

Interactive comment on “Free atmospheric CO₂ enrichment did not affect symbiotic N₂-fixation and soil carbon dynamics in a mixed deciduous stand in Wales” by M. R. Hoosbeek et al.

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Reply to referee #2

During the first two years of FACE treatment (2005 and 2006), stem and branch biomass was enhanced in *Alnus glutinosa* by 33 and 25 %, in *Betula pendula* by 28 and 9% and in of *Fagus sylvatica* by 39 and 37%. After canopy closure, NPP was on average 1112 and 1225 g DM m⁻² y⁻¹ in the ambient and FACE plots respectively (Smith, 2010).

In the text (results section) referring to tables 1 and 2 we presented, next to average values, also s.e. values. Indeed, we did not present df and P values. Of course we

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can add these data as footnotes to these tables. In the text referring to table 3 we did present P values.

We presented error bars in figures 1 – 3 and presented P values in the figure captions. Of course we can add more statistical data, but we wonder whether the extra information justifies the extra space needed.

We did address the possible redistribution of above ground litter due to wind. Litterfall was monitored per plot and species with the use of litterfall baskets (Smith, 2010). Based on these data we wrote: “. . . cross contamination with leaves from other species was about 24-27% of the total litterfall within alder and birch single species patches. The beech leaves remained on branches until the following spring and then slowly shed.”

As said in response to referee #1, isotopic data of soil fractions are not available.

Reference

Smith, A. R.: The effect of atmospheric CO₂ enrichment on biogeochemical cycling of a temperate forest ecosystem, PhD, School of Environment, Natural Resources and Geography, Bangor University, Bangor, 2010.

Interactive comment on Biogeosciences Discuss., 7, 4153, 2010.