

Interactive comment on “Modeling lightning-NO_x chemistry at sub-grid scale in a global chemical transport model” by A. Gressent et al.

Anonymous Referee #2

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I agree with the other 2 reviewers that the paper presents an important study and is worth publishing after some revisions.

Key points that I would like to see addressed are:

- Lightning emissions are of NO, not NO_x. It would be helpful if the paper discussed this from the beginning and not waiting until Section 4 to clarify this.
- p. 34101: the Ox family is O + O₃ + NO₂ (not O₂!)
- The English needs to be corrected throughout the paper - there are numerous mismatches of plural-singular, and extraneous or missing articles (the, a). Also, for example, on p. 34106, 'allows to form' should be 'allowing formation of'.

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Interactive comment on Atmos. Chem. Phys. Discuss., 15, 34091, 2015.

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