Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2019-616-AC5, 2019 © Author(s) 2019. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Significant climate impacts of aerosol changes driven by growth in energy use and advances in emissions control technology" by Alcide Zhao et al.

## Alcide Zhao et al.

zhao.alcide@gmail.com

Received and published: 25 October 2019

Dear Editor and referees,

Many thanks for your comments that have helped improve this manuscript substanially.

While revising the manuscript, we realised that the isolation of the effects of aerosol changes in the "Best Estimate" experiment was probably biased due somehow to the experimental set-up (related to the initial condition issue). To address this issue, we have carried out a new experiment, which is now used throughout the revised manuscript (including Figures and texts). Note that, while this has resulted in differ-

C<sub>1</sub>

ent estimates of the impacts of aerosol changes in the best estimate case, it does not have any bearing on the major findings of this study on the comparison of the two different retrospective emission scenarios.

On behalf of all co-authors and sincerely,

Alcide Zhao

alcide.zhao@ed.ac.uk

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2019-616, 2019.