Interactive comment on “Benzo(a)pyrene in Urban Environment of Eastern Moscow: Pollution Levels and Critical Loads” by Nikolay S. Kasimov et al.

Anonymous Referee #2

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This paper appears a relevant contribution to the PEEX special issue. The paper is relatively well-written and organized. The study appears to be scientifically sound, even though this is a bit difficult to judge in lack of a description of a data quality control (see major comment below). I have a few, mostly minor, comments that should be considered carefully before publication of this paper.

My only major comments on the paper is that something should be said about the quality of the data used in calculating the various numbers presented in the paper, including the associated uncertainties. If such an analysis has been presented in some earlier publication, that should be cited and perhaps the main results summarized very shortly.

The flow of the text at the end of section 2.3 on page 4 could be slightly improved. First,

line 11: . . .is calculated as the difference D - . . .Second, please write . . .where m is the mass of solid matter in a snow sample (ng), n is the number of . . .etc.

Units (lines 2-7 on page 7). I would recommend using the unit g/cm3 instead of t/m3 for density. Please also add the units (mg) into parenthesis on lines 6-7.

The flow of the text around equations 1-4 on pages 7-8 should be improved. First, there is no need to write Eq. n before the equations (e.g. the text before eq. 1 could read: . . .can be described as follows:, before eq. 2 as . . .this equation gives, ect.). Second, there is no need to repeat the term alpha1 after eq. 1 because is has already been defined in eq. 1. Third, it is unclear to me why some of the equations are numbered and some others are not. Finally, I do not understand why some equation-like things are in the text, while are presented as separate equation in their own line.

Grammatical corrections:

p. 1, line 19, . . .at the annual . . .
p. 5, line 13: . . .-80), however . . .(add comma)
p. 6, line 2: . . .layers, the . . .(add comma)
p. 6, line 7: . . .typical for cases where relatively . . .
p. 6, line 9: . . .the BaP content
p. 6, line 15: . . .soils, especially . . .(add comma)
p. 8, line 8: . . .in Wild and Jones (1995), . . .
p. 8, line 14: . . .exposure times . . .
p. 8, line 15: . . .cannot drop . . .
p. 8, line 31: what is the meaning of “there” in this sentence?
p. 9, line 5: . . .cannot exceed . . .
Finally, the authors use both present and past tense when discussing the results. This is mostly correct, yet in some place a present tense is used even though past tense would be more appropriate. Please check out and correct.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-649, 2016.