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comment

Interactive comment on "Optimization of an Urban Monitoring Network for Retrieving an Unknown Point Source Emission" *by* Hamza Kouichi et al.

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The idea of the paper is to achieve the best result with as less as possible information. This idea is very innovative and I support any new effort. The application is the atmospheric dispersion in urban areas. The goal is to find the source when we know the flow field and the real concentration measurements.

I have one major comment/question.

When authors try to validate this approach they compare results of source inversion (distance to true source etc) with 'optimal network' of 10 sensors with the results obtained by the full network (40 sensors). Why don't they directly compare results of 'optimal' network of 10 sensors with the results of other networks of 10 sensors? Of

course, there are too many of such networks. But by application of the combination same procedure as we did in Kovalets et al (2011) and Efthimiou et al (2017) they at least could prove that their 'optimal network' yields the results within say best 5 or 10% of the results that could be achieved with 10 sensors.

1) I.V. Kovalets, S. Andronopoulos, A.G. Venetsanos, J.G. Bartzis, Identification of strength and location of stationary point source of atmospheric pollutant in urban conditions using computational fluid dynamics model, Math Comput Simulat, 82 (2011) 244-257.

2) G.C. Efthimiou, I.V. Kovalets, A. Venetsanos, S. Andronopoulos, C.D. Argyropoulos, K. Kakosimos, An optimized inverse modelling method for determining the location and strength of a point source releasing airborne material in urban environment, Atmos. Environ., 170 (2017) 118-129.