	GIK_158.5cm	68.495	0.83166	2802	5.79E+15	5	70217942	2.818084175	1.21349E-08	5.73947719	
GIK23065-3	163	GIK23065_163cm	68.495	0.83166	2802	2.6E+15	5	6347857.59	3.948059007	2.4457E-09	6.370806065	
GIK23065-3	173.5	GIK23065_173.5cm	68.495	0.83166	2802	2.21E+15	5	33693362.9	2.298696933	1.52756E-08	5.503090731	
GIK23065-3	187	GIK23065_187cm	68.5	0.83166	2802	4.09E+15	5	153885320	2.279981858	3.76356E-08	5.495299562	High 230Thxs
GIK23065-3	204.5	GIK23065_204.5cm	68.495	0.83166	2802	3.31E+15	5	125243330	2.026059694	3.77967E-08	5.394897393	
GIK23065-3	209.5	GIK23065_209.5cm	68.495	0.83166	2802	3.25E+15	5	119771539	2.000604327	3.68533E-08	5.385389278	
GIK23065-3	219.5	GIK_219.5cm	68.495	0.83166	2802	4.57E+15	5	169259753	2.70682908	3.69977E-08	5.685677063	
GIK23065-3	222.5	GIK23065_222.5cm	68.495	0.83166	2802	3.38E+15	5	174432028	2.170256196	5.24237E-08	5.450689127	
GIK23065-3	241	GIK230065_241cm	68.5	0.83166	2802	4.92E+15	5	208826977	2.198522702	4.24864E-08	5.462005316	
GIK23065-3	254.5	GIK23065_254.5cm	68.495	0.83166	2802	2.28E+15	5	39927244.8	2.272184758	1.75302E-08	5.492069152	
GIK23065-3	257.5	GIK23065_257.5cm	68.495	0.83166	2802	1.95E+15	5	72615324.9	2.27128966	3.72313E-08	5.491698892	
GIK23065-3	268	GIK230065_268cm	68.5	0.83166	2802	3.93E+15	5	75946741.5	2.345419003	1.93174E-08	5.522770165	
GIK23065-3	276.5	GIK23065_276.5cm	68.495	0.83166	2802	2.09E+15	5	18375886.2	2.837542293	8.7738E-09	5.645956119	
GIK23065-3	283.5	GIK23065_283.5cm	68.495	0.83166	2802	1.96E+15	5	14161286.6	3.273408693	7.22532E-09	5.976219915	
GIK23065-3	285	GIK230065_285cm	68.5	0.83166	2802	4.13E+15	5	31159111.1	2.296632876	7.53973E-09	5.50228873	
GIK23065-3	295.5	GIK23065_295.5cm	68.495	0.83166	2802	2.53E+15	5	5943405.51	4.021702259	2.349E-09	6.416703909	
GIK23065-3	304.5	GIK23065_304.5cm	68.495	0.83166	2802	2.75E+15	5	1678210.69	6.026669029	6.10966E-10	7.830756003	Low 230Thxs
GIK23065-3	312	GIK230065_312cm	68.5	0.83166	2802	5.12E+15	5	29646716.5	2.472514231	5.79444E-09	5.57793211	
GIK23065-3	330.5	GIK23065_330.5cm	68.5	0.83166	2802	4.85E+15	5	26581444.8	2.515119377	5.48578E-09	5.596947872	
GIK23065-3	340.5	GIK23065_340.5cm	68.495	0.83166	2802	2.91E+15	5	22851393.6	2.858854379	7.84866E-09	5.759604879	
GIK23065-3	352.5	GIK23065_352.5cm	68.495	0.83166	2802	2.64E+15	5	25397539.3	2.952391608	9.61044E-09	5.806601089	
GIK23065-3	365.5	GIK23065_365.5cm	68.495	0.83166	2802	1.51E+15	5	17867974.1	2.744463257	1.18492E-08	5.70388998	
GIK23065-3	379.5	GIK23065_379.5cm	68.495	0.83166	2802	2.05E+15	5	-	-	-	-	
GIK23065-3	399.5	GIK23065_399.5cm	68.495	0.83166	2802	2.69E+15	5	40845485.3	2.33542103	1.52099E-08	5.518531633	
GIK23065-3	420.5	GIK23065_420.5cm	68.495	0.83166	2802	2.18E+15	5	42671380.8	2.339498591	1.95485E-08	5.520258477	
GIK23065-3	446.5	GIK23065_446.5cm	68.495	0.83166	2802	2.97E+15	5	11447384.7	3.092184939	3.85202E-09	5.878912118	
GIK23065-3	474.5	GIK23065_474.5cm	68.495	0.83166	2802	3.7E+15	5	22383377.7	2.519150805	6.0487E-09	5.598760647	
PS1235-2	27.5	PS1235-5_27-28cm	78.8592	1.3098	2485	6.44E+15	5	110476133	2.267605398	1.71534E-08	5.831375108	
PS1235-2	197	PS1235-5_196.5-196.5cm	78.8592	1.3098	2485	6.2E+15	5	61645796.1	2.297730598	9.94753E-09	5.502687153	High 230Thxs
PS1235-2	283	PS1235-2_283cm	78.8592	1.3098	2485	5.4E+15	5	153441206	2.253962267	2.84129E-08	5.484555215	
PS1235-2	350	PS1235-2_350cm	78.8592	1.3098	2485	5.3E+15	5	148291181	2.246148224	2.79908E-08	5.481348543	
PS1235-2	365.5	PS1235-5_365-366cm	78.8592	1.3098	2485	5.34E+15	5	19728744.1	2.658010558	3.69253E-09	5.662598355	
PS1235-2	387.5	PS1235-2_387.5cm	78.8592	1.3098	2485	6.08E+15	5	14271755.6	2.620998817	2.34873E-09	5.645319725	Low 230Thxs
PS1235-2	428.5	PS1235-5_428-429cm	78.8592	1.3098	2485	6.88E+15	5	30134388.3	2.348976022	4.38072E-09	5.524281705	
PS1235-2	452.5	PS1235-5_452-453cm	78.8592	1.3098	2485	4.37E+15	5	44522541.4	2.607830523	1.0186E-08	5.639218034	
PS1235-2	538.5	PS1235-2_538.5cm	78.8592	1.3098	2485	4.84E+15	5	147895457	2.247353174	3.05614E-08	5.481842417	
PS1533-3	32.5	PS1533_32-33cm	82.19	15.107	2030	2E+16	5	38101882.6	2.280578423	1.90901E-09	5.495547101	
PS1533-3	247.5	PS1533_247-248cm	82.19	15.107	2030	6.91E+15	5	47933990.7	2.441304336	6.93453E-09	5.564168119	
PS1533-3	252.5	PS1533_252-253cm	82.19	15.107	2030	7.47E+15	5	48654902.3	2.37589519	6.51587E-09	5.535781603	
PS1533-3	382.5	PS1533-3_382.5cm	82.19	15.107	2030	4.97E+15	5	154030492	2.246681285	3.10167E-08	5.481567002	High 230Thxs
PS1533-3	412.5	PS1533_412-413cm	82.19	15.107	2030	4.35E+15	5	14078221.6	2.973621601	3.23364E-09	5.817424295	
PS1533-3	452.5	PS1533_452-453cm	82.19	15.107	2030	5.01E+15	5	8648452.24	3.017871177	1.72628E-09	5.840166645	Low 230Thxs
PS2185-6	45.5	PS2185_45.5cm	87.5293	144.1662	1073	5.36E+15	5	2973848.72	7.455779307	5.54499E-10	8.97711786	
PS2185-6	55.5	PS2185_55.5cm	87.5293	144.1662	1073	4.49E+15	5	2886122.35	8.275726617	6.43223E-10	9.668901232	
PS2185-6	65.5	PS2185_65.5cm	87.5293	144.1662	1073	5.28E+15	5	52185716.9	2.604143034	9.88793E-09	5.63751372	High 230Thxs
PS2185-6	85.5	PS2185_85.5cm	87.5293	144.1662	1073	3.71E+15	5	4892603.46	6.292403912	1.31976E-09	8.037060843	
PS2185-6	103	PS2185_103cm	87.5293	144.1662	1073	4.02E+15	5	2653451.78	6.842390503	6.59986E-10	8.474568295	Low 230Thxs
PS2185-6	106.5	PS2185_106.5cm	87.5293	144.1662	1073	2.7E+15	5	2795093.16	7.05955428	1.03352E-09	8.650855832	
PS2185-6	145.5	PS2185_145.5cm	87.5293	144.1662	1073	7.45E+15	5	131528409	2.423929175	1.76484E-08	5.556566624	

Supplement 1: 10Be/9Be ratio, 10Be-concentrations, 9Be-concentrations measured in Nordic Seas and Arctic cores...

(2/2)

Core	Sediment Depth [cm]	Sample Name	Lat [°N]	Lon [°E]	Water depth [m]	9Be [at/g]	Uncertainty 9Be (%)	10Be [at/g]	Uncertainty 10Be (%)	10Be/9Be	uncertainty 10Be/9Be [%]	230Thxs extrema used in Fig. 1
PS2200-5	31.5	PS2200_31-32cm	85.3277	-14.022	1073	3.38E+15	5	807631.828	6.236988957	2.38654E-10	7.993749511	
PS2200-5	43.5	PS2200_43-44cm	85.3277	-14.022	1073	8.19E+15	5	749646.549	5.687829727	9.15484E-11	7.573071174	
PS2200-5	57.5	PS2200_5_57.5cm	85.3277	-14.022	1073	3.27E+15	5	29724182.9	2.458573891	9.08364E-09	5.571766827	High 230Thxs
PS2200-5	67.5	PS2200_67-68cm	85.3277	-14.022	1073	3.28E+15	5	3108390.61	3.878473106	9.46653E-10	6.327918586	
PS2200-5	72.5	PS2200_72-73cm	85.3277	-14.022	1073	4.58E+15	5	2975171.96	4.463156333	6.48895E-10	6.70222086	Low 230Thxs
PS2200-5	92.5	PS2200-5_92.5cm	85.3277	-14.022	1073	3.53E+15	5	65579946.4	2.302340797	1.86002E-08	5.504613805	
PS2200-5	108.5	PS2200-5_108.5cm	85.3277	-14.022	1073	2.89E+15	5	70216696.8	2.281122635	2.43346E-08	5.495772965	
PS51-038-4	17	PS51/038_17cm	85.13333	-171.433	1515	4.5E+15	5	13811459.4	2.621045966	3.0698E-09	5.645341615	
PS51-038-4	25	PS51/038_25cm	85.13333	-171.433	1515	4.43E+15	5	4216060.11	3.9779968	9.50866E-10	6.389402049	
PS51-038-4	30.5	PS51-038-4_30.5cm	85.135	-171.442	1473	5.23E+15	5	47434695	2.363441969	9.06447E-09	5.530448259	High 230Thxs
PS51-038-4	37	PS51/038_37cm	85.13333	-171.433	1515	3.32E+15	5	5791914.64	3.166653649	1.74591E-09	5.918420003	
PS51-038-4	43	PS51/038_43cm	85.13333	-171.433	1515	3.65E+15	5	4982410.51	3.384807527	1.36408E-09	6.037956773	Low 230Thxs
PS51-038-4	46.5	PS51-038-4_46.5cm	85.135	-171.442	1473	3.7E+15	5	31980217.8	2.304736089	8.63754E-09	5.505616082	
PS72/396-5	16.5	PS72/396-5_16-17cm	80.5778	-162.318	2723	5.33E+15	5	22183021.7	2.678052704	4.16562E-09	5.672033699	
PS72/396-5	17.5	PS72/396-5_17-18cm	80.5778	-162.318	2723	4.85E+15	5	18941723.9	2.470260165	3.90348E-09	5.576933323	
PS72/396-5	21.5	PS72/396-5_21-22cm	80.5778	-162.318	2723	6.12E+15	5	88415872.1	2.192896337	1.44426E-08	5.459743066	High 230Thxs
PS72/396-5	25.5	PS72/396-5_25-26cm	80.5778	-162.318	2723	4.45E+15	5	21823379.1	2.750083384	4.90164E-09	5.70639629	
PS72/396-5	27.5	PS72/396-5_27-28cm	80.5778	-162.318	2723	4.06E+15	5	10660452.6	2.808798938	2.62534E-09	5.734923842	Low 230Thxs
PS72/396-5	30.5	PS72/396-5_30-31cm	80.5778	-162.318	2723	4.17E+15	5	11939372.5	2.898857078	2.86216E-09	5.779565067	
PS72/396-5	34.5	PS72/396-5_34-35cm	80.5778	-162.318	2723	6.14E+15	5	131067711	2.212570739	2.13624E-08	5.467674942	
PS87-030-1	23.5	PS87/030_23-24cm	88.662	-61.542	1277	4.08E+15	5	1581112.14	4.714693988	3.87777E-10	6.872287785	
PS87-030-1	40.5	PS87/030_40-41cm	88.662	-61.542	1277	3.29E+15	5	1049851.28	5.75203384	3.19424E-10	7.621410191	
PS87-030-1	54.75	PS87-030-1_54.75cm	88.662	-61.542	1277	3.78E+15	5	21117821.8	2.435011542	5.57964E-09	5.561410002	
PS87-030-1	57.5	PS87/030_57-58cm	88.662	-61.542	1277	2.55E+15	5	16322483.5	2.50129728	6.40563E-09	5.590750225	Low 230Thxs
PS87-030-1	60.5	PS87/030_60-61cm	88.662	-61.542	1277	3.44E+15	5	30183924.7	2.440138709	8.77303E-09	5.563656794	
PS87-030-1	65.5	PS87-030-1_65.5cm	88.662	-61.542	1277	4.02E+15	5	79762051.7	2.270811169	1.9854E-08	5.491501012	High 230Thxs
PS2138-1	360	PS2138-1_360cm	81.5377	30.8762	862	4.4E+15	5	51471582.3	2.708427056	1.16971E-08	5.686437999	
PS2138-1	362	PS2138-1_362cm	81.5377	30.8762	862	4.67E+15	5	51311389.9	2.832119976	1.09889E-08	5.74638178	
PS2138-1	364	PS2138-1_364cm	81.5377	30.8762	862	5.02E+15	5	51262647.1	2.881028878	1.02088E-08	5.770643586	
PS2138-1	368	PS2138-1_368cm	81.5377	30.8762	862	5.41E+15	5	48072628.6	2.911984607	8.88598E-09	5.786160588	
PS2138-1	372	PS2138-1_372cm	81.5377	30.8762	862	5.5E+15	5	41472555.7	3.081195785	7.47229E-09	5.873139489	
PS2138-1	376	PS2138-1_376cm	81.5377	30.8762	862	5.57E+15	5	27600755.8	3.281009233	4.95811E-09	5.980386408	
PS2138-1	383	PS2138-1_383cm	81.5377	30.8762	862	4.56E+15	5	71301334.1	2.635151406	1.56259E-08	5.651904363	
PS2138-1	384	PS2138-1_384cm	81.5377	30.8762	862	4.07E+15	5	80909021.2	2.486850494	1.99015E-08	5.584301691	
PS2138-1	389	PS2138-1_389cm	81.5377	30.8762	862	4.15E+15	5	107191982	2.461135383	2.58538E-08	5.572897574	
PS2138-1	396	PS2138-1_396cm	81.5377	30.8762	862	3.34E+15	5	74387926.8	2.697440719	2.22473E-08	5.681213465	
PS2138-1	402	PS2138-1_402cm	81.5377	30.8762	862	3.64E+15	5	120604405	2.616773632	3.30996E-08	5.643359305	
PS2138-1	406	PS2138-1_406cm	81.5377	30.8762	862	5.07E+15	5	95298749.1	2.663909085	1.88068E-08	5.665369504	
PS2138-1	410	PS2138-1_410cm	81.5377	30.8762	862	4.82E+15	5	98820922.3	2.54829278	2.05152E-08	5.611933365	
PS2138-1	412	PS2138-1_412cm	81.5377	30.8762	862	2.99E+15	5	52153527.6	2.926977646	1.74656E-08	5.793720578	
PS2138-1	414	PS2138-1_414cm	81.5377	30.8762	862	3.44E+15	5	49799633	3.270468187	1.44878E-08	5.974609792	
PS2138-1	362	PS2138-1_362	81.5377	30.8762	862	3.51E+15	5	42609292	2.94517292	1.21528E-08	5.802934045	
PS2138-1	366	PS2138-1_366	81.5377	30.8762	862	3.35E+15	5	35206872.1	2.507625567	1.05198E-08	6.349273491	
PS2138-1	370	PS2138-1_370	81.5377	30.8762	862	3.28E+15	5	29267842.4	2.847568492	8.93389E-09	5.754011324	
PS2138-1	372	PS2138-1_372d	81.5377	30.8762	862	3.9E+15	5	29750003.7	3.00048163	7.62022E-09	5.831199706	
PS2138-1	372	PS2138-1_372d24	81.5377	30.8762	862	4.72E+15	5	46460926.6	2.668998513	9.83574E-09	5.667764379	
PS2138-1	374	PS2138-1_374	81.5377	30.8762	862	2.55E+15	5	13486635.9	3.86613166	5.2884E-09	6.320361857	
PS2138-1	380	PS2138-1_380	81.5377	30.8762	862	3.76E+15	5	22508723.5	2.871898661	5.97923E-09	6.026874357	
PS2138-1	384	PS2138-1_384d	81.5377	30.8762	862	2.77E+15	5	47970896.7	2.511729595	1.73153E-08	5.595425413	
PS2138-1	391	PS2138-1_391	81.5377	30.8762	862	2.82E+15	5	55395495.8	2.225685169	1.96203E-08	5.780448952	
PS2138-1	400	PS2138-1_400	81.5377	30.8762	862	3.54E+15	5	77838348.3	2.141914739	2.19895E-08	5.439466771	
PS2138-1	404	PS2138-1_404	81.5377	30.8762	862	3.86E+15	5	79966969.1	2.175935254	2.07119E-08	5.452952799	
PS2138-1	408	PS2138-1_408	81.5377	30.8762	862	3.61E+15	5	60871214.3	2.239565885	1.68532E-08	5.47865452	
PS2138-1	416	PS2138-1_416	81.5377	30.8762	862	2.03E+15	5	27987939.8	2.625999247	1.38178E-08	5.647643052	
PS2138-1	362	PS2138-1_362 cm	81.5377	30.8762	862	3.29E+15	5	34491460.7	3.698042142	1.04714E-08	6.953387004	
PS2138-1	368	PS2138-1_368 cm	81.5377	30.8762	862	3.26E+15	5	31001299.4	3.979224443	9.51135E-09	6.423147452	
PS2138-1	370	PS2138-1_370 cm	81.5377	30.8762	862	3.22E+15	5	25742972.2	3.506567414	8.00434E-09	6.107046342	
PS2138-1	418	PS2138-1_418 cm	81.5377	30.8762	862	3.28E+15	5	48079008	2.924471525	1.46783E-08	6.611849122	
PS2138-1	420	PS2138-1_420 cm	81.5377	30.8762	862	3.76E+15	5	64471828.1	2.641936257	1.71406E-08	5.655070927	
PS2138-1	422	PS2138-1_422 cm	81.5377	30.8762	862	4.63E+15	5	63210658.4	2.690466234	1.3652E-08	6.48240722	
PS2138-1	424	PS2138-1_424 cm	81.5377	30.8762	862	3.57E+15	5	54314012.3	2.982088717	1.51939E-08	5.821756876	