

Additional minor comments:

- Line 121 – Instead of “envisaged emissions intensity of each combination process” state “desired PM<sub>2.5</sub> concentration in the dilution system” that way the reader can understand what criteria was used and present the target concentration as well. The sampling concentration is an important factor in the partitioning of semivolatile species, which may be contributing to BrC absorption that was collected on the filter. There is semi-volatile BrC – see Xie et al. 2020 <https://doi.org/10.5194/acp-20-14077-2020> - which may end up being collected on the filter depending upon the sampling concentrations.
- Line 168 – 171 – The authors note that their reference material CarB has an AAE of 0.91 and HASS has an AAE of 1.86. It is problematic that the HASS reference material has an AAE that is far lower than the BrC values listed in table S3. The authors need to discuss the implication of using a reference material with a much lower AAE than other BrC sources. The authors should also report the MAE for each of the reference materials to facilitate comparisons with other approaches to quantify BrC mass.
- Lines 200 – 220 – The authors should present the BrC EFs from Shen et al. 2013, that was referenced on line 194-197.
- Line 289 – The authors should include a reference for the source of the funeral pyre emissions estimate.
- Figure 4 – How can you state that the absorption of the samples was above the limit of detection at wavelengths in the 750 – 850 nm range when absorption for the reference material was only quantified at 650 nm? For combustion generated PM the absorption generally decreases as the wavelength increases so being above the limit of detection at 650 nm does not imply that the measurement is above the limit of detection in the range of 750 – 850 nm. Also, there should be error bars on this figure since this is representing multiple samples.
- Equation 2 and Figure 5 – It should be noted that this equation only applies to a range of AAEs, since AAE's larger than their max value will result in fractions greater than 1.