

Dear Editor,

Thank you for the minor comments to improve the quality of the paper. We have revised the manuscript based on your comments. A detailed response to each comment is provided in this file with comments from comments in black, author's response in red, and author's changes in manuscript in blue.

1. Table 2 is a useful comparison of previous studies and helps highlight the novelty of this work. Please double check the values entered in this table. For example, the Excess Mortality value for Conibear et al. (2018) is not correct. It should be 0.99 million (see Page 3 of Conibear et al.). Please check the numbers from the other studies as well.

Responses: Sorry for the mistake. We have checked through all the mentioned studies and ensured all the numbers are correct now. We also updated Table 2 with more information from other studies and described them in related parts in the manuscript.

Changes in manuscript: Corrected errors and added more information in Table 2.

2. Line 185-Line 191. This paragraph should be updated to include the other studies now included in Table 2.

Responses: Thanks for comments and we added all the discussion towards the studies mentioned in Table at lines 191 to 200.

Changes in manuscript: Lines 191 to 200 were updated with more discussions in Table 2.

3. Line 160 and Table 2. It would be useful to compare population weighted PM_{2.5} concentrations from previous studies when this is available.

Responses: We only found annual population weighted PM_{2.5} concentration discussed in Conibear et al. (2018) and GBD MAPS Working Group (2018) and added them to Table 2. Due to the differences in simulation period and resolutions, the values are much different. The following discussions were added in Lines 161 to 163.

Changes in manuscript: Population weighted PM_{2.5} concentrations in Conibear et al. (2018) and GBD MAPS Working Group (2018) were added to Table 2 and following discussions were added to lines 163 to 165.