Title of Paper: Comparison of open-source image-based reconstruction pipelines for 3D root phenotyping of field-grown maize

Reviewer Comments:

The writing is clear, and the methods are well described. There are some minor typos, grammatical errors highlighted below:

"Therefore, we asked the question which pipeline produces the need model detail in the shortest time for field-grown maize root."
… the needed model detail …
Response: Thanks for your detailed comments, we have changed the sentence to "Here we attempt to determine the suitability of available reconstruction pipelines for efficiently producing high-quality models of field-grown maize root systems."

"In addition to visual quality, we compare 3D model quality by computing total number of points and surface density of all sixty root models, as well as recordings the computation time,"
… as well as recording the computation time …
Response: Thanks for your detailed comments, we have changed the related sentence to "as well as the recording computation time cost,"

"Surface density is defined here as the number of neighbors within spherical neighborhood radius R, divided (normalized?) by the neighborhood"
Seems like a previous review comment made it into the final version.
Response: Thanks for your detailed comments, we have removed the previous review comments.

Minor details, but there are a few typos - inconsistent subject-verb agreement ("sample images ... are shown") and verb form ("we compared" vs "we compare"). Also, when referring to a previous publication e.g. "published in [7]" would read more easily following the latex template as "published in Ref. 7", and with regular citations provided superscripts.
Response: Thanks for your detailed comments, we have changed the related sentences with inconsistent subject-verb agreement. And the regular citations as "published in Ref. 7".

The proceeding is well written and provides a relevant comparison of methods for analyzing root structure. As noted in the proceeding, these are preliminary results, and it will be interesting to see performance of the pipelines on the larger dataset with ground truth data.
Response: Thanks for your detailed comments, we will perform more tests with larger dataset with ground truth data.

The proceeding presents interesting preliminary comparisons of 3D reconstruction pipelines with field grown maize root images. This is a nice methods comparison, but I believe that the chosen metrics limit the paper's impact. To increase the impact, I suggest adding additional metrics that compare models to phenotypes of interest.
Response: Thanks for your detailed comments, due to the 4-page limitation of length, we will consider adding more metrics to compare models in our further research.