

Responses to Editor

Dear Editor,

We thank you for your constructive comments and all the thoughtful and hard work during the handling of this paper. Those comments are very valuable and helpful for revising and improving this paper. We have made corrections accordingly, which we hope to have addressed your concerns. Revised parts are marked in track change mode in the paper. The main corrections are as follows.

Comments to the Author:

There are grammar errors such as Line 145 and other lines. The authors need to check all grammar instead of this current form.

Response: Thank you for this suggestion. We have carefully revised the grammar errors and sent the MS to be polished by a native speaker. And we corrected all the grammar errors as can be seen throughout the MS.

Line 85, EDGAR

Response: Thank you, revised accordingly.

Line 100, the first author should be Zhang, et al. (2007). Authors should not rely on EndNote that usually brought errors for the references and checks the accuracy for all references.

Response: Thank you for this careful check and good suggestion. We have carefully double-checked and corrected all the wrong formats of references, such as the corrections in lines 103, and 334 for Zhang et al., (2007).

Line 122, authors deleted the EIA, IEA, and BP. Are they one of 9 global and regional emission datasets at Line 34? Will the number of inventories not be 9 emission datasets in the abstract if they are not compared with others? it may be a bit confusing. The authors need to explain it for the later sections that mentioned them again.

Response: Thank you for this good suggestion. We added descriptions in lines 132-133 to clearly define the 9 inventories. EIA, IEA, and BP do not belong to the 9

inventories. The 9 inventories used in the main text include: 1) 6 gridded datasets, namely ODIAC, EDGAR, PKU, CHRED, MEIC, NJU, and 3 statistical data, namely GCP/CDIAC, CEADs, and NCCC.