

Interactive comment on “Consumption of CH₃Cl, CH₃Br and CH₃I and emission of CHCl₃, CHBr₃ and CH₂Br₂ from a retreating Arctic glacier’s forefield” by Moya L. Macdonald et al.

Anonymous Referee #2

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This is a very well written and documented manuscript that describes the consumption/emission of various organic short-lived halocarbons, CO₂, and CH₄ in a variety of environments within a retreating glacier forefield. The results suggest these polar glacial regions are not a strong source or sink of these gases, however it lays the ground work for future studies to explore this in other glacial areas and to further examine the role of terrestrial cyanobacterial production of halogenated trace gases. I recommend publishing this manuscript after the authors address the minor points below.

The flux values in the abstract need some context, e.g., how significant are they in

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terms of sources or sinks or how do they compare with other measurements if available.

Were there any lab tests of potential impacts on storing the air samples in the vials or bags prior to analysis?

On p. 4, line 19 the radiocarbon age is 1850-1926 for the tundra site, but the abstract says approximately 1950 year old tundra.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-943>, 2019.

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