

**Response to Author Replies: Review of the manuscript “Competition between core and periphery-based processes in warm convective clouds – from invigoration to suppression” by G. Dagan, I. Koren and O. Altartz**

The authors' efforts to answer the referee comments appropriately are much appreciated. There are several points which contribute to a better understanding of the manuscript, such as additional references and the clarification of notations used throughout the study. I also appreciate the additional effort to oppose drag force and entrainment effects, and an exact quantification would probably be beyond the scope of this study.

The added Figure 6 in the revised manuscript as well as some supplementary material add further value. Please find three more minor comments in the following.

**Concerning the “General” section of the author replies**

4) The treatment of ice processes

I recognize that the present study involves many idealizations which should not necessarily be seen as a shortcoming. However as a reader I would feel more comfortable to be informed about idealizations as detailed as possible. Regarding the ice, I still would like to know which simulations in particular are affected by supercooled cloud droplets. This could be explained based on Figure 6 (original manuscript) which shows the cloud top height. For example, by using dashed horizontal lines to indicate 0°C and -10°C, or by explaining in the text in which altitudes these temperatures can be expected.

**Concerning the replies to reviewer 2:**

13) Table 1

Going in the same direction of the previous comment, I would be interested in the temperatures corresponding to the altitudes listed in the table.

29) Figure S3

I was just wondering whether the peak at  $t > 100$ min in the T3RH3 can be interpreted as an artefact in the stage shortly before the cloud disappears.