

Interactive comment on “Nitrous oxide production in boreal soils with variable organic matter content at low temperature – snow manipulation experiment” by M. Maljanen et al.

Anonymous Referee #1

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General comments:

The manuscript presents results from a unique combination of a field and a lab experiment. The results give insight to the processes producing N₂O in frozen soils and will be useful e.g. for modeling those fluxes. The manuscript is well prepared but would benefit from a language check.

Specific comments:

- As several samples for mineral N and DOC determination were taken it would be logical to state in the results whether there was any correlation between the fluxes and these variables. - In the discussion you discuss the amount of frozen water in the

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different soils but you do not discuss its effect on the fluxes. - As the hypothesis was that the OM content (and the resulting amount of unfrozen water?) affects the response of soils to thinner snow cover you could clearly state in the discussion that the results did not actually support the hypothesis (but were interesting, though).

Interactive comment on Biogeosciences Discuss., 6, 5305, 2009.