

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

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Thank you for reading carefully.

Referee Comments: English needs revising.

Author Response: We changed phrases at each sentence. 39) integration → integral
41) Muon detection technology also have been → The muon detector have been

Referee Comments: Typo or missing sentence.

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Author Response: 217) “ $N_0(X, Z, \beta)$ is the” is deleted.

Referee Comments: 19) From a volcanic perspective, airborne radar is commonly used to measure and analyze mountain topography. Topography usually derives from satellite or airborne imaging, and if you really want precision, laser scans not radar mapping. Please clarify, and give sources.

Author Response: “radar” is our mistake. “LIDAR” is true. Geospatial Information Authority of Japan (GSI) used this method when they made 5m DEM data. GSI Japanese page https://fgd.gsi.go.jp/download/ref_dem.html

Referee Comments: 45) These citations are swapped, Ambrosino is plastic scintillators ... (hodoscope by scintillating plastic bars (Jourde et al., 2013), glass resistive plate chambers (Ambrosino et al., 2015),)

Author Response: Ambrosino et al.(2015) used both plastic scintillators and glass resistive plate chambers, so we added Ambrosino et al.(2015) as the example of plastic scintillators. 45) hodoscope by scintillating plastic bars (Jourde et al., 2013, Ambrosino et al., 2015)

Thank you and best regards, Nagahara Miyamoto

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