

## **Supplementary Material to "Efficient Sensor Placement for Leak Localization Considering Uncertainties"**

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Received: date / Accepted: date

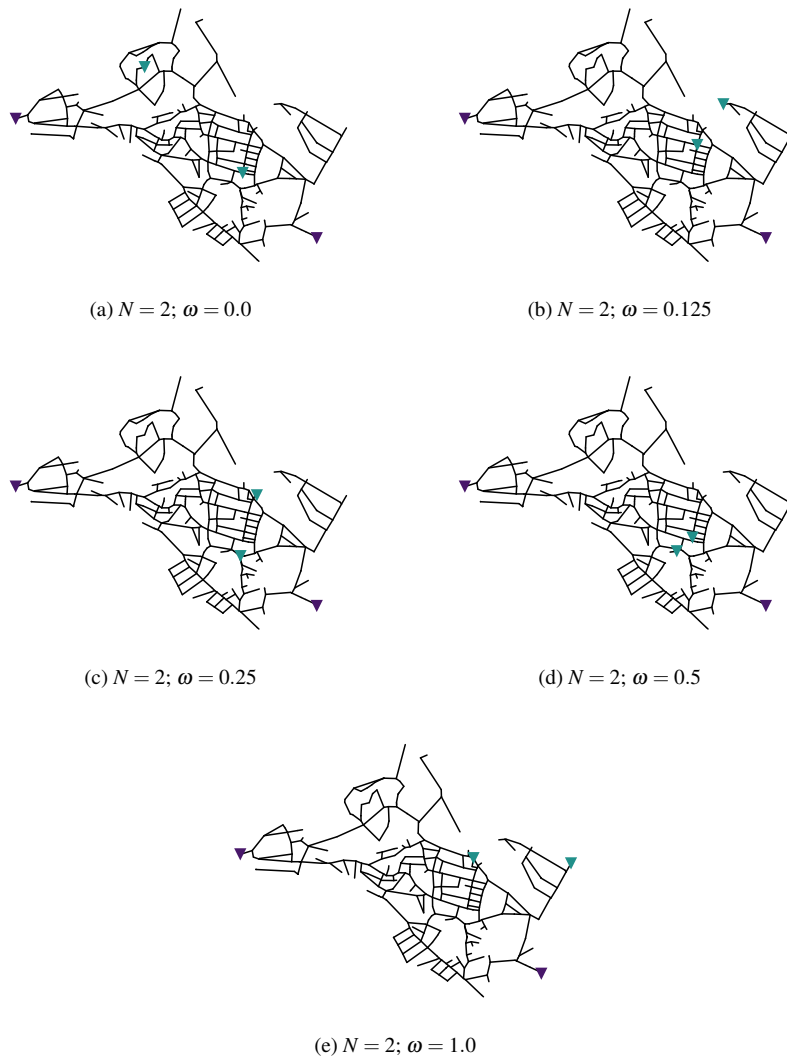


Fig. 1: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for two additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

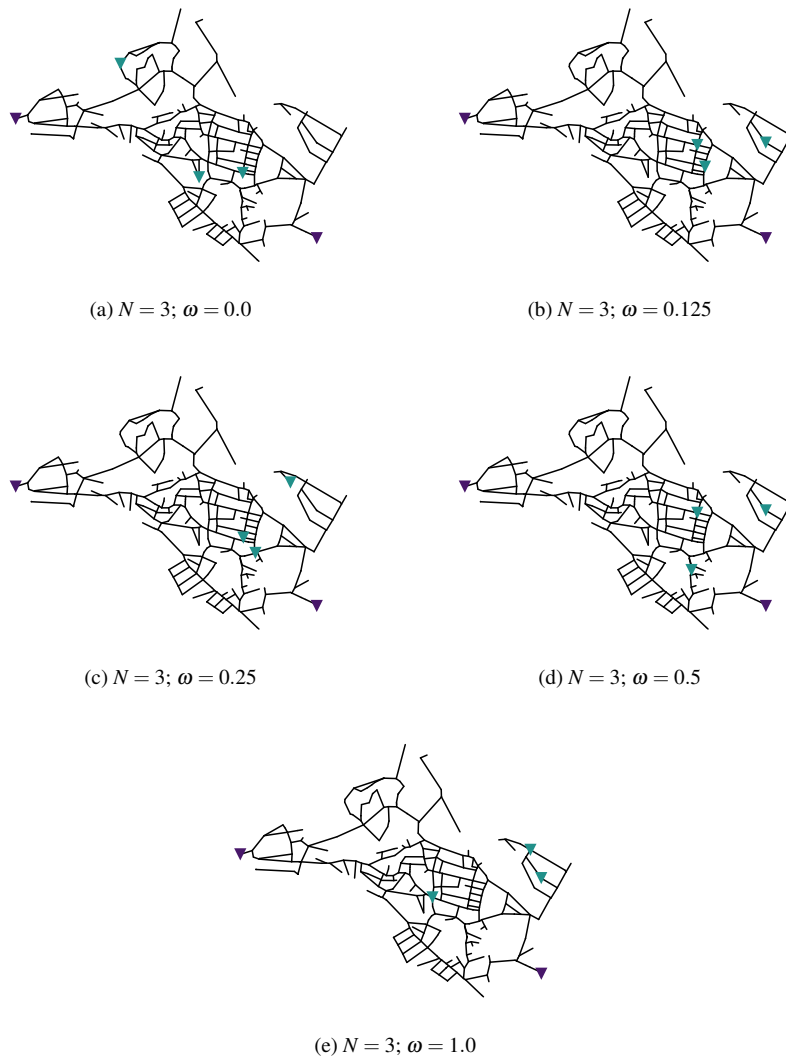


Fig. 2: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for three additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

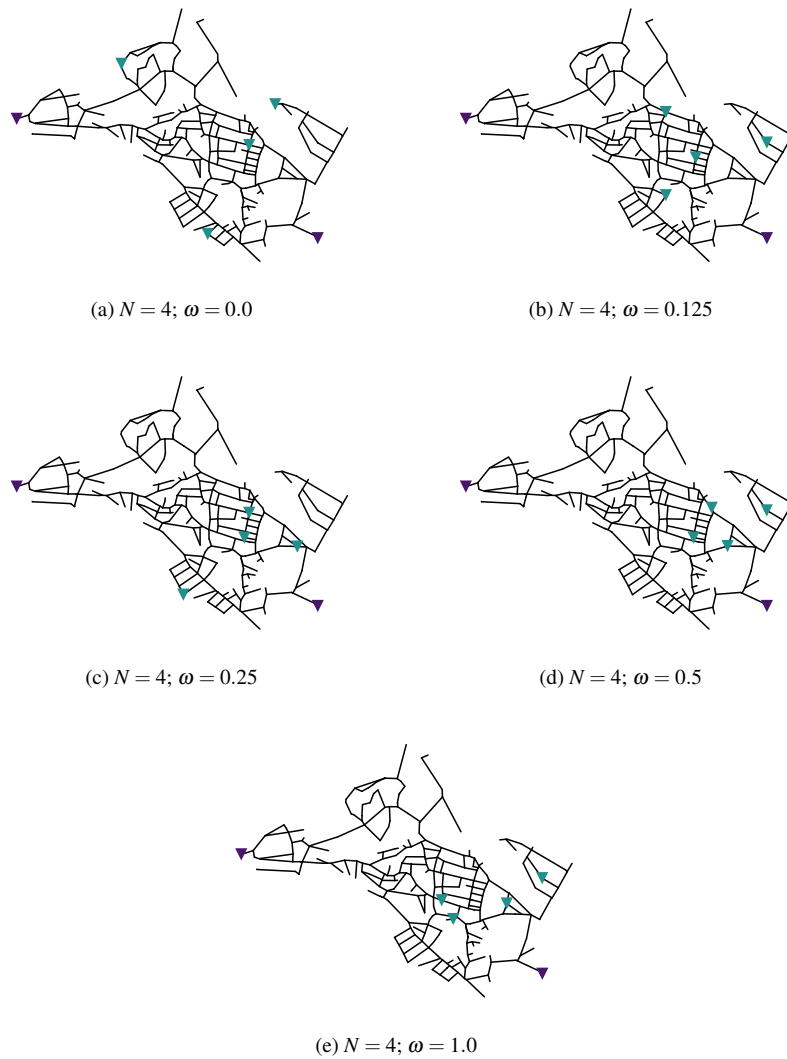


Fig. 3: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for four additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

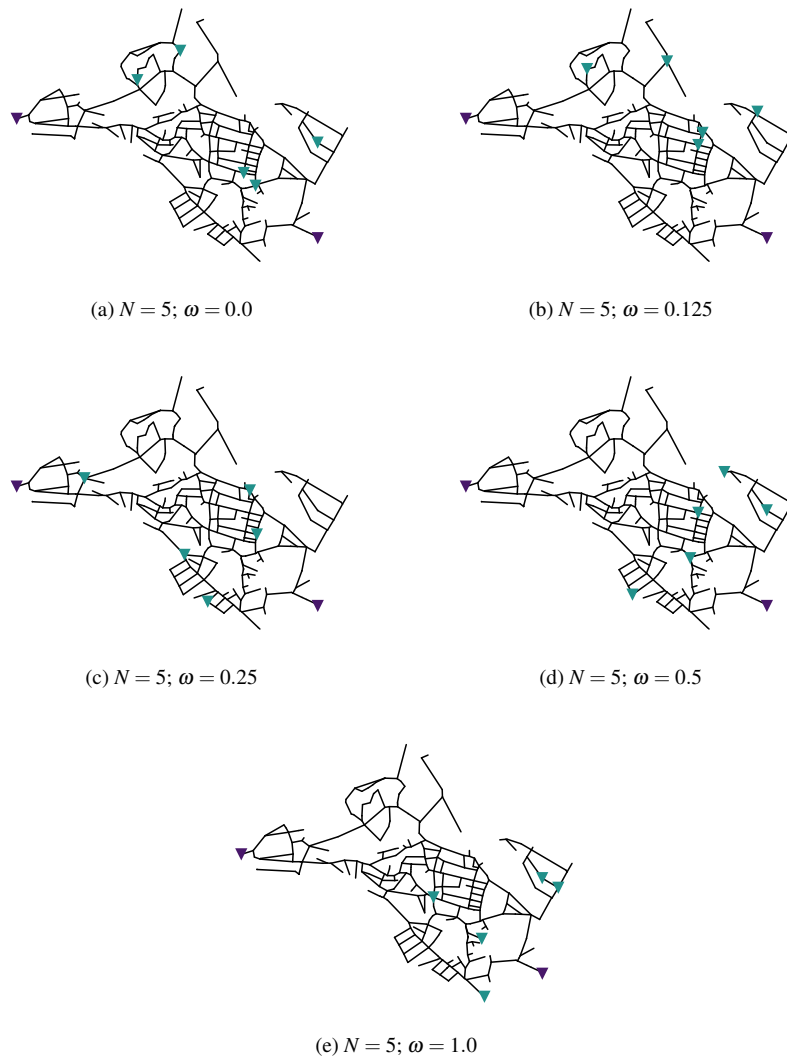


Fig. 4: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for five additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

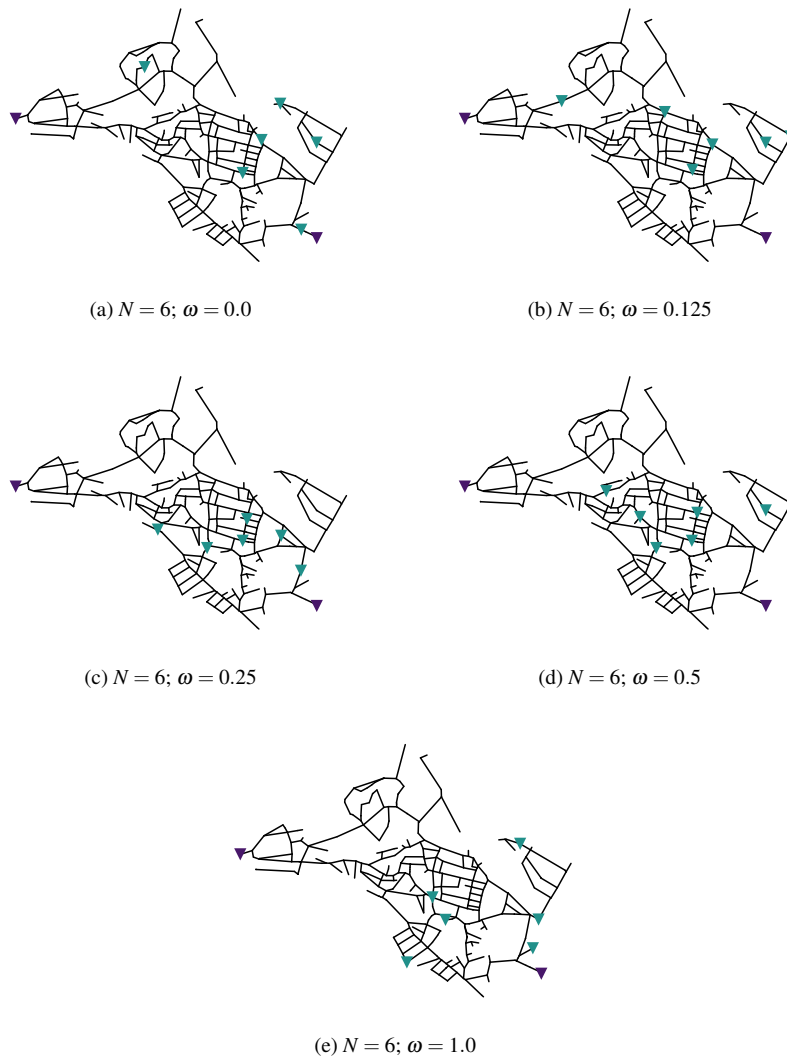


Fig. 5: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for six additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

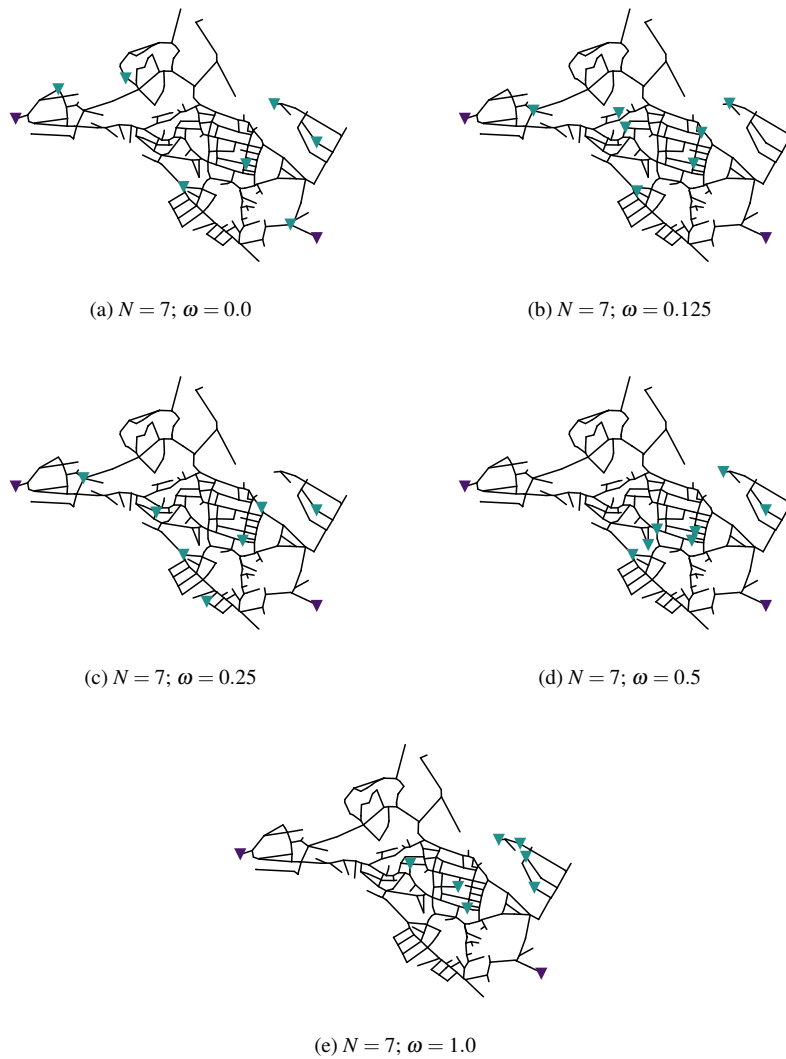


Fig. 6: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for seven additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

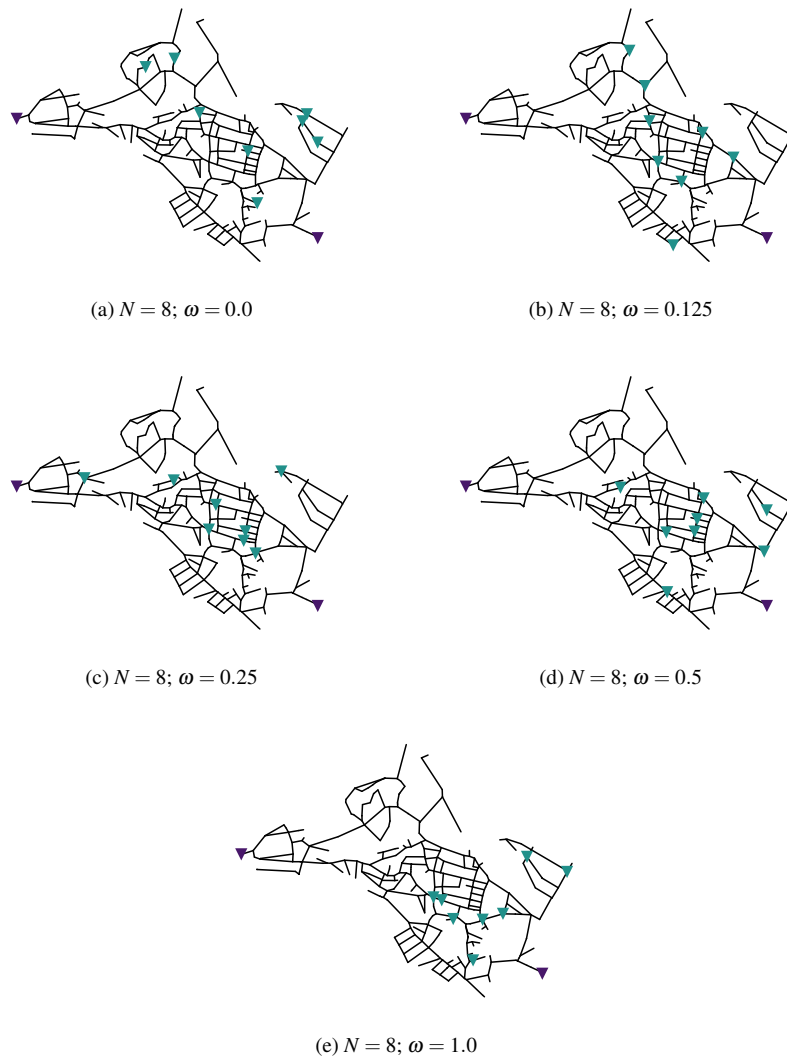


Fig. 7: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for eight additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.



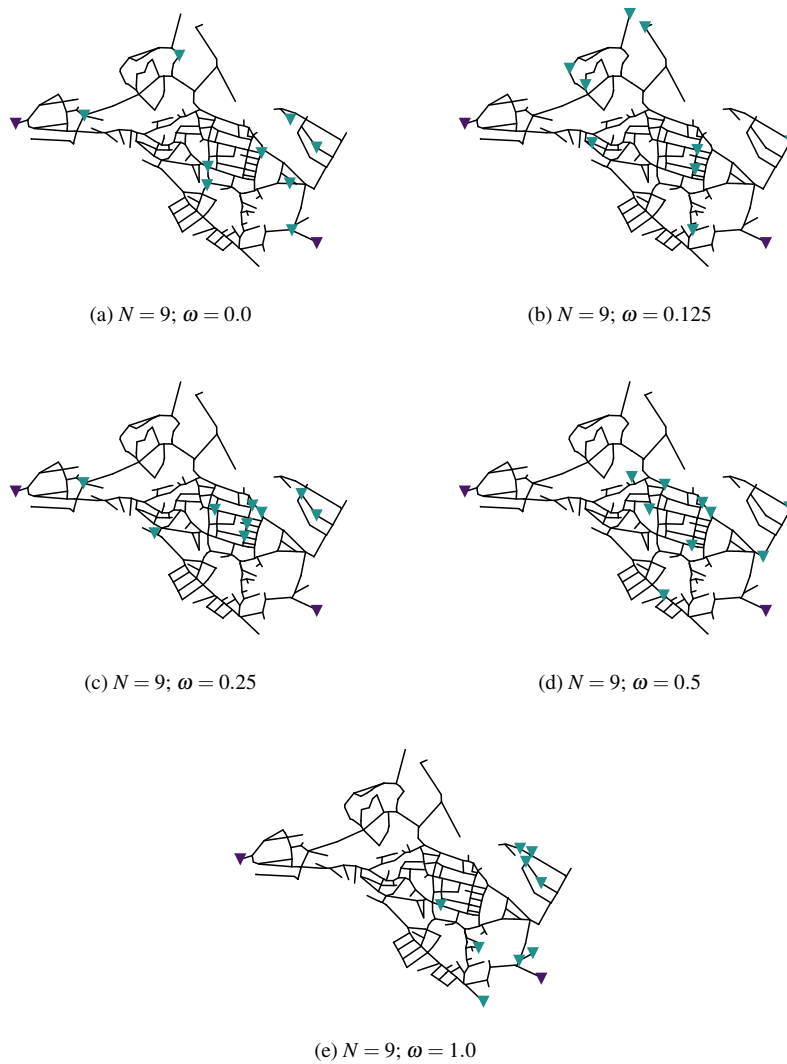


Fig. 8: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for nine additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.

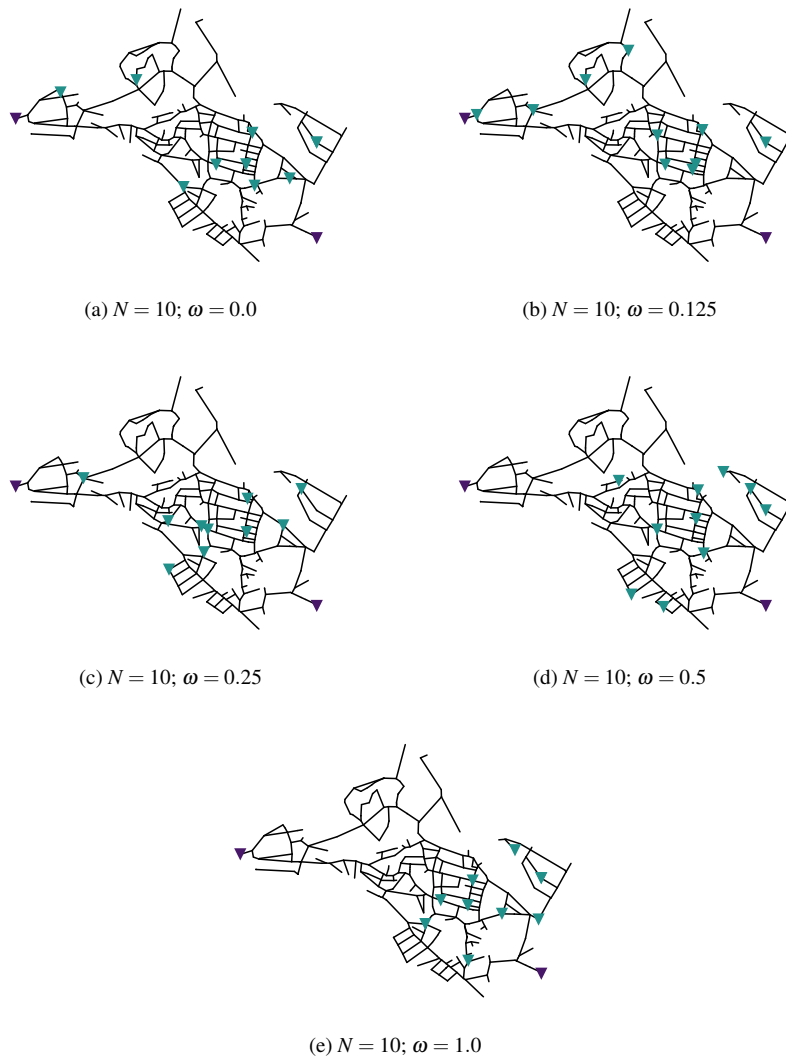


Fig. 9: Sensor positions (green triangles) resulting from the enhanced sensor placement algorithm described for ten additional placed sensors and different weighting factors  $\omega$ . Already installed sensors at the inflow and outflow point of the DMA are depicted as purple triangles.