

Interactive comment on "Inner structure of the Puy de Dôme volcano: cross-comparison of geophysical models (ERT, Gravimetry, Muonic Imagery)" *by* A. Portal et al.

Anonymous Referee #2

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This paper addresses the comparison of three independent methods used to investigate the inner structure of the Puy de Dome volcano (electrical resistivity, gravimetry and muon imagery). As the authors remark, an experiment involving the concurrent acquisition using the three methods is currently carried out at Puy de Dome, and preliminary results are presented in the paper. These results, although still qualitative, are extremely interesting and my suggestion to the editor is to publish the paper after the following minor indications.

The authors should report (eg: in fig.2) the location of the muon detector, in order to provide information on the field of view of the instrument. This is necessary for the

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comparison of the three pictures in Fig.5.

Please, provide a simple explanation of what you mean by "non-standardized" attenuation coefficient, regarding the moun radiography results. Which kind of corrections did you perform on the raw data?

The bibliography is too short. Among the others, I suggest to cite similar works regarding the comparison of muon radiography with geophysical data (see eg: Lesparre et al., Geophys. J. Int., 185, p. 1-14, 2012).

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., 2, 703, 2012.