Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2018-11-RC2, 2018
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Interactive comment on "Feasibility of three-dimensional density tomography using dozens of muon radiographies and Filtered BackProjection for volcano" by Shogo Nagahara and Seigo Miyamoto

Anonymous Referee #2

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The paper is dedicated to 3D methods developments in the field on muography. There is a real interest in this methodological work for all small and portable detectors operations such as nuclear emulsions for instance. This is more questionable for real-time muons hodoscopes. The objectives are clearly stated and the results reasonably presented for a first methodological approach. Real muons data would have been appreciated if available. This would have been more breaking-through. Apart from esthetical corrections and minor typos, I have a more technical question concerning the role of the a priori inputs one has to bring in the method. It is said that a small amount of a

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priori information is needed but this sounds not true when one really implements it. For instance to stabilize the inversion you need to use constraints on the solutions, which correspond to real a priori information. I would like the authors to comment on this and to add a discussion paragraph on this item if possible.

Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2018-11, 2018.