

## **Response to Anonymous Referee #1 26 Oct 2020**

Thank you for your helpful comments on the manuscript.

We considered all comments. Furthermore, we strongly improved the manuscript based on your comments.

## **5 Response to Anonymous Referee #2 6 March 2021**

Thank you for your helpful comments on the manuscript.

We considered all comments. Furthermore, we strongly improved the manuscript based on your comments.

### **Relevant changes made with regard to the comments:**

- 10 1. Abstract has been written more precisely.
2. Fourier's law and its simplifications is described explicitly.
3. Italic letters for variables, normal letters for parameters in the whole document.
4. Complement of equations in the algorithm: The whole methodology is described (without detailed calculation procedures).
- 15 5. Heat transfer through windows and walls is documented exactly. Accordingly, Figure 1 and 3 are updated.
6. Integration of the building model into PALM is shown in new Figure 2.
7. Description of relevant effects which can be found exemplarily in the simulation. Therefore, two buildings A and B are shown in comparison in Figure 4.
8. Update of references.

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### **Relevant changes made with regard of the topical editor:**

1. Technical corrections
2. Inserted credits to Figure 4
3. Note for the production process: We used italic typesetting for all time-dependent variables and normal typesetting
- 25 for all time-independent parameters.