We would like to thank again both reviewers for their time revising our manuscript and their helpful comments. All the reviewers' comments (in black) and corresponding responses (in blue) are listed below. Copied text from the manuscript is marked in italics and underlined sentences correspond to changes in the manuscript (see also the submitted manuscript with track-changes).

Referee #2

The authors have sufficiently addressed almost all of the comments by the reviewer. There is only one minor additional comment. Regarding the size range of observations, the authors used 3 micron to 6400 micron, but the model simulations removed all ice crystals D > 200 micron, meaning that no large ice or snow particles are used in the model.

We thank the reviewer for this observation but we need to clarify that we did consider the same size range for both observations and model. We constrained the observations to 200 µm to align with the model simulations removing ice crystals with D > 200 µm and we state this in lines 306-310 of the latest manuscript version. We removed the last highlighted words in the text below to avoid confusion with ice particles, since we talk about snow particles here:

As explained in Sect. 3.2, to enhance comparability with the model grid-box averages, the observational data were averaged over the model's 15-minute time resolution. Additionally, only ice crystals with diameters smaller than 200 µm are considered in the calculation of cirrus microphysical properties to ensure consistency with the model, where ice crystals larger than 200 µm are transferred to snow crystals, which are assumed to be removed within one model time step by precipitation, melting, or sublimation (Righi et al., 2020).

The reviewer suggests showing sensitivity tests of restricting the observation range to 3 - 200 micron. These results may be included in the supplemental material, and they will evidently prove that removing D > 200 micron in the model simulations does not significantly change the conclusions.

We believe that this sensitivity test is no longer necessary given that our study already had the observation range restricted to 3-200 µm.

In addition, can the author clarify if the final model size range is 3 - 200 micron or 0-200 micron? The former should be more accurate since the observations start at 3 micron, not 0 micron. But it is unclear if the authors also cut off the 0-3 micron from the model output.

The model size range is 3-200 µm, consistent with the observations. To clarify that when we describe the ice particle data set in Section 2.1 in lines 93-94 and state that the particle size range is between 2-6400 µm, we refer to the nominal combined size distribution that the instruments can provide. Therefore, we added the word "nominal": *Together, these instruments provide nominal cloud particle size distributions from 2 to 6400 µm.*

Later in Section 3.2, when the strategy for the combination of model simulations and observations is described, we added a sentence in line 214 to clarify the size range used for both observations and model:

In addition, the same ice crystal size range is applied to both observations and model simulations, defined between 3 and 200 µm.