

Interactive comment on “Field evaluation of low-cost particulate matter sensors in high and low concentration environments” by Tongshu Zheng et al.

Anonymous Referee #2

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This paper well documents for the evaluation of low-cost PM sensors, including RH corrections, under various ambient PM concentrations. All descriptions and discussion are clear, but several points should be addressed before its publication.

Major comments:

- How the flow rate of low-cost PM sensors of this study were calibrated before, during, and after field deployments? Especially, I am wondering how well the flow rate was maintained in high PM concentrations (i.e., Kanpur)
- More specific descriptions on (1) how the instrument segregate the particles into the different size, especially for PM2.5, and (2) its efficiency and accuracy.

- Fig 2: what "Raw Sensor" means?

- Fig. 4 & other scatter plots: (1) indicate the number of used data in color scale to figure out the distribution of PM concentration, (2) add bias and root mean square difference in each figure.

- Why the slope is higher than 1 for most cases (e.g., Figs 4 and 7)? Discussion on the potential factors effecting on low-cost PM sensor measurements would be helpful in future research. - It would be nice to provide in supplement how much the total cost, including the sensor, was.

Interactive comment

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-111, 2018.

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