

Interactive comment on “Recipe for continuous monitoring of total ozone with a precision of around 1 DU applying mid-infrared solar absorption spectra” by M. Schneider and F. Hase

Anonymous Referee #1

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General comments

This manuscript presents a new method for improving the accuracy of total ozone retrieval from FTIR absorption spectra, by simultaneously recovering temperature and ozone. I recommend publishing it in ACP after minor revisions. My major comment concerns the lack of experimental tests of the proposed method.

Specific comments

Page 9096, line 16: "As a-priori of O_3 ". I suppose you mean $^{48}O_3$?

Page 9096, line 21-22: "The spectral signatures of the minor isotopologues of $^{49}O_3$ are

only considered by scaling a climatological profile." What about $^{50}\text{O}_3$?

Page 9096, line 27: "The applied temperature data". Do you mean " The a priori temperature data" ?

Page 9097, line 2 and 3: why do you use spectroscopic line parameters from 2 different HITRAN databases ?

Technical corrections

Page 9095, line 21: remove coma after "x and xa"

Page 9096, line 13: remove coma after "asymmetric"

Page 9103, line 26: add coma after "error small"

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 9093, 2007.

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Interactive Discussion

Discussion Paper