

Atmos. Meas. Tech. Discuss., referee comment RC1
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Comment on amt-2021-391

Anonymous Referee #2

Referee comment on "Evaluating the consistency and continuity of pixel-scale cloud property data records from Aqua and SNPP (Suomi National Polar-orbiting Partnership)" by Qing Yue et al., Atmos. Meas. Tech. Discuss.,
<https://doi.org/10.5194/amt-2021-391-RC1>, 2021

This manuscript presents an extensive evaluation of the cloud retrievals from multiple concurrent passive remote sensing observations. The work described here is substantial and vital, especially given the incoming EarthCare and AOS in this decade. The paper is well written and will definitely contribute to the community's effort to produce climate records of cloud retrievals. It fits the scope of AMT very well. I only have a few minor suggestions regarding the presentation and recommend publication after these issues are addressed.

1. Line 46, "The 2017 US National Academy Decadal Survey (ESAS 2017)", should this be 2018 instead of the 2017 Decadal Survey?

2. Line 183, please specify what exactly version of ECMWF data was used here.

3. Line 191, Hook (2019) was cited here for the CAMEL surface emissivity. This might be OK. But the CAMEL has two formal publications, <https://doi.org/10.3390/rs10040643> and <https://doi.org/10.3390/rs10050664>. The authors might consider these two papers as references here.

4. In the legend of Figure 2, "MODIC Con." Should be "MODIS Con.".

5. In figures 15-18, the arrangements of the bar plot are a bit confusing. For two groups, "No Mask" and "Mix/Uncert", are bars arranged in the same order as in other groups? It looks not like the case on my screen.

6. There are five places that an "i" is missing in "Cloud_Phase_Optical_Propertes".