



EGUsphere, referee comment RC2
<https://doi.org/10.5194/egusphere-2022-285-RC2>, 2022
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Comment on egusphere-2022-285

Anonymous Referee #2

Referee comment on "The climate impact of hydrogen-powered hypersonic transport" by Johannes Pletzer et al., EGU sphere, <https://doi.org/10.5194/egusphere-2022-285-RC2>, 2022

authors have presentd a comprehensive study about the climatic impacts of air pollution from hypersonic aircrafts. Authors have covereddetailed explanation about the two set of emissions, two numerical models and the climatic impact. The reviewer 1 made very specifc and accurate observations and I agree that this manuscript may needs minor modification. In particular:

On line 131, authors states: "A comparison with satellite data shows that over the annual cycle ozone volume mixing ratios are well reproduced in the stratosphere, apart from southern polar regions and with larger differences at tropospheric altitud". Can you comment about these differences?

Include color legend for figure 1 and 2.

Suggestion: It is better to communicate the results with bar plots and not pie charts.

Lines 419-421. Is EMAC better? I believe the author plays with the ideia without explicitly stating.

Line 486: The author mention WACCM used by another author without define it.

There are some paragraphs consisting in less than 2 phrases. Each paragraph should have at least three phrases, intro, body and conclusion.

The manuscript has an excessive number of tables and figures. Consider moving some into supplementary material