

Comment on soil-2021-96

Anonymous Referee #1

Referee comment on "An open *Soil Structure Library* based on X-ray CT data" by Ulrich Weller et al., SOIL Discuss., <https://doi.org/10.5194/soil-2021-96-RC1>, 2022

The idea of an open soil structure library based on X-ray CT data is great. The authors have an extensive expertise in the subject. The manuscript is well organized. The case study is relevant. There are two aspects where I can see an improvement of the present manuscript. First, even if the authors have been working with this subject for many years, they are not the first and not the only ones. I suggest to reduce the selfcitation to the absolute necessary (). For example, L18, L24 (can't find Schlüter et al., 2019 in the reference list by the way), L26, and L45, papers published by others than the authors should be cited for these topics, and it doesn't matter if these manuscripts are older. Second, as mentioned by the authors, segmentation is crucial for the resulting binary image of the soil structure. Other sensitive procedures are image acquisition (type and setting of the scanner) and filtering (physical and numerical). I suggest to request metadata concerning the acquisition, the filtering, and the segmentation for each uploaded dataset in the way as soil and site properties.