Biogeosciences Discuss., 8, C2542—C2543, 2011 www.biogeosciences-discuss.net/8/C2542/2011/ © Author(s) 2011. This work is distributed under the Creative Commons Attribute 3.0 License.



Interactive comment on "Stand age and tree species affect N₂O and CH₄ exchange from afforested soils" by J. R. Christiansen and P. Gundersen

J. R. Christiansen and P. Gundersen

jrc@life.ku.dk

Received and published: 19 August 2011

We want to thank both referees on their work and effort with reviewing this manuscript. Their thoughtful comments and suggestions have clearly improved the paper and made it more focused. We have specifically commented all the suggestions by both referees. These comments are posted in the individual replies to referees #1 and #2.

The two major concerns that both referees had were related to our regression analyses between mineral nitrogen concentrations/leaching and N2O fluxes. One regression dealt with the relationship between N2O fluxes and measured N availability after the experiment and the second regression concerned previous measurements of NO3

C2542

concentrations and leaching and N2O fluxes. In this respect we have followed both reviewers and removed all statistics regarding N concentrations and N2O emissions from results. Following referee #2 we deleted Fig. 5A and moved Fig. 5B to the discussion section on N2O exchange and underlined that this relationship can only be treated as an indication. No regression was carried out based on this dataset. We argued in the discussion why we included the relationship. We have changed the caption of Fig. 5 so it only contains the text written previously for Fig. 5B.

Jesper Riis Christiansen and Per Gundersen

Interactive comment on Biogeosciences Discuss., 8, 5729, 2011.