Interactive comment on “Using the tracer flux ratio method with flight measurements to estimate dairy farm CH₄ emissions in central California” by Conner Daube et al.

Anonymous Referee #2

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In this paper, the author mix up a well-known technique of estimating emission, the tracer release method with airplane measurement usually used for mass-balance approach. They show that using an aircraft to do the tracer method is feasible even when the original campaign was not exactly designed for it and that the validity and precision of the results could be improved if the airplane flight paths are adapted to the tracer ratio method. This is an interesting and well-written paper and we recommend publication after minor changes.

P1 l19-21: The last comment is not really necessary or should be reformulated.

p3 Instruments for the ground-based transects are described but the one that data are used from (except the TILDAS) are not detailed. Please, add some details about instrumentation for CO₂, wind, ... for the airplane as well.

p6 l2 It would be good here already to say why there is no estimate for the manure as we are expecting it from the previous sentences.

Table 1: There is no * that relates to the comment below the table. Either erase it or modify the table accordingly.

Figure 2: Please use SI units and not knots