

Interactive comment on "Cloud_cci ATSR-2 and AATSR dataset version 3: a 17-yearclimatology of global cloud and radiation properties" *by* Caroline A. Poulsen et al.

Anonymous Referee #1

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This manuscript documents the introduction to the version 3 (V3) of the Cloud_cci ATSR-2/AATSR dataset. Clouds data products are important for clouds-related climate and weather studies. Obtaining clouds parameters in modeling of climate is critical for predicting the temperature trend of the atmosphere and earth surface. Thus, this document and the data the manuscript wants to report, are important data for climate studies. This paper gives sufficient review of the historical instruments and products for this issue, English and presentation are both good. As a introduction to a dataset, it aslo outlines a general picture of the shape of the data. However, this paper's V3 data do not show very significant improvements from V2 as displayed by Figs1-2 and Table 4. So this manuscript may consider changing the title to address the difference

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of V3 and V2. Also, the flux data of V3 have very big difference from CERES data as shown in Tables 6 and 7, up to \sim 10%. But the authors claim their product agrees well with CERES. This must be changed. Also, why V3 flux and CERES flux have so big difference, must be unambiguously clarified. V3 or CERES problem? If flux data have 10% error, the data generally have no use for climate studies. Therefore, this reviewer recommends this paper be published after major revisions.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2019-217, 2019.