

Reply to comments by Anonymous Referee #2

on the manuscript " Long-term study of cloud radiative effect, cloud fraction and cloud type at two stations in Switzerland using hemispherical sky cameras " by Aebi et al., submitted to *Atmospheric Measurement Techniques*.

We thank the referee for the constructive comments that we have tried to accommodate in the text. Detailed answers to the comments are given below (bold: referee comment, regular font: authors response).

This study deals with the analysis of the cloud radiative effect in Switzerland using two sky camera systems in Davos and Payerne in conjunction with pyranometers, pyrgeometers and precision filter radiometers. The results provide analytical information about the shortwave, longwave and total cloud effect components, while a sensitivity analysis was performed as well.

The overall analysis is sound and after the following minor revisions it could be published in the AMT journal.

- (1) First of all there is a confusion with the Tables throughout the paper. On page 7, line 26 the authors present the LCE results, so the correct Table is 1 (and not 2). Subsequently, on page 10, line 5 Table 3 need to be replaced with Table 2 (describes the SCE), while on page 12, line 10 the corresponding Table is 3 and not 4 (there is not even such a Table in the manuscript).

We acknowledge your comment on that, it was a compilation error and the table numbers are in the right order now.

- (2) On page 4, line 19 it is recommended to add an abbreviation for the "lookup table" as LUT in brackets (LUT) and then replace all the subsequent identical expressions with the "LUT" (e.g. on page 4, line 22; 24; etc).

We added the suggested abbreviation LUT and used it then throughout the whole manuscript.

- (3) Finally, in Sections 3.2.1 (page 13, line 5) and 3.2.2 (page 15, line 2) it is preferable to mention and use as reference the corresponding sections instead of figures, unless Figures 3 and 4 describe the entirety of Sections 3.1.1 and 3.1.2.

We changed the reference to the corresponding sections (instead of the reference to the figures).

I strongly believe that the topic of this manuscript is interesting and the whole approach will be valuable for the AMT community, so after the above corrections this paper worth to be published in the AMT journal.