

Interactive comment on “Atmospheric column CO₂ measurement from a new automatic ground-based sun photometer in Beijing from 2010 to 2012” by Z. Q. Li et al.

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I appreciate very much the work done by Li et al.. But both reviewers asked for a specific modification, which has not been done so far.

The DAI index is very hard to compare with the CO₂ Carbon Tracker data. The authors should create the vertical column density of CO₂ from their DAI, and compare these values to the Carbon Tracker data in one Figure. This should be done for the diurnal and the seasonal cycles, including the error bars of both observations. Furthermore, Figure 10 should be modified by showing the XCO₂ data (vertical column) from the sun

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photometer on the x-axis. This will allow to judge the quality of the new proposed sun photometer measurements.

I encourage the authors very much to do this, and since they performed spectroscopic solar absorption measurements, it should be possible.

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