Biogeosciences Discuss., 6, C2379–C2380, 2009 www.biogeosciences-discuss.net/6/C2379/2009/ © Author(s) 2009. This work is distributed under the Creative Commons Attribute 3.0 License.



## *Interactive comment on* "Soil respiration in a fire scar chronosequence of Canadian boreal jack pine forest" by D. R. Smith et al.

## N. Töpfer

natascha.toepfer@copernicus.org

Received and published: 2 October 2009

During the typesetting of this paper, the following section was accidentally removed. We apologize that this was not noticed before publication.

## 3.2 Soil organic carbon analyses

 $C_s$  contents of samples collected during FC 2 are shown in Table 3 and Fig. 5. Mean  $C_s$  ( $\overline{C_s}$ ) ranged from 0.060 g C/cm<sup>3</sup> (1975B, fire scar age = 0 years) to 0.103 g C/cm<sup>3</sup> (1991NB, fire scar age = 16 years). It was checked that the  $C_s$  data for the five scar age categories were normally distributed (Kolmogorov-Smirnov test: P>0.1 for all scar age categories). To test for differences between scars, ANOVA was inappropriate due to evidence of a statistically significant difference in variances between fire scar age

C2379

categories (Levene's test: W=8.833; df=4, 27; P<0.001). Therefore a non-parametric test was performed, which indicated significant differences in median  $C_s$  between one or more scar age categories (Kruskal-Wallis test:  $\chi^2$ =11.031; N=32; df=4; P=0.026). Subsequent t tests (Students t test where Levene's P>0.05; Unequal variances t test where Levene's P<0.05) revealed a statistically significant difference in  $\overline{C_s}$  between 1948B and 1975B (P<0.001), though other comparisons were not statistically significant (P>0.1) (Table 4; Fig. 5).

Interactive comment on Biogeosciences Discuss., 6, 8725, 2009.