

General comments

The manuscript is generally well-written and straightforward to follow. It documents greater details of OA composition in “a region of scarce data availability”, so would be of value to extend available literature on BB OA in this region. After some specific comments and many technical corrections are made, the manuscript would be suitable for publication. In particular, there are lots of technical errors with figure captions and style. A major though technical suggestion would be to revise clustergram color scheme and its color scheme referenced in subsequent figures so it is red-green color blind accessible.

Specific comments

1. Clustering analysis color scheme used throughout figures: The use of green and red for 2/3 clusters throughout the figures without marker type changes would be confusing for any reader with red-green color blindness. Would recommend revising the selected color scheme throughout figures and text and/or implement line type and marker type changes in figures to aid.
2. Line 270: Rephrase the part following “...volatilization,” as I think authors are trying to say that absorption leads to these compounds becoming trapped into the particle phase rather than emitted via absorption
3. Line 341: rephrase to “...nitrophenols can rapidly form from monoaromatics photooxidation or their reactions with nitrate radicals.”
4. Line 342: rephrase sentence for clarity
5. Line 344: why do the authors suggest nighttime transport here given that they state 4-NC formation is fast at night? Is there something about the back trajectories that support formation of 4-NC away from site and transported at nighttime vs daytime to sight? Seems too speculative.
6. Introduction and Conclusions sections: The manuscript could provide greater appreciation to readership by additional text providing recommendations on what further data/measurements are needed in this area going forward and what larger scale atmospheric problems are to be addressed here. How does BB at PDI differ from other areas impacted by high BB influence referenced throughout (tropical forests, etc).

Technical corrections

1. Line 51: consider rephrasing sentence; unclear
2. Line 79: change quotation to comma in population number
3. Line 180: rephrase (1) insert “than” after “less” and (2) delete “of”
4. Line 247: delete “and” before “... the most abundant...”
5. Line 273: delete “were” before “...ranged from...”
6. Line 297: insert “do” after “nor”
7. Line 322: correct spelling of “concertation”
8. Line 333: change “are” to “of” or rephrase sentence
9. Line 347: fix figure reference to figure 6
10. Line 445: insert “respectively,” following the concentrations of OC and EC

11. Figure 2 not referenced in main text
12. Figure 3a right axis units should be ng/m³
13. Figure 3b) caption: language in caption regarding ratio of char-EC to soot-EC reversed from figure including description of dashed lines
14. Figure 5 caption: says left axes in units of ug/m³, but some axes show ng/m³ levels
15. Figure 7 caption: fix cross reference to section on clustergram analysis; not Section 3.3