

Atmos. Meas. Tech. Discuss., referee comment RC2 https://doi.org/10.5194/amt-2022-101-RC2, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on amt-2022-101

Anonymous Referee #3

Referee comment on "Extended validation and evaluation of the OLCI–SLSTR SYNERGY aerosol product (SY_2_AOD) on Sentinel-3" by Larisa Sogacheva et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2022-101-RC2, 2022

This paper presents the synergy AOD product from Sentinel-3 and its evaluation against a set of other global AOD products. This is obviously product of a thorough comparison, from the use of validations against AERONET, MAN (and SURFRAD and SKYNET in supplement), and MODIS datasets, and the breadth and level of detail of the manuscript shows it. This is a high-quality manuscript and should be published in AMT, and will likely be used as reference for many other validation of satellite aerosol products. While this manuscript is long, it is obviously needed, and the quality of the work is appreciated.

A review of the manuscript is attached.

Please also note the supplement to this comment: <u>https://amt.copernicus.org/preprints/amt-2022-101/amt-2022-101-RC2-supplement.pdf</u>