We would like to thank the reviewer and editor for their comments.

Response to 3rd Referee report on revised manuscript of

The authors have addressed some of the two reviewer's concerns in the revised manuscript, some only in the reply to reviewers or not at all, e.g. that section 2.3 in the current paper is nearly identical to section 2.5. in Gan et al. 2014 and could be referred to instead of duplicated.

We have shortened this section and added a reference to Gan et al. (2014a). We have not completely eliminated this section as we believe that at least a brief description of the methodology should be included in this manuscript to allow it to stand on its own.

The paper still lacks clarity in places, e.g. what aerosol species are included, and is overly confident in a number of statements, e.g. observed and modeled trends are considered to agree 'well' if they have the same sign.

As detailed in our responses to the reviewer's comments during the open discussion period, the WRF-CMAQ simulations considered the full suite of inorganic and organic aerosol species. This information has now been explicitly added to Section 2.2

The paper could benefit from language editing (e.g. l.295/296) and more precise language in several places (e.g. l.377, 'Comparison of modeled... *shows*...'. What is stated here is not shown in the paper but it is rather a list of hypothesis.

Thank you for pointing this out. l.295/296 is fixed and l.377 is rephrased.

The authors may consider to carefully re-read their manuscript and take advantage of the fact that there are native speakers among the authors.

Thank you for the suggestions.

Response to editor's comment.

Comments to the Author:
Dear authors,
The manuscript is now nearly publishable. Please make sure that you remove the close overlap with Gan et al. (ACP 2014) by either re-formulating (the reviewer in particular points to section 2.3) or omitting and referencing.

We have shortened this section and added a reference to Gan et al. (2014a). We have not completely eliminated this section as we believe that at least a brief description of the methodology should be included in this manuscript to allow it to stand on its own.