

Interactive comment on “Field Calibration of Low-Cost Air Pollution Sensors” by Andres Gonzalez et al.

Andres Gonzalez et al.

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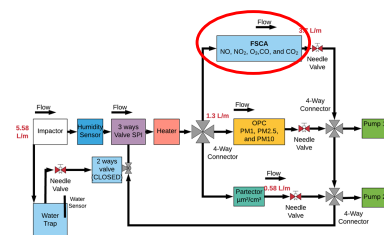
All the answers are the PDF document.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2019-299, 2019.

C1

(1). The paper states that the MAAQShox also contains sensors for SO₂, CO₂ and VOC, but only calibration for the five pollutant sensors mentioned above is reported here

- (2)
- The air monitoring station using as reference does not measure SO₂, CO₂ and VOC.
 - Generally, CO₂ is not measured in air monitoring station.
 - The concentration of SO₂ is ~ 0 ppb therefore we are not going to include in the measurements.
 - The data of VOC is limited to other air monitoring stations that don't measure CO, NO NO₂ and O₃ and PM_{2.5}. The VOC calibration would have required a separate study.
- (3).



“The MAAQShox holds five gas sensors and two particle sensors. The gas sensors included in the calibration are CO, CO₂, O₃, NO₂, and NO (B4 sensors AlphaSense, Inc.)”

(1). In both the Introduction (Line 80) and the Methods (Line 180) it is stated that the aim of this work is to “evaluate” the performance of the sensors in their MAAQShox, yet the design of their study and the data presented only reports a calibration (and not even the full calibration data), not an evaluation.

- (2)
- A new aim of this study was established including the reviewer comments for line 80 and 180.
- (3)

Line 85. “We seek to relate sensor response, temperature, humidity, and concentrations other species exhibiting cross sensitivities to reference field measurements performs. Our analysis seeks to determine the accuracy and precision with which low-cost sensors perform during periodic “in-use” calibration.”

Fig. 1.

C2