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Atmospheric Measurement Techniques Discussions

Interactive comment on "First eddy covariance flux measurements by PTR-TOF" *by* M. Müller et al.

Anonymous Referee #1

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The application of the PTR-MS as the analytical sensor for Eddy Covariance flux measurements greatly improved the possibilities for flux measurements. The developments of a commercially available Time of Flight detector that can be combined with the PTR-MS system further widen the application range. The presented paper clearly demonstrates this on the emission of methanol from grassland. That the authors have chosen this situation was a good choice as the emission pattern of methanol is well known.

The limitation of the applicability of the combined PTR-MS- TOF system lies in the large amount of data produced that must be processed. The paper presents convincing methods to deal with this and also to control the performance of the TOF detector. It will be interesting to see upcoming applications where the full capability of the system will be explored and many other compounds beside methanol will be evaluated. For methanol fluxes alone the application of the expensive PTR-MS TOF system seems

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not superior to the conventional approach.

Interactive comment on Atmos. Meas. Tech. Discuss., 2, 3265, 2009.

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