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

Anonymous Referee #1

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The study deals with the very timely and important question of black carbon mobility in the environment. Therefore, the environmental relevance is high enough to encourage the publication of this study.

I miss a more detailed discussion about the methods applied. The new method is not described, but only cited. At least the most important details should also be given in this publication. What is different to the DSC method applied in this study and those applied in earlier studies? Why not apply Thermogravimetry? The exact quantification via DSC is only valid as long as the combustion enthalpies do not differ between the different BC types. I would expect a variety of combustion enthalpy, which may also depend on the decomposition temperature of the respective BC species. Page 876 line 15: "had" Page 877 lines 15-16: give units in a proper way. Discussion: I do not really understand how the BC transportation rates were obtained. Transport experiments have to my knowledge not been conducted. Also, a discussion on possible transport
mechanisms would really improve the publication.

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