

## ***Interactive comment on “Prelocalization and Leak detection in water drinking distribution network using modeling-based algorithms: Case study: The city of Casablanca (Morocco)” by Faycal Taghlabi et al.***

**Anonymous Referee #1**

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1. Line 10: “water drinking distribution network (WDDN)” ??? Should be “drinking water distribution network (DWDN)” 2. Line 12: “on the field” must be “in the field” 3. Line 25: don’t use CC for Climate Change 4. Line 39: don’t use capitol after comma 5. Line 41: “DHS” must be “DHS” 6. Line 61: So there is no flow meter at each inlet?? 7. Line 81. End with “ 8. Line 96. What is N 9. Line 119-120. No, this is not dynamic simulation; this is consecutive static simulations. Epanet can only do static calculation, no dynamic calculation including dynamic aspects of accelerating and slowing down of water 10. Line 130 and 139. I don’t understand. How can you vary

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the Emitter Coefficient? Do you suggest that you keep pressure constant and leak size constant, and let Emitter Coefficient determine the leak flow? Why did you choose this method? How do you model a leak in Epanet? 11. Line 144. Why 1972 simulations? 12. Line 144. Did you also simulate leaks at different times? E.g. at 6 am; at 3 pm; et cetera. 13. Line 172. This seems very precise. How large is the area the you researched? 14. Line 187. Change “number of sensor node” to “sensor node number” 15. Line 210-2015. Why is this? Why simple linear band? 16. Line 225. What is the average demand in the area? Can you show a graph of an average day of measured water demand? 17. Line 225. For how long was de leak simulated? 15 minutes? 1 hours? ?? 18. Line 240. What is simulated (red line?) and what is measured (green squares?)? Please explain

Please also note the supplement to this comment:

<https://www.drink-water-eng-sci-discuss.net/dwes-2020-3/dwes-2020-3-RC1-supplement.pdf>

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Interactive comment on Drink. Water Eng. Sci. Discuss., <https://doi.org/10.5194/dwes-2020-3>, 2020.

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