

***Interactive comment on “AIRUSE-LIFE+:  
a harmonized PM speciation and source  
apportionment in 5 Southern European cities” by  
F. Amato et al.***

**Anonymous Referee #1**

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The paper of Amato et al. presents a comparison between 5 cities in the Southern Europe for a full year. This comparison involves PM<sub>2.5</sub> and PM<sub>10</sub> filter based measurements and source apportionment techniques. The findings are important for the aerosol community and the topic is relevant to the ACP. I recommend publishing of this paper, however after some improvements:

(1) The introduction and especially the conclusion part is too long (almost 2.5 pages), which makes it very difficult for the reader to remember most of the information. I suggest you reduce them highlighting only the most important findings, so that the reader still finds it interesting.

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(2) I recommend adding headlines between the different topics in the section “3.2.8 Source apportionment results” so the reader would be easily guided.

(3) The figures 3, 4 and 5 are quite busy and difficult to be read. A lot of information is given in a rather chaotic way. For example in Figure 3 you could make the y axis linear (instead of logarithmic) and ignore values lower than 0.01 (you could give the whole information in the supplement). The size fonts are very small and are difficult to be read. The graphs should be presented in such a way that could be easily read.

More specific comments:

1- Please clarify whether or not the filter analysis from these 5 cities was performed by one or more laboratories (i.e. the same or different instrumentation).

2- Page 8, line 21: Please provide reference.

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Interactive comment on Atmos. Chem. Phys. Discuss., 15, 23989, 2015.

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