

## ***Interactive comment on “Modelling organic aerosol over Europe in summer conditions with the VBS-GECKO parameterization: sensitivity to secondary organic compound properties and IVOC emissions” by Victor Lannuque et al.***

**Anonymous Referee #1**

Received and published: 29 March 2019

The manuscript presents a detailed analysis of the performances of VBS-GECKO SOA model implemented in the chemical transport model CHIMERE. The study is carefully done: the methodology and the results are well described; the simulated concentrations of organic carbon are compared to the observations and to other simulations in a consistent way. The period investigated is relevant for the purpose of the study and the input data already tested in a previous modelling exercise.

The results of the study are definitely relevant for the scientific community but still it will be interesting to discuss what happen when model configuration considers simul-

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taneous the changes of two or more parametrization properties and also combinations between the IVOC emissions from vehicle exhausts and the parametrization properties.

Specific comments: Pg. 6, Line 19 I suggest to rephrase “ECMWF in the EURODELTA-III project was shown to be one of the most representative models over “Europe.” in a meaningful way since ECMWF is not a model.

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Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2018-1244>, 2019.

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