Interactive comment on “The SOA/VOC/NOx system: an explicit model of secondary organic aerosol formation” by M. Camredon et al.

Anonymous Referee #2

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General comments

The paper describes a modelling study of the formation of secondary organic aerosol (SOA) from 1-octene. An explicit gas-phase oxidation scheme is coupled to a thermodynamic condensation module. The model is used to help understand the production of SOA during multiple oxidation steps of the primary hydrocarbon. The paper describes the system under a range of NOx and VOC environments.

The methods and assumptions made in the analysis appear to be valid and are clearly described. The results are presented in a clear and concise manner. I can find no problems with the conclusions drawn by the authors.

Current understanding of SOA formation is very limited and this paper makes a useful
contribution. This paper will be of interest to the community and I recommend publication in ACP.

Specific Comments:

Page 11234, Line 10. Should this be $Y^{max}$.