

Dear Editor

Thank you for these last comments. Under each question from editor, I have added the answer in red.

Editor Decision: Publish subject to minor revisions (review by editor) (01 Sep 2020) by Ashu Dastoor

Comments to the Author:

Please revise the manuscript according to my comments below. Thank you

Non-public comments to the Author:

1. Please remove "The" at the beginning and add a comma after Station Nord in the title of paper:

Variability in Gaseous Elemental Mercury at Villum Research Station, Station Nord, in North Greenland from 1999 to 2017

This has been done in the text.

2. Please correct first sentence, second paragraph, in the introduction to:

The sources of mercury in the environment can be divided into terrestrial emissions (including geogenic, biomass burning and reemissions from soils and vegetation), anthropogenic and oceanic evasion, accounting for roughly 2.1, 2.5 and 3.4 ktonnes of the emissions, respectively (Outridge et al. 2018).

We have changed the text but anthropogenic evasion is not the right term, so instead is add;

“The sources of mercury in the environment can be divided into natural, terrestrial emissions (including geogenic, biomass burning and reemissions from soils and vegetation), anthropogenic, and oceanic emissions, accounting for 2.1, 2.5 and 3.4 ktonnes of the emissions, respectively (Outridge et al. 2018).”

3. Please correct the last statement, page 1, in introduction to:

Applying the latest kinetic data, Horowitz et al. (2017) found lifetime of GEM in the atmosphere with respect to gaseous oxidized mercury (GOM) oxidation of 2.7 months using the GEOS-CHEM model coupled to an ocean general circulation model (MITgcm).

We have modified the suggested sentence slightly as “...(GOM) oxidation” is out of place

“Applying the latest kinetic data, Horowitch et al. (2017) found a lifetime in the atmosphere of GEM with respect to removal by oxidation of 2.7 months using the GEOS-CHEM model coupled to an ocean general circulation model (MITgcm).”

4. Please revise entire manuscript to improve the language.

We have improved the language and two native English-speaking persons have checked the language and made additional improvements.