Interactive comment on “Size distributions of dicarboxylic acids, ketocarboxylic acids, α-dicarbonyls and fatty acids in atmospheric aerosols from Tanzania, East Africa during wet and dry seasons” by S. L. Mkoma and K. Kawamura

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Reviewer #3 (Comments to Author):

The authors greatly appreciate the reviewer’s comments that improved the quality of our manuscript. We made changes and error corrected according to the suggestions. Please find our replies preceded by “Reply.” We also indicate the actions that were taken in the revised version of the manuscript.

This is a well-written manuscript with no obvious scientific flaws. The only negative issue I can pinpoint is the originality of the work: the second author has published several papers using an approach that is very similar to the one applied here.

Reply: We insist that the originality of the work is as follows: (1) there have been no extensive studies that have conducted on tropical organic aerosols in Africa, (2) the study on diacids in aerosols has been conducted for the first time in Tanzania.

On the other hand, the obtained measurements represent an environment from which very few prior atmospheric observations have been reported. This, in my opinion, favors publishing this manuscript. I have a few minor issues to be considered before acceptance for publication.

First, the term “size distribution” should be used in neither the title of the paper nor the title of section 3.1. Measuring aerosol concentrations in only two size fractions does not justify calling them size distributions.

Reply: We agree with the reviewer’s comment. We replace the term “Size distribution” with “Molecular composition” in the title of the paper and headline of sections 3.1.

Second, the conclusion section is mainly a summary of the main findings of the paper. The authors should work a bit toward pointing out the readers what is really new in the obtained results and what atmospheric implications this would have.

Reply: The conclusion section has been extensively modified with a headline of “Summary and conclusions. Please see the summary and conclusion section in the revised MS.

Third, there are a few places with minor grammatical problems:

Reply: Based on the comments, the few grammatical problems have been corrected in the revised manuscript. P 25649, line 15: . . .and fossil fuel combustion. P 25665, lines 24-25: . . .wet and dry season. P 25668, line 14: . . .a significant.
P 25670, line 14: Those ratios to WSOC (this is a strange way of expressing this issue).

Reply: We changed this term (Those ratios to WSOC) to “Their contribution to WSOC” in the revised manuscript.

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 25657, 2012.