

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

### **Anonymous Referee #2**

Received and published: 18 January 2020

The manuscript entitled “Origin and Transformation of Ambient VOCs during a Dust-to-Haze Episode in Northwest China” discussed the characteristics of ambient VOCs in a northwestern city in China, and the transformation of VOCs during a dust-to-haze episode was explored in this study. Generally, the paper is well organized and presented, and shows the possibility of VOC transformation through heterogeneous reactions during the episode. The paper can be considered for publication after the following minor revisions are made. Some specific comments are listed below.

Line 73: Change “sampling” to “samples”

Line 82: Change “with” to “by”

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Line 139: The last sentence is not clear. The contribution of gasoline vehicular emissions on ambient VOCs should be pointed out.

Line 150: It should be “aerodynamic diameter”

Line 228: Is the difference of photochemical reactions rate with OH radical between trans-2-butene and cis-2-butene large enough to compare?

Line 278-281: The first two sentences are not necessary in conclusion part, moreover, key conclusions should be presented by supporting data.

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

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