



Corrigendum to

“A new method to determine the aerosol optical properties from multiple-wavelength O₄ absorptions by MAX-DOAS observation” published in *Atmos. Meas. Tech.*, 12, 3289–3302, 2019

Chengzhi Xing¹, Cheng Liu^{1,2,3,7}, Shanshan Wang^{4,5}, Qihou Hu³, Haoran Liu¹, Wei Tan³, Wenqiang Zhang^{3,6}, Bo Li¹, and Jianguo Liu^{2,3}

¹School of Earth and Space Sciences, University of Science and Technology of China, Hefei, 230026, China

²Center for Excellence in Regional Atmospheric Environment, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, 361021, China

³Key Lab of Environmental Optics & Technology, Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Hefei, 230031, China

⁴Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention (LAP³), Department of Environmental Science and Engineering, Fudan University, Shanghai, 200433, China

⁵Shanghai Institute of Eco-Chongming (SIEC), No.3663 Northern Zhongshan Road, Shanghai, 200062, China

⁶School of Environmental Science and Optoelectronic Technology, University of Science and Technology of China, Hefei, 230026, China

⁷Anhui Province Key Laboratory of Polar Environment and Global Change, USTC, Hefei, 230026, China

Correspondence: Shanshan Wang (shanshanwang@fudan.edu.cn) and Cheng Liu (chliu81@ustc.edu.cn)

Published:

In the abovementioned paper, the radiative transfer model SCIATRAN was used to simulate O₄ DSCDs in the UV and visible bands. The authors would like to add the following information at the beginning of the fourth paragraph in Sect. 4 and the acknowledgements.

Moreover, in order to illustrate the variations in the O₄ absorptions due to the change in aerosol loadings, we used the radiative transfer model SCIATRAN (developed by the Institute of Remote Sensing/Institute of Environmental Physics (IUP/IFE), University of Bremen, <http://www.iup.physik.uni-bremen.de/sciatran> (last access: 6 September 2019), Rozanov et al., 2005, 2014) to simulate O₄ DSCDs in the UV and visible bands under conditions with different aerosol optical properties, but under a fixed given series of observation geometry with elevation angle, solar zenith angle, and relative azimuth angle.

Acknowledgements. This research was supported by grants from the National Key Research and Development Program of China (2018YFC0213104, 2018YFC0213100, 2016YFC0203302, 2017YFC0210002), National Natural Science Foundation of China (41722501, 91544212, 51778596, 41575021), and Shanghai Pu-jiang Talent Program (17PJC015). We would like to thank CAMS and Peking University for the data of σ_{sca} and σ_{abs} measured in Gucheng and PKUERS, respectively. In addition, we would like to sincerely thank the great contribution of the SCIATRAN development team at the Institute of Remote Sensing/Institute of Environmental Physics (IUP/IFE), University of Bremen.

References

Rozanov, A., Rozanov, V., Buchwitz, M., Kokhanovsky, A., and Burrows, J. P.: SCIATRAN 2.0 – A new radiative transfer model for geophysical applications in the 175–2400 nm spectral region, *Adv. Space Res.*, 36, 1015–1019, <https://doi.org/10.1016/j.asr.2005.03.012>, 2005.

Rozanov, V., Rozanov, A., Kokhanovsky, A., and Burrows, J.: Radiative transfer through terrestrial atmosphere and ocean: Software package SCIATRAN, *J. Quant. Spectrosc. Ra.*, 133, 13–71, <https://doi.org/10.1016/j.jqsrt.2013.07.004>, 2014.