

Interactive comment on “Validation of five years (2003–2007) of SCIAMACHY CO total column measurements using ground-based spectrometer observations” by A. T. J. de Laat et al.

Anonymous Referee #2

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This paper presents a validation of the SCIAMACHY CO retrievals, updated since a previous validation study, and covering a longer time period than the previous paper. This is a valuable paper for the SCIAMACHY user community, and AMT seems to be an appropriate journal for its publication. The paper is well written and clearly presents the validation procedure and the results. I recommend publication after addressing a few minor points.

There is no mention of validation using in situ aircraft profiles. If this has been done it should be referenced here. If not, it would be very valuable to perform that comparison

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(for a different paper).

p. 2896: It is stated that the SCIAMACHY CO total column is assumed to be the true column, with a reference to de Laat et al. (2010). It seems a figure illustrating this to be the case (similar to the figure for MOPITT, Fig 4 of de Laat 2010), would be valuable here.

p.2904, l16: 'larger' -> 'higher'

p.2906, l9: 'season' -> 'seasonal' (maybe other places, too)

p.2902, l18: 'either three' -> 'any of the three' (either is for 2 choices)

p.2914,l32: title does not match published title (de Laat 2010)

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