

Interactive comment on “Analysis of the impact of inhomogeneous emissions in a semi-parameterized street canyon model” by T.-B. Ottosen et al.

Anonymous Referee #2

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The paper takes forward the well known OSPM model developed some 20 years ago by allowing for some limited aspects of inhomogeneous emission geometry in a street canyon. Given the time lapse, it is surprising that the authors make little or no mention of studies of urban flows that have taken place during this period nor the improved understanding gained, nor, on the basis of this work what are the strengths and weaknesses of OSPM. Overall the paper seems unambitious and quite limited in scope. The correlations do not give confidence that there is much if any improvement over the original OSPM model.

Specific questions and comments:

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- Under future work is stated: ‘At present the receptor is located at the wall of the street’ Obviously it would be much more useful if receptors could be located anywhere in the canyon. It needs to be clear earlier in the text where receptors can be located and why there are limitations in where they can be located. - At section 3.2 is stated ‘Introducing horizontal diffusion was deemed outside the scope of the present study’. Why? Is it indeed possible to include horizontal diffusion neatly within the OSPM framework? It’s also not clear why only two segments have been allowed for.

Interactive comment on Geosci. Model Dev. Discuss., 8, 935, 2015.

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