

Interactive
Comment

Interactive comment on “Nitrogen feedbacks increase future terrestrial ecosystem carbon uptake in an individual-based dynamic vegetation model” by D. Wårlind et al.

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I think this is a very nice contribution and I enjoyed reading the manuscript.

Suggestions:

Please check if a figure of accumulative vegetation woody, non-woody, soil, litter N sequestration (analog Fig A1) may help to better understand the results.

Page 154: the abbreviation PNV is used only two times in the paper. Is it useful to use the abbreviation? It would be easier to use the name.

Page 156: Does soil moisture have an impact on N availability?

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Page 157: “The simulations were made with 30 replicate patches to be able to represent the regional vegetation.” Does this mean 30 replicate patches per grid element?

Page 160: I would guess, if C sequestration is limited by the availability of N, the stoichiometry of soil and of the different plant tissues determines C budgets, while the C residence time does not contribute much to explain C balances? Please reconsider.

Page 163: Citation (Vitousek and Howarth, 1991; Vitousek et al., 2010; Wang et al., 2010). You may add Goll et al. 2012.

Page 165: “in a future high-CO₂ world” probably “in a future warmer and high-CO₂ world”

Figure 3 and 4: Please check if the captions fit to the figures?

Interactive comment on Biogeosciences Discuss., 11, 151, 2014.

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