Interactive comment on “Solar occultation with SCIAMACHY: algorithm description and first validation” by J. Meyer et al.

Anonymous Referee #1

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I found this a very difficult paper to review, because it is a report of work in progress and there are so many loose ends in it. The algorithm uses well-established retrieval principles and the only original aspects of the paper relate to ‘engineering’ issues such as the tangent altitude derivation. Although very important, the use of O2 to infer pressure is not new and the paper does not present a formal validation of the heights inferred. Overall, I do not think that this paper will be of interest to the wider atmospheric science community which ACP serves, and recommend that it be submitted to a more specialist journal dealing with the satellite retrieval field. The ACP community will only be interested in the final version of the algorithm which will produce data that they may use.
The standard of English in the paper does not help comprehension. This is not the fault of the person who wrote it - but one of the authors is a native Englishman! I recommend that in future more attention should be paid to the legibility of what is a very technical subject, given that this expertise clearly exists within the group.

Interactive comment on Atmos. Chem. Phys. Discuss., 5, 17, 2005.