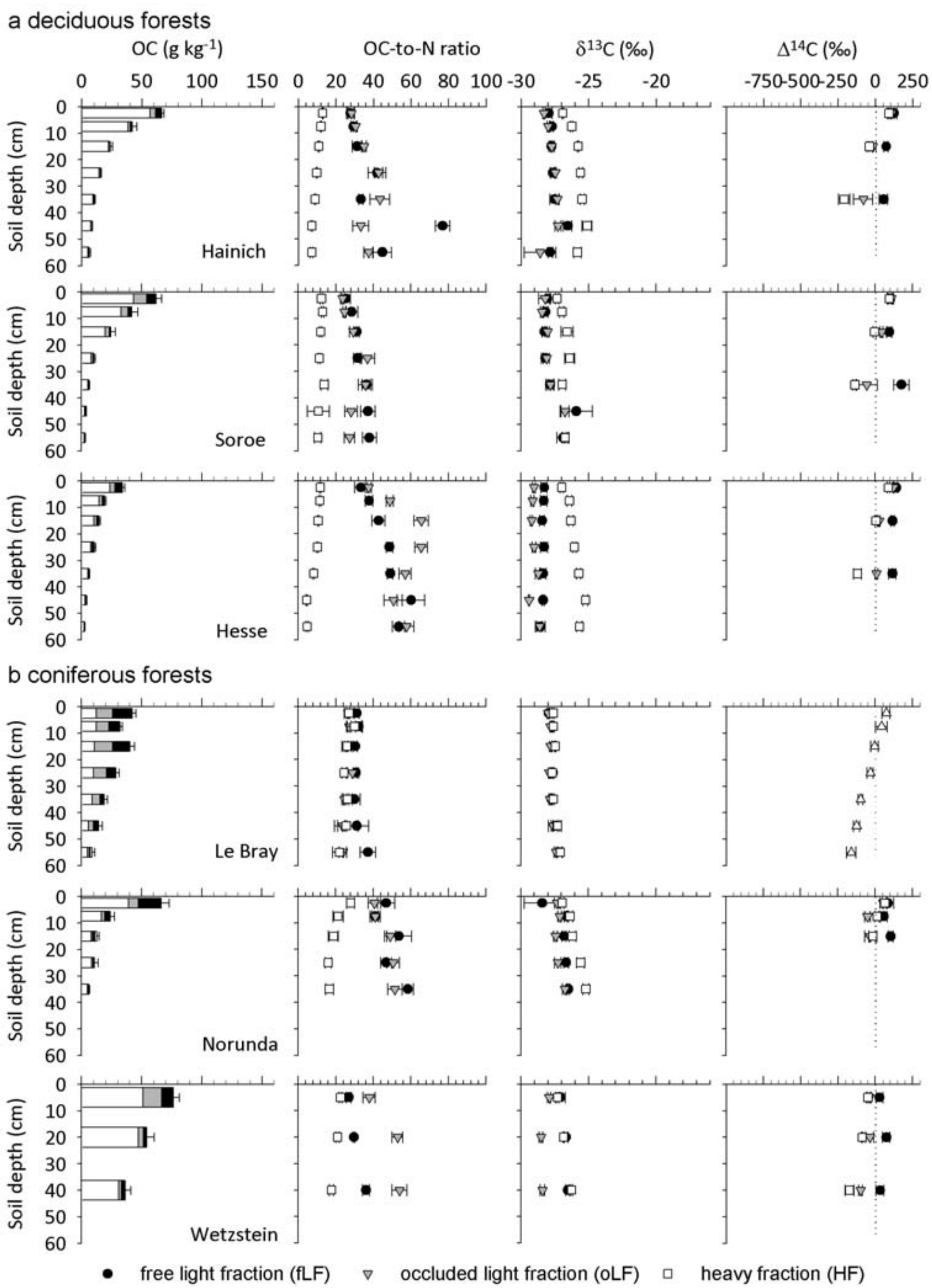
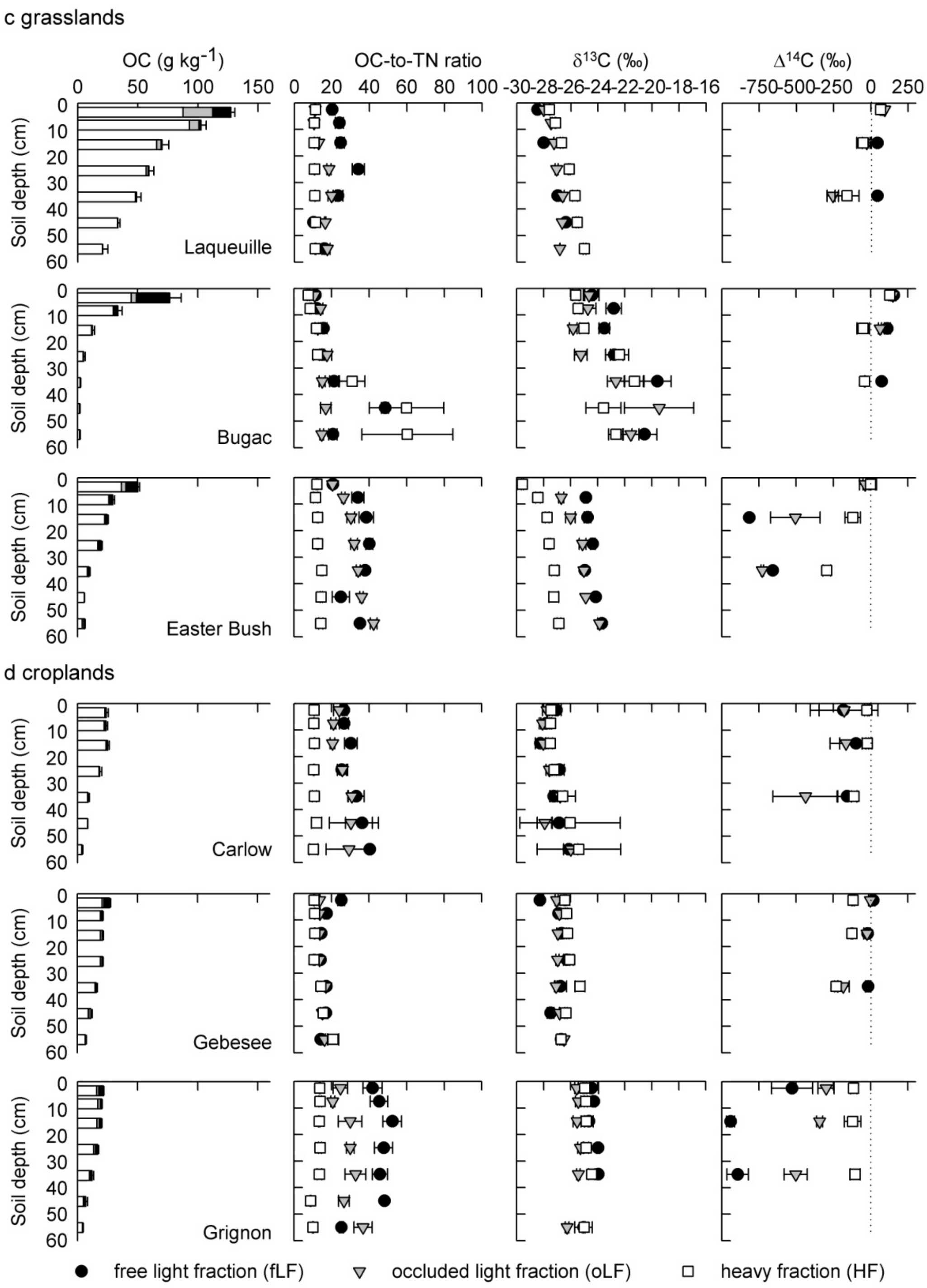
Supporting information Schrumpf et al.

Supplementary Figure A1

Contribution of density fractions (fLF: free light fraction, oLF: occluded light fraction, HF: heavy fraction) to OC at different soil depths (left diagrams) of deciduous forest (Hainich, Soroe, Hesse), coniferous forest (Le Bray, Norunda, Wetzstein), grassland (Laqueuille, Bugac, Easter Bush) and cropland (Carlow, Gebesee, Grignon) sites. The figures to the right present OC-to-TN ratios, $\delta^{13}C$, and $\Delta^{14}C$ values of density fractions at different soil depths of respective sites.

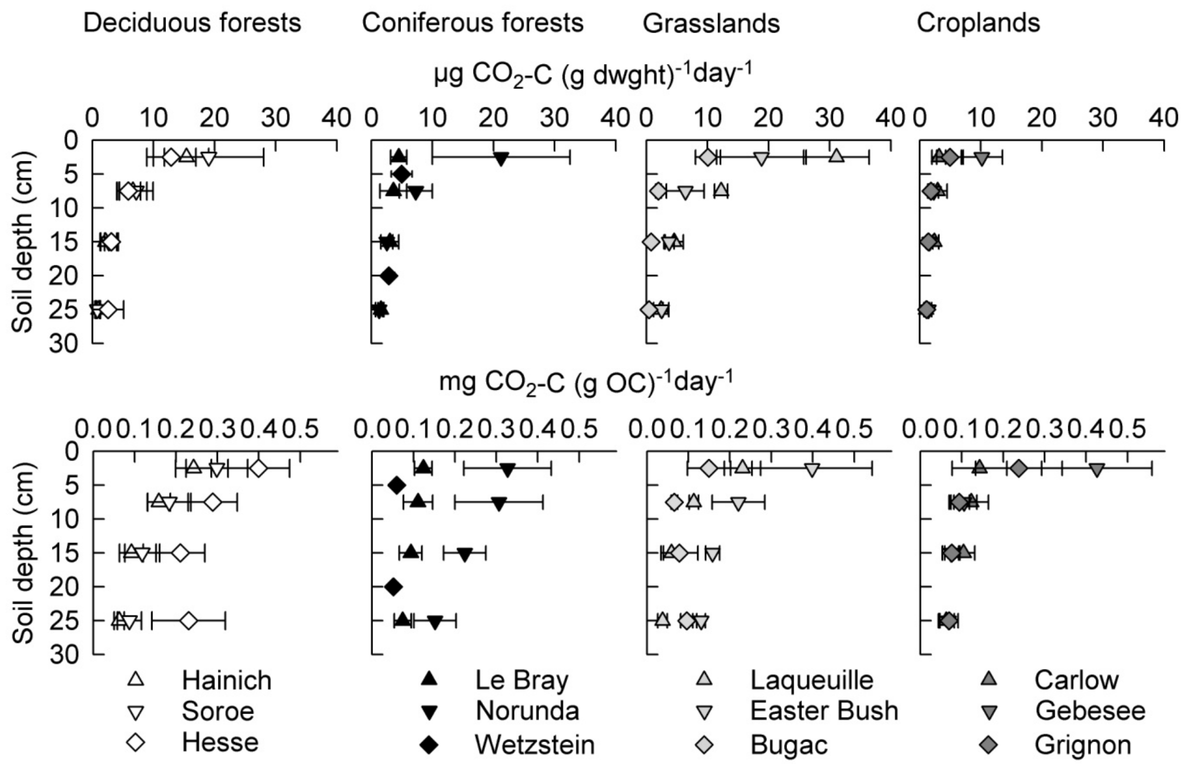


Supplementary Figure A1 continued



Supplementary Figure A2

Average C mineralization rates in the mineral soil over 20 days, given per g soil dry weight and per g OC.



Supplementary Table A1

Soil characteristics of the 12 study sites. Values are means of 10 samples per site with standard error in brackets.

Soil depth [cm]	OC [g kg^{-1}]	IC	C/N	OC stock [kg C m^{-2}]	pH (H_2O)	Sand [g kg^{-1}]	Silt	Clay
Hesse, France, deciduous forest, 48°40’N, 07°05’E, 820 mm, Stagnic Luvisol								
0–5	34 (2)	0	15 (1)	1.4 (0.1)	4.7 (0.0)	107 (14)	578 (13)	314 (5)
5–10	19 (1)	0	13 (0)	1.1 (0.1)	4.6 (0.0)	78 (12)	605 (10)	318 (8)
10–20	15 (1)	0	12 (0)	1.7 (0.1)	4.7 (0.0)	79 (12)	601 (13)	320 (8)
20–30	11 (1)	0	11 (1)	1.3 (0.1)	4.6 (0.0)	79 (11)	606 (12)	315 (10)
30–40	6 (1)	0	9 (0)	0.9 (0.1)		82 (14)	579 (14)	339 (10)
40–50	4 (1)	0	7 (1)	0.6 (0.1)		86 (17)	550 (15)	364 (13)
50–60	3 (0)	0	5 (1)	0.4 (0.1)		74 (16)	518 (18)	408 (10)
Sorø, Denmark, deciduous forest, 55° 29’N, 11° 38’E, 660 mm, Gleyic Cambisol								
0–5	62 (4)	0	14 (0)	2.4 (0.1)	5.9 (0.1)	482 (34)	260 (14)	258 (28)
5–10	42 (5)	0	13 (0)	2.1 (0.2)	5.6 (0.1)	498 (40)	267 (17)	235 (26)
10–20	24 (4)	0	12 (0)	2.6 (0.3)	6.1 (0.1)	534 (36)	246 (19)	220 (24)
20–30	10 (1)	0	12 (0)	1.4 (0.2)	6.8 (0.1)	524 (43)	207 (17)	269 (30)
30–40	6 (1)	17 (7)	10 (0)	0.8 (0.1)		477 (52)	211 (23)	312 (33)
40–50	3 (1)	43 (15)	10 (1)	0.2 (0.2)		262 (12)	285 (12)	453 (23)
50–60	3 (1)	37 (9)	9 (0)	0.4 (0.1)		425 (64)	245 (31)	330 (39)
Hainich, Germany, deciduous forest, 51°04'N, 10°27’E, 800 mm, Eutric Cambisol								
0–5	62 (7)	1 (0)	13 (0)	2.4 (0.2)	6.0 (0.1)	24 (1)	459 (25)	517 (26)
5–10	41 (5)	0 (0)	12 (0)	2.0 (0.1)	5.9 (0.1)	28 (3)	466 (26)	506 (27)
10–20	24 (2)	0 (0)	11 (0)	2.8 (0.2)	6.6 (0.1)	27 (1)	473 (31)	500 (32)
20–30	16 (1)	1 (0)	10 (0)	2.1 (0.1)	7.1 (0.0)	29 (3)	350 (37)	621 (35)
30–40	10 (1)	3 (1)	9 (0)	1.4 (0.1)	7.4 (0.0)	37 (7)	305 (39)	658 (39)
40–50	8 (2)	9 (5)	9 (1)	0.9 (0.3)	7.6 (0.0)	47 (9)	325 (28)	628 (26)
50–60	7 (1)	11 (3)	8 (1)	0.7 (0.2)	7.8 (0.0)	17 (4)	279 (39)	704 (40)
Bugac, Hungary, grassland, 46.8 °, E 18.9°, 500 mm, Eutric Arenosol								
0–5	74 (7)	10 (2)	10 (0)	3.2 (0.2)	7.8 (0.0)	601 (32)	179 (26)	220 (28)
5–10	39 (4)	11 (2)	10 (0)	2.5 (0.2)	8.1 (0.0)	684 (28)	164 (24)	152 (16)
10–20	19 (3)	9 (1)	13 (1)	2.6 (0.3)	8.4 (0.0)	782 (15)	103 (19)	116 (14)
20–30	9 (1)	9 (1)	20 (2)	1.5 (0.1)	8.6 (0.0)	805 (32)	73 (15)	122 (21)
30–40	8 (1)	11 (2)	[b]	1.2 (0.1)		799 (47)	74 (21)	127 (30)
40–50	7 (1)	13 (3)	[b]	1.2 (0.1)				
50–60	8 (1)	15 (2)	[b]	1.4 (0.1)		803 (33)	90 (22)	107 (18)
Laqueuille, France, grassland, 45°38'N, 02°44'E, 1313 mm, Umbric Andosol								
0–5	126 (3)	0	11 (0)	2.9 (0.2)	5.3 (0.0)	186 (12)	551 (10)	263 (9)
5–10	103 (4)	0	10 (0)	3.6 (0.2)	5.3 (0.0)	232 (21)	538 (15)	229 (12)
10–20	70 (6)	0	10 (0)	5.4 (0.3)	5.5 (0.0)	247 (19)	549 (15)	204 (16)
20–30	59 (4)	0	10 (0)	4.3 (0.2)	5.7 (0.0)	240 (6)	550 (9)	210 (9)
30–40	49 (4)	0	10 (0)	3.6 (0.2)		251 (8)	542 (11)	207 (15)
40–50	31 (8)	0	11 (0)	2.4 (0.5)		333 (28)	497 (15)	170 (18)
50–60	21 (4)	0	10 (0)	1.7 (0.3)		370 (29)	482 (13)	148 (23)

Table A1 *continued*

Soil depth [cm]	OC [g kg^{-1}]	IC	C/N	OC stock [kg C m^{-2}]	pH (H_2O)	Sand [g kg^{-1}]	Silt	Clay
Easter Bush, UK, grassland, 55° 52´N, 3°10´W, 890 mm, Stagnic Cambisol								
0–5	48 (2)	0	13 (0)	2.3 (0.1)	5.6 (0.1)	559 (8)	195 (8)	246 (5)
5–10	33 (3)	0	13 (0)	1.8 (0.1)	5.9 (0.0)	559 (38)	191 (7)	250 (33)
10–20	25 (1)	0	13 (0)	3.0 (0.2)	5.8 (0.0)	590 (13)	192 (7)	218 (8)
20–30	20 (1)	0	13 (0)	2.7 (0.2)	6.2 (0.0)	600 (11)	190 (5)	210 (8)
30–40	12 (1)	0	13 (0)	1.6 (0.2)		633 (16)	168 (7)	199 (12)
40–50	6 (2)	0	15 (0)	0.9 (0.2)				
50–60	6 (0)	0	15 (0)	0.7 (0.1)		553 (36)	206 (26)	241 (17)
Carlow, Ireland, cropland, 52°51'N, 6°54'W, 804 mm, Eutric Cambisol								
0–5	24 (2)	3 (2)	10 (0)	1.4 (0.1)	7.7 (0.0)	572 (21)	214 (17)	214 (9)
5–10	24 (2)	3 (2)	10 (0)	1.3 (0.1)	7.7 (0.0)	567 (20)	225 (14)	209 (12)
10–20	25 (2)	3 (2)	10 (0)	2.7 (0.1)	7.6 (0.1)	559 (21)	217 (11)	224 (12)
20–30	19 (2)	3 (1)	9 (0)	2.0 (0.1)	7.6 (0.1)	560 (23)	215 (11)	224 (14)
30–40	9 (1)	7 (6)	9 (1)	0.9 (0.1)		565 (40)	180 (20)	255 (29)
40–50	11 (2)	13 (11)	8 (1)	0.6 (0.2)				
50–60	4 (1)	26 (11)	7 (1)	0.4 (0.1)		552 (51)	163 (21)	285 (48)
Gebesee, Germany, cropland, 51°06'N, 10°55'E, 470mm, Haplic Phaeozem								
0–5	27 (1)	0 (0)	12 (0)	1.4 (0.1)	7.1 (0.0)	30 (2)	613 (12)	358 (12)
5–10	21 (0)	0 (0)	11 (0)	1.5 (0.1)	7.1 (0.1)	25 (1)	588 (12)	387 (12)
10–20	21 (1)	1 (0)	11 (0)	3.0 (0.1)	7.3 (0.0)	25 (1)	608 (13)	366 (13)
20–30	21 (1)	2 (0)	11 (0)	2.9 (0.1)	7.3 (0.0)	23 (0)	588 (21)	389 (21)
30–40	16 (1)	4 (2)	11 (0)	2.2 (0.1)		20 (1)	637 (12)	343 (13)
40–50	11 (1)	10 (2)	11 (0)	1.5 (0.1)				
50–60	7 (1)	19 (2)	10 (0)	0.9 (0.1)		16 (1)	686 (11)	298 (11)
Grignon, France, cropland, 48°51' N, 1°58' E, 700 mm, Eutric Cambisol								
0–5	22 (0)	1 (0)	12 (0)	1.5 (0.1)	7.7 (0.0)	80 (4)	581 (10)	339 (8)
5–10	21 (0)	1 (0)	12 (0)	1.6 (0.0)	7.7 (0.0)	79 (4)	581 (12)	340 (11)
10–20	20 (1)	1 (1)	11 (0)	3.0 (0.1)	7.7 (0.0)	82 (5)	580 (12)	338 (8)
20–30	17 (1)	1 (0)	12 (0)	2.7 (0.1)	7.8 (0.0)	76 (4)	572 (11)	352 (8)
30–40	12 (1)	0 (0)	11 (1)	1.9 (0.2)		67 (9)	587 (15)	346 (11)
40–50	7 (1)	0 (0)	9 (1)	1.1 (0.2)				
50–60	5 (0)	0 (0)	8 (0)	0.7 (0.1)		40 (4)	565 (18)	395 (16)
Norunda, Sweden, coniferous forest, 60°5'N, 17°29'E, 527mm, Haplic Podzol								
0–5	67 (7)	0	30 (2)	1.5 (0.2)	4.1 (0.0)	497 (53)	364 (38)	140 (32)
5–10	25 (4)	0	24 (2)	0.7 (0.1)	4.6 (0.0)	536 (58)	315 (47)	149 (27)
10–20	13 (2)	0	21 (2)	[c]	5.0 (0.0)	539 (64)	293 (41)	169 (42)
20–30	8 (1)	0	20 (2)	[c]	5.4 (0.1)	525 (92)	259 (38)	216 (75)
30–-40	6 (1)	0	18 (2)	[c]		468 (98)	285 (54)	247 (83)

Table A1 *continued*

Soil depth [cm]	OC [g kg^{-1}]	IC	C/N	OC stock [kg C m^{-2}]	pH (H_2O)	Sand [g kg^{-1}]	Silt	Clay
Wetzstein, Germany, coniferous forest, 50°27'N, 11°27'E, 840mm, Cambic Podzol								
0–10	77 (5)	0	24 (1)	2.4 (0.3)	3.5 (0.0)	233 (25)	504 (16)	263 (23)
10–30	54 (6)	0	23 (1)	3.8 (0.2)	3.7 (0.0)	199 (14)	435 (22)	366 (21)
30–50	37 (4)	0	20 (1)	2.4 (0.2)	4.2 (0.0)	217 (19)	446 (15)	337 (16)
Le Bray, France, coniferous forest, 44°43'N, 0°46'E, 900mm, Anthric Ortsteinic Podzol								
0–5	42 (4)	0	24 (1)	2.0 (0.1)	4.2 (0.0)	860 (7)	59 (4)	82 (4)
5–10	30 (4)	0	23 (1)	1.8 (0.2)	4.2 (0.0)	874 (5)	50 (4)	76 (4)
10–20	40 (4)	0	23 (1)	4.4 (0.6)	4.2 (0.0)	863 (10)	59 (5)	77 (5)
20–30	28 (4)	0	23 (1)	3.7 (0.3)	4.2 (0.0)	884 (9)	52 (4)	64 (9)
30–40	19 (3)	0	23 (1)	2.9 (0.4)		904 (10)	35 (3)	61 (8)
40–50	14 (3)	0	21 (1)	2.2 (0.5)		915 (11)	23 (4)	62 (9)
50–60	9 (2)	0	19 (1)	1.5 (0.3)		938 (8)	15 (2)	47 (6)

[a]FAO (2006), [b]N concentration too low, [c] no stone content available to determine stocks

OC concentrations in density fractions and mass and carbon losses during density fractionation

On average, the oLF had the largest OC concentrations (354 ± 117g kg^{-1}), followed by the fLF (289 ± 95 g kg^{-1}) and the HF, which contained least OC (20 ± 14 g kg^{-1}). There were no specific trends of fLF- and oLF-OC concentrations among land use types and with soil depths. The range of OC concentrations in individual fractions confirms previous results (Golchin et al., 1994; Golchin et al., 1997; Roscoe and Buurman, 2003; Kolbl and Kogel-Knabner, 2004; John et al., 2005; Grünewald et al., 2006). Smaller OC concentrations in the fLF than in the oLF are likely the result of sonication prior to oLF separation, which removes mineral components adhering to plant fragments. The fLF, which is separated without sonication, may still contain adhering mineral components. Additionally, clay dispersed in the SPT solution and not settling during centrifugation may be collected on the glass-fibre filters and then processed together with the light fractions. Consequently, both light fractions are contaminated with mineral particles to different extent, where larger OC concentrations occur in samples which are lower in mineral components. The variability of light fraction OC concentrations within and between soil profiles, therefore, probably reflects differences in mineral contamination.

The average mass recovery across all samples was 95%. Smallest mass losses occurred for the sandy soils of Le Bray (1%), largest for the Hainich soils (6–15%), which had the largest clay contents. The mass recoveries are in the range of values reported by Chenu and Plante (2006, >97%) and Grünewald *et al.* (2006, 96–104%). Median mass losses per site were positively related to average clay contents for all soil depths except for the 0–5 cm layer, indicating that clay dispersion contributed to mass losses. Partial dissolution of carbonates might have contributed to mass losses at some sites.

The recovery of OC was on average less than the mass recovery. Largest losses of >20% occurred for soils from Le Bray, Gebesee and Hainich, while losses for soils from the Wetzstein site were smallest (7–12%). Similar OC losses have been reported, *e.g.*, by Baisden *et al.* (2002; 11 ± 5%), Chenu & Plante (2006; 12–19%), Crow *et al.* (2007; 17–26%), and Castanha *et al.* (2008; 17–26%), while Roscoe & Buurman (2003) and Grünewald *et al.* (2006) had smaller OC losses (1–11%).

Supplementary Table A2

Mass loss and organic C recovery during density fractionation (average and standard deviation in brackets).

	Mass-loss	C-loss	Mass-loss	C-loss	Mass-loss	C-loss
	[%] of total weight or total OC					
	Carlow		Grignon		Gebesee	
0-5	13 (7)	2 (1)	1 (8)	8 (2)	20 (7)	6 (1)
5-10	10 (4)	2 (0)	10 (13)	11 (1)	21 (5)	6 (1)
10-20	13 (7)	2 (0)	8 (12)	11 (1)	20 (5)	6 (2)
20-30	17 (10)	3 (2)	8 (7)	12 (2)	20 (5)	6 (1)
30-40	19 (10)	5 (4)	16 (28)	13 (3)	29 (8)	6 (1)
50-60	28 (4)	8 (8)	38 (7)	20 (3)	n.d.	5 (1)
	Bugac		Easter Bush		Laqueuille	
0-5	15 (8)	5 (1)	15 (11)	3 (1)	11 (6)	11 (4)
5-10	19 (9)	4 (1)	16 (11)	3 (0)	6 (3)	1 (3)
10-20	18 (10)	3 (1)	23 (7)	4 (3)	3 (10)	0 (4)
20-30	16 (9)	3 (1)	19 (8)	2 (0)	2 (8)	-1(3)
30-40	14 (6)	3 (1)	20 (14)	20 (14)	27 (11)	22 (10)
50-60	21 (18)	3 (1)	14 (4)	14 (4)	24 (8)	20 (5)
	Hesse		Soroe		Hainich	
0-5	19 (7)	3 (1)	15 (4)	4 (2)	16 (3)	6 (2)
5-10	10 (6)	3 (1)	13 (8)	4 (2)	22 (6)	6 (3)
10-20	11 (7)	3 (1)	25 (10)	4 (3)	28 (6)	8 (3)
20-30	11 (6)	3 (1)	27 (12)	8 (5)	23 (7)	10 (4)
30-40	13 (4)	3 (2)	17 (19)	10 (6)	25 (6)	13 (5)
50-60	14 (7)	5 (3)	33 (16)	7 (4)	26 (19)	14 (6)
	Wetzstein		Norunda		Le Bray	
0-5	10 (5)	5 (3)	15 (7)	2 (1)	21 (11)	1 (0)
5-10	9 (5)	5 (2)	10 (9)	2 (0)	13 (6)	1 (0)
10-20	12 (5)	3 (1)	13 (7)	2 (2)	15 (10)	1 (0)
20-30	10 (5)	5 (3)	13 (9)	2 (3)	26 (10)	1 (0)
30-40	9 (5)	5 (2)	16 (7)	3 (4)	22 (10)	1 (0)
50-60					25 (12)	0 (0)

Supplementary Table A3

Carbon stocks in density fractions of the 12 study sites. Values are means of 10 samples per site (se: standard error, n = 10 and n = 3 for the 40–50 cm layer, cv: coefficient of variation).

Soil depth	fLF			oLF			HF		
	mean	se	cv	mean	se	cv	mean	se	cv
[cm]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]
Hesse									
0–5	0.26	0.03	37	0.19	0.03	43	1.00	0.06	20
5–10	0.11	0.01	29	0.14	0.02	39	0.80	0.03	14
10–20	0.23	0.04	51	0.25	0.03	35	1.26	0.06	16
20–30	0.23	0.07	94	0.13	0.01	38	0.98	0.06	19
30–40	0.09	0.01	42	0.07	0.01	57	0.72	0.04	17
40–50	0.07	0.00	5	0.03	0.01	64	0.43	0.07	22
50–60	0.05	0.01	90	0.02	0.01	108	0.35	0.03	30
Sum	1.04			0.82			5.55		
Sorø									
0–5	0.31	0.07	70	0.41	0.07	55	1.71	0.10	19
5–10	0.15	0.04	81	0.30	0.05	57	1.63	0.10	20
10–20	0.11	0.03	74	0.41	0.11	83	2.05	0.18	28
20–30	0.09	0.01	49	0.21	0.04	64	1.15	0.11	30
30–40	0.04	0.01	62	0.09	0.01	45	0.75	0.07	30
40–50	0.16	-	-	0.17	-	-	0.28	-	-
50–60	0.04	0.01	78	0.04	0.01	88	0.38	0.07	51
Sum	0.92			1.64			7.94		
Hainich									
0–5	0.19	0.03	54	0.16	0.04	74	2.21	0.13	17
5–10	0.07	0.02	88	0.08	0.02	63	1.85	0.11	20
10–20	0.05	0.01	65	0.13	0.03	62	2.62	0.15	18
20–30	0.04	0.01	45	0.14	0.02	45	1.88	0.07	13
30–40	0.03	0.00	45	0.12	0.01	31	1.28	0.11	28
40–50	0.05	0.03	102	0.11	0.03	48	0.68	0.19	49
50–60	0.04	0.01	89	0.08	0.02	70	0.58	0.15	74
Sum	0.48			0.84			11.25		
Bugac									
0–5	1.05	0.15	44	0.14	0.03	63	1.97	0.21	32
5–10	0.23	0.03	44	0.06	0.04	196	2.24	0.14	20
10–20	0.12	0.02	53	0.06	0.02	127	2.51	0.24	30
20–30	0.07	0.01	57	0.04	0.02	124	1.24	0.06	15
30–40	0.05	0.01	87	0.02	0.01	108	1.11	0.11	31
40–50	0.04	0.03	96	0.01	0.01	103	1.23	0.21	24
50–60	0.02	0.01	87	0.03	0.01	96	1.35	0.14	33
Sum	1.43			0.33			11.30		

Table A3 *continued*

Soil depth	fLF			oLF			HF		
	mean	se	cv	mean	se	cv	mean	se	cv
[cm]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]
Laqueuille									
0–5	0.34	0.08	68	0.55	0.09	48	2.04	0.22	33
5–10	0.06	0.01	71	0.28	0.03	33	3.29	0.14	14
10–20	0.06	0.01	54	0.29	0.08	75	4.93	0.29	19
20–30	0.04	0.01	66	0.12	0.08	200	4.16	0.11	8
30–40	0.02	0.00	75	0.06	0.03	158	3.56	0.21	19
40–50	0.01	0.01	107	0.02	0.01	111	2.34	1.16	70
50–60	0.01	0.00	111	0.01	0.00	106	1.68	0.26	50
Sum	0.57			1.25			22.08		
Easter Bush									
0–5	0.45	0.07	44	0.17	0.04	65	1.69	0.11	19
5–10	0.12	0.01	34	0.07	0.01	41	1.49	0.07	14
10–20	0.16	0.02	37	0.14	0.01	27	2.95	0.10	10
20–30	0.24	0.07	94	0.14	0.02	46	2.34	0.13	17
30–40	0.07	0.01	63	0.12	0.02	51	1.15	0.11	31
40–50	0.08	0.04	66	0.23	0.05	73	0.78	0.29	42
50–60	0.10	0.03	78	0.20	0.04	65	0.52	0.05	31
Sum	1.08			0.81			9.55		
Carlow									
0–5	0.04	0.00	36	0.03	0.01	72	1.29	0.09	23
5–10	0.05	0.02	135	0.03	0.01	101	1.20	0.06	17
10–20	0.10	0.02	61	0.06	0.01	43	2.62	0.11	13
20–30	0.04	0.01	63	0.03	0.01	58	1.95	0.07	12
30–40	0.01	0.00	105	0.02	0.01	105	0.90	0.12	43
40–50	0.01	0.00	67	0.01	0.00	67	0.60	0.15	51
50–60	0.01	0.00	122	0.01	0.00	96	0.34	0.09	62
Sum	0.25			0.20			8.91		
Gebesee									
0–5	0.25	0.04	48	0.09	0.01	40	0.93	0.04	13
5–10	0.06	0.01	66	0.09	0.01	43	1.13	0.05	13
10–20	0.08	0.02	64	0.20	0.03	42	2.35	0.04	5
20–30	0.08	0.01	34	0.20	0.02	30	2.29	0.06	7
30–40	0.02	0.00	56	0.10	0.02	49	1.93	0.13	20
40–50	0.01	0.00	35	0.07	0.01	18	1.38	0.09	10
50–60	0.01	0.00	75	0.03	0.01	73	1.20	0.08	31
Sum	0.49			0.77			11.23		

Table A3 *continued*

Soil depth	fLF			oLF			HF		
	mean	se	cv	mean	se	cv	mean	se	cv
[cm]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]	[kg OC m^{-2}]		[%]
Grignon									
0–5	0.25	0.03	37	0.12	0.01	18	1.10	0.06	16
5–10	0.10	0.01	37	0.16	0.01	21	1.29	0.03	9
10–20	0.27	0.05	56	0.31	0.03	25	2.47	0.10	12
20–30	0.30	0.02	23	0.23	0.03	36	2.15	0.13	19
30–40	0.21	0.04	62	0.15	0.03	54	1.56	0.15	30
40–50	0.11	0.04	46	0.05	0.01	22	0.82	0.13	22
50–60	0.01	0.00	62	0.06	0.01	51	0.60	0.04	22
Sum	1.23			1.09			10.02		
Norunda									
0–5	0.54	0.09	45	0.21	0.03	46	0.95	0.17	51
5–10	0.15	0.02	42	0.08	0.02	57	0.51	0.14	73
Wetzstein									
0–10	0.28	0.05	55	0.44	0.07	50	1.72	0.27	49
10–30	0.22	0.03	42	0.30	0.07	71	3.31	0.17	16
30–50	0.22	0.04	52	0.15	0.02	50	2.06	0.21	32
Sum	0.72			0.90			7.08		
Le Bray									
0–5	0.74	0.07	27	0.63	0.12	56	0.59	0.10	53
5–10	0.53	0.13	75	0.62	0.09	44	0.76	0.13	50
10–20	1.62	0.46	85	1.90	0.18	29	1.35	0.27	60
20–30	0.96	0.21	65	1.41	0.28	59	1.38	0.27	60
30–40	0.43	0.13	95	0.95	0.18	60	1.36	0.18	42
40–50	0.35	0.09	85	0.67	0.15	71	0.85	0.16	58
50–60	0.14	0.03	72	0.27	0.14	157	0.83	0.20	73
Sum	4.78			6.45			7.13		

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