

Author comments

Referee 1

I thank the authors for their thoughtful response. All of my concerns have been either addressed or appropriately rebutted, and I believe the paper is publishable in its current form. However the authors may want to slightly tweak the wording in some places, as I noticed a couple of cases of awkward phrasing. Notably the final sentence of the abstract might be worth elaborating on: "These [further studies] should include more realistic hydrogen aircraft models, alternative meteorological and microphysical models, analysis of real-world flight patterns and measurement data" - "measurement data" is so broad as to be almost useless, so it might be useful to instead make this a separate sentence stating what measurements the authors believe are most urgently needed based on this work.

We thank the referee again for the helpful comments and for the positive assessment of the revised manuscript. In response, we have gone through the manuscript once more to correct remaining grammatical errors, inconsistencies in notation and formatting, and instances of awkward phrasing.

The most notable revision is in the final part of the abstract, where we have clarified what types of measurements would be most valuable for constraining the present analysis, as suggested by the referee. We have also made wording improvements in the Introduction (line 45), Sect. 4.2 (lines 442–451), and Sect. 4.3 (lines 497–501).

We sincerely thank both referees for their careful and constructive feedback, which has substantially improved the manuscript.

List of changes:

1. Rephrased several sentences with awkward wording.
2. Corrected remaining grammatical errors.
3. Removed inconsistencies in nomenclature, notation, and formatting.
4. Clarified the final part of the abstract by specifying the most urgently needed measurements.