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8, S10377-S10378, 2009

Interactive Comment

Interactive comment on "Gaseous mercury distribution in the upper troposphere and lower stratosphere observed onboard the CARIBIC passenger aircraft" by F. Slemr et al.

Anonymous Referee #1

Received and published: 13 January 2009

The paper Gaseous mercury distribution in the upper troposphere and lower stratosphere observed onboard the CARIBIC pasenger aircraft

This paper is a very nice treatment of a large set of rare measurements of mercury in the upper troposphere and further aloft. It should be accepted.

1/ there are some details given, perhaps unnecessary, that are not explained and defocus the reader: page 2 seven times four flights, twelve times four flights; figure 2, the section numbers in the top panel,

2/ Figure 3 and 4 - are the data only for measurements within a specified altitude

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range? Are measurements made on takeoff and landing included? Can you show vertical profiles? The 3-dimensional nature is hard to visualize.

3/ I think that your inlet is forward facing; it wouldn't hurt to mention this.

4/ when you use the soda lime trap, then you have 1 cartridge with soda lime and one without - you toggle between the two? This would be interesting to see. Did you make this measurement in different seasons?

5/ page 10 - I do not understand what you mean by 15 or 10 trajectories were available for each mercury measurement; what do yo do with this information?

6/ page 17 - why were April 28, May 30 and July 6 exceptions?

7/ do not understand the first sentence in section 3.3

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 18651, 2008.

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