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Supplement of

Spatial variability and the fate of cesium in coastal sediments near Fukushima, Japan

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Supplemental Materials:**Supplement S1** Additional Information for Sampling Locations of Marine Sediment Cores off the Coast of Fukushima, Japan

Core No.	Date Sampled (m-dd-yy)	Latitude (N)	Longitude (E)	Water Depth (m)	Distance from FDNPP (km)	Core Length (cm)
1	6/29/12	30.2002	145.0990	5900	886	10
2	6/12/12	47.0117	159.7217	5156	1863	10
3	5/14/12	38.3144	143.6216	4066	248	6
4	5/14/12	38.2664	143.5000	3259	236	8
5	7/7/12	36.4825	141.5020	1300	113	10
6	5/22/13	36.5025	141.4952	1260	110	18
7	5/15/12	37.5008	142.0020	546	86	8
8	5/16/12	36.7678	141.4023	497	80	8
9	5/16/12	37.0007	141.4990	321	62	8
10	5/17/12	36.4995	140.9988	309	103	8
11	5/19/13	36.9162	141.3439	205	63	17
12	5/19/13	36.9173	141.0890	125	56	20
13	5/21/13	37.2340	141.2300	125	27	19
14	5/19/13	36.9143	141.0005	65	57	16
15	5/16/13	37.4167	141.2985	120	23	12
16	5/17/13	37.4165	141.1778	60	13	14
17	5/16/13	37.5499	141.1262	35	16	14
18	5/17/13	37.4161	141.0997	35	6	14
19	9/11/13	37.5000	141.0792	23	9	16
20	9/11/13	37.4167	141.0500	14	2	18
R1-R8	5/21/13	37.2340	141.2300	125	27	5

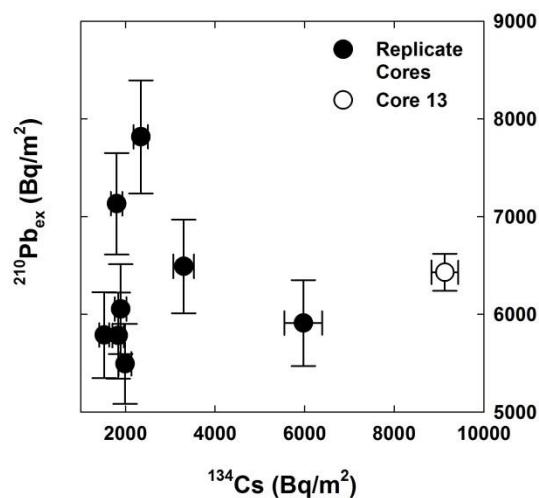
Supplement S2 Replicate Core Activities and Inventories from Core 13 Location

No.	Activities (Bq kg ⁻¹)			Inventories (Bq m ⁻²)		
	¹³⁴ Cs ¹	¹³⁷ Cs ¹	²¹⁰ Pb _{ex}	¹³⁴ Cs ¹	¹³⁷ Cs ¹	²¹⁰ Pb _{ex}
R1	49 ± 3	55 ± 4	140 ± 10	2000 ± 100	2200 ± 200	5500 ± 400
R2	210 ± 10	220 ± 20	200 ± 20	6000 ± 400	6500 ± 500	5900 ± 400
R3	48 ± 3	56 ± 4	150 ± 10	1800 ± 100	2200 ± 200	5800 ± 400
R4	110 ± 10	120 ± 10	220 ± 20	3300 ± 200	3600 ± 300	6500 ± 500
R5	62 ± 4	63 ± 4	210 ± 20	2300 ± 200	2400 ± 200	7800 ± 600
R6	59 ± 4	67 ± 5	190 ± 10	1900 ± 100	2100 ± 100	6100 ± 500
R7	55 ± 4	64 ± 4	220 ± 20	1800 ± 100	2100 ± 100	7100 ± 500
R8	43 ± 3	45 ± 3	170 ± 10	1500 ± 100	1600 ± 100	5800 ± 400
13 ²	220 ± 6	200 ± 10	1000 ± 30	9100 ± 300	8000 ± 200	6400 ± 200

¹Values were decay-corrected to FDNPP discharge maximum (April 6th, 2011)

²Results for 0 to 5 cm only

Supplement S3 ¹³⁴Cs Inventories versus ²¹⁰Pb_{ex} Inventories for Replicate Cores and Core 13



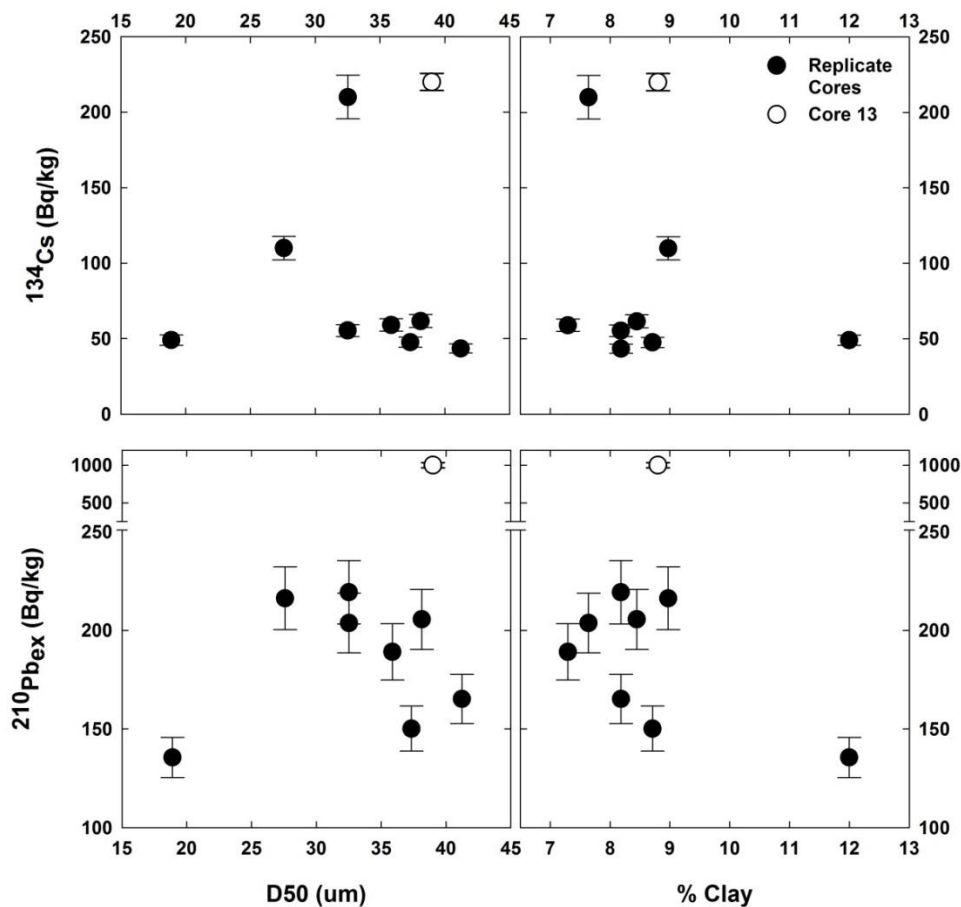
Supplement S4 Replicate Core and Core 13 Grain Size Analysis Results

Grain Size and Density Results

No.	D50 (μm)	% Clay (<4 μm)	% Silt and Clay (<63.4 μm)	Dry Bulk Density (g cm ⁻³)
R1	19	12.0	85.2	1.5
R2	33	7.6	72.5	1.2
R3	37	8.7	69.4	1.4
R4	28	9.0	75.7	1.3
R5	38	8.4	69.0	1.5
R6	36	7.3	70.3	1.4
R7	33	8.2	72.4	1.4
R8	41	8.2	66.2	1.5
13 ¹	39	8.8	66.5	1.5

¹Results for 0 to 5 cm only

Supplement S5 ¹³⁴Cs and ²¹⁰Pb_{ex} Activities versus Grain Size Parameters for Replicate Cores and Core 13



Supplement S6 Density, Activity, and Inventory Values by Core Section

Core No.	Depth (cm)	Thickness (m)	Bulk Density	Dry Density	$^{210}\text{Pb}_{\text{ex}}$ (Bq kg ⁻¹)	$^{210}\text{Pb}_{\text{ex}}$ (Bq m ⁻²)	^{137}Cs (Bq kg ⁻¹)	^{137}Cs (Bq/m ⁻²)	^{134}Cs (Bq kg ⁻¹)	^{134}Cs (Bq/m ⁻²)
1	0.25	0.005	320	1.9	5000 ± 500	8000 ± 800	7.8 ± 0.5	12 ± 1	ND	ND
	0.75	0.005	450	2.5	1500 ± 100	3400 ± 300	7.1 ± 0.5	16 ± 1	ND	ND
	1.25	0.005	360	2.2	1400 ± 100	2600 ± 300	5.6 ± 0.4	10 ± 1	ND	ND
	1.75	0.005	450	2.2	1400 ± 100	3080 ± 300	5.2 ± 0.4	23 ± 2	ND	ND
	2.5	0.01	470	2.3	1100 ± 100	5000 ± 500	4.7 ± 0.3	22 ± 2	ND	ND
	3.5	0.01	470	2.2	260 ± 30	1300 ± 100	ND	ND	ND	ND
	4.5	0.01	530	2.2	110 ± 10	560 ± 60	ND	ND	ND	ND
	5.5	0.01	540	2.2	110 ± 10	600 ± 60	ND	ND	ND	ND
	6.5	0.01	530	2.1	180 ± 20	930 ± 90	ND	ND	ND	ND
	7.5	0.01	560	2.2	190 ± 20	1100 ± 100	ND	ND	ND	ND
	8.5	0.01	570	2.1	170 ± 20	950 ± 90	ND	ND	ND	ND
9.5	0.01	560	2.0	160 ± 20	910 ± 90	ND	ND	ND	ND	
2	0.25	0.005	420	2.6	2000 ± 200	4300 ± 400	3.8 ± 0.3	8.0 ± 0.6	ND	ND
	0.75	0.005	390	2.1	1600 ± 200	3000 ± 300	4.9 ± 0.4	9.5 ± 0.7	ND	ND
	1.25	0.005	390	2.5	1000 ± 100	1900 ± 200	2.4 ± 0.2	4.6 ± 0.3	ND	ND
	1.75	0.005	460	2.2	480 ± 50	1100 ± 100	1.8 ± 0.2	4.1 ± 0.6	ND	ND
	2.5	0.01	530	2.8	410 ± 40	2200 ± 200	ND	ND	ND	ND
	3.5	0.01	520	2.3	340 ± 30	1800 ± 200	ND	ND	ND	ND
	4.5	0.01	520	2.3	440 ± 40	2300 ± 200	ND	ND	ND	ND
	5.5	0.01	510	2.2	320 ± 30	1600 ± 200	ND	ND	ND	ND
	6.5	0.01	510	2.3	120 ± 10	640 ± 60	ND	ND	ND	ND
	7.5	0.01	510	2.2	42 ± 4	210 ± 20	ND	ND	ND	ND
8.5	0.01	510	2.2	33 ± 3	170 ± 20	ND	ND	ND	ND	
9.5	0.01	590	2.4	46 ± 5	270 ± 30	ND	ND	ND	ND	
3	0.25	0.005	290	2.3	900 ± 70	1300 ± 100	6.7 ± 0.7	10 ± 1	ND	ND
	0.75	0.005	290	2.3	830 ± 60	1200 ± 100	3.4 ± 0.5	5.0 ± 0.8	ND	ND
	1.25	0.005	290	2.3	660 ± 50	1000 ± 100	2.7 ± 0.3	4.0 ± 0.5	ND	ND
	1.75	0.005	290	2.3	520 ± 40	760 ± 60	1.5 ± 0.3	2.2 ± 0.4	ND	ND
	2.5	0.01	290	2.3	170 ± 10	490 ± 40	ND	ND	ND	ND
	3.5	0.01	290	2.3	--	--	ND	ND	ND	ND
	4.5	0.01	290	2.3	--	--	ND	ND	ND	ND
	5.5	0.01	290	2.3	--	--	ND	ND	ND	ND
4	0.25	0.005	280	2.8	960 ± 70	1300 ± 100	22 ± 2	30 ± 2	23 ± 4	32 ± 5
	0.75	0.005	260	2.2	640 ± 50	830 ± 60	3.1 ± 0.9	4 ± 1	ND	ND
	1.25	0.005	310	1.8	760 ± 60	1200 ± 100	3 ± 1	5 ± 2	ND	ND
	1.75	0.005	290	2.2	850 ± 60	1200 ± 100	3 ± 1	5 ± 1	ND	ND

	2.5	0.01	310	1.7	950 ± 70	2900 ± 200	2.0 ± 0.3	6 ± 1	ND	ND
	3.5	0.01	270	2.1	1000 ± 100	2700 ± 200	3.1 ± 0.4	9 ± 1	ND	ND
	4.5	0.01	300	2.1	1000 ± 100	3000 ± 200	2.8 ± 0.4	8 ± 1	ND	ND
	5.5	0.01	300	1.7	1000 ± 100	3000 ± 200	2.1 ± 0.4	6 ± 1	ND	ND
	6.5	0.01	310	2.8	1000 ± 100	3200 ± 200	ND	ND	ND	ND
	7.5	0.01	310	3.1	970 ± 70	3000 ± 200	ND	ND	ND	ND
5	0.25	0.005	940	2.4	610 ± 60	2900 ± 300	22 ± 2	100 ± 10	22 ± 2	100 ± 10
	0.75	0.005	990	2.4	420 ± 40	2100 ± 200	5.8 ± 0.4	29 ± 2	6.3 ± 0.6	31 ± 3
	1.25	0.005	890	2.2	340 ± 30	1500 ± 100	3.4 ± 0.2	15 ± 1	3.4 ± 0.3	15 ± 1
	1.75	0.005	910	2.3	320 ± 30	1500 ± 100	4.3 ± 0.3	19 ± 1	3.8 ± 0.5	17 ± 2
	2.5	0.01	770	2.0	250 ± 20	1900 ± 200	3.0 ± 0.2	23 ± 2	2.9 ± 0.3	22 ± 3
	3.5	0.01	800	2.2	170 ± 20	1400 ± 200	1.5 ± 0.1	12 ± 1	ND	ND
	4.5	0.01	780	1.8	110 ± 10	860 ± 90	1.0 ± 0.1	7.5 ± 0.9	ND	ND
	5.5	0.01	780	1.8	170 ± 20	1300 ± 100	1.0 ± 0.1	8.0 ± 0.6	ND	ND
	6.5	0.01	780	1.8	200 ± 20	1600 ± 200	ND	ND	ND	ND
	7.5	0.01	780	1.8	54 ± 5	420 ± 40	ND	ND	ND	ND
	8.5	0.01	780	1.8	7 ± 1	58 ± 6	ND	ND	ND	ND
9.5	0.01	780	1.8	--	--	ND	ND	ND	ND	
6	0.25	0.005	750	2.5	640 ± 50	2400 ± 200	48 ± 3	180 ± 10	34 ± 5	130 ± 20
	0.75	0.005	750	2.5	650 ± 50	2400 ± 200	11 ± 1	40 ± 3	8 ± 2	31 ± 6
	1.25	0.005	750	2.5	610 ± 50	2300 ± 200	17 ± 1	65 ± 5	13 ± 2	51 ± 7
	1.75	0.005	690	1.6	480 ± 40	1700 ± 100	15 ± 1	52 ± 4	12 ± 2	43 ± 5
	2.5	0.01	920	2.6	360 ± 30	3300 ± 200	2.8 ± 0.2	25 ± 2	3.5 ± 0.5	32 ± 4
	3.5	0.01	1140	2.2	250 ± 20	2900 ± 200	1.1 ± 0.2	13 ± 2	ND	ND
	4.5	0.01	1140	2.5	120 ± 10	1400 ± 100	ND	ND	ND	ND
	5.5	0.01	910	2.1	23 ± 3	210 ± 30	ND	ND	ND	ND
	6.5	0.01	850	1.9	15 ± 3	130 ± 30	ND	ND	ND	ND
	7.5	0.01	830	1.9	10 ± 7	80 ± 60	ND	ND	ND	ND
	8.5	0.01	1010	2.1	--	--	ND	ND	ND	ND
	9.5	0.01	800	2.3	--	--	ND	ND	ND	ND
	10.5	0.01	750	2.5	--	--	ND	ND	ND	ND
	11.5	0.01	770	3.1	--	--	ND	ND	ND	ND
	13	0.02	780	2.2	--	--	ND	ND	ND	ND
15	0.02	680	1.8	--	--	ND	ND	ND	ND	
17	0.02	950	2.5	--	--	ND	ND	ND	ND	
7	0.25	0.005	630	1.0	190 ± 10	610 ± 40	6.3 ± 0.4	20 ± 1	6 ± 1	20 ± 3
	0.75	0.005	570	0.9	140 ± 10	400 ± 30	3.3 ± 0.4	9 ± 1	4 ± 1	12 ± 4
	1.25	0.005	830	1.1	150 ± 10	620 ± 50	2.4 ± 0.4	10 ± 1	2 ± 1	10 ± 4
	1.75	0.005	800	1.5	170 ± 10	660 ± 50	3.0 ± 0.4	12 ± 1	3 ± 1	14 ± 4
	2.5	0.01	810	1.3	170 ± 10	1400 ± 100	2.2 ± 0.2	18 ± 1	ND	ND

	3.5	0.01	700	1.1	160 ± 10	1100 ± 80	2.6 ± 0.2	18 ± 1	ND	ND
	4.5	0.01	810	1.3	140 ± 10	1150 ± 90	0.7 ± 0.1	5 ± 1	ND	ND
	5.5	0.01	750	1.2	120 ± 10	920 ± 70	0.6 ± 0.1	4 ± 1	ND	ND
	6.5	0.01	840	1.4	81 ± 6	680 ± 50	ND	ND	ND	ND
	7.5	0.01	840	1.4	42 ± 4	350 ± 30	ND	ND	ND	ND
8	0.25	0.005	270	1.8	620 ± 40	830 ± 60	94 ± 7	130 ± 9	81 ± 6	109 ± 8
	0.75	0.005	280	1.2	710 ± 50	990 ± 70	56 ± 4	78 ± 5	59 ± 4	83 ± 6
	1.25	0.005	320	1.6	690 ± 50	1100 ± 80	66 ± 5	110 ± 7	70 ± 5	111 ± 8
	1.75	0.005	360	2.0	640 ± 50	1150 ± 80	21 ± 1	38 ± 3	21 ± 1	38 ± 3
	2.5	0.01	500	1.7	530 ± 40	2600 ± 200	39 ± 3	190 ± 10	48 ± 3	240 ± 20
	3.5	0.01	580	1.7	330 ± 20	1900 ± 100	7.4 ± 0.5	43 ± 3	7.5 ± 0.7	43 ± 4
	4.5	0.01	660	1.6	280 ± 20	1800 ± 100	4.0 ± 0.3	26 ± 2	ND	ND
	5.5	0.01	630	1.4	290 ± 20	1800 ± 100	9.6 ± 0.7	61 ± 4	10 ± 1	66 ± 5
	6.5	0.01	620	1.6	300 ± 20	1900 ± 100	13 ± 1	78 ± 5	13 ± 1	78 ± 6
	7.5	0.01	620	1.6	310 ± 20	1900 ± 100	16 ± 1	97 ± 7	16 ± 1	100 ± 7
9	0.25	0.005	440	0.8	470 ± 30	1030 ± 70	57 ± 4	124 ± 9	63 ± 4	140 ± 10
	0.75	0.005	360	0.7	390 ± 30	690 ± 50	43 ± 3	78 ± 5	45 ± 4	80 ± 7
	1.25	0.005	460	1.0	340 ± 20	790 ± 60	32 ± 2	74 ± 5	35 ± 3	81 ± 7
	1.75	0.005	670	1.9	310 ± 20	1040 ± 80	19 ± 2	62 ± 6	20 ± 5	70 ± 20
	2.5	0.01	770	1.5	300 ± 20	2300 ± 200	11 ± 1	87 ± 6	14 ± 1	106 ± 9
	3.5	0.01	760	1.6	270 ± 20	2100 ± 100	8.7 ± 0.6	66 ± 5	9 ± 2	70 ± 10
	4.5	0.01	710	1.4	240 ± 20	1700 ± 100	2.6 ± 0.4	19 ± 3	ND	ND
	5.5	0.01	890	1.6	200 ± 10	1800 ± 100	1.5 ± 0.4	13 ± 3	ND	ND
	6.5	0.01	865	1.5	130 ± 10	1120 ± 80	0.9 ± 0.3	8 ± 3	ND	ND
	7.5	0.01	840	1.3	100 ± 10	840 ± 60	0.6 ± 0.3	5 ± 2	ND	ND
10	0.25	0.005	540	1.1	320 ± 20	850 ± 60	61 ± 4	160 ± 10	71 ± 5	190 ± 10
	0.75	0.005	550	1.1	320 ± 20	880 ± 60	55 ± 4	150 ± 10	59 ± 4	160 ± 10
	1.25	0.005	570	1.2	320 ± 20	920 ± 70	70 ± 5	200 ± 10	82 ± 6	230 ± 20
	1.75	0.005	520	1.1	290 ± 20	770 ± 60	38 ± 3	98 ± 7	42 ± 3	110 ± 8
	2.5	0.01	790	2.1	260 ± 20	2000 ± 100	18 ± 1	140 ± 10	18 ± 1	140 ± 10
	3.5	0.01	770	1.6	270 ± 20	2100 ± 200	5.1 ± 0.4	39 ± 3	ND	ND
	4.5	0.01	825	1.7	250 ± 20	2000 ± 100	2.1 ± 0.3	17 ± 2	ND	ND
	5.5	0.01	880	1.7	220 ± 20	1900 ± 100	1.6 ± 0.1	14 ± 1	ND	ND
	6.5	0.01	800	1.4	200 ± 10	1600 ± 100	1.2 ± 0.2	10 ± 2	ND	ND
	7.5	0.01	760	1.1	200 ± 10	1500 ± 100	0.9 ± 0.2	7 ± 1	ND	ND
11	0.25	0.005	1330	3.0	190 ± 10	1260 ± 90	39 ± 3	260 ± 20	41 ± 4	270 ± 30
	0.75	0.005	1330	3.0	190 ± 10	1240 ± 90	45 ± 3	300 ± 20	45 ± 4	300 ± 20
	1.25	0.005	1330	3.0	170 ± 10	1150 ± 80	52 ± 4	350 ± 20	61 ± 4	400 ± 30
	1.75	0.005	1330	2.8	140 ± 10	950 ± 70	70 ± 5	470 ± 30	72 ± 5	480 ± 30
	2.5	0.01	1180	2.1	130 ± 10	1500 ± 100	52 ± 4	620 ± 40	63 ± 4	740 ± 50

	3.5	0.01	1300	2.2	120 ± 10	1500 ± 100	41 ± 3	530 ± 40	46 ± 3	600 ± 40
	4.5	0.01	1280	2.1	100 ± 10	1300 ± 100	15 ± 1	200 ± 10	18 ± 2	240 ± 30
	5.5	0.01	1150	1.7	63 ± 6	720 ± 70	6.2 ± 0.6	71 ± 7	7 ± 2	80 ± 20
	6.5	0.01	1030	1.6	42 ± 3	430 ± 30	3.2 ± 0.3	33 ± 3	4 ± 1	40 ± 10
	7.5	0.01	1200	2.1	33 ± 5	390 ± 60	1.5 ± 0.4	18 ± 5	ND	ND
	8.5	0.01	1340	2.4	33 ± 5	440 ± 70	1.0 ± 0.3	13 ± 4	ND	ND
	9.5	0.01	1290	2.1	17 ± 5	220 ± 70	0.9 ± 0.4	12 ± 5	ND	ND
	10.5	0.01	1290	2.1	22 ± 6	280 ± 70	0.8 ± 0.3	10 ± 4	ND	ND
	11.5	0.01	1330	2.0	16 ± 8	200 ± 100	ND	ND	ND	ND
	13	0.02	1330	2.0	10 ± 6	300 ± 200	0.9 ± 0.4	23 ± 11	ND	ND
	15	0.02	1390	2.3	7 ± 3	190 ± 70	0.6 ± 0.2	16 ± 4	ND	ND
	16.5	0.01	1390	2.3	11 ± 5	150 ± 70	ND	ND	ND	ND
12	0.25	0.005	160	0.2	390 ± 40	310 ± 40	170 ± 10	135 ± 9	140 ± 20	110 ± 20
	0.75	0.005	160	0.2	350 ± 30	280 ± 20	280 ± 20	230 ± 20	320 ± 20	250 ± 20
	1.25	0.005	160	0.2	310 ± 20	250 ± 20	240 ± 20	190 ± 10	250 ± 20	200 ± 10
	1.75	0.005	180	0.3	310 ± 20	280 ± 20	180 ± 10	160 ± 10	200 ± 10	180 ± 10
	2.5	0.01	200	0.3	230 ± 20	450 ± 30	180 ± 10	360 ± 30	210 ± 20	430 ± 30
	3.5	0.01	390	0.8	200 ± 10	790 ± 60	114 ± 8	440 ± 30	140 ± 10	540 ± 40
	4.5	0.01	310	0.5	230 ± 20	720 ± 50	140 ± 10	430 ± 30	160 ± 10	480 ± 30
	5.5	0.01	320	0.5	230 ± 20	730 ± 50	101 ± 7	320 ± 20	122 ± 9	390 ± 30
	6.5	0.01	580	1.7	240 ± 20	1400 ± 100	102 ± 7	590 ± 40	119 ± 8	690 ± 50
	7.5	0.01	320	0.5	240 ± 20	760 ± 60	52 ± 4	170 ± 10	70 ± 8	220 ± 30
	8.5	0.01	600	2.1	220 ± 20	1300 ± 100	35 ± 2	210 ± 10	45 ± 5	270 ± 30
	9.5	0.01	680	2.7	220 ± 20	1500 ± 100	23 ± 2	160 ± 10	26 ± 4	170 ± 30
	10.5	0.01	770	2.2	210 ± 20	1600 ± 100	12 ± 1	91 ± 8	12 ± 3	90 ± 30
	11.5	0.01	700	2.0	160 ± 10	1140 ± 90	10 ± 1	71 ± 8	10 ± 4	70 ± 30
13	0.02	900	2.3	150 ± 10	2700 ± 200	4.1 ± 0.7	70 ± 10	6 ± 3	110 ± 50	
15	0.02	820	2.3	150 ± 10	2500 ± 200	4.8 ± 0.8	80 ± 10	5 ± 3	70 ± 40	
17	0.02	760	1.9	88 ± 8	1300 ± 100	5.7 ± 0.8	90 ± 10	6 ± 3	100 ± 40	
19	0.02	760	1.9	73 ± 7	1100 ± 100	2.1 ± 0.6	32 ± 9	ND	ND	
13	0.25	0.005	790	2.4	220 ± 20	850 ± 60	86 ± 6	340 ± 20	94 ± 7	370 ± 30
	0.75	0.005	790	2.4	160 ± 10	650 ± 50	99 ± 7	390 ± 30	97 ± 7	380 ± 30
	1.25	0.005	770	1.9	150 ± 10	590 ± 40	160 ± 10	600 ± 40	150 ± 10	590 ± 40
	1.75	0.005	950	2.0	160 ± 10	750 ± 60	210 ± 10	980 ± 70	190 ± 10	910 ± 60
	2.5	0.01	830	2.5	140 ± 10	1200 ± 90	220 ± 20	1800 ± 100	230 ± 20	1900 ± 100
	3.5	0.01	750	1.8	140 ± 10	1070 ± 80	250 ± 20	1900 ± 100	270 ± 20	2000 ± 100
	4.5	0.01	870	2.1	150 ± 10	1300 ± 100	230 ± 20	2000 ± 100	340 ± 20	2900 ± 200
	5.5	0.01	850	2.0	150 ± 10	1300 ± 100	170 ± 10	1400 ± 100	180 ± 10	1500 ± 100
6.5	0.01	1000	2.8	150 ± 10	1500 ± 100	115 ± 8	1150 ± 80	106 ± 7	1060 ± 70	
7.5	0.01	930	2.4	150 ± 10	1400 ± 100	77 ± 5	720 ± 50	72 ± 5	670 ± 50	

	8.5	0.01	990	2.8	150 ± 10	1500 ± 100	43 ± 3	420 ± 30	41 ± 3	410 ± 30
	9.5	0.01	950	2.9	150 ± 10	1400 ± 100	22 ± 2	210 ± 10	25 ± 2	230 ± 20
	10.5	0.01	880	2.4	100 ± 10	900 ± 70	13 ± 1	117 ± 8	14 ± 1	130 ± 10
	11.5	0.01	900	2.3	77 ± 6	690 ± 60	17 ± 1	150 ± 10	17 ± 2	160 ± 20
	13	0.02	800	1.8	140 ± 10	2200 ± 200	10 ± 1	160 ± 10	8 ± 2	140 ± 30
	15	0.02	940	2.8	92 ± 7	1700 ± 100	2.5 ± 0.4	47 ± 7	4 ± 1	70 ± 20
	17	0.02	900	2.6	25 ± 4	460 ± 80	6.3 ± 0.5	114 ± 8	7 ± 1	130 ± 20
	18.5	0.01	920	2.2	30 ± 4	280 ± 30	3.6 ± 0.4	33 ± 4	5 ± 2	50 ± 10
14	0.25	0.005	950	2.2	150 ± 20	700 ± 70	270 ± 20	1270 ± 90	280 ± 20	1300 ± 90
	0.75	0.005	950	2.2	130 ± 10	600 ± 50	180 ± 10	870 ± 60	210 ± 10	1000 ± 70
	1.25	0.005	950	2.2	100 ± 10	480 ± 40	140 ± 10	690 ± 50	170 ± 10	810 ± 60
	1.75	0.005	950	2.2	110 ± 10	510 ± 40	140 ± 10	680 ± 50	160 ± 10	780 ± 50
	2.5	0.01	1020	2.1	130 ± 10	1300 ± 100	220 ± 20	2200 ± 200	270 ± 20	2700 ± 200
	3.5	0.01	990	2.2	120 ± 10	1200 ± 100	520 ± 40	5200 ± 400	710 ± 50	7000 ± 500
	4.5	0.01	1000	2.1	120 ± 10	1200 ± 100	270 ± 20	2700 ± 200	320 ± 20	3200 ± 200
	5.5	0.01	980	2.0	120 ± 10	1200 ± 100	230 ± 20	2200 ± 200	260 ± 20	2600 ± 200
	6.5	0.01	1000	2.0	120 ± 10	1200 ± 100	260 ± 20	2600 ± 200	310 ± 20	3100 ± 200
	7.5	0.01	980	2.2	150 ± 20	1400 ± 200	280 ± 20	2700 ± 200	330 ± 20	3300 ± 200
	8.5	0.01	1070	2.1	100 ± 10	1020 ± 80	160 ± 10	1700 ± 100	180 ± 10	1900 ± 100
	9.5	0.01	980	2.2	89 ± 8	870 ± 80	160 ± 10	1500 ± 100	190 ± 10	1800 ± 100
	10.5	0.01	1170	2.5	110 ± 10	1300 ± 100	150 ± 10	1700 ± 100	180 ± 10	2100 ± 100
	11.5	0.01	950	1.6	100 ± 10	920 ± 80	200 ± 10	1900 ± 100	250 ± 20	2400 ± 200
15	13	0.02	980	1.7	82 ± 7	1600 ± 100	28 ± 2	560 ± 40	36 ± 3	700 ± 70
	15	0.02	1090	2.0	82 ± 8	1800 ± 200	79 ± 6	1700 ± 100	89 ± 6	1900 ± 100
	0	0	0		110 ± 20		51 ± 4		60 ± 10	
	0.5	0.01	1220	1.4	25 ± 3	310 ± 30	10 ± 1	121 ± 8	12 ± 1	150 ± 10
	1.5	0.01	1220	1.4	29 ± 5	350 ± 60	18 ± 1	220 ± 20	20 ± 2	250 ± 30
	2.5	0.01	1050	1.4	24 ± 5	260 ± 50	15 ± 1	160 ± 10	17 ± 2	180 ± 20
	3.5	0.01	1090	1.2	30 ± 5	330 ± 50	10 ± 1	108 ± 8	10 ± 2	110 ± 20
	4.5	0.01	1020	1.2	27 ± 8	280 ± 80	13 ± 1	140 ± 10	14 ± 2	140 ± 20
	5.5	0.01	1050	1.3	22 ± 5	230 ± 50	11 ± 1	118 ± 8	12 ± 2	130 ± 20
	6.5	0.01	950	1.1	33 ± 5	310 ± 50	13 ± 1	123 ± 9	15 ± 2	140 ± 20
	7.5	0.01	960	1.2	48 ± 6	460 ± 60	14 ± 1	140 ± 10	15 ± 3	140 ± 20
	8.5	0.01	1120	1.4	32 ± 5	360 ± 60	16 ± 1	180 ± 10	19 ± 3	210 ± 30
	9.5	0.01	940	1.1	22 ± 6	210 ± 50	15 ± 1	140 ± 10	19 ± 2	180 ± 20
	11	0.02	1100	1.5	32 ± 5	700 ± 100	8.9 ± 0.6	200 ± 10	10 ± 2	210 ± 50
16	0.25	0.005	1210	1.5	36 ± 4	220 ± 20	25 ± 2	150 ± 10	26 ± 2	160 ± 10
	0.75	0.005	1080	1.2	27 ± 2	150 ± 10	15 ± 1	83 ± 6	16 ± 1	85 ± 6
	1.25	0.005	1220	1.5	25 ± 2	150 ± 10	14 ± 1	88 ± 6	14 ± 1	88 ± 6
	1.75	0.005	1060	1.3	27 ± 2	140 ± 10	15 ± 1	82 ± 6	17 ± 1	92 ± 6

	2.5	0.01	1140	1.5	30 ± 3	340 ± 30	18 ± 1	200 ± 10	20 ± 1	230 ± 20
	3.5	0.01	1260	1.7	25 ± 2	320 ± 30	18 ± 1	220 ± 20	19 ± 1	230 ± 20
	4.5	0.01	1010	1.2	27 ± 4	270 ± 40	21 ± 1	210 ± 10	21 ± 2	210 ± 20
	5.5	0.01	1170	1.6	33 ± 4	390 ± 50	26 ± 2	300 ± 20	22 ± 2	260 ± 20
	6.5	0.01	1350	2.0	35 ± 6	470 ± 80	20 ± 1	280 ± 20	22 ± 2	300 ± 20
	7.5	0.01	1190	1.7	28 ± 7	340 ± 80	21 ± 1	250 ± 20	21 ± 2	260 ± 30
	8.5	0.01	1140	1.5	28 ± 5	320 ± 60	21 ± 1	240 ± 20	21 ± 1	240 ± 20
	9.5	0.01	1100	1.4	28 ± 4	300 ± 50	21 ± 1	230 ± 20	16 ± 1	180 ± 20
	11	0.02	1100	1.4	23 ± 3	510 ± 70	17 ± 1	370 ± 30	16 ± 1	360 ± 30
	13	0.02	1100	1.4	31 ± 4	680 ± 90	8.5 ± 0.6	190 ± 10	9 ± 1	190 ± 20
	0.25	0.005	1020	1.4	27 ± 8	140 ± 40	40 ± 3	200 ± 10	42 ± 4	210 ± 20
	0.75	0.005	1140	2.4	44 ± 7	250 ± 40	29 ± 2	170 ± 10	33 ± 3	190 ± 20
	1.25	0.005	1040	1.4	48 ± 6	250 ± 30	44 ± 3	230 ± 20	51 ± 4	260 ± 20
	1.75	0.005	1110	1.5	32 ± 5	180 ± 30	20 ± 1	109 ± 8	21 ± 2	120 ± 10
	2.5	0.01	1280	1.9	30 ± 5	390 ± 60	25 ± 2	320 ± 20	29 ± 2	370 ± 30
	3.5	0.01	1090	1.7	39 ± 6	430 ± 60	35 ± 2	380 ± 30	44 ± 3	480 ± 30
	4.5	0.01	990	1.4	58 ± 7	570 ± 60	85 ± 6	840 ± 60	93 ± 7	920 ± 60
	5.5	0.01	1240	2.1	27 ± 5	340 ± 60	32 ± 2	400 ± 30	38 ± 3	470 ± 30
	6.5	0.01	1120	1.6	48 ± 4	540 ± 50	62 ± 4	700 ± 50	73 ± 5	820 ± 60
	7.5	0.01	1250	1.8	48 ± 6	610 ± 70	45 ± 3	570 ± 40	54 ± 4	670 ± 50
	8.5	0.01	1370	2.1	29 ± 5	390 ± 70	20 ± 1	270 ± 20	24 ± 3	320 ± 40
	9.5	0.01	1290	1.9	45 ± 5	580 ± 70	38 ± 3	490 ± 30	43 ± 3	550 ± 40
	10.5	0.01	1290	1.9	38 ± 6	490 ± 70	40 ± 3	520 ± 40	52 ± 4	670 ± 50
	11.5	0.01	1290	1.9	33 ± 5	430 ± 70	17 ± 1	220 ± 20	24 ± 3	310 ± 30
	12.5	0.01	1290	1.9	43 ± 7	550 ± 80	18 ± 1	230 ± 20	21 ± 2	270 ± 30
	13.5	0.01	1290	1.9	37 ± 5	470 ± 60	13 ± 1	170 ± 10	16 ± 2	210 ± 30
	0.25	0.005	1010	1.5	37 ± 3	190 ± 20	73 ± 5	370 ± 30	73 ± 5	370 ± 30
	0.75	0.005	1090	1.6	23 ± 2	120 ± 10	51 ± 4	280 ± 20	54 ± 4	290 ± 20
	1.25	0.005	1080	1.5	21 ± 2	120 ± 10	43 ± 3	230 ± 20	46 ± 3	250 ± 20
	1.75	0.005	1130	1.7	19 ± 3	110 ± 20	42 ± 3	240 ± 20	44 ± 3	250 ± 20
	2.5	0.01	1140	1.6	13 ± 3	140 ± 30	38 ± 3	440 ± 30	42 ± 3	480 ± 30
	3.5	0.01	1170	1.7	13 ± 2	150 ± 20	37 ± 3	430 ± 30	38 ± 3	440 ± 30
	4.5	0.01	1050	1.4	11 ± 3	120 ± 30	25 ± 2	260 ± 20	27 ± 2	290 ± 20
	5.5	0.01	1120	1.6	17 ± 6	190 ± 60	29 ± 2	320 ± 20	31 ± 2	350 ± 20
	6.5	0.01	1120	1.6	15 ± 6	170 ± 70	39 ± 3	440 ± 30	39 ± 3	440 ± 30
	7.5	0.01	1060	1.5	17 ± 6	180 ± 60	35 ± 2	380 ± 30	36 ± 3	380 ± 30
	8.5	0.01	1130	1.6	18 ± 6	210 ± 70	38 ± 3	430 ± 30	37 ± 3	420 ± 30
	9.5	0.01	1250	1.9	15 ± 4	180 ± 50	41 ± 3	520 ± 40	42 ± 3	520 ± 40
	11	0.02	1250	1.9	18 ± 4	460 ± 100	42 ± 3	1050 ± 70	47 ± 3	1170 ± 80
	13	0.02	1250	1.9	15 ± 3	380 ± 70	45 ± 3	1120 ± 80	44 ± 3	1110 ± 80

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18

19	0.5	0.01	1480	2.2	15 ± 4	230 ± 60	25 ± 2	370 ± 30	30 ± 2	440 ± 30
	1.5	0.01	1520	2.3	10 ± 4	150 ± 70	21 ± 1	320 ± 20	22 ± 2	330 ± 30
	2.5	0.01	1370	2.0	19 ± 4	260 ± 60	47 ± 3	650 ± 50	51 ± 4	700 ± 50
	3.5	0.01	1320	1.9	11 ± 3	150 ± 40	47 ± 3	620 ± 40	52 ± 4	680 ± 50
	4.5	0.01	1330	1.9	13 ± 1	170 ± 20	24 ± 2	320 ± 20	26 ± 2	340 ± 20
	5.5	0.01	1380	2.0	10 ± 2	140 ± 20	27 ± 2	370 ± 30	28 ± 2	390 ± 30
	6.5	0.01	1390	2.0	14 ± 2	200 ± 30	21 ± 2	300 ± 20	23 ± 2	320 ± 20
	7.5	0.01	1300	1.8	9 ± 4	120 ± 50	19 ± 1	250 ± 20	19 ± 2	250 ± 20
	8.5	0.01	1360	1.9	13 ± 4	180 ± 50	24 ± 2	330 ± 20	24 ± 2	330 ± 20
	9.5	0.01	1250	1.7	15 ± 4	190 ± 50	25 ± 2	310 ± 20	24 ± 2	300 ± 20
	11	0.02	1410	2.1	13 ± 3	380 ± 80	27 ± 2	760 ± 50	27 ± 2	760 ± 50
	13	0.02	1310	1.8	17 ± 5	400 ± 100	19 ± 1	490 ± 30	19 ± 1	490 ± 40
	15	0.02	1370	2.0	13 ± 5	400 ± 100	19 ± 1	520 ± 40	23 ± 2	630 ± 50
20	0.5	0.01	1200	2.1	3 ± 6	40 ± 70	1600 ± 100	19000 ± 1000	1320 ± 90	16000 ± 1000
	1.5	0.01	1220	2.0	14 ± 4	170 ± 50	128 ± 9	1600 ± 100	150 ± 10	1800 ± 100
	2.5	0.01	1130	1.9	20 ± 4	230 ± 50	170 ± 10	1900 ± 100	180 ± 10	2100 ± 100
	3.5	0.01	1290	2.3	19 ± 4	240 ± 50	180 ± 10	2300 ± 200	200 ± 10	2600 ± 200
	4.5	0.01	1110	1.7	15 ± 4	170 ± 50	220 ± 20	2400 ± 200	230 ± 20	2500 ± 200
	5.5	0.01	1030	1.7	36 ± 5	370 ± 50	230 ± 20	2400 ± 200	250 ± 20	2600 ± 200
	6.5	0.01	1130	1.8	18 ± 4	210 ± 40	220 ± 20	2500 ± 200	240 ± 20	2700 ± 200
	7.5	0.01	1100	1.7	18 ± 3	190 ± 40	220 ± 20	2400 ± 200	240 ± 20	2600 ± 200
	8.5	0.01	1220	2.1	18 ± 3	230 ± 40	230 ± 20	2900 ± 200	290 ± 20	3600 ± 200
	9.5	0.01	1050	1.6	19 ± 4	200 ± 40	210 ± 10	2200 ± 200	250 ± 20	2700 ± 200
	11	0.02	1120	1.8	6 ± 5	100 ± 100	330 ± 20	7400 ± 500	350 ± 20	7800 ± 500
	13	0.02	1200	1.9	14 ± 3	350 ± 80	220 ± 20	5300 ± 400	240 ± 20	5800 ± 400
	15	0.02	1190	2.0	9 ± 3	220 ± 70	280 ± 20	6800 ± 500	300 ± 20	7200 ± 500
17	0.02	970	1.8	44 ± 4	860 ± 80	690 ± 50	13300 ± 900	720 ± 50	14000 ± 1000	

Depth values signify the average depth of the section below the sediment surface (e.g. a 0 to 1 cm section will have a depth of 0.5 cm). Thickness is the vertical width of the sections. Bulk density is reported as dry kg per total volume in m³. Dry density is reported as gram dry per volume of dry sample in cm³.

ND Not detectable

-- Sections reached equilibrium for ²¹⁰Pb_{ex} (²¹⁴Pb values within uncertainty of ²¹⁰Pb for same section)

¹Values were decay-corrected to FDNPP discharge maximum (April 6th, 2011)