

GRAIN SIZE ANALYSIS

grain size distribution was analysed using laser particle sizer (FRITSCH Analysette 22 MicroTec plus) for the <2 mm-fraction and GRADISTAT software vers. 9.1; Blott & Pye (2001; doi: 10.1002/esp.261)

abbreviations in descriptions: c., coarse; f., fine; grav., gravelly; med., medium; mod., moderately; sl., slightly; sort., sorted; v., very

Header and content info:

STATID: distinctive station identifier for stations (see supplement "STATID_statid_data_suppl" for station list and details)
SAMPLE TYPE: description of sample type
TEXT_GROUP: description of textural group
MEAN: mean grain size (M_g) [μm]; method of Folk & Ward (1957; doi: 10.1306/74D70646-2B21-11D7-8648000102C1865D)
MEAN DESCRI: description of mean grain size (M_g); graphical method (μm) of Folk & Ward (1957; doi: 10.1306/74D70646-2B21-11D7-8648000102C1865D)
MODE 1: mode 1 [μm]; most often measured grain size of all particles
SORT: sorting (σ_g); graphical method (μm) of Folk & Ward (1957; doi: 10.1306/74D70646-2B21-11D7-8648000102C1865D)
Sk: skewness (S_k); graphical method (μm) of Folk & Ward (1957; doi: 10.1306/74D70646-2B21-11D7-8648000102C1865D)
K: kurtosis (K_g); graphical method (μm) of Folk & Ward (1957; doi: 10.1306/74D70646-2B21-11D7-8648000102C1865D)
D50: percentile D_{50} or median grain size [μm]; grain size below which 50 % of all particles were found
DM SAMPLE: total dry mass [g] of sample
DM <2mm: dry mass [g] of fraction < 2 mm
DM >2mm: dry mass [g] of fraction > 2 mm
GRAV: proportion [%] of gravel (64 mm – 2 mm)
SAND: proportion [%] of sand (2000 μm – 63 μm)
MUD: proportion [%] of mud (<63 μm); total of silt and clay-fraction
V C GRAV: proportion [%] of very coarse gravel (64 mm – 32 mm)
C GRAV: proportion [%] of coarse gravel (32 mm – 16 mm)
M GRAV: proportion [%] of medium gravel (16 mm – 8 mm)
F GRAV: proportion [%] of fine gravel (8 mm – 4 mm)
V F GRAV: proportion [%] of very fine gravel (4 mm – 2 mm)
V C SAND: proportion [%] of very coarse sand (2 mm – 1 mm)
C SAND: proportion [%] of coarse sand (1000 μm – 500 μm)
M SAND: proportion [%] of medium sand (500 μm – 250 μm)
F SAND: proportion [%] of fine sand (250 μm – 125 μm)
V F SAND: proportion [%] of very fine sand (125 μm – 63 μm)
V C SILT: proportion [%] of very coarse silt (63 μm – 31 μm)
C SILT: proportion [%] of coarse silt (31 μm – 16 μm)
M SILT: proportion [%] of medium silt (16 μm – 8 μm)
F SILT: proportion [%] of fine silt (8 μm – 4 μm)
V F SILT: proportion [%] of very fine silt (4 μm – 2 μm)
CLAY: proportion [%] of clay (<2 μm)

STATID	SAMPLE_TYPE	TEXT_GROUP	MEAN	MEAN_DESCR	MODE_1	SORT	Sk	K	D50	DM_SAMPLE	DM <2mm	DM >2mm	GRAV	SAND	MUD	V_C GRAV	C GRAV	M GRAV	F GRAV	V_F GRAV	V_C SAND	C SAND	M SAND	F SAND	V_F SAND	V_C SILT	C SILT	M SILT	F SILT	V_F SILT	CLAY
2_TO_A_I_2019	unimodal, mod. well sort.	sand	338.5	med. sand	355.3	1.433	-0.101	0.994	344.3	194.7	193.6	1.1	0.000	97.430	2.038	0.000	0.000	0.000	0.000	0.000	12.712	17.789	0.179	0.202	0.433	0.390	0.265	0.272	0.476		
6_TO_A_K_2019	unimodal, mod. sort.	sl. grav. sand	193.9	f. sand	216.2	1.695	-0.344	2.131	198.1	439.4	439.4	0.0	0.000	94.381	5.619	0.000	0.000	0.000	0.000	0.000	22.774	65.556	0.049	0.553	1.553	1.197	0.748	0.668	0.900		
12_TO_A_IV_2019	unimodal, poorly sort.	mud. sand	166.6	f. sand	195.7	2.158	-0.476	2.633	179.3	343.9	343.9	0.0	0.000	86.701	13.299	0.000	0.000	0.000	0.000	0.000	16.719	60.882	9.100	1.601	3.938	2.983	1.834	1.399	1.545		
21_TO_B_IV_2019	unimodal, well sort.	sand	293.8	med. sand	291.3	1.406	-0.115	1.056	293.1	441.7	439.4	2.3	0.000	96.416	3.584	0.000	0.000	0.000	0.000	0.000	3.584	66.036	26.591	0.206	0.202	0.869	0.828	0.537	0.476	0.672	
25_TO_B_K_2019	unimodal, mod. well sort.	sand	369.4	med. sand	392.5	1.443	-0.099	1.012	375.6	472.5	466.0	6.5	0.000	97.512	2.488	0.000	0.000	0.000	0.000	0.004	20.099	65.099	12.213	0.097	0.289	0.577	0.500	0.375	0.317	0.430	
31_TO_B_I_2019	unimodal, well sort.	sand	271.9	med. sand	291.3	1.398	-0.116	1.050	276.0	441.2	441.0	0.2	0.000	96.618	3.382	0.000	0.000	0.000	0.000	0.000	1.374	62.686	29.255	0.478	0.614	0.997	0.610	0.393	0.366	0.498	
44_T1_B_IV_2019	unimodal, mod. well sort.	sl. grav. sand	288.2	med. sand	291.3	1.441	-0.120	1.059	293.1	439.3	436.5	2.8	0.000	96.522	3.478	0.000	0.000	0.000	0.000	0.000	4.102	47.939	42.096	5.175	0.512	0.272	0.223	0.269	0.208	0.184	
52_T1_A_IV_2019	unimodal, mod. sort.	sand	222.4	f. sand	238.8	1.872	-0.369	2.226	229.4	417.9	417.9	0.0	0.000	93.415	6.585	0.000	0.000	0.000	0.000	0.000	0.310	40.199	49.251	3.655	0.811	1.850	1.445	0.897	0.711	0.871	
56_T1_A_K_2019	unimodal, mod. sort.	sl. grav. sand	309.9	med. sand	355.3	1.862	-0.296	1.671	319.6	421.5	421.0	0.5	0.000	94.766	5.234	0.000	0.000	0.000	0.000	0.006	14.274	54.985	24.241	1.259	0.987	1.480	0.971	0.624	0.514	0.657	
74_T3_B_K_2019	unimodal, well sort.	sl. grav. sand	327.6	med. sand	355.3	1.413	-0.095	1.002	332.2	327.5	326.4	1.1	0.000	97.779	2.221	0.000	0.000	0.000	0.000	0.000	9.653	68.587	19.367	0.171	0.248	0.513	0.440	0.303	0.290	0.427	
77_T3_B_IV_2019	unimodal, mod. well sort.	sl. grav. sand	575.8	c. sand	645.0	1.495	-0.117	0.996	588.9	343.4	329.0	14.4	0.003	98.845	1.152	0.000	0.000	0.000	0.000	0.003	6.319	58.913	31.166	1.972	0.475	0.169	0.197	0.224	0.168	0.165	
92_T3_A_IV_2019	unimodal, mod. well sort.	sand	227.2	f. sand	238.8	1.477	-0.156	1.116	232.1	222.3	222.3	0.0	0.000	95.690	4.310	0.000	0.000	0.000	0.000	0.000	41.231	50.696	3.479	0.494	1.083	0.860	0.602	0.538	0.734		
99_T3_A_K_2109	unimodal, mod. well sort.	sl. grav. sand	347.7	med. sand	392.5	1.559	-0.093	0.982	354.4	344.7	344.0	0.7	0.000	98.427	1.573	0.000	0.000	0.000	0.000	0.004	20.746	56.160	20.586	0.871	0.257	0.318	0.244	0.208	0.209	0.336	
119_T7_B_K_2019	unimodal, mod. sort.	sand	234.1	f. sand	238.8	1.848	-0.366	2.364	240.0	328.7	324.8	3.9	0.000	93.793	6.207	0.000	0.000	0.000	0.000	0.000	44.734	46.314	2.179	0.625	1.653	1.304	0.811	0.758	1.045		
124_T7_B_IV_2019	unimodal, mod. well sort.	sl. grav. sand	480.2	med. sand	528.8	1.522	-0.103	0.997	489.9	502.5	492.2	10.3	0.000	98.197	1.803	0.000	0.000	0.000	0.000	0.000	1.992	46.109	44.432	5.521	0.142	0.315	0.365	0.335	0.257	0.214	
142_T7_A_K_2019	unimodal, well sort.	sl. grav. sand	231.5	f. sand	238.8	1.394	-0.103	1.016	235.0	348.0	348.0	0.0	0.000	97.460	2.540	0.000	0.000	0.000	0.000	0.000	0.100	42.108	52.884	2.368	0.123	0.652	0.479	0.296	0.363	0.626	
150_T7_A_IV_2019	unimodal, mod. well sort.	sl. grav. sand	224.0	f. sand	238.8	1.442	-0.134	1.065	228.5	373.6	373.6	0.0	0.000	96.293	3.707	0.000	0.000	0.000	0.000	0.000	0.166	39.127	53.541	3.459	0.361	0.912	0.763	0.495	0.489	0.689	
166_T14_B_K_2019	unimodal, mod. well sort.	sl. grav. sand	310.3	med. sand	355.3	1.443	-0.086	0.999	314.5	570.6	548.8	21.8	0.000	97.899	2.101	0.000	0.000	0.000	0.000	0.000	8.153	64.462	24.901	0.383	0.207	0.468	0.406	0.293	0.294	0.432	
173_T14_B_IV_2019	unimodal, mod. well sort.	sl. grav. sand	385.6	med. sand	392.5	1.448	-0.128	1.004	313.6	529.8	523.4	6.4	0.000	96.865	3.135	0.000	0.000	0.000	0.000	0.000	24.190	63.108	9.476	0.090	0.430	0.783	0.598	0.415	0.367	0.542	
176_T14_A_K_2019	unimodal, mod. sort.	sl. grav. sand	239.6	f. sand	238.8	1.738	-0.346	2.122	245.2	500.8	499.1	1.7	0.032	94.107	5.861	0.000	0.000	0.000	0.000	0.000	0.108	0.385	47.227	44.788	1.598	1.073	1.669	0.951	0.617	0.660	0.891
196_T14_A_IV_2019	unimodal, mod. sort.	sand	225.6	f. sand	238.8	1.871	-0.372	2.238	232.7	518.2	518.0	0.2	0.000	92.898	7.101	0.000	0.000	0.000	0.000	0.000	0.299	41.785	47.805	3.009	1.217	2.044	1.371	0.842	0.728	0.900	
16_GR_NA1_U_2019	unimodal, mod. well sort.	sand	463.3	med. sand	478.7	1.475	-0.084	0.993	470.1	353.1	351.1	2.0	0.000	98.475	1.525	0.000	0.000	0.000	0.000	0.000	46.777	42.795	50.322	4.408	0.272	0.277	0.197	0.176	0.258		
26_GR_NA2_U_2019	unimodal, mod. well sort.	sand	523.8	c. sand	584.0	1.487	-0.085	0.984	532.3	542.7	533.9	8.8	0.000	98.862	1.138	0.000	0.000	0.000	0.000	0.000	3.319	52.792	39.568	3.003	0.179	0.190	0.239	0.201	0.152	0.143	0.213
36_GR_NA3_U_2019	unimodal, mod. well sort.	sand	642.1	c. sand	712.4	1.453	-0.149	1.052	658.4	410.2	408.3	1.9	0.000	98.879	1.121	0.000	0.000	0.000	0.000	0.000	9.495	66.516	20.901	1.511	0.456	0.130	0.229	0.246	0.172	0.142	
16_GR_SA1_U_2019	unimodal, mod. sort.	sl. grav. sand	328.0	med. sand	392.5	1.754	-0.106	1.000	336.9	345.4	343.1	2.3	0.000	97.783	2.217	0.000	0.000	0.000	0.000	0.000	6.263	22.382	46.302	24.791	3.685	0.131	0.466	0.498	0.383	0.303	0.437
26_GR_SA2_U_2019	unimodal, poorly sort.	sl. grav. sand	218.5	f. sand	238.8	2.197	-0.376	2.040	230.2	427.0	420.7	6.3	0.000	90.785	9.214	0.000	0.000	0.000	0.000	0.000	2.692	40.463	40.569	6.659	0.103	2.887	2.157	1.238	0.858	1.041	
36_GR_SA3_U_2019	unimodal, poorly sort.	mud. sand	122.7	v. f. sand	238.8	3.006	-0.633	2.211	183.5	373.4	370.0	3.4	0.000	82.245	17.755	0.000	0.000	0.000	0.000	0.000	0.049	23.850	49.682	8.665	2.830	5.786	3.737	2.210	1.575	1.618	
27_GR_DK2_U_2019	unimodal, poorly sort.	sl. grav. sand	242.2	f. sand	263.7	2.094	-0.346	1.924	252.2	198.2	176.8	21.4	0.000	99.336	6.674	0.000	0.000	0.000	0.000	0.002	4.979	45.743	37.144	5.459	0.598	1.819	1.536	1.024	0.761	0.936	
17_GR_DK1_U_2019	unimodal, poorly sort.	mud. sand	150.3	f. sand	291.3	1.416	-0.602	1.736	232.4	182.0	164.2	17.8	0.000	80.454	19.546	0.000	0.000	0.000	0.000	0.000	4.784	40.399	25.953	5.721	5.169	5.623	3.395	1.997	1.502	1.859	
37_GR_DK3_U_2019	unimodal, mod. well sort.	sand	418.5	med. sand	478.7	1.473	-0.094	0.993	425.8	283.2	280.9	2.3	0.000	98.912	1.888	0.000	0.000	0.000	0.000	0.000	33.479	56.113	8.238	0.115	0.304	0.479	0.358	0.224	0.207	0.316	
57_GR_DK5_U_2019	bi-modal, poorly sort.	mud. sand	103.7	v. f. sand	216.2	3.333	-0.606	1.416	162.3	163.7	0.9	0.000	76.013	23.987	0.000	0.000	0.000	0.000	0.000	0.049	20.059	43.394	12.511	5.820	7.392	4.529	2.499	1.783	1.963		
47_GR_DK4_U_2019	unimodal, mod. sort.	sl. grav. sand	348.4	med. sand	392.5	1.778	-0.179	1.098	362.6	201.4	194.4	7.0	0.000	95.962	4.038	0.000	0.000	0.000	0.000	0.000	0.059	25.843	47.222	2.047	0.251	0.491	1.070	0.886	0.607	0.444	0.540
17_GR_NDS01_U_2020	unimodal, mod. sort.	sand	183.5	f. sand	238.8	1.950	-0.338	1.889	190.5	184.0	183.8	0.2	0.000	93.107	6.893	0.000	0.000	0.000	0.000	0.000	0.000	13.247	54.377	13.452	0.647	2.					