

## Requested revisions to ACP-2016-397

A number of the new sections that you added either have mistaken grammar, or are not clear. So I'm asking you to fix those things before the paper can be accepted.

The pages and line number refer to the corrected manuscript.

Page 1, Lines 18-20, I can't parse this phrase to figure out what the numbers refer to. Please split this up to be explicit.

Page 2, Line 13. 'indicate' should be 'indicates'

Page 2, Line 14. Should be 'the atmospheric environment'.

Page 4, Line 3. 'On recently study', should be 'One recent study'

Page 4, Line 8. 'but the observation on... is limited' should be 'but the observations of... are limited'

Page 4 Lines 10-11. 'and to be important' should be and are known to be important'

Page 5, Line 10. 'branches'

Page 5, Line 21. What does  $R_o = 0.77\%$  mean?

Page 5, Line 22. 'of' should be 'on'

Page 6, Line 2. 'comprised' should be 'composed'

Page 6, Line 12. 'firstly' should be 'first'

Page 6, Line 14. 'sets filter' should be 'sets of filters'

Page 6, Line 16. 'stabled' should be 'stabilized'

Page 7, Line 22. 'differences were observed' should be 'differences that were observed'

Page 9, Line 18. 'be' should be 'been'

Page 14, Line 16. 'dropped' should be 'fell'

Page 15, Line 5. Eliminate the word 'of'

Page 16, Line 24. 'characters' should be 'characteristics'

Page 18, Line 18. Eliminate the word 'are'

Page 20, Line 6. Instead of 'present less' consider using 'contain fewer'

Page 21, Line 17. 'deeply' should be 'deep'

Page 22, Lines 19-20. The first part of the sentence doesn't make sense. Are you trying to say that both BB and Coal-derived HULIS exhibit many sharp signals between 6.5-8.5 ppm?

Page 23, Lines 23-24. I can't tell what you mean by this sentence.

Page 27, Line 12. Instead of 'were characterized as contain' it would be better to say 'contained'

Page 28, Lines 15-16. It is not clear what you mean when you say 'was firstly' or 'were firstly'.

Are you saying this is the first time these features have been observed? If so, you will need to say it differently.