

The authors have addressed most of my comments. However, I still quite puzzled about the total lack of CWC to the SIP mechanism choices despite orders of magnitude changes in the ice crystal concentration. The authors provided some speculation about this, but none of their reasons would explain why there is no CWC sensitivity with SIP mechanism tests but substantial CWC sensitivity when the CCN concentration is varied. In Figure 6 (CCN tests), only the top middle panel shows a near lack of CWC sensitivity to CCN, but in this case the ice crystal number concentration is likewise not sensitive to CCN. The CWC analysis to me strongly suggests that there is an error in the data processing code. The authors state (Lines 454-55) that “As soon as one SIP process is activated, all mean vertical profiles of CWC are merged in the WARM and MID-WARM cases.” What does this mean exactly? Is this merging the reason why the CWC profiles are so similar?

Minor Comments:

1. Line 88: Rather than “...” it would be better to use “etc.” to end the sentence.
2. Line 125: “rimmed” → “rimed”