

Interactive comment on “Retrieval Algorithm for the Column CO₂ Mixing Ratio from Pulsed Multi-Wavelength Lidar Measurements” by Xiaoli Sun et al.

Joel Campbell

joel.f.campbell@nasa.gov

Received and published: 31 December 2020

Regarding your reference to the work at NASA Langley (Dobler et al.), there is a more recent update to that you might want to reference also since there is a very large database of XCO₂ measurements associated with it that is part of the Act America project lead by Ken Davis. This paper also outlines the algorithms used in computing XCO₂. The paper is:

Field Evaluation of Column CO₂ Retrievals From Intensity-Modulated Continuous-Wave Differential Absorption Lidar Measurements During the ACT-America Campaign

C1

Joel F. Campbell, Bing Lin, Jeremy Dobler, Sandip Pal, Kenneth Davis, Michael D. Obland, Wayne Erxleben, Doug McGregor, Chris O'Dell, Emily Bell, Brad Weir, Tai-Fang Fan, Susan Kooi, Iouli Gordon, Abigail Corbett, Roman Kochanov

Earth and Space Science Volume7, Issue 12, December 2020
<https://doi.org/10.1029/2019EA000847>

There is also a database at:

https://daac.ornl.gov/cgi-bin/dataset_lister.pl?p=37

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2020-466, 2020.

C2