Interactive comment on “Photochemical production of ozone in Beijing during the 2008 Olympic Games” by C. C.-K. Chou et al.

Anonymous Referee #1

Received and published: 28 July 2011

A. Overall Quality: The paper presents an interesting case study on the photochemical production of ozone in Beijing based on measurements during the 2008 Olympic Games. The results are analyzed and discussed in a concise way. The discussion provides insight in the results observed and can provide a useful input in the scientific community and an addition on the existing literature regarding the air quality in Beijing, especially concerning measures related to the 2008 Olympic Games.

B. Specific Comments: - Some further clarifications are needed (e.g. how is OPEx exactly defined and measured, etc.). - In section 1, page 3, the sentence “Furthermore, given that the O3-precursors...chamber studies” is not clear and needs to be rephrased and further explained. - The authors should comment on the short measurement period used for the case study and the implications that this may have on the
results and the conclusions of the paper (e.g. as related to the influence from meteorology, etc.). - In section 3.2, page 6, the sentence “This hypothesis. . .of this study” is not clear and needs to be further explained. - In section 3.2, page 6, the sentence “Thus the persistent levels. . .photochemical dynamics” should be related to the meteorological data (e.g. radiation) which is important in this respect. - The discussion / conclusions sections could be further enhanced. - The last sentence of the conclusions needs to be further clarified.

C. Technical Suggestions: - The quality of some figures (such as figure 3a, b, 5, 7a, b) needs improvement, if to be printed in black and white. - The paper will benefit from some corrections to the use of the English language.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 16553, 2011.