

Response to Handling Editor:

Dear Authors:

Thank you for revising the MS. The revision is adequate, but requires some technical corrections. Some corrections are shown below, but not complete. Please go through the MS and correct them.

Many thanks and best,

J Kuttippurath

Reply: Thank you very much for your positive evaluation of our revised manuscript and for guiding it toward acceptance. We appreciate your feedback and have carefully addressed the technical corrections you highlighted.

In addition, we have thoroughly reviewed the entire manuscript to ensure consistency and have corrected other technical issues to the best of our ability.

L9-10: it sounds that the air mass advection occurs only from the “polluted” region

Reply: Omitted the phrase “heavily pollution” from the sentence.

L13: enable

Reply: Corrected

L14: delete “layer”, use “aerosols”

Reply: Corrected

L63-64: Sorry to refer our work here, but this study (DOI: 10.1016/j.heliyon.2023.e17940) is very relevant and clearly demonstrates your point. Transport of aerosols from the IGP and northern India to the BoB region, through trajectory and potential source contribution function (PSCF) analysis.

Reply: Thank you for highlighting this relevant study. We appreciate the suggestion and agree that the work by Kuttippurath, J. et al., 2023, provides important supporting evidence for the aerosol transport mechanisms discussed in our manuscript. We have now cited this study appropriately in the revised version.

L113, 129-130: space between latitude and longitude indicators (e.g. 22. 65 N). Degree symbol is also missing. Check other places too.

Reply: Checked and corrected.

L132: “6.9 m” and in other places

Reply: Checked and corrected.

L164, 219: “50 m” and in other places

Reply: Checked and corrected.

L174: Sometimes you use 70th, but in some other place 70th (e.g. L266). Be consistent in using them.

Reply: Corrected everywhere.

L205: Sometimes you use Indo-Gangetic PLAIN, and sometimes “PLAINS” with “S”. Be consistent in using this.

Reply: Corrected as Indo-Gangetic Plain (IGP) everywhere.

L231: 2 days, ... up to 5 days

Reply: Corrected

L257, 259 and other places: Supplementary Fig. S1. Delete the “figure”

Reply: Corrected everywhere.

L336: “. Barbaro et al. (2014) suggest that ..”

Reply: Corrected.

L337: “Similarly, Wang et al. (2015) suggest .. ”

Reply: Corrected.

L341: the same correction as for L337

Reply: Corrected.

L401: “2 km”

Reply: Corrected.