

**Review on the manuscript of “Ozone and NOx chemistry in the eastern US: Evaluation of CMAQ/CB05 with Satellite (OMI) data” written by T. P. Canty et al.**

Authors suggested a framework for the eastern US simulation in order to achieve the O<sub>3</sub> criteria of the National Ambient Air Quality Standard (NAAQS), with the consideration of two independent OMI-retrieved data (KNMI and GSFC NO<sub>2</sub> columns). The revised manuscript is acceptable for the final publication in ACP with following minor corrections.

1. In Abstract (p. 4428, lines 22-23), it is not the ‘ratio of urban to rural NO<sub>2</sub> column’. It may be the ‘ratio of model to satellite NO<sub>2</sub> column’ as presented in Fig. 8.

2. In the CMAQ<sub>MGN</sub> simulation using the latest MEGAN data, the CMAQ-calculated NO<sub>2</sub> columns over the entire domain increase as shown in Fig. 7. It was also discussed in p. 4440, lines 23-25. However, authors still described the directly-opposite result (i.e., decrease in the CMAQ NO<sub>2</sub> columns over the domain) in Conclusions (p. 4445, line 12). This was not properly corrected in the revised manuscript. Again, authors have to check out this point.

3. p. 4428, line 12, ‘under estimate’ → ‘underestimate’