

## ***Interactive comment on “SO<sub>2</sub> noontime peak phenomenon in the North China Plain” by W. Y. Xu et al.***

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Commented by Wei Zhou,

The authors present an interesting analysis of noontime peak SO<sub>2</sub> in the northern China plain. The authors are suggested to discuss if SO<sub>2</sub> was consumed by lower clouds via aqueous processing when SO<sub>2</sub> peaks occurred. Previously, SO<sub>2</sub> in Texas power plant plumes was rapidly lost via aqueous processing of scatters clouds, the corresponding SO<sub>2</sub> lifetime of which was 2~3 hours (Zhou et al., 2012).

Reference: W. Zhou, D. S. Cohan, R. W. Pinder, J. A. Neuman, J. S. Holloway, J. Peischl, T. B. Ryerson, J. B. Nowak, F. Flocke, and W. G. Zheng; Observation and modeling of the evolution of Texas power plant plumes, Atmospheric Chemistry and Physics, 12, C349

455-468, 2012 (<http://www.atmos-chem-phys.net/12/455/2012/acp-12-455-2012.html>)

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