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comment**

Interactive comment on "Long-term measurements of ground-level ozone in Windsor, Canada – Part I. temporal variations and trends" *by* Xiaohong Xu et al.

Anonymous Referee #2

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The authors investigate temporal variations and long-term (1996-2015) trend of ground-level O3 and its precursors (NOx and VOCs) at two urban sites in Windsor, Ontario, Canada. They looked into trend of ozone and total ozone (O3+NO2) in different months of year and different time of day. The analysis showed decreased O3 titration, reduced local photochemical production of O3, and increased background O3 level during the study period. The authors suggest that these factors are the reasons for the increased annual O3 concentration in the study area.

This study provides useful results for assessing and further developing O3 control measures in city of Windsor and adds to the data base on surface ozone changes in North

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[Discussion paper]

American cities. However, there is limited novelty on data analysis method and little new insight into the ozone processes. IGAC's Tropospheric Ozone Assessment Report project (http://www.igacproject.org/activities/TOAR) has analyzed the trends of surface ozone in the world and offered general discussions on its relationship with its precursors in different parts of the globe. Other previous papers have examined the trends and discussed the factors influencing the trend in individual city/location. It is unclear how the present study advances our understanding of the ozone trend and driving factors. I suggest the authors add more in-depth analysis and discussion of the data, perhaps by reducing some general descriptions of the data and incorporating findings they intend to put in part II of analysis of this dataset.

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Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2018-851, 2018.