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Interactive comment on "Evaluation of various methods to measure particulate bound mercury and associated artifacts" by S. Wang et al.

Anonymous Referee #2

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This paper compares various sampling methods including OFF, MOUDI, and TekSpec considering sampling artifacts. They found that negative artifacts were significant for long sampling duration and positive artifacts were minor under rural condition. Also, they showed that TekSpec frit can be a good alternative sampler to measure the concentration of coarse PBM which is an important variable to estimate dry deposition velocity of PBM. This paper provides invaluable information to reduce uncertainties on PBM measurement and suggesting an alternative method to measure coarse PBM concentrations. Still there should be further study to find out which artifact will be important under urban condition. I would recommend this paper for publication.

Technical comments: Check the end of sentence on line 6 pg 8595 "which these measurements suggest was not significant at this site." I suggest it can be changed to

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"which was not significant artifact at this site." In Figure 3, the title of Y axis should change to "Fraction of PBM1.0 in total PBM." In Figure 7, "after four treatments" should be changed to "after three treatments."

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 8585, 2013.