

Interactive comment on “MIPAS IMK/IAA Carbon Tetrachloride (CCl₄) Retrieval” by E. Eckert et al.

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General remarks

This paper describes a dataset consisting of CCl₄ mixing ratios retrieved from radiances from the MIPAS instrument on ENVISAT. The data are a valuable contribution to our understanding of stratospheric chemistry and the paper is well written and organised. It should therefore be published with only technical corrections. I list some of these corrections below; they mostly concern the figures, many of which are too small in the form presented for review and are such that the journal's page layout staff will not be able to make them much larger in the final version.

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Specific corrections

- Page 3, Line 87: Figures should be referenced in numerical order: the first reference to a figure in the text should be to figure 1. (I would not re-order the figures to correct this, rather, I would remove the reference to figure 3 in this line.)
- Figure 1 and Figure 3: The figures are really too small. They might be just about OK if made the full width of the two columns in the final version, but I am not sure about this. Text on figures should be a similar size to the text in the figure caption. The legends in these figures are particularly hard to read; it would help if they were not on top of the curves.
- Figure 2: It is good that the two panels have the same colour scale for easy comparison. But the scale should go down to the lowest values shown in the left panel. As the figure stands, the colour white is used to represent two distinct things: negative values, and areas where there are no data. The “no data” areas should be left white, and the (white free) colour scale should extend so that it applies to the negative areas. The figure title “PAN, 200807” is not needed to distinguish the two panels and tells the reader nothing that is not in the caption. It should be removed. The contour lines should be in a colour (or colours) that allow them to be seen against the colour scale. With these changes made, Page 3 Line 113 will need to be changed (and can possibly be simplified). Many of these comments also apply to figures 4, 5 and 6.
- Page 6 line 118: “setup” should be “set up” because it is a verb. (Note that on page 7 line 140, “setup” is a noun and should be left as it is.)
- Page 6 line 131: “The spectral region [...] could be narrowed to [values]” Narrowed from what?

- Figure 7: This figure is probably OK if shown at the full 8.3cm width of a journal column. The title “Rows of A” on each panel should be removed.
- Page 11 sec 5.1.1: It would be nice to add a figure showing the mean ATMOS profiles and a suitably-averaged MIPAS profile for the same time of year.
- Page 11 line 212: Remove comma after “profile”.
- Page 13 figure 9: It is again marginal whether this figure is large enough. It is probably OK at the full two-column width of the journal page. It would be a great improvement if the five panels were labelled (a) to (e) so that the text could refer to “panel (e)” rather than “second panel to the right”. (I think this means “second panel *from* the right” but I am not sure; letter labels would remove this kind of confusion.)
- Figures 10 and 11: I again have concerns about the sizing of the figures. The text in the captions is unreadably small at the size of the review article. The title on Figure 11 is not needed.

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