

**MS# AMT-2022-187, Performance of AIRS ozone retrieval over the central Himalayas: Case studies of biomass burning, downward ozone transport and radiative forcing using long-term observations, Rawat et al.,**

- The title should be corrected, particularly for the phrase after colon. I cannot see the significant analyses about the 'Case studies of biomass burning, downward ozone transport and radiative forcing using long-term observations' in this manuscript. Only 2-3 short chapters are related to the case studies, but I cannot see the meaningful finding about the ozone pattern associated with the biomass burning. There is not many obvious explanations of ozone variation related to the biomass burning pattern. In particular, there is not any statement about the biomass burning in the short summary and abstract, showing that authors did not pay attention to this topic. Most of materials are just about the 'Validation of AIRS ozone retrieval over the central Himalayas using ozonesonde and other satellite dataset'. This validation does not look bad so it can be acceptable as a journal paper. Thus, authors should change the title considering the main point of this manuscript.

**Thank you very much for your time in reviewing the MS. As suggested, we have now changed the title of manuscript to “Performance of AIRS ozone retrieval over the central Himalayas: Use of ozonesonde and other satellite dataset”.**

- Similar to the first comment, it is very hard to see the meaning of 'Himalayan research'. The only point that authors addressed is that this is the first work over this region. It does not provide a motivation of this study. Authors should suggest the 'unique point' of this work different from other AIRS ozone validation, and this unique point should be excavated using the keyword of 'Himalaya'. Please improve the introduction and conclusion part in this context.

**Thank you very much. We have now added more relevant sentences to further improve the introduction and conclusion part. We feel that now the importance of the region and motivation of the present study is clearer.**

- The manuscript looks unnecessarily long. Please organize whole manuscript again to have a proper length. Authors may need to move some trivial things to the supplement materials (Title change is also related to this length control).

**Thanks. We have now moved most part of the methodology section to the supplement materials. We have also moved one figure to the supplementary section, one figure is modified to reduce its size and few references are reduced.**

- It is better to include Fig. 1 in the author's response (associated with the normalization factor) in the supplement file.

**Thank you for your suggestion. We have now included the figure in the supplement materials as Figure S3.**