Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2017-787-RC3, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "A multi-model comparison of meteorological drivers of surface ozone over Europe" by Noelia Otero et al.

## **Anonymous Referee #2**

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The paper presents an analysis of a suite of chemical transport models applied to simulate ozone levels over Europe. I value very high the community effort of gathering around a common exercise and I am aware of the amount of time required to run, collect, harmonise and analyse model's results. I have to note, however, that the comments I posted for the 'quick' assessment of the paper have not been addressed:

The methodology presented is sound and entails massive amount of analysis work. Though, I fail to see the fruits of such analysis! I found the paper unbalanced in several parts, with a very long and qualitative introduction and scarcity of quantitative results. What is the main message of the paper? What the advancement? What is novel (in the results) with respect to other existing multi model comparison activities? Again, the authors conclude with speculation as to why certain models behave in some way

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rather than in another?. But where are the quantitative, supporting argument? I would invite the authors to deeply analyse existing results from the literature (e.g. Vautard et al., 2012 Brunner et al, 2015; Makar et al. 2015, among many others) and reconsider their contribution in light of the novelty it might bring.'

After re-reading the paper I still fail to see what is the key novelty and scientific advancement brought by this paper. All findings (sensitivity to season, regions, etc..) are documented by dozens of papers. The authors apply a, perhaps, different methodology that converges, nonetheless, at conclusions similar to those already known since several years. In my view the paper, in its current shape, is too qualitative and lacks a clear message that stands out and justifies a publication. In light of the poorly exposed scientific significance I advise the editor to ask the authors to significantly review the paper before it can be considered suitable for publication.

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2017-787, 2018.