

Second review of “Technical note: Isolating methane emissions from animal feeding operations in an interfering location” by McCabe et al.

May 9, 2023

Reviewer Recommendation:

Minor revisions before publication.

Summary:

The content of the submitted manuscript remains largely the same information as the first iteration of the article. Two methods to isolate CH₄ emissions are described. The data is from airborne in-situ measurements. In addition to the original data from F2 now also data from RF13 is included to support the technical analysis. The changes made by the authors have clarified all my original concerns and focused the results adequately for publication.

I believe the revised manuscript is publishable, provided the authors address a few very minor comments that remain to be cleared up.

Minor Comments:

(Line numbers are with respect to the changes tracked document)

Figure 1 caption: missing space in “cattle= 2.5”

Figure 1 caption: suggest adding commas between the different animal head equivalents

Line 105: remove second space prior to “5 degrees”

Line 133: add m/s behind “windspeed of 8.4”

Line 134: the MBL figure is Fig. S2

Line 138: suggest using NH₃ and CH₄ for consistency

Line 156: bppv should be ppbv

Line 197: missing a minus in +/-

Line 282: remove “by” prior to or remove parentheses around “4%”

Figure 4 caption: the caption states “points on the left side of the curtain figure” – does this mean to the left of the vertically dashed line?

Figure 4 caption: Greely should be Greeley

Line 305: this sentence is incoherent, check grammar

Line 348: add parentheses around the two references

Line 350: add parentheses around the two references

Line 407: “of a ~1.5 hours” should be “of ~ 1.5 hours”

Table 2: Transect 5 distance should be 16.8 (as in Table S4)

Line 424: Monte Carlo should be capitalized

Line 457: “slightly than” should be “slightly higher than”