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## Interactive comment on "Ice water content vertical profiles of high-level clouds: classification and impact on radiative fluxes" by A. G. Feofilov et al.

## A. G. Feofilov et al.

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We thank the reviewer for his/her positive assessment of the paper and for the corrections.

Below, we provide point-by-point answers to each of the comments.

We mark the reviewers' comments/questions and the authors comments/responses by "RC:" and "AC:", respectively.

**RC:** Abstract: line 6. "which sufficiently well represents the IWC profiles". Shouldn't it be "which represents the IWC profiles sufficiently well"?

AC: fixed, thanks.

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**RC:** Page 16331, lines 24–25. "AIRS footprint can up to CALIPSO L2 samples at 5km resolution". A word is missing. Should it be "can collocate with up to"?

**AC:** in the updated version, this part of the phrase reads as follows: "...for favorable conditions, the AIRS footprint can cover up to three CALIPSO L2 samples at 5 km resolution and up to ten GEOPROF/DARDAR L2 samples at the spatial resolution of a CPR footprint..."

**RC:** Page 16337, I. 22–24. I think something happened to this sentence, as I can't make sense of it.

**AC:** Thanks for pointing this out. We have modified the phrase to make it readable: "As one can see from the normalized IWP histogram values presented in Table 5a and 5b, the relative frequency of thick ice cloud occurrence is higher in single- rather than in multi-layer system".

Interactive comment on Atmos. Chem. Phys. Discuss., 15, 16325, 2015.