

***Interactive comment on “Contribution of advection to the carbon budget measured by eddy covariance at a steep mountain slope forest in Switzerland” by S. Etzold et al.***

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General Remarks

We thank all three referees and Andy Kowalski for very valuable comments and suggestions on the manuscript. Main criticism from the referees was a complete derivation of the mass balance equations used and description of the introduced simplifications, as well as the use of the CO<sub>2</sub> density gradient rather than the CO<sub>2</sub> mixing ratio for the calculation of advection. We will change the revised manuscript accordingly (see also detailed responses). Furthermore the description of the vertical measurement profile seemed apparently to be confusing. We will make an effort to clarify this.

C1144

Detailed responses to the remarks of referees 1 to 3 and to the comment by A.Kowalski are included in the supplement.

Please also note the supplement to this comment:  
<http://www.biogeosciences-discuss.net/7/C1144/2010/bgd-7-C1144-2010-supplement.pdf>

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