

Comments on the revised version of “Validation of Copernicus Sentinel-3/OLCI Level 2 LAND Integrated Water Vapour product” by Niilo Kalakoski et al.

Anonymous reviewer
8 July 2022

The authors have changed the manuscript taking into account all comments and suggestions. In the revised version, the presentation of the input data and the results became clear and unambiguous. Still, I have few minor comments which I recommend to consider before submitting the final version for publication:

Page 5, Line 136

From this sentence in Section 4.1, I assume that initially all matchups in the database fit the +/- 3 hour time window, both for IGRA and SUOMINET. In Section 4.2 the time window for SUOMINET matchups was reduced to 15 minutes. In order to clarify this issue I would recommend making an explicit corresponding note in the text of Section 4.1.

Captions for Figure 4 and Figure 5

In my opinion, these captions can be misleading. The authors write:

“Solid line shows the median of each 2 kg/m² wide bin,..... Bins with less than 20 matchups were omitted from the figure”

I guess that the latitude bins and the SZA (solar zenith angle) bins are used in these figures, but not the IWV bins. If so, please remove mentioning the IWV bins and indicate the width of the latitude and SZA bins.

In the revised version, the authors analyse the IWV results only over land. Though this fact is indicated in the title and in the abstract of the manuscript, I would recommend emphasizing it somewhere in the main text also.

Page 1, Line 17

The authors agreed to remove the abbreviation ECV which is used only once but it is still present in the text.