

Interactive comment on “

Characterization of a volcanic ash episode in southern Finland caused by the Grimsvötn eruption in Iceland in May 2011” by V.-M. Kerminen et al.

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Referee comment:

This paper characterizes the aerosol at Helsinki (Finland) on a day where volcanic ash aerosols from an Icelandic volcano were present. For this case study, a set of various in-situ techniques, dispersion model simulations, and satellite retrievals is used.

C11419

Though each applied method is probably not new, the combination of the methods and their application to this case study provides consistent interesting results which will be useful for further studies. This paper is well written. The description of the methods and the discussion of the results is reasonable. I recommend to publish this paper in ACP after few minor corrections.

Our comment: We than the reviewer for his/her positive comments. Below we address each of the comments separately.

Specific comments and technical corrections:

Comment: 24934/1: Remove ",,"

Reply: Removed

Comment: 24935/3-4: What does "various environments" mean here?

Reply: We rewored the text as "...soils and vegetation, as well as animals and humans"

Comment: 24936/7: Replace "surface air" by "boundary layer".

Reply: Replaced

Comment: 24937/10: "to generate vacuum to vacuum chambers.": Maybe you can improve this sentence.

Reply: We rewored the text as "to generate vacuum into the instrument"

Comment: 24944/19: replace "SO2" by "SO2"

Reply: Corrected

Comment: 24951/5-6: "satellites are not yet able to provide ... vertical location of volcanic particles": This is not true because space-bourne lidars (like CALIOP) are able to do this.

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Reply: We rewrote the text as “most satellites are not. . .”

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 24933, 2011.

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