

Supplementary materials

Table S1. Heterotrophic CO₂-C $\mu\text{g C m}^2 \text{ h}^{-1}$ flux estimation model coefficients

<i>Predictors</i>	<i>Estimates</i>	CO₂_het		<i>p</i>
		<i>CI</i>		
(Intercept)	-9530.94	-17469.10 – -1592.77		0.019
T soil	2165.37	1793.70 – 2537.04		<0.001
Land use [Betula]	16184.78	8093.06 – 24276.49		<0.001
Land use [Pinus]	14563.10	6449.75 – 22676.46		0.001
Land use [Vegetation]	4142.48	-4084.46 – 12369.42		0.322
GWL	93.70	27.87 – 159.52		0.006
Random Effects				
σ^2		94764159.73		
τ_{00} Cycle		20433080.35		
τ_{00} Object		21825871.77		
ICC		0.31		
N Object		15		
N Cycle		16		
Observations		176		
Marginal R ² / Conditional R ²		0.655 / 0.761		

Table S2. CH₄-C flux estimation model coefficients

<i>Predictors</i>	Log_CH₄_norm		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	1.36	-0.96 – 3.67	0.249
Land use [Betula]	-2.14	-5.24 – 0.96	0.175
Land use [Pinus]	-4.19	-7.65 – -0.73	0.018
Land use [Vegetation]	4.01	-0.59 – 8.62	0.087
GWL	-0.01	-0.03 – 0.02	0.468
GWL kat [Shallow]	-0.76	-3.00 – 1.49	0.507
Land use [Betula] * GWL	-0.01	-0.04 – 0.02	0.688
Land use [Pinus] * GWL	0.01	-0.03 – 0.05	0.659
Land use [Vegetation] * GWL	-0.06	-0.12 – 0.00	0.053
Land use [Betula] * GWL kat [Shallow]	4.28	1.14 – 7.42	0.008
Land use [Pinus] * GWL kat [Shallow]	2.68	-0.93 – 6.29	0.146
Land use [Vegetation] * GWL kat [Shallow]	-1.28	-5.76 – 3.20	0.574
GWL * GWL kat [Shallow]	-0.00	-0.06 – 0.05	0.932
(Land use [Betula] * GWL) * GWL kat [Shallow]	-0.08	-0.16 – -0.01	0.029
(Land use [Pinus] * GWL) * GWL kat [Shallow]	-0.02	-0.11 – 0.06	0.609
(Land use [Vegetation] * GWL) * GWL kat [Shallow]	0.05	-0.04 – 0.14	0.271
Random Effects			
σ^2	2.44		
τ_{00} Object	1.60		
ICC	0.40		
N Object	15		
Observations	272		
Marginal R ² / Conditional R ²	0.500 / 0.698		