

Geosci. Instrum. Method. Data Syst. Discuss., referee comment RC2
<https://doi.org/10.5194/gi-2021-35-RC2>, 2022
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Comment on gi-2021-35

Anonymous Referee #2

Referee comment on "A muographic study of a scoria cone from 11 directions using nuclear emulsion cloud chambers" by Seigo Miyamoto et al., Geosci. Instrum. Method. Data Syst. Discuss., <https://doi.org/10.5194/gi-2021-35-RC2>, 2022

The article submitted is of very high quality.

It is written in good English and reads well.

The methodology is rigorous and well established, and the presentation of results is fair.

There is only one aspect that needs a clarification. Because each ECC stack belongs to a different observation point, the reader is left with the suspect that there are possible systematic effects in data that may mimic interesting signals. In order to make the statements stronger, I would suggest to publish/check the efficiency maps (or fill factor maps) not only as functions of slope/angle, but also of position in the film. Indeed, local drops of efficiency or background increases in certain areas of the films may add systematic effects. While they have probably been correctly accounted for, at least on average (pages 24,25,26,27), the text does not clarify enough the treatment of position-dependent performance variations of the emulsion films.

I understand this revision requires further editing work, but the data should already be available to them; I think it is in the interest of the authors to provide the strongest possible evidence for the signals observed.

All the rest of the manuscript is fine.