

Interactive comment on “Errors in top-down estimates of emissions using a known source” by Wayne M. Angevine et al.

Anonymous Referee #3

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1 General comments

The paper address important topic with interesting data. To quantify uncertainties is definitely important topic in atmospheric science today. The paper is well written and clear to follow, however, some clarification would be beneficial, see specific and technical comments bellow.

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2 Specific comments

1. I suggest the authors to divide some sections to subsections in order to increase clarity and readability of the paper. E.g., list of errors in Discussion could be considered in separate subsections. Similarly the Methods section etc.
2. It would be definitely worth to add a subsection with mass-balance method description since it is the core methodology of the paper. It is in the paper already, but some part is in Introduction, some in Methods, please, consider to consolidate it.
3. On line 151 (and also elsewhere), the authors stated that "A robust estimate of the background (concentration not attributable to the source of interest) is required." Could you please elaborate in more details the estimation of background in your case?

3 Technical corrections

1. please, follow the ACP house standards, see https://www.atmospheric-chemistry-and-physics.net/for_authors/manuscript_preparation.html. Specifically, figures should be references as "Fig. X", tables as "Table X", etc.
2. In multipanel figures, please, use (a), (b), etc. for each panel according to house standard