

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.

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The paper concerns the geochemical and mineralogical characterisation of PM1 particles during a burning torch event in an oil pre treatment plant located in Agri Valley (Southern Italy). The overall quality of the work is excellent and sounds with the current state-of-the-art. However I have to point out some comments.

- The authors pay great attention to discriminate anthropogenic from natural pollutants and they well identify the contribute of Saharan dust events. I suggest to the authors to pay more attention to analyse the possible contribute of local emission sources (agri-

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culture activities, industrial activities, road networks etc..).

- I suggest to better emphasize the degree of novelty and originality of the results, in particular I recommend to compare the findings of this work with other analogue environmental monitoring activities.
- No comments and analyses on the possible implications of this work with future environmental monitoring activities in the pilot area are presented and discussed. This part is extremely relevant for improving the environmental monitoring strategy.
- The quality of reference captions could be improved. The captions must be more informative and to include short comments, in the present form they only identify the data displayed in the graphs.

Taking into account these considerations, I suggest the publication of this paper after a minor revision.

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