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Discussions

Interactive comment on "Validation of the Sentinel-5 Precursor TROPOMI cloud data with Cloudnet, Aura OMI O$_2$-O$_2$, MODIS and Suomi-NPP VIIRS" *by* Steven Compernolle et al.

Anonymous Referee #2

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The third reviewer touches on two aspects that in my comments have probably remained implicit and have not been sufficiently highlighted.

The first aspect is the accuracy of retrieval for very reflective surfaces. My request to subdivide and categorize biases in function of cloud fraction and surface reflectivity aims to understand two things: (1) what happens for very low CF (2) what happens for very high SA (3) where the algorithms start diverging in performance.

The second is the compactness and clarity of the product naming, having in mind the usability of the data for the typical user. I would appreciate in the conclusions clear and concise guidance on which products to use, for which purposes, and which not. I think

the authors and the production teams should make an effort in this direction.

A reason for further uncertainty is the announcement of new products that would emerge from minimal adjustments of the algorithm. I do not think it is necessary to deem FRESCO-S a new product, only if you change the spectral range within O2A by a few nm. This is just a source of confusion for the reader and certainly cannot be considered a milestone for a typical algorithm development chain.