

Interactive comment on “Calculations of automatic chamber flux measurements of methane and carbon dioxide using short time series of concentrations” by N. Pirk et al.

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We thank Roland Fuß for his comment on our manuscript, and regret any confusion caused by our slightly colloquial use of "robust" in the context of statistical regression techniques.

All model fits in this work have been obtained using the least-squares optimization method. While the resulting fit parameters (fluxes, curvatures and intercepts) are normally stable enough for our purposes, it may be conceivable that fits based on robust regression methods could improve results, especially towards low flux magnitudes where the signal-to-noise ratio decreases. And while it would be very interesting to test

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such methods with our dataset, we believe such an analysis would be out of scope for the present study.

Hence, we propose to change the wording in the abstract to avoid "robust", and use "simple" instead: "Due to experimental uncertainties the simple linear regression model (first order polynomial) is often applied, even though theoretical considerations of the technique suggest the application of other, curvilinear models."

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