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Corrigendum to "Differences in ozone retrieval in MIPAS channels A and AB: a spectroscopic issue" published in Atmos. Meas. Tech., 11, 4707–4723, 2018

Norbert Glatthor[1], Thomas von Clarmann[1], Gabriele P. Stiller[1], Michael Kiefer[1], Alexandra Laeng[1], Bianca M. Dinelli[2], Gerald Wetzel[1], and Johannes Orphal[1]

[1]Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research, Karlsruhe, Germany
[2]National Research Council of Italy, Institute of Atmospheric Sciences and Climate, Bologna, Italy

Correspondence: Norbert Glatthor (norbert.glatthor@kit.edu)

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Contrary to our reply to referee 2 (p C5/C6) we forgot to mention the study of Janssen et al. (2016) in our updated manuscript and to emphasise their similar findings with respect to changes in the air-broadening coefficients.

Thus, we would like to add the following sentences to the end of Sect. 8 (Additional investigations) of our paper:

"Thus, the larger $\gamma_{\mathrm{air},0}$ parameter would result in a retrieval of lower ozone VMRs at 30 km in altitude. A similar effect has already been shown by Janssen et al. (2016), who demonstrated that – contrary to what they found for the ozone lines of weaker bands in the 10 µm spectral region – an increase in the air-broadening coefficients of the lines of the ν_3 band leads to a retrieval of lower ozone column amounts."

In this context we would like to point out that Janssen et al. (2016) give a comprehensive review of recent investigations of the differences between ozone measurements in the UV, 5 and 10 µm spectral regions. Further, their work has strong methodological links to our analysis, because they performed a detailed intercomparison of ozone line data (intensities, air-broadening coefficients, temperature dependence of air-broadening coefficients) and retrieval results in the 5 and 10 µm bands using the HITRAN-2012, GEISA-2011 and S&MPO (Spectroscopy & Molecular Properties of Ozone) databases. Among other things, they also investigated the effects of scaling or replacing spectroscopic parameters on retrieved ozone column amounts.

References

Janssen, C., Boursier, C., Jeseck, P., and Té, Y: Line parameter study of ozone at 5 and 10 μm using atmospheric FTIR spectra from the ground: A spectroscopic database and wavelength region comparison, J. Mol. Spectrosc., 326, 48–59, https://doi.org/10.1016/j.jms.2016.04.003, 2016.

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