Since R and number of data points have been provided, two-tailed probabilities, P_2, can also be shown in many figures and in the text. This would better demonstrate the high values of many R. I have done my best to suggest more appropriate wording that in most cases reduces the text. After these changes this manuscript should be ready to proceed to publication.

Page 1
L23. Replace good with useful or effective or viable.
L24. Delete 2nd the.
L25. Concentration plural.
L26. Move 10-40 nm in front of size. Delete of. Insert comma 2019 after 6.
L27. Move NPF in front of frequency. Delete of. Delete occurrence. Insert period after time. Delete also.
L28. Delete demonstrated the. Change to meet to met. Change in to by. Change the to observed.
L29. Delete relative to observations. Change replicating to replicated.
L30-32. Move of July 1-2 in front of featured. Remove ly from newly. Delete formed. Insert the after with. Delete ity. Remove being. Move activation after (CCN). Remove to.
L32-33. Move of July 3 in front of characterized. Remove by.
L33-34. Move of July 6 right after Case 3. Change where to showed. Remove ly from newly. Remove formed.
L34. Remove was observed. Remove tended to. Add ed to overpredict. Delete the.
L34-35. Move daytime in front of condensation.
L35. Remove during twice. Delete the. Move nighttime in front of formation. End the sentence after NO_3. Insert These before resulted. Remove an.
L36. Overestimation plural. Remove parameter. Remove had the.
L37. Delete to. Change meet to met. Change in to for. Delete 2nd the. Supersaturation should be one word (in spit of what WORD claims). Insert NPF before days.
Page 2
L1. Delete with NPF. Delete effect caused. Change by to of. Remove 's.
L2. Delete -sized.
L3. Delete have. Remove ly. Change initiates at to begins in.
L4. Change fraction to parts. Remove ly.
L5. Remove ly. Delete formed. Delete play a. Change dominant to dominate. Delete role. Move organics dominate in front growth.
L5-6. Move in the free troposphere in front of the primary.
L6. Change shift to to are.
L10. Delete come together to. Delete a. Nucleus plural. Change which is then to that can.
L11. Delete followed by the. Change growth to grow. Delete of these newly nucleated particles. Delete process is known as.
L12. Delete and.
L16. Move CCN in front of budget. Remove of.
L17. Delete newly formed. Delete resulting.
L17-18. Move NPF in front of particles.
L18. Delete from. Remove comma. Insert to then after days. Remove ing from make. Contribution plural.
L19. Delete concentrations.

L22. Insert Although before The. Add n to Asia. Delete in. Move plains after Asian. Change but to it still.

L25. Delete conditions.

L26. Delete It is worth noting that.

L27. Delete there has been a. Insert The before significant. Insert NCP before air. Pollutant plural. Delete emissions. Delete in the NPC.

L29. Change all words before CCN to could affect. Change as suggested to production.
        Air pollution decreases could go either way concerning CCN so do not lock yourself in to a decrease.

L30. Remove by previous studies. Delete after considering the. Insert This before situation.

L31. Change outlined above to makes. Remove is. Delete an. Change updated to new. Study plural. Change quantifies to quantify. Delete the diverse.

L32. Delete contributions of. Change to to for. Add th to grow. Insert of after growth. Remove ly from newly. Delete formed. Change modify to modification. Then insert of.

L32-33. Remove ing from becoming. Delete to. Insert that may before become.

L33. Remove simultaneously.

L37. Delete using these particle.

L38. Delete sizers. Delete The. Delete to.

Page 3

L3. Change with to in.

L5. Remove to.

L6. Delete in the. Add ly to horizontal. Delete direction.

L8. Remove our. Delete the. Move NPF in front of spatial. Delete of. move regional scale right after NPF. Inhomogeneity plural. Delete of. delete event at a.

L13. Define PNC.

L16. Insert model after (APM).

L21. Change particularly to especially. Change in to for. Change growing to growth. Remove ly from newly. Insert of before new. Delete formed.

L22. Delete 1st the.

L23. Insert to after particles. Remove ing from growing. Delete the required. Size plural and move after CCN. Delete for. Delete formation.

L28. Remove ly from newly. Delete formed.

L29. Delete size. Delete loadings.

L30. Remove occurrence of. Delete events.

L32. Delete last the.

L35. Change for to to. change the to they. Delete particles.

Last line. Change situation to located. Remove an altitude of. Insert elevation after m.

Page 4.

L1. Left parenthesis before above. Comma after level. Remove left parenthesis.

L2. Change 2nd The to This.

L3. Delete forest. Insert comma which at end of line.

L 4. Delete and. Delete emission.

L5. Change in to to. Delete direction, about. Delete away.

L6. Change in to to. Delete direction.

L7. Delete 1st The. Change in to from. Delete direction.

L8. Change in to from. Change zones to directions.

L14. Change connected to obtained. Remove last the.
L15. Change in to of.
L17. Delete during the period.
L19. Change period in to comma. Comma after Thus. Insert the before SMPS.
L20. Change observed to determined.
L29. Delete the occurrence of. Change during the period to between. Change to to and.
L30. Remove ranging.
L32. Delete 2nd the.
L33. Delete the year.
L35. Delete in the modeling.
Page 5
L1. Forest plural. Delete stations.
L3. Delete has.
L10. Change in to for. Change new particle formation to NPF. Delete events.
L11. Change between to for.
L19. Move 10-40 nm in front of range. Delete of.
L20. Delete 2nd the.
L27. Change on to of.
L28. Change The to This. Change correlation coefficient to R. Change among the upper to high in.
L29. Delete values of. Insert range after 7.
L30. Delete performance when the. Change reproduced to reproduction. Change the to of.
L31. Simulation plural. Delete performance.
L32. Change last the to its.
L33. Delete simulation. Change in to near. Change coastal to coast. Delete atmosphere.
L36. Change in to for. Change in to of. delete the.
L37. Delete last the.
L37-38. Move organic (singular) in front of mass.
L38. Delete of. Change in to within.
L39. Insert the before low. Change in to within.
Page 6
L1. Delete although the.
L2. Delete the. Move sometimes in front of poorly. Change meteorological to meteorology. Delete parameters for.
L3. Change and to or. Remove ing.
L4. Period after parentheses. Change it should be noted that the to However,.
L5. Delete the. Delete partially.
L9. Change in to within. Move June 29 to July 6 in front of observations. Delete from.
L12. Benchmark plural. Change in to for.
L13. Before and insert $P2 = 10^{-8}$ as low as calculable.
L18. Delete the.
L20. Delete the modeled.
L22. Change on to of.
L23. Delete The. Insert the after in. Delete a. Change overestimate to overestimations.
L25. Delete The. Delete demonstrated the. Delete to. Change meet to met.
L26. Before MFB insert $P2 = 10^{-8}$.

L27. Before MFB insert $P2 = 10^{-8}$.

L28. Delete performed to. Change meet to met.

L29. Insert $P2 = 10^{-8}$ after 0.58.

L30. Delete value. Change as well as to with.

L30-31. Move in suburban Beijing in front of an.

L32. Delete the. Change to to that. Remove one e from meet twice. Benchmark plural. Change in to for. Insert of after variables. Remove ed. Move interest after of.

L37. Insert and after 30.

Page 7

L4. Change over to above.

L7. Change on to of.

L17. Benchmark plural. Change to to for. Move PNC in front of plumes. Delete of. Change at to on the. Change nighttime to nights. Change on to of.

L21. Insert the after in. Remove ing.

L22. Change on to of. Insert the before vertical.

L23. Delete direction.

L25. Before parentheses insert $R = 0.38$, $P2 = 2.38 \times 10^{-7}$.

L26. Insert $R = 0.50$, $P2 = 10^{-8}$.

L27. Change in to for. Delete 2nd the. Insert $R = 0.51$, $P2 = 10^{-8}$.

L28. Delete 1st the.

L31. Move model in front of predictions (plural). Delete by the.

Page 8

L1. Change in to of. Remove comma.

L4. Change in to within.

L7. Remove ing.

L10. Remove to.

L14. Remove to.

L21. Insert to- before particle.

L22. Delete has.

L24. Too many left parentheses.

L29. Delete the.

L39. Simulation plural. Observation plural. Delete the. Change under to for.

Page 9

L4. Change in to for.

L10. Insert the before vertical.

L12. Change to to that. Remove e from meet.

L15. Change over to above.

L25. Respectively to what?

L38. Delete a.

Page 10.

L4. Explain residual layer.

L12. Remove al.

L15 Point plural. Change comma to and.

L19. Change on to at.

L21. Delete away. Remove al from observational.

L25. Remove al from observational. Period after afternoon.

L28. Remove ly formed. Delete had. Change grown to grew. Change to to too. Delete rest of line.
L29. Insert large to before observe. Remove able.
L30, 31, 35 and 39. Remove al from observational.
L38. How could preexisting particles replace?
L39. Since then does not make sense.
Page 11.
L5. Insert the after on. Delete the.
L8. Change the to a. Remove al from observational.
L10. Remove al from observational. Change it to them. Change into to to. delete the.
L11. Level plural. Concentration plural.
L12. Change into the to to. Change level to concentrations. Remove ing from modeling.
L23. Change observational to observed.
L27. Delete budget.
L32. Remove al.
L35. Delete 3rd the.
L38. Delete the.
Page 28
L5. Arrow plural.
L6 & L8. Change over to above.

Figure 2. Now that you provide N two-tailed probabilities, P2, can be calculated and presented. P2 is 0.59 for b, 10^{-8} for c and 0.50 for d. More decimal places for R would allow more precise P2.
Figure 3. Assuming N = 15, P2 is 0.0044.
Figure 5. Assuming N = 176, P2 is 2.38×10^{-7} for a, 10^{-8} for b, 4.77×10^{-7} for c and 10^{-8} for d.
Figure 6. Define POA and SOA.
Figure 8. L5. Arrow plural. L6 & 8. Change over to above.

Supplemental
 Page 1
L31. Remove al from observational.
L34. Delete 2nd the.
L35. Remove al from observational. Delete the.
Page 2
L2 and 4. . Remove al from observational.

Figure S1. Assuming N = 176, all P2 are 10^{-8} except parentheses of f is 2.38×10^{-7}.
Figure S2 Assuming N is he sum of Fig. 2, 479 these P2 are 10^{-8}.
Figure S5. Rearrange the pies to that the two for each date are next to each other horizontally so that there are 3 rows of 2 pies instead of 2 rows of 3 pies.
Figure S6. Assuming all N are 23? P2 for a is 0.0013, for b 0.21, for c 0.0025, for d 0.015, for e 0.29 for f 0.0078.