MS No.: esd-2021-22: Impact of urbanization on thermal environment of Chengdu-Chongqing Urban Agglomeration under complex terrain, Si Chen et al.

Response to Editor

Dear Dr. Gabriele Messori,

Thank you very much for your assistances involved in reviewing the manuscript. We revised the manuscript by paying particular attention to the comments as follows:

1. Comment 1: While you have provided a complete set of replies to the remaining comments, I note that in many cases the corresponding explanations have not been included in the revised paper text (e.g. comments no. 1 and 3, but there are other examples). Since other readers may have the same questions as the Reviewer, I would encourage you to include at least part of the clarifications you provided to the Reviewer in your updated text.

Response 1: For 'comments no.1 from Anonymous Referee #4', we added a detailed clarifications in the revised manuscript as suggested. Please refer to 'Page5, Lines 26-30'.

For 'comments no.3' from Anonymous Referee #4, we added a description on reclassification of land use data in the revised manuscript as suggested, please refer to 'Page3, Lines 31-35' and Table 1 for details.

- 2. Comment 2: Similarly, while I understand that you may want to avoid significant new analysis following the Reviewer's comment no. 6, this is indeed an interesting point that may be discussed in the concluding section of the text as future work.

 Response 2: We added a discussion in the revised manuscript as suggested, please refer to 'Page11, Lines 20-24'.
- 3. Comment 3: I also believe that the caption to Fig. 4 is still incorrect (check the panel letters) a point raised by the Reviewer which you did not update.

 Response 3: Revised as suggested, please refer to Fig.4.

In addition, we checked and corrected the format of the newly added references to meet the requirements; The legend explanation of Fig. 8 and Fig.10 is added, and the error identification information of Fig. 9 is corrected. For details, please refer to the revised manuscript.

We would like to take this opportunity to thank you for all your assistances on this manuscript.

Sincerely, Si Chen, Zhenghui Xie, et al.