Interactive comment on “Chemical mass balance estimation of arsenic in atmospheric dust fall out in an urban residential area, Raipur, Central India” by G. Balakrishna et al.

Anonymous Referee #1

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The manuscripts shows a good attempt at measuring the flux of dust depositing in an industrial city with the main focus on Arsenic. The manuscript can be improved with some editing for grammar and language. However, several key things were missing: detail meteorological information, explanation of wind channels, data for other chemical species measured, particle size distribution information, error budget and details about accuracy and method detection values for the chemical analyses.

Few other comments: As is predominant in which modal diameter? Are all forms of As readily soluble in water? Effect of wet precipitation on your study/measurements or during periods of high RH need to be discussed. Show the source profiles measured
in this study as supplementary information (very important). There is general lack of measurement from a background site (for e.g. thick vegetation). Fig 2 anf Fig 3 should be redrawn with zero intercepts. What do the intercept mean in current form in fig 2&3?? Data about other chemical species measured should be provided as they are required input for the CMB. Figure captions should be more informative and legends should be improved.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 26411, 2010.