Dear Editor,

Thank you for reviewing our manuscript number ESS-2021-2018. We have gone through all the referee’s commentaries and adjusted the manuscript accordingly. After this paragraph you will find our responses. The style used in the response letter is the following: the original general comments made by the editor are kept in normal text, our responses are in blue italics initiating with A (Authors).

Comments to the author:

Dear Authors,

Only two very small technical issues remain

1) page 21, line 5: yeas = years

A: the correction has been made.

2) In the acknowledgements: The EDGAR website is fine but for CAMS-GLOB referring to Granier et al. (2019) is enough as the reference is in the reference list, no need for the doi number etc. For ECCAD I suggest to adjust to: "Finally, data provided by the GEIA data portal ECCAD (https://eccad.aeris-data.fr/) has been a great support for this study."

A: Both suggestions have been included in the final version.