We thank an anonymous referee for his/her fruitful suggestions. We have revised our paper entitled "Annual variations of carbonaceous $PM_{2.5}$ in Malaysia: influence by Indonesian peatland fires" according to the comments of the reviewer 3.

Our responses to the reviewer's reports are as follows:

1) Calculation of CPI values: why not use the more commonly used equation as suggested by Bray and Evans (1961)? Denominator should include both -1 and +1 even C-number.

Based on the equation suggested by Bray and Evans (1961), we recalculated the CPI values shown in this manuscript. Then, we revised our manuscript as follows:

- ♦ We replaced "e.g., Chen et al., 2014; He et al., 2010" (Page 22430, Line 7) by "e.g., Bray and Evans, 1961; Chen et al., 2014; He et al., 2010; Yamamoto et al., 2013".
- ♦ We added the reference "Bray, E. E. and Evans, E. D.: Distribution of *n*-paraffins as a clue to recognition of source beds, Geochim. Cosmochim. Acta, 22, 2–15, 1961." before the reference "Chen, Y., Cao, J., Zhao, J., Xu, H., Arimoto, R., Wang, G., Han, Y., Shen, Z., and Li, G.: *n*-Alkanes and polycyclic aromatic hydrocarbons in total suspended particulates from the southeastern Tibetan Plateau: concentrations, seasonal variations, and sources, Sci. Total Environ., 470–471, 9–18, 2014." (Page 22434, Lines 25 – Page 22435, Line 2) in this manuscript.
- We added the reference "Yamamoto, S., Kawamura, K., Seki, O., Kariya, T., and Lee, M.: Influence of aerosol source regions and transport pathway on δD of terrestrial biomarkers in atmospheric aerosols from the East China Sea, Geochim. Cosmochim. Acta, 106, 164–176, 2013." before the reference "Yang, L., Nguyen, D. M., Jia, S., Reid, J. S., and Yu, L. E.: Impacts of biomass burning smoke on the distributions and concentrations of C₂–C₅ dicarboxylic acids and dicarboxylates in a tropical urban environment, Atmos. Environ., 78, 211–218, 2013." (Page 22438 Lines 31–33) in this manuscript.
- ♦ We removed "The CPI is defined as the sum of the concentrations... (Chen et al., 2014; He et al., 2010)." (Page 22430, Lines 7–11).

- ♦ We replaced "Here, the CPI values are calculated by the following equation" (Page 22430, Lines 11–12) by "The CPI values are calculated by the following equation based on the suggestion by Bray and Evans (1961)".
- \diamond We revised the equation (2) (Page 22430, Line 13) as follows.

$$CPI = 0.5 \times \left(\frac{\mathcal{C}_{25} + \mathcal{C}_{27} + \mathcal{C}_{29} + \mathcal{C}_{31}}{\mathcal{C}_{26} + \mathcal{C}_{28} + \mathcal{C}_{30} + \mathcal{C}_{32}} + \frac{\mathcal{C}_{25} + \mathcal{C}_{27} + \mathcal{C}_{29} + \mathcal{C}_{31}}{\mathcal{C}_{24} + \mathcal{C}_{26} + \mathcal{C}_{28} + \mathcal{C}_{30}}\right)$$

- ♦ We added the sentence "The CPI values are generally high (CPI > 5) when there is no serious input from fossil fuel hydrocarbons (CPI = 1) (Yamamoto et al., 2013, and references therein)." after the equation 2 (Page 22430, Line 13).
- ♦ We replaced " 1.2 ± 0.15 and 0.96 ± 0.12 " (Page 22430, Lines 14–15) by " 1.3 ± 0.12 and 1.0 ± 0.14 " due to the change of equation (2).
- ♦ We replaced " 1.4 ± 0.13 " (Page 22430, Line 17) by " 1.6 ± 0.13 ".

2) C27 has been suggested as a possible indicator of IPF; Cmax at odd carbon number in the region of C25-33 is generally accepted as plant wax origin but can it be so source specific? Some study has shown that Cmax can change with burning.

- ♦ We suggested C₂₇ as an indicator of IPF based on [1] the *n*-alkane source profile of IPF reported by Fujii et al. (2015a) and [2] no significant input from <u>higher plant wax origin (CPI > 5 (Yamamoto and Kawamura,</u> <u>Geochemical Journal, 44, 419–430, 2010)</u>) because CPI is less than 5 in this study.
- 3) Cmax at 26 accounts about 75% during NE monsoon the authors suggested that C22-26 is indicative of petrogenic sources; Cmax at 26 seems a little higher than the usual C24? Factor A2 in table 2a showed dominance of C22-24 not C26? Factor S3 even though showed higher value for C26, but relative to C22-24, much lower. Please clarify.
 - ♦ We replaced "75%" (Page 22429, Line 28) by "89%".
 - ☆ In this manuscript, we regard Factors A2 and S3 in Table 2 as petrogenic sources because C₂₂₋₂₄ are heavily loaded. Although C₂₂₋₂₆ are heavily loaded

for Factor S3, C_{25} and C_{26} are not heavily loaded for Factor A2. We consider it is because C_{25} and C_{26} for PJ_A data are strongly influenced by IPF source (Factor A1) and contribution of those in Factor A2 is weakened. In contrast, there is no influence of IPF source for PJ_S data because PJ_S data don't include the data for IPF samples.

[Others]

- 4) We replaced "in review" (Page 22435, Line 32) by "accepted".
- 5) We replaced "in review" (Page 22436, Line 3) by "accepted".