

## ***Interactive comment on “Bias caused by water adsorption in hourly PM measurements” by Gyula Kiss et al.***

### **Anonymous Referee #3**

Received and published: 31 March 2017

This manuscript presents results from valuable experiments on the adsorption of water by Beta attenuation monitors. The results are particularly of importance for research groups, who perform measurements with a time resolution of one hour or so. However, as indicated below, I have several (mostly minor) comments, so that some revision is needed before this manuscript can be published in AMT.

Specific comments:

1. Lines 59-61: A literature reference would be welcome for the statement in this sentence.
2. Line 141 and further within the manuscript: The term "filter mass" is confusing; it clearly does not denote the total filter mass, but some type of "apparent net" mass.

C1

3. Technical and other (mostly minor) corrections:

- Line 7: Replace "PM" by "PM mass".
- Line 10: Replace "retaining significant" by "retaining a significant".
- Line 26: Replace "2013.)" by "2013).".
- Line 27: Replace "of mass" by "of the mass".
- Line 35: Replace "economy" by "the economy" and replace "efforts PM10" by "efforts the PM10 mass".
- Line 36: Replace "Environment, European Environment Agency, Bigi" by "Environment; European Environment Agency; Bigi".
- Line 37: Replace "as PM10" by "as the PM10".
- Line 44: Replace "in urban" by "in an urban".
- Line 48: Replace "while RH" by "while the RH".
- Line 49: Replace "was more" by "was a more".
- Lines 52, 78, 149, 151 and 247: Replace "e.g." by "e.g.,".
- Line 52: Replace "high PM" by "high PM mass".
- Line 53: Replace "as tapered" by "as the tapered".
- Lines 54 and 308: Replace "Maclas" by "Macias".
- Line 57: Replace "World, Air" by "World; Air".
- Line 64: Replace "for the samples" by "for samples".
- Line 68: Replace "resulted in" by "resulted in a".
- Line 73: Replace "et al. 2004" by "et al., 2004".

C2

- Line 76: Replace "found best" by "found the best".
- Line 79: Replace "Pittsburgh" by "the Pittsburgh".
- Line 83: Replace "of original" by "of the original".
- Line 84: Replace "Grober et al. 2005" by "Grober et al. (2005)".
- Line 87: Chung et al. (2001) is not in the Reference list.
- Line 88: Replace "with TEOM" by "with a TEOM".
- Line 89: Replace "while BAM" by "while the BAM".
- Lines 90 and 91: Replace "with TEOM" by "with the TEOM".
- Line 94: Replace "by TEOM" by "by the TEOM".
- Line 99: Replace "while BAM" by "while the BAM".
- Line 103: Replace "Investigations" by "The investigations".
- Line 115: Replace "with heated" by "with a heated".
- Line 117: Replace "monitor" by "monitor;".
- Line 119: Replace "inlet heated" by "the inlet heated".
- Line 126: Replace "Fig. 1." by "Fig. 1".
- Line 129: Replace "apparent" by "the apparent".
- Line 131: Replace "were observed" by "was observed".
- Line 146: Replace "and filter" by "and the filter".
- Line 162: Replace "sampling" by "the sampling".
- Line 163: Replace "of heated" by "of a heated".
- Line 164: Replace "when non-heated" by "when a non-heated".

C3

- Line 165: Replace "that heated" by "that a heated".
- Line 168: Replace "of average" by "of the average".
- Line 171: Replace "with blank" by "with the blank".
- Line 184: Replace "but the diurnal" by "but diurnal".
- Line 186: Replace "Fig. 3a." by "Fig. 3a".
- Line 191: Replace "Fig. 2a-b." by "Fig. 2a-b" and replace "of filter" by "of the filter".
- Line 196: Replace "with heated" by "with a heated".
- Line 202: Replace "the sampling" by "the July sampling".
- Line 214: Replace "with heated" by "with a heated".
- Line 233: Replace "empty glass" by "an empty glass".
- Line 260-262: There is not referred to this reference within the text.
- Lines 261, 265 and 324: Replace "J Air Waste Ma" by "J. Air Waste Manage. Assoc.".
- Line 303: Replace "12:4" by "12, 43".
- Line 309: Replace "904" by "904-907".
- Line 316: Replace "Ruppecht" by "Rupprecht".
- Lines 340-341: Titles of journal articles should be in lower case instead of in Title Case.
- Line 342: Replace "Sci Tech." by "Sci. Technol.".
- Line 347: Replace "I. and" by "I., and".

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