Interactive comment on “Aerosol effective density measurement using scanning mobility particle sizer and quartz crystal microbalance with the estimation of involved uncertainty” by B. Sarangi et al.

Anonymous Referee #2

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General comments:
This is a useful paper that aims to quantify the accuracy of average particle density measurements made by combining SMPS and QCM.

Specific comments:
The analysis of uncertainty components is the most valuable part of the paper. However, this analysis is quite hard to follow, eg the combined uncertainty estimates for the inorganic lab study are not given in Table 3, and seem to only appear in the Conclusions. The combined results should first be presented and discussed in Section 3.2.

Technical corrections:
P12892 line 10: “seizer” should be “sizer”.
P12892 line 16: it is not clear what the impactor dimension (“0.0457 cm”) refers to. It would be more useful to state the cut-off size.
P12924 Table 3: the figure 2.96 in the relative standard uncertainty AN column and u4(m) row appears to be incorrect.