

Release and biomethylation of antimony in shooting ranges soils upon flooding.

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Table S1. Microwave programming for the digestion procedure.

Time (min)	Power (W)	Temperature (°C)
0-5	300	120
5-10	700	200
10-30	450	200

Table S2. ICP-MS (Agilent 7700x) and HPLC-ICP-MS (Agilent 1200 series) instrumental settings for Sb analysis

Parameter	Total	HPLC-ICP-MS
RF power	1550 W	1550 W
Carrier gas flow rate	1.03 L min ⁻¹	0.9 L min ⁻¹
Nebulizer pump	0.1 rps	0.3 rps
Spray chamber temperature	2 °C	2 °C
Makeup Gas	0 mL min ⁻¹	0.26 mL min ⁻¹
LENSES:		
Extract 1	0	0
Extract 2	-200 V	-120 V
Omega bias	-100 V	-60 V
Omega lens	10 V	8.5 V
Cell entrance	-40 V	-30 V
Cell exit	-60 V	-50 V
Deflect	1 V	13.4 V
Plate bias	-60 V	-40 V
REACTION CELL:		
He flow	4.3 mL min ⁻¹	-
OctP bias	-18 V	-
OctP RF	190 V	-
Energy discrimination	3 V	-

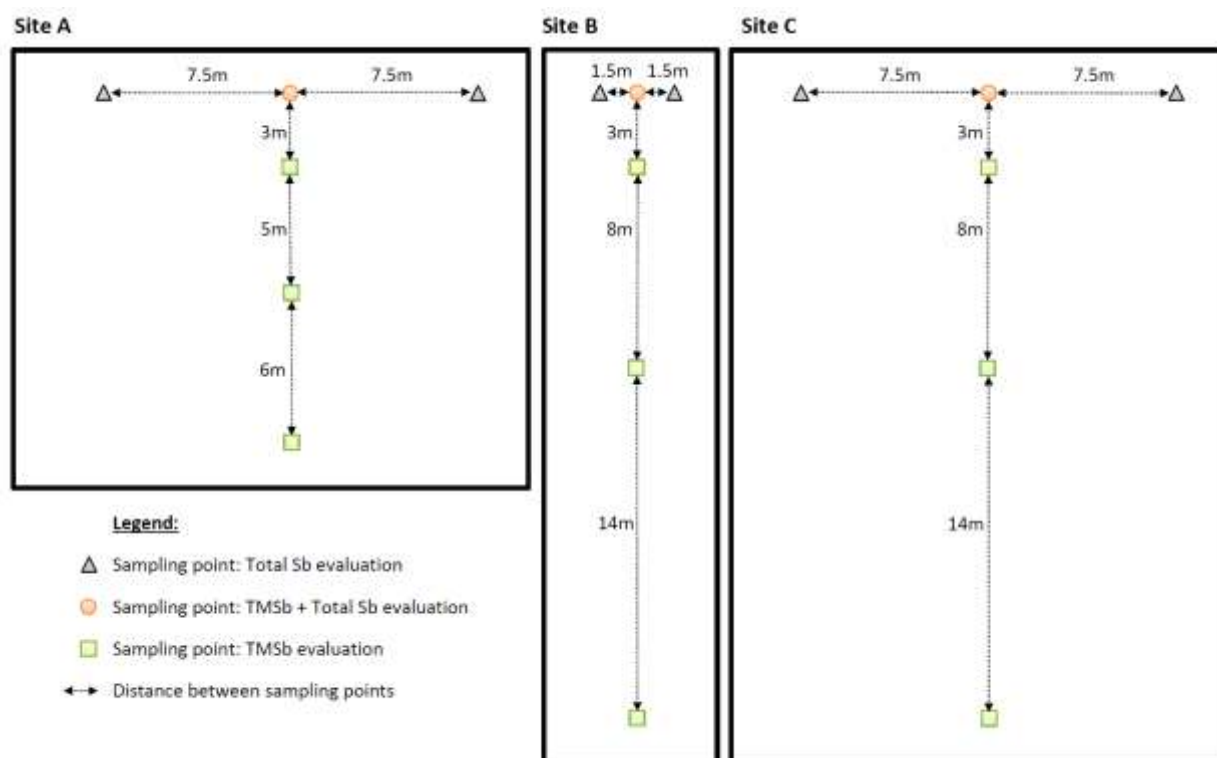


Figure S1. Sampling plan. A 2 cm diameter core was taken at each sampling point. The core was divided in four depth layers: 0-5 cm, 5-15 cm, 15-25 cm and 25-35 cm.

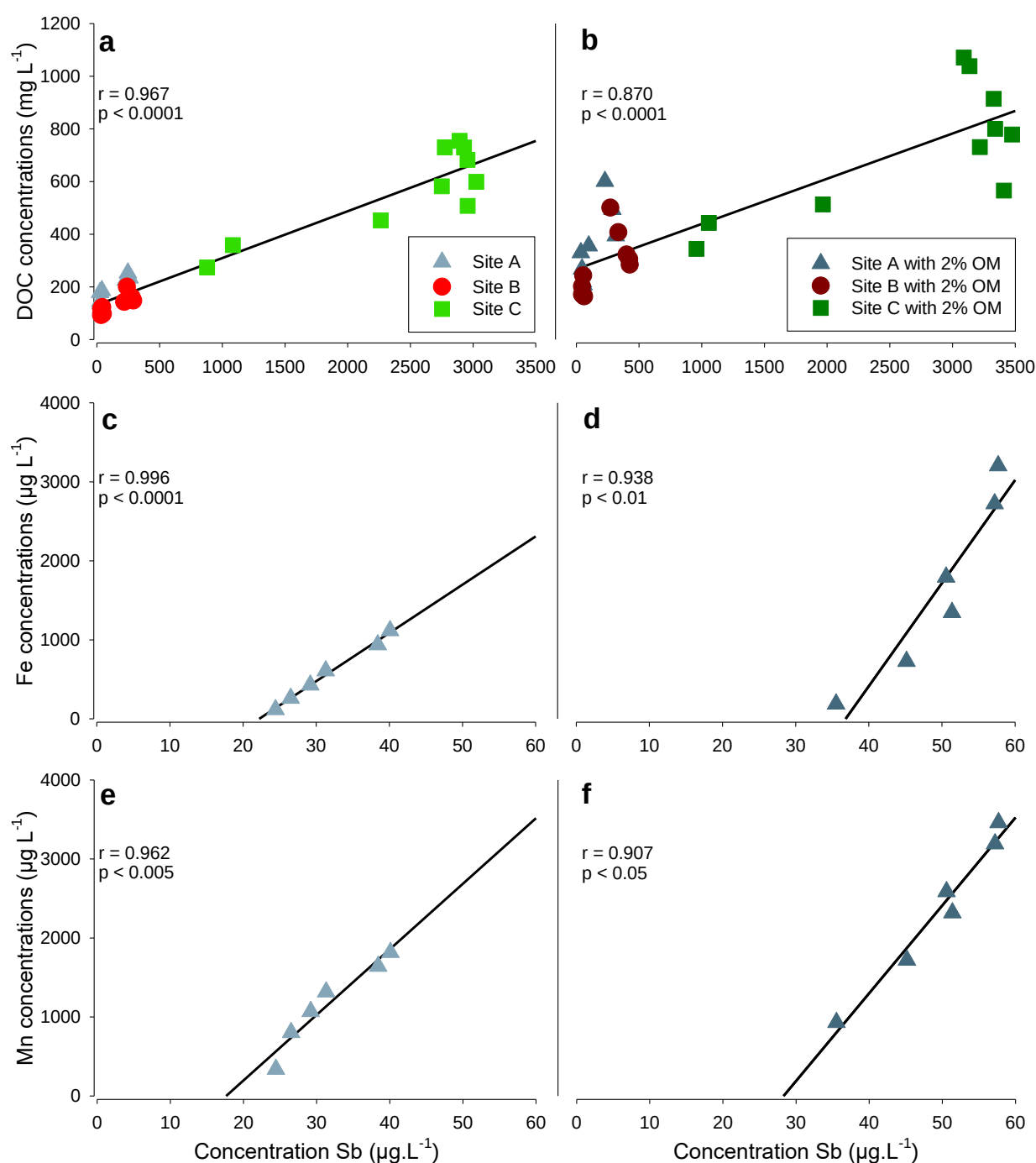


Figure S2. Relationships between the concentrations of Sb in soil solution and those of (a) DOC in the treatment without addition of organic matter (w/o OM, cow dung); (b) DOC in the treatment with addition of 2% OM (with OM) ; (c) Fe (w/o OM); (d) Fe (with OM); (e) Mn (w/o OM); (f) Mn (with OM). (a) & (b): data from the whole experiment duration used. (c), (d), (e) & (f): only data from after four days of incubation used.

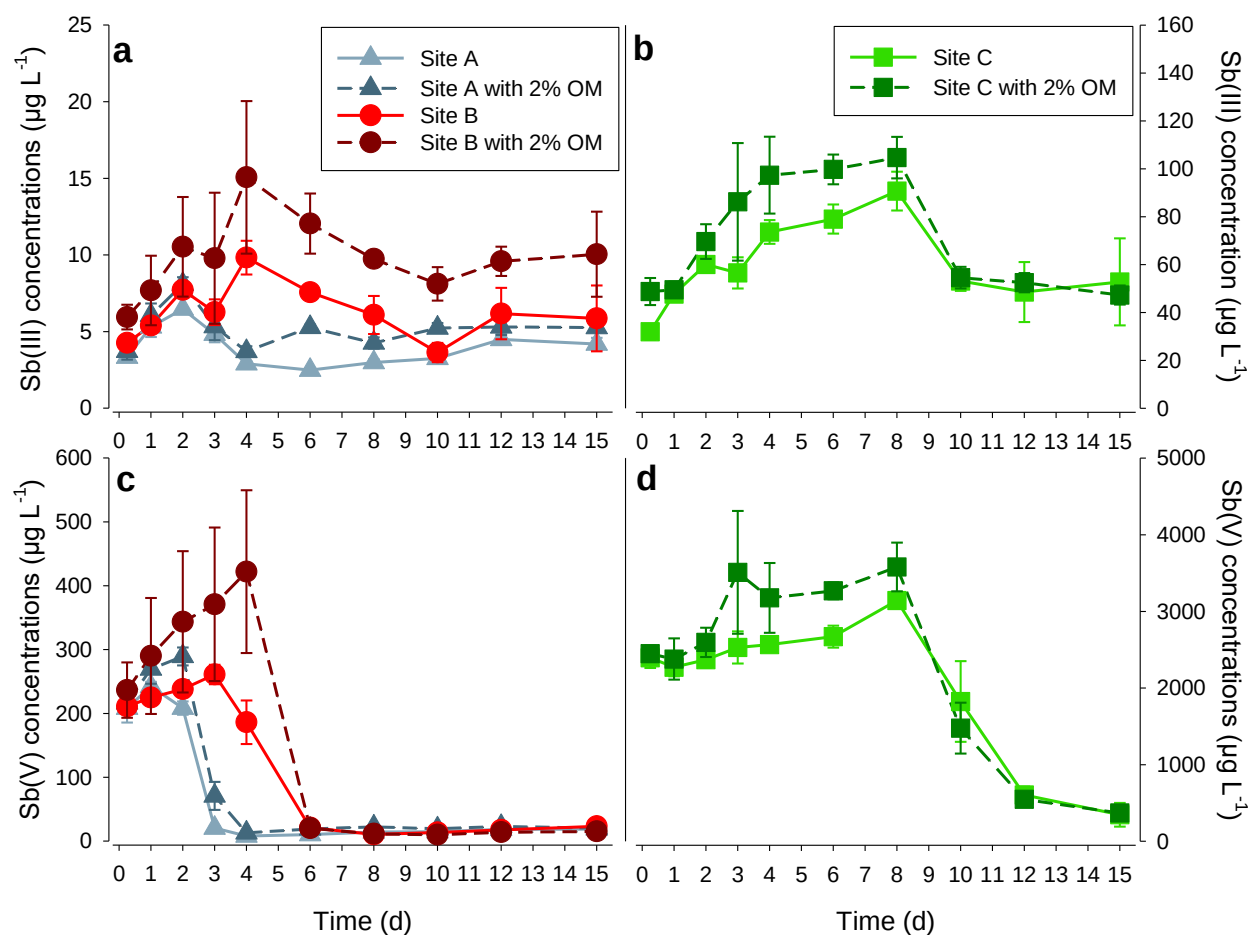


Figure S3. Course of the soil solution concentrations during the flooding experiment (mean $\pm$ sd, $n = 3$ incubators): (a) Sb(III) concentrations in the soil solution from Sites A and B; (b) Sb(III) concentrations in the soil solution from Site C; (c) Sb(V) concentrations in the soil solutions from Sites A and B; (d) Sb(V) concentrations in the soil solutions from Site C.