

## ***Interactive comment on “Origin of springtime ozone enhancements in the lower troposphere over Beijing: in situ measurements and model analysis” by J. Huang et al.***

**Anonymous Referee #1**

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Review of Huang et al. Doi:10.5194/acpd-14-32583-2014

This paper presents observations of ozone concentrations in the lower troposphere over Beijing during April and May. Two global chemical transport models are compared with the data. The paper explains the meteorological conditions that support the observed ozone enhancements, and attribute the enhancements to ozone primarily produced in the Asian lower troposphere. From my perspective, this is a well-written paper and generally fit for publication in Atmospheric Chemistry and Physics. My comments are very minor in nature, and page numbers and line numbers refer to the printed ACPD version.

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Section 3, Page 32592, lines 4-5: Awkward sentence. Change to “Measurements were made by both platforms on four days: 1, 3, 11, and 15 May.”

Section 3, Page 32594: Lines 1-5: Please be specific n how “enhanced” is defined. Was there a threshold?

Section 4, Page 32596, Lines 1-5: Is there another meteorological scale that could be missing and is important? Is that what is implied here?

Section 5.1, Page 32598, line 8 and others: The word “suppressed” is not a good choice here. If the emissions were completely turned off in the model, as I suspect they were, then do not use the word “suppressed” throughout this paragraph. Instead say the emissions were not included.

Section 5.2, Page 32600, Lines 14 – 15: “Followed by a trend of decreasing with altitude” is awkward and should be reworded.

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Interactive comment on Atmos. Chem. Phys. Discuss., 14, 32583, 2014.

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