

## ***Interactive comment on “Water vapour profiles from SCIAMACHY solar occultation measurements derived with an onion peeling approach” by S. Noël et al.***

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We thank the referee for the comments and will consider them in the revised version of the paper.

### **Answers to general comments:**

Main comment is that a detailed error analysis/budget and assessment of precision and accuracy is missing. The revised version of the paper will include a dedicated section in which the errors will be summarised and discussed.

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### **Answers to specific comments:**

1. *Introduction p205: confusion is made between Optimal Estimation and Global fit approach (which is not mentioned in the text). Actually OE and onion peelings are not opposite (and it's possible to develop and OE based on onion peeling approach). The text must be clarified and the global fit approach must be mentioned [reference: Massimo Carlotti, “Global-fit approach to the analysis of limb-scanning atmospheric measurements,” Appl. Opt. 27, 3250-3254 (1988)]*

It is agreed that OE and onion peeling are not opposite and may in fact be combined. The introduction section will be re-formulated and also include the reference to the Global Fit method mentioned above.

2. *Fig 2. is difficult to read, please coarsen lines the curves.*

The lines will be thicker in the revised version of the paper.

3. *Fig 3. Please grow the symbols in the upper panel.*

OK.