

Introduction

Page 4429, Lines 5-6. Cite the USEPA's Cross State Air Pollution Rule, <http://www.epa.gov/crossstaerule/>

Page 4429, Lines 15-20. This could be due to the fact that NO_x does not always control ozone. It depends which regime the region is in. For example, ozone changes in urban areas are typically VOC driven, while those in rural are NO_x driven (e.g. Tsimpidi et al., 2008; Choi et al., 2012).

Page 4430, Lines 20-24. Any specific reason why the Eastern United States? It would be nice if the authors could add in a few references to justify this.

Methodology

Page 4430, Line 25. Where is the reference web-link for NASA's Aura satellite?

Page 4430, Line 27. What is LT?

Page 4431, Lines 6-7. A few lines could explain this better to a layman reader.

Page 4431, Lines 23-24. What does this mean- that there are some assumptions going into the calculations in case of missing data?

Page 4432, Lines 20-22. References for these models?

Analysis and Results

Page 4436, Line 5. I suggest replace "bias" with "low predicted values". Technically, "low bias" indicates good agreement with in-situ measurements, which is definitely not the case here.

Page 4437, Lines 25-28. NEI was available for 1999 and 2002. Which NEI did Yu et al. use? The authors need to be clearly specific here. Did Yu et al. use one of the above mentioned versions projected to 2006? If yes, did they see the same CO/NO_y ratio of ~2?

Page 4438, Lines 1-3. Was CMAQ higher or in-situ measured higher? The previous lines indicate modeled higher, and here they indicate in-situ higher. The authors need to be consistent and state the facts clearly. Otherwise this is muddying the scientific discussion.

Page 4443, Lines 13-17. The authors should mention that their measurement comparison was similar to Anderson et al.

Conclusions

Page 4443, Line 20. Isn't this due to lower radiation? The authors should indicate that here.