

Interactive comment on “The AOTF-based NO₂ camera” by Emmanuel Dekemper et al.

Emmanuel Dekemper et al.

emmanuel.dekemper@aeronomie.be

Received and published: 16 November 2016

Dear Dr Kern,

Thank you for drawing our attention to the paper by Cheng and Chan (2004). We were aware of a later paper by the same authors:

Cheng and Chan (2005). Acousto-optic measurements of tropospheric nitrogen dioxide column density by solar spectroscopy. *Applied Optics*, 44(26), 5536–5543.

The same concept is exploited in both papers (2004 and 2005): use of an AOTF to measure a broadband solar spectrum through the atmosphere, then apply the standard DOAS retrieval method. According to us, this is not a very clever use of an AOTF in remote sensing: a considerable amount of time is spent scanning the spectrum wavelength by wavelength to obtain what can be achieved within a second with a grating-based solution. Moreover, the imaging capability of the AOTF is not exploited whereas it is the key advantage compared to scanning systems.

Printer-friendly version

Discussion paper



We would prefer not to mention these papers because we would have to spend several sentences explaining why it is not such a good example of using AOTF technology in atmospheric remote sensing.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-237, 2016.

[Printer-friendly version](#)

[Discussion paper](#)

