

Geosci. Commun. Discuss., referee comment RC2
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Comment on gc-2021-30

Fabio Cramerì (Referee)

Referee comment on "V3Geo: a cloud-based repository for virtual 3D models in geoscience" by Simon J. Buckley et al., Geosci. Commun. Discuss., <https://doi.org/10.5194/gc-2021-30-RC2>, 2021

This manuscript introduces an online repository for 3-D photographic models, aimed for research and science education, that additionally allows for user interaction and inspection. Thanks to advances in and wider availability of digital capturing techniques, 3-D photographic models are becoming a standard tool in field-related studies. Providing an online community repository is therefore a very useful and timely service. Once used and populated with more content, the platform has the potential to become an integral resource and tool to the wider Geoscience community. The platform's long-term viability, which is key in such a context, is discussed and clarified to the user. The manuscript is written very well and nicely illustrated. Whether the manuscript fits the journal's scope is up to the editor(s), but I highly suggest that Geoscience Communication also publishes manuscripts introducing community tools like this and not only research-based work. I therefore recommend this widely useful work for publication after some minor revision.

Could it be clarified whether updates (of faulty data) or extensions (with additional related data) are possible at all, and whether those would be traceable by the users (e.g., via versioning)? Similarly, could a dataset be made obsolete, if another, better/newer one is published (to avoid duplication, continued use of outdated data, and save storage space)?

Adding a short, simplified guide for unexperienced readers to the manuscript to explain how a 3-D photographic model is created (starting from standing in front of a sample/outcrop), is not key to the paper, but would, I think, be useful to promote their wider use and give unexperienced field geologists a feeling about whether they could use this tool too, or not.

Line 9: Being a geodynamic modeller, reading the title and first sentence, my first impression was the manuscript being about an online repository of physical models of the Earth. I guess other readers with yet another background might understand it to be about conceptual models. Given that you have a rather wide audience in this journal, maybe it

would be worth clarifying the term ‚model‘ early on at the beginning of the abstract, by using a term like “3-D photographic models” or similar?

Lines 30-37: Is the use of 3-D photographic models also bringing down field-work costs in general (by reducing the work force and time in the field)? If so, would that be another very good argument to mention here?

Lines 50-54: Out of interest: Is that a similar approach to the quadtree used in e.g., Google Earth?

Line 224: Consider clarifying to: „several gigabytes of model data“.

Thanks for this excellent work!

Fabio Crameri

5.12.2021