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Interactive comment on "Determination of field scale ammonia emissions for common slurry spreading practice with two independent methods" by J. Sintermann et al.

Anonymous Referee #3

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General comments

This paper is gives information on a comparison of two methods to measure NH3 fluxes from slurry application and is suited for publication in Atmos. Meas. Tech.

The paper is well-written and gives detailed information on the methods used. For that reason I can recommend publication.

Specific comments. p. 2638 L. 13. It would be appropriate to refer to Søgaard et al. (2002) here, as this gives an overview of measured NH3 emission fluxes from slurry.

p. 2640 L. 9. It would be nice if some information would be given on possible adsorption

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of NH3 to the tubings.

First there is referred to Table 2 and after that to Table 1. The order of the Tables should therefore be changed.

- p. 2642 L. 20. A remark should be made on whether a splash plate is a device that is normally used to spread slurry in Switzerland (in many countries this technique is forbidden).
- p. 2646 equation (2). Mention why you have chosen the bi-exponential decay here.
- p. 2650 L. 20. It should be motivated why the median NH3 concentration for the period June to September was taken as a background concentration and not the actual background concentration.
- p. $2650 \text{ L.}\ 2$. It would be nice if the equation for the surface temperature would also be given.
- p. 2662 Conclusions. It would be nice if some conclusions could be drawn on the advantages/disadvantages of both methods that also include some notes on how easy they are to work with in the field.

Interactive comment on Atmos. Meas. Tech. Discuss., 4, 2635, 2011.