Biogeosciences Discuss., 10, C1876–C1877, 2013
www.biogeosciences-discuss.net/10/C1876/2013/

Biogeosciences
Discussions
Open Access

Interactive comment on "Three years of increased soil temperature and atmospheric N deposition have no effect on the N status and growth of a mature balsam fir forest" *by* L. D'Orangeville et al.

L. D'Orangeville et al.

loicdorangeville@gmail.com

Received and published: 15 May 2013

We would like to thank the referee for the useful comments. Following is a detailed description of the changes to be made to the manuscript and answer to the points brought to our attention by the anonymous referee.

REFEREE. The seasonality of growth was a major point in the discussion and should be made clear in the results.

We agree. We will change section 3.4 accordingly, by including a description of the

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

seasonality of growth, including the beginning of seasonal basal area increment and the date when maximal growth rate was reached.

REFEREE. In Fig. 3 the unit for available N is μg/10 cm2 which can hardly be interpreted. Give numbers in kg ha-1.

We agree that the unit used to express results from ion-exchange membranes (PRS-probes) is uncommon and difficult to compare with those from the literature. The probes provide a dynamic measure of ion flux relative to the surface area of the ion-adsorbing membrane itself. The volume of soil sampled by the probe is likely to vary depending on the texture, structure and water content of the soil. Therefore, the quantity of a given ion adsorbed on the membrane surface (10cm^2) cannot be extrapolated to a hectare basis without introducing a large error which would make comparisons with published values in kg/ha useless. In addition, it is the company's requirement to report results in this unit.

Interactive comment on Biogeosciences Discuss., 10, 1313, 2013.