

Interactive comment on “PM₁ geochemical and mineralogical characterization using SEM-EDX to identify particle origin – Agri Valley pilot area (Basilicata, Southern Italy)” by S. Margiotta et al.

Anonymous Referee #2

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The paper is very interesting, of broad interest, being also well written and documented, therefore I report here a few detailed remarks that may help the authors to improve the manuscript .

1. In the title, you write “PM₁ geochemical”, however in the text you don’t report geochemical data and you don’t make a significant discussion on it. In the present form the title isn’t conform to contents. I strongly suggest to change “geochemical” with “chemical”. 2. I think a few data about geological framework have to be added in the Pilot Site section; 3. In this paper, wide importance was attributed to coarser fraction of the samples skipping the finer one. However the author claim “ . . . the finer particles

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consist mainly of anthropogenic or composite origin aerosol . . .”. In order to improve the reasoning, it could be better including discussion on the finer fraction 4. Figure 2. The reference are missing, please indicate it. 5. Figures 5-6-7-8. You should insert the date of burning torch flare event.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 291, 2015.