Response to the Associate Editor

We would like to thank the Associate Editor for carefully reading the manuscript and for providing helpful comments, remarks and suggestions. You can find below our response.

The comments from the two reviewers have been addressed satisfactorily in the responses. However, it is not always clear what has been changed in the revised manuscript in reaction to the reviewers' comment. For example, the question of Rev. #2 about the cloud filtering gets an extensive answer but it is not said what has been changed in the manuscript to clarify the issue. Please check the responses, and briefly indicate what action has been taken to address the reviewers' comments.

Done: In response to the question of Reviewer #2 about the cloud filtering a short discussion is included in P.15, L352-354. Also in response to the question of Reviewer #1 about the in situ measurement site a short discussion is included in P.14, L314-315 of the revised manuscript.

- Typography in Equation 2: symbol A should be in italics. However, if A is a matrix, it should be bold and upright. If x is a vector, it should be bold and upright.

The symbols of Equation 2 have been corrected.

- References: please correct the alphabetical order in some places: Friedrich before Friess, and other places.

Done: Friedrich is listed before Friess and Holben before Hoenninger in the revised version of the manuscript. This was due to a technical issue. Please note that these corrections do not show up in the track-changes file, because the reference layout is automatically produced after building the source .tex file and therefore latexdiff cannot find the differences.