Introduction

Provides broad context of the study, special problem, and research gap. Objective of the study is clearly stated. Paragraph describing EIs (page 2, lines 41-50) would profit from Reference(s) in the first sentence.

Materials and Methods

Divided into sub-sections with informative titles. The data and model are mostly clearly described with a few exceptions.

Page 4, lines 76-80. Add a few lines about the box model, especially what distinguishes it from 3D models mentioned on line 81.

Page 5, section 2.3. I would start this section with a description of the model's initial conditions and parametrization (e.g., lines 101-106).

Results and Discussion

Contains two sections: O3 time series and Ox production budgets; Alkenes and Ox Production. Because the main objective of this study is to test sensitivity of the modeled ozone to VOCs emission inventories, I expected to find word "sensitivity" in one of the sub-titles as well as in the discussion of results. Please revise this section keeping your objective in mind! Also try to quantify the degree of sensitivity of model output to EIs.

In addition to the discussion of similarities and differences with other studies, it would be good if you point out directly what you found new in this study.

Discussion of uncertainties in input data and model results should be added in the next version of this paper.

Conclusions

The first sentence should say more explicitly how sensitive modeled ozone to emission inventory speciation. Is it very sensitive or slightly sensitive?

Abstract

Has good structure. After reading it I would be still uncertain if it is worthwhile to invest into new emission inventories or not. Is the maximum difference of 17 ppb large or not?

Style

Do not start paragraphs with statements like this: "The emissions … compared in this study are listed in Table XX" or "The time series of ozone … are shown in Figure XX".

It is better to start a paragraph with a topic sentence or a main message of the figure/ table you describe and then refer to a table or figure in brackets. For instance, "Here the solvent sector EI were chosen to represent a range of case studies, …. (Table XX)."