Biogeosciences Discuss., https://doi.org/10.5194/bg-2017-450-RC4, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Application of the ACASA model for a spruce forest and a nearby patchy clearing" by Kathrin Gatzsche et al.

## **Anonymous Referee #2**

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Dear authors, thank you for the detailed reply on the review. I can follow the explanations concerning the actual state and widespread usage of ACASA in the scientific community. It is also visible for me that the authors are willing to deal with the limits of ACASA in simulation of local advection. I would be ready to accept the paper under the following conditions:

The authors must extend the conclusions by a paragraph which describes the limits of ACASA concerning simulation of local advection. For it, the authors should use their answers from the interactive discussion including a sentence about uncertainties of ACASA when 3D effects are neglected. The answer in the discussion that the methods of measurements and simulations must be coincident seems to be plausible for me. But it does not replace an estimation how the local advection contributes to the mea-

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sured energy budget in the footprint area. A short comment in the conclusion to that fact is also recommended. Finally the authors must give a comment about the transferability of the newly parameterised ACASA to other sites with a similar heterogeneity of landuse.

Interactive comment on Biogeosciences Discuss., https://doi.org/10.5194/bg-2017-450, 2017.