The authors want to kindly thank all reviewers for their very fruitful comments and thoughts. We include below a point by point response to their suggestions.

Answers to the first referee

Specific comments

- 1. Introduction Page 28081, Line 2 Suggest adding have before generally *done*
- 2. Page 28082, Line 1 Suggest adding experiments after chamber done
- 3. Page 28082, Lines 13, 15, and 18 The chemical formulas used have not been defined *All formulas are now defined in the text*.
- 4. Acknowledgements Page 28092, Line 4 Suggest changing author to authors *done*
- 5. References Page 28092, Line 11 Accent marks are missing from Prevot, Page 28093, Line 20 Accent marks are missing from Prevot, Page 28093 done
- 6. Line 26 Believe levels Of O-3 should be levels of O3 done
- 7. Page 28093, Line 27 Believe NO chi should be NOx done
- 8. Page 28094, Line 10 Accent marks are missing from Prevot, Page 28094, Line 25 Accent marks are missing from Prevot, Page 28095, Line 18 Accent marks are missing from Prevot, Page 28095, Line 32 Accent marks are missing from Prevot, Page 28096, Line 16 Accent marks are missing from Prevot, Page 28097, Line 26 Accent marks are missing from Prevot done
- 9. Figure 2 -Believe f43 on the y-axis of plot c should be in italics, Figure 4 -Believe f44 and f43 on the y- and x-axes should be in italics done
- 10. Figure 5 -It looks like there is something overlapping with the units on the y-axis of plot

corrected

11. Supplementary Material Winter 2011 Page 1, Line 1 – Suggest removing the the before Winter

done

12. Supplementary Material Winter 2011 Page 1, Line 3 – Suggest changing peak a to peak at

done

- 13. Supplementary Material Winter 2011 Page 1, Figure S1 caption In first line of caption suggest changing for the winter to during winter done
- 14. Supplementary Material Winter 2011 Page 2, Figure S2 caption Suggest changing for the winter to during winter done

15. Supplementary Material Summer 2011 Page 3, Line 1 – Suggest removing the the before summer

done

- 16. Supplementary Material Summer 2011 Page 3, Figure S4 caption In first line of caption suggest changing over the winter to over summer done
- 17. Supplementary Material Summer 2011 Page 4, Figure S5 caption In first line of caption suggest removing the the before summer done
- 18. Supplementary Material Summer 2011 Page 4, Figure S6 The units for EC should be ug C/m3

done