

Interactive comment on “Origin and Transformation of Ambient VOCs during a Dust-to-Haze Episode in Northwest China” by Yonggang Xue et al.

Ping Gong

gongping@itpcas.ac.cn

Received and published: 23 December 2019

The current manuscript organized well. But some places may be improved in future:

- 1) Why did the authors choose the period of dust-to-haze episode to observe? How did it relate with the reaction of aerosols? Please describe the relationship between the scientific issue and the research design.
- 2) In the Results and Discussions, the basic results, such as the levels of pollutants and the ratios of compounds, were not shown the manuscript. It is strange for readers that the sections starts with the sentences like “the concentrations in Xi’an are similar

C1

with Beijing” or “the T/B ratios in this study indicated that. . .”

- 3) I don’t think it is reasonable to use HYSPLIT model in L157-186. It had discussed that the pollution come from local emission in the above sections.
- 4) The abstract and Introduction highlighted the effect of metallic oxides on the photo-chemical reactions of VOCs. But in the manuscript, this situation wasn’t discussed in details, and even no relationship figures of VOCs and metals were shown.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-980>, 2019.

C2