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Interactive Comment

Interactive comment on "Attenuation of concentration fluctuations of water vapor and other trace gases in turbulent tube flow" by W. J. Massman and A. Ibrom

W. J. Massman and A. Ibrom

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Again we thank Tim Griffis, the reviewer, and the editor for their comments. This is my (wjm) final comment on this paper.

All comments seem largely supportive of this work and my co-author and I will revise the manuscript as recommended by the editor and reviewer. We will also include a brief statement (probably in the conclusion section) about the possibility of using the tube attenuation model for work with fluxes of isotopes of CO_2 and H_2O . When we started this research we were not considering isotopes, but I definitely think this is an issue worth considering. In my response to Tim Griffis I suggested that there are some simple ways of testing the present turbulent tube flow model with isotopic fluxes. Nev-





ertheless, it is my opinion that to truly address this issue the wall boundary condition will need to be reformulated. As a result of Tim Griffis' comments I have begun working on such a reformulation, which I plan to apply to both laminar tube flow and turbulent tube flow. I am planning a second paper to address these matters more completely (and I hope more satisfactorily).

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 9819, 2008.

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Interactive Comment

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