Bečvářová P, Horváth M, Šarapatka B, Zouhar V (2018).
Dynamics of soil organic carbon (SOC) content in stands of Norway spruce (*Picea abies*) in central Europe
iForest – Biogeosciences and Forestry – doi: 10.3832/ifor2521-011

Supplementary Material

Tab. S1 - Frequency of the studied plots according to ecological series and edaphic categories (Viewegh et al. 2003).

Ecological series (code)	Edaphic category (code)	Number of samples
extreme (Z)	scrub (Z)	1
acidic (oligotrophic, K)	compacted acid (I)	17
	nutrient poor (M)	
	acidic (K)	
	stony slope (N)	
rich (mesotrophic, B)	nutrient (B)	18
	nutrient medium (S)	
maple; enriched with humus (eutrophic, J)	stony colluvial (A)	1
gleyed (strongly fluctuating water tables, P)	nutrient medium gleyed soils (O)	5
	acidic gleyed soils (P)	

Tab. S2 - Frequency of the analysed samples from the monitoring plots, according to density of stocking and age class. Highest frequencies are marked in bold.

Density of stocking ↓ / Age class →	2.	3.	4.	5.	6.	7.	8.	Number of samples
0.3	-	-	-	-	-	1	2	**3**
0.4	-	-	-	1	-	2	-	**3**
0.6	-	-	1	-	1	-	1	**3**
0.7	-	-	-	-	1	-	1	**2**
0.8	-	-	**2**	**1**	**4**	-	-	**7**
0.9	2	2	**4**	**4**	**5**	1	-	**18**
1	-	-	**2**	**3**	**1**	-	-	**6**
Number of samples	**2**	**2**	**9**	**9**	**12**	**4**	**4**	**42**

Tab. S3 - SOC content (t ha^{-1}) in the organic (O) and surface mineral (A) soil horizon, according to stand age class. (SD): standard deviation; (SEM): standard error of the mean.

Age class	Organic (O) Horizon (t ha^{-1})					Surface Mineral (A) Horizon (t ha^{-1})				
	Range	Median	Mean	SD	SEM	Range	Median	Mean	SD	SEM
2	5.99-27.47	16.72	16.72	15.18	10.73	9.56-14.75	12.15	12.15	3.67	2.59
3	5.83-8.77	7.30	7.30	2.08	1.47	26.08-36.06	31.07	31.07	7.06	4.99
4	4.21-38.04	9.95	13.57	11.17	3.72	7.60-155.54	17.89	36.06	46.25	15.42
5	4.34-26.60	12.12	13.53	6.67	2.22	3.68-64.83	14.40	20.91	19.07	6.36
6	5.83-30.37	12.47	13.77	8.05	2.32	4.50-116.34	27.03	39.74	36.90	10.65
7	15.30-34.92	24.43	24.77	8.08	4.04	21.60-91.25	51.36	53.89	29.17	14.59
8	14.47-43.19	30.48	29.65	11.81	5.91	70.24-260.64	122.55	144.00	84.71	42.35

Tab. S4 - SOC content (t ha^{-1}) in the organic (O) and surface mineral (A) soil horizon, according to density of stocking of forest stands. (SD): standard deviation; (SEM): standard error of the mean.

Density of stocking (class)	Organic (O) Horizon (t ha^{-1})					Surface Mineral (A) Horizon (t ha^{-1})				
	Range	Median	Mean	SD	SEM	Range	Median	Mean	SD	SEM
0.3	31.82-43.19	34.92	36.64	5.88	3.39	21.6-150.48	70.24	80.77	65.08	37.58
0.4	15.30-26.60	23.23	21.71	5.80	3.35	3.68-91.25	58.52	51.15	44.25	25.55
0.6	7.22-38.04	14.47	19.91	16.11	9.30	35.66-260.64	35.66	109.80	130.64	75.42
0.7	29.14-30.37	29.75	29.75	0.87	0.62	4.50-94.63	49.56	49.56	63.73	45.07
0.8	4.21-28.15	9.87	11.58	7.87	2.97	5.40-155.54	44.46	61.16	54.87	20.74
0.9	5.22-27.46	10.89	11.92	7.08	1.67	5.75-44.20	17.95	24.14	15.14	3.57
1.0	6.51-21.87	14.22	14.17	5.52	2.25	7.60-107.35	16.38	30.11	38.34	15.65

Fig. S1 - Location of the study area and monitoring plots. (1): Drahanská vrchovina Upland; (2): Jeseníky Mountains.

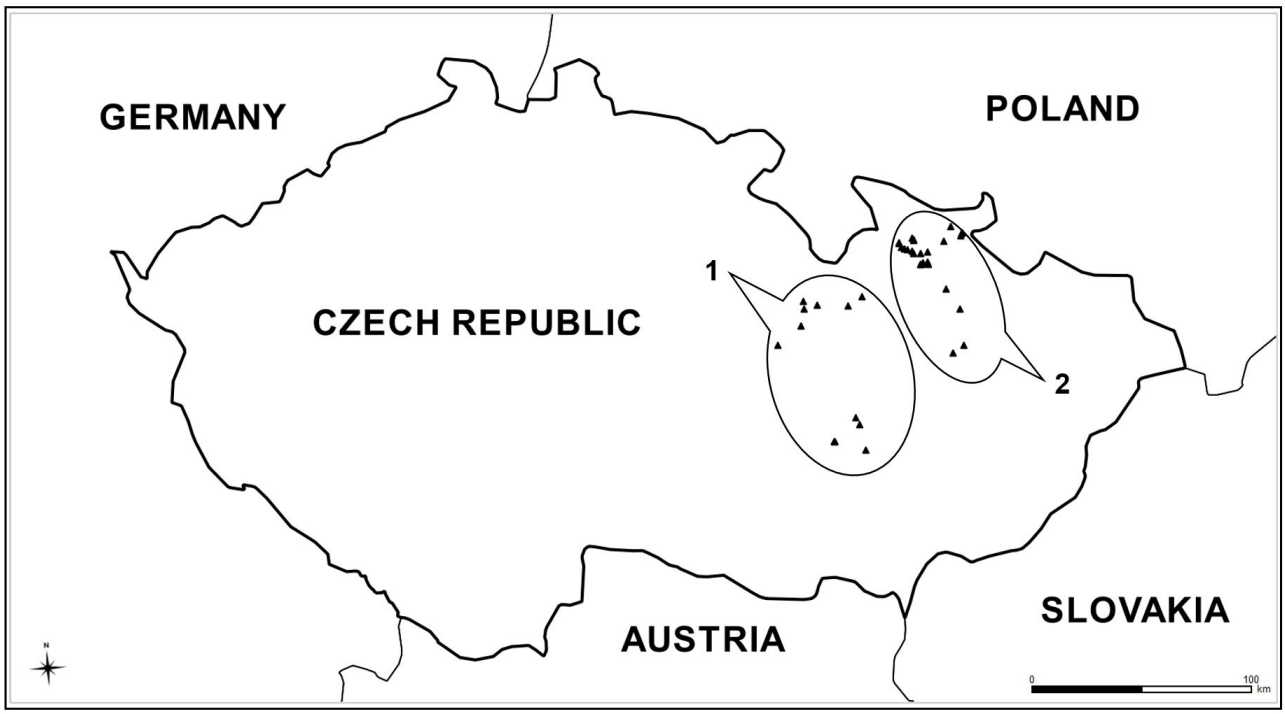

Fig. S2 - Variation of SOC content (t ha^{-1}) in the surface mineral soil horizon in relation to the absolute height-yield class (AHYC).

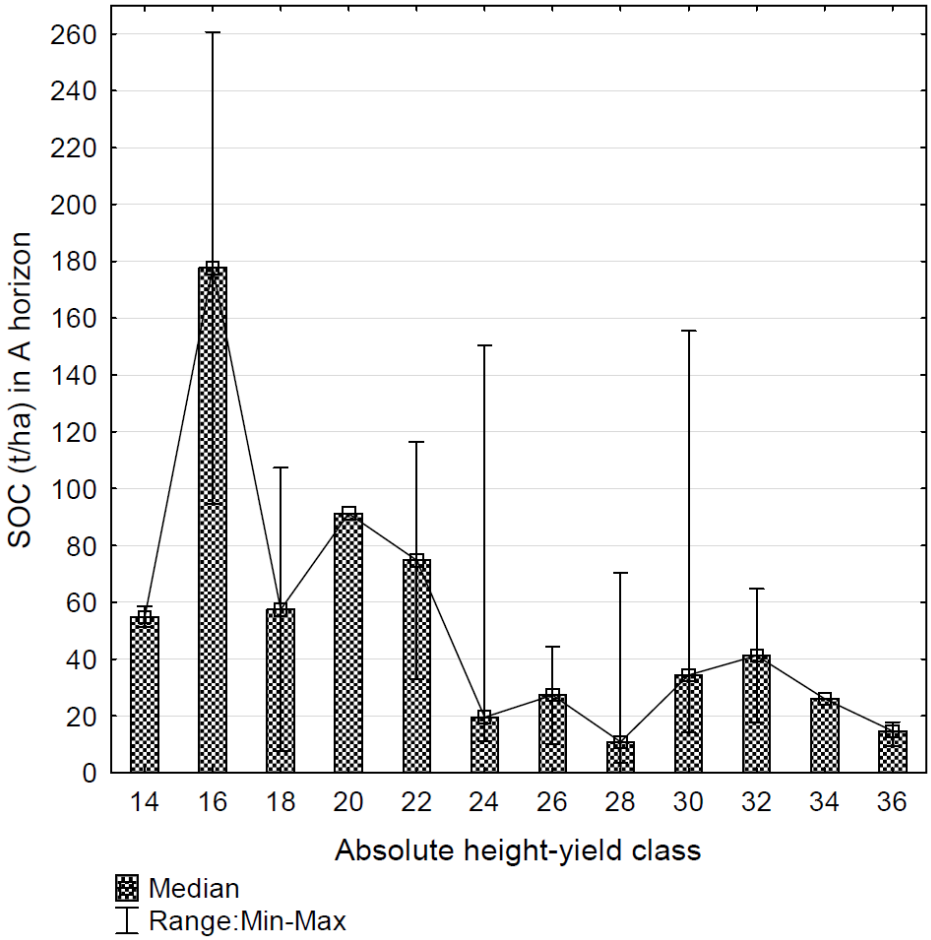

Fig. S3 - Comparison of SOC content (t ha^{-1}) in the organic (O) and surface mineral (A) soil horizon according to the humus forms present in the analysed dataset.

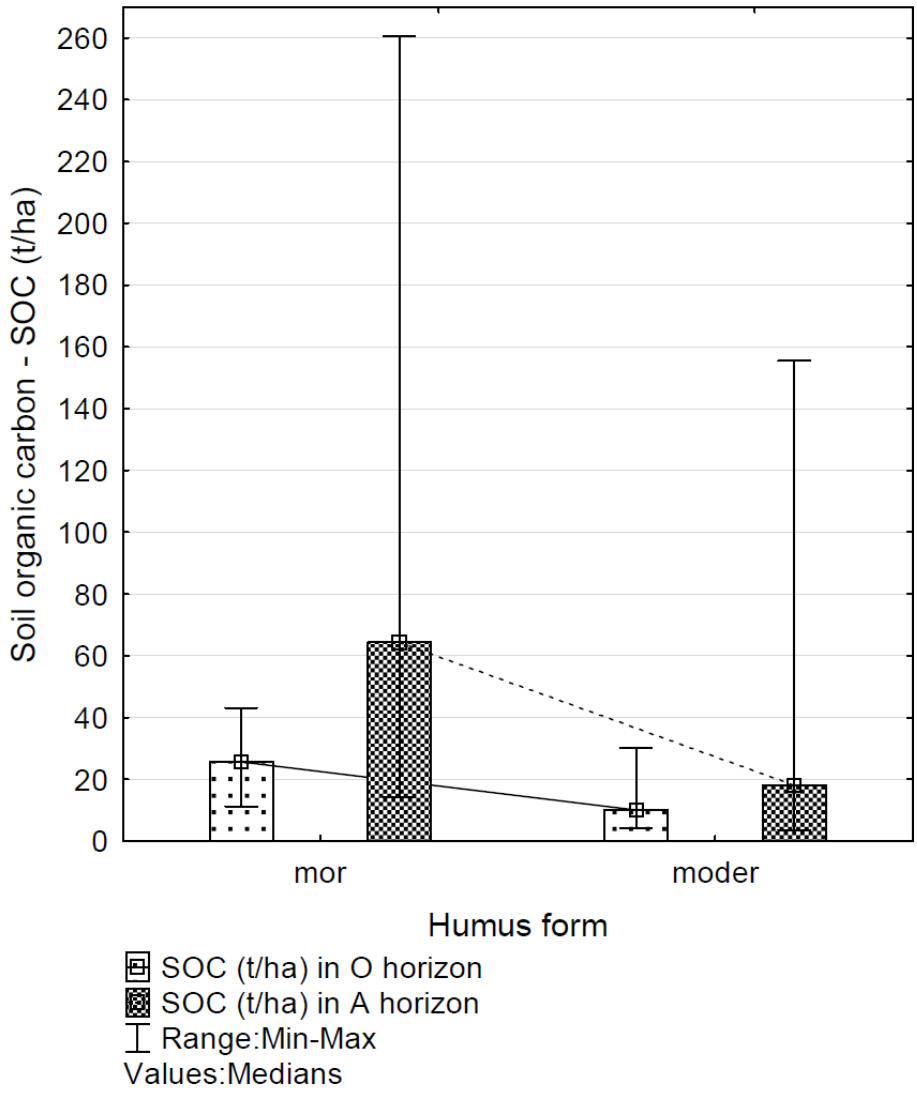

Fig. S4 - Variation of median values of absolute height-yield class (AHYC) in each represented forest vegetation zones (FVZ).