

Interactive comment on “Chemical apportionment of southern African aerosol mass and optical depth” by B. I. Magi

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Responses to Referees

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I thank the Anonymous Referees for their constructive suggestions and corrections, as well as the time they put into reviewing my paper. I responded to the comments by the two Referees as separate supplements. One notable change is that I shifted my

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manuscript to passive voice and more or less eliminated the use of the collective “we”. I corrected and changed many statements to improve clarity. I added some further discussions about the impacts of my correction to filter mass concentrations, as well as choices about some of the key assumptions. No scientific conclusions have changed.

In addition to comments by the Referees, I corrected three minor errors in the originally submitted manuscript. The first was a minor correction to the median and IQR values of E2003 listed in Table 2 – they should have been the same as those listed in Table 4, but were not due to a minor miscalculation. Second, I deleted two filter locations from the map in Figure 1 over Namibia (they were not used in the study) and added the filter locations for samples described by Eatough et al. (2003), which I unintentionally neglected to do in the submitted manuscript. Third, the r_2 value in Figure 3 was actually r . I corrected Figure 3 to include r_2 , and updated the text at the end of Section 4.1 to reflect the changes as well.

Finally, I added references to Sinha et al. (2003b) to facilitate the discussion of the impacts of my correction to filters from SAFARI-2000. I also added references to Bohren and Huffman, Bond et al. (2006), and Matzler (2002) as requested by Tami Bond for people who use the Mie code developed for Matlab. I removed the acknowledgement as a result of adding the references.

Sincerely,

Brian Magi

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