

Author's response to request for minor revisions

The Associate Editor raised the following points:

Associate Editor Decision: Publish subject to minor revisions (review by editor) (20 Oct 2020) by [Michel Van Roozendaal](#)

Comments to the Author:

The comments raised by reviewers, are very well covered in your detailed answers, however I have one more comment and a question:

(1) Fig.3: the usual convention is to refer to 'measured' for the observed values (dSCDs derived from the DOAS fit) and 'calculated' for the simulated values (obtained using Heipro).

(2) Fig.4: the local maximum at 2 km in the FTIR averaging kernel is quite surprising (at least to me). I was expecting to see a monotonic increase in sensitivity up to approx. 10km, as e.g. reported in Vigouroux et al. (2009). Please could you comment on the origin of this local maximum?

We thank the Associate Editor for his decision and questions.

(1) We have updated the label of Fig. 3(a) to reflect the convention

(2) The averaging kernels in Fig.4 looked odd because an error was made in plotting (columns and rows mixed up). We sincerely apologise for this error which we should have picked up on earlier. The correct averaging kernels have now been plotted in Fig. 4 and much more closely resemble the results in Vigouroux et al. (2009).