

The Cryosphere Discuss., referee comment RC1 https://doi.org/10.5194/tc-2022-139-RC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

## **Comment on tc-2022-139**

Anonymous Referee #1

Referee comment on "200-year ice core bromine reconstruction at Dome C (Antarctica): observational and modelling results" by François Burgay et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2022-139-RC1, 2022

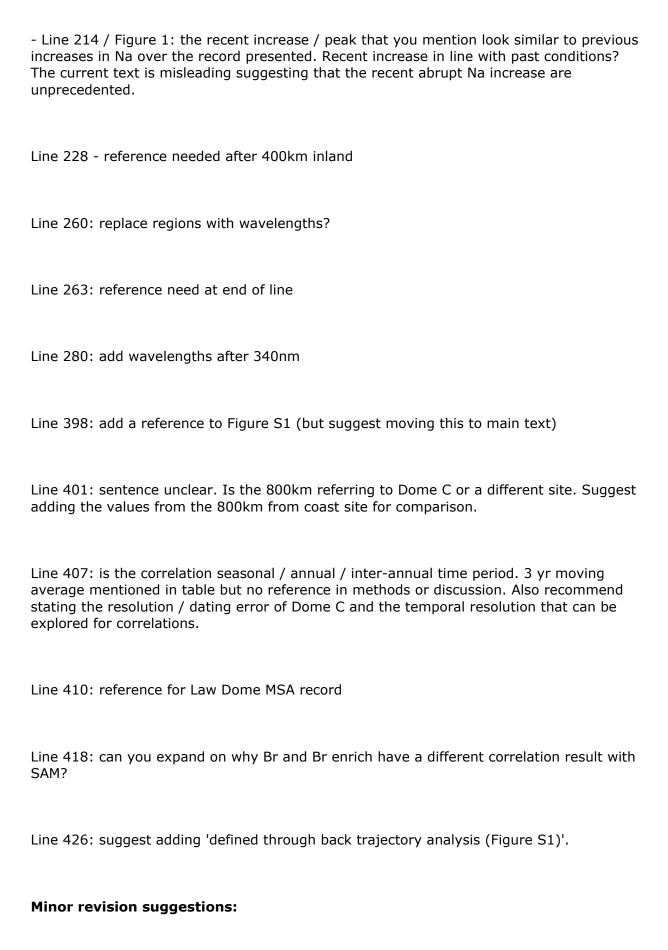
Overall the manuscript contributes new and important understanding of bromine preservation and potential environmental influences at Dome C. The manuscript objectives, methodology and results are mostly clear. Minor revision suggestions below:

## Method suggestions:

- move equations from the results section to method section. e.g. equation 1. Discuss only results / discussion in results / discussion section.
- move the matlab function description to the method section
- move the correlation analysis methods + note the 3-yr moving average (& why this time period was chosen) used for correlation to the methods section currently in the results / discussion and table 2.

## **Results / Discussion suggestions:**

- First sentence (line 204) is repeated from methods / add to methods.
- Suggest moving Figure S1 to main figures its your first result that you discuss and you refer to it alot throughout your manuscript



- multiple long sentences throughout the manuscript. Suggest splitting these into 2 sentences to make the message clearer. Examples start on: line 10, line 42, line 225, line 228, line 242, line 316
- abbreviations need to be consistent with using them. Recommend only adding an acronym if you refer to it more than 5 times.
- spelling mistakes line 194 and 195