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**BGD** 

4, S397-S398, 2007

Interactive Comment

## Interactive comment on "Mobility of black carbon in drained peatland soils" by J. Leifeld et al.

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## General comments

The paper presents results showing high downward translocation rates of black carbon (BC) in managed / formerly managed peat soils. These results are interesting and important. The authors discuss the factors that may lead to the processes by which the BC moves and the forms that it may occur in. In the discussion, the authors compare results to BC vertical translocation rates in mineral soils and other organic soils. The discussion is thorough and the only part that I think needs to be expanded is the comparison to other organic soils. For example, the soils described here are under grass and were formerly drained and cultivated. I suspect that translocation rates would be much lower in the Indonesian peats described in the discussion (page 879, line 28 to page 880, line 4) and in un-drained peats, since the water table tends to be far closer

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to the surface in these systems and poor volumes may be different. Perhaps some additional discussion of implications of soil management on BC translocation in organic soils could be added, as this is potentially useful information.

Minor comments:

Line 1: Put BC in brackets, i.e. (BC)

Interactive comment on Biogeosciences Discuss., 4, 871, 2007.

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