

Earth Syst. Dynam. Discuss., referee comment RC2
<https://doi.org/10.5194/esd-2021-22-RC2>, 2021
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Comment on esd-2021-22

Hideki Takebayashi (Referee)

Referee comment on "Impact of urbanization on thermal environment of Chengdu-Chongqing Urban Agglomeration under complex terrain" by Si Chen et al., Earth Syst. Dynam. Discuss., <https://doi.org/10.5194/esd-2021-22-RC2>, 2021

In this study, the changes in the thermal environment when the topography and land use were changed were calculated by WRF.

In the model verification in Section 3.1, the cross-correlation of the different variables shown in Fig. 4 is not important, and the bias, RMSE, and correlation coefficient of the observed and calculated values in each valuable should be evaluated. Please present the observation points in Fig. 1, explain the outline of the observation, and discuss the calculation accuracy.

It is considered that the wind system has changed due to changes in topography. In particular, consider the effect of mountain and valley wind circulation on the thermal environment.

The authors stated that the topography further changes the heat island effect. It must be discussed whether this is a general finding. This appears to be happened a result of setting conditions by the authors. If so, this study is just a case study and it should not be published as an academic research paper.