

Interactive comment on “Bias Correction of Long-Path CO₂ Observations in a Complex Urban Environment for Carbon Cycle Model Inter-Comparison and Data Assimilation” by T. Scott Zaccheo et al.

Anonymous Referee #2

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This paper describes bias correction method for long-path absorption CO₂ measurements. The subject is suitable for AMT, and the paper is well written.

Specific Comments p.11 l.4: “on-line position” -> “off-line position”

Table 1: The table heading “Average Wavelength Offset (GreenLITETM-in situ)” is not very correct expression.

It would be better to add a brief description on GreenLITETM hardware system including key words such as “DFB laser diode” and “Semiconductor optical amplifier”.

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Otherwise it is not possible to figure out the hardware system without seeing Dobler et al. 2017.

p.3, l. 24: The following description seems not correct. “the common mode terms cancel out for the IMCW approach but would be independent for the better-known pulsed method.” Common mode terms are cancel out with pulsed methods too.

The observation site names are sometimes difficult to follow. Is “CTI tower” the same as “the roof of the lower of the two Montparnasse building”? Jussieu (p.8. l. 33) should be QUA. It would be better to indicate the GreenLITE site names in Fig. 1.

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