**Table 1 Soil parameters.** Vertical soil profiles of nitrous oxide ( $N_2O$ ) and carbon dioxide ( $CO_2$ ) concentrations, soil volumetric water content (VWC), and soil temperature (at 10 cm soil depth) were determined simultaneously with forest floor gas flux measurements at each soil position. Mean values ( $\pm$  standard error) from three soil positions are presented, except for  $N_2O$  concentrations, where soil near soil chamber 1 exhibited high  $N_2O$  concentrations (i.e.,  $N_2O$  conc.<sup>a</sup>), whereas soil adjacent to soil chambers 2 and 3 showed similarly low  $N_2O$  concentrations (i.e.,  $N_2O$  conc.<sup>b</sup>).

	N <sub>2</sub> O conc. <sup>a</sup>	N <sub>2</sub> O conc. <sup>b</sup>	CO <sub>2</sub> conc.	VWC	Temp.
Soil depth	(ppm)	(ppm)	(ppm)	$(m^3 m^{-3})$	(°C)
10 cm	$1.803 \pm 0.112$	$0.164 \pm 0.009$	$6935 \pm 553$	$0.246 \pm 0.014$	$14.7 \pm 0.16$
20 cm	$2.858 \pm 0.293$	$0.130 \pm 0.010$	$8320 \pm 588$	$0.184 \pm 0.011$	-
30 cm	$2.258 \pm 0.341$	$0.133 \pm 0.013$	$7831 \pm 675$	$0.253 \pm 0.021$	-
40 cm	$3.847 \pm 0.398$	$0.165 \pm 0.013$	$9513 \pm 647$	$0.359 \pm 0.004$	-

<sup>&</sup>quot;a" is standing for  $N_2O$  concentrations at four soil depths of the soil position 1. "b" is standing for mean  $N_2O$  concentrations in soil profile at soil positions 2 and 3.