

***Interactive comment on “Combined
biogeophysical and biogeochemical effects of
large-scale forest cover changes in the MPI earth
system model” by S. Bathiany et al.***

Anonymous Referee #1

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The paper by is well written but I am concerned that the combination of underestimation of boreal carbon vegetation by more than a factor of 2 and the overestimation of the tropical carbon vegetation by more than a factor of 2 may lead to misconceptions and erroneous conclusions specifically concerning the importance of boreal and tropical deforestation in adding to global temperature change.

I would like to see that the study either:

- a) improves the vegetation model to be more in line with realistic vegetation carbon densities or
- b) discusses the implications of the poor vegetation on model in more detail in the sec-
C164

tion on sensitivities (4.3). There is some discussion already, but perhaps the authors could include sensitivities in the presentation of results.

I do not know which option is easier for the authors.

Please find attached a PDF with comments including small typos and grammatical corrections.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/7/C164/2010/bgd-7-C164-2010-supplement.pdf>

Interactive comment on Biogeosciences Discuss., 7, 387, 2010.