

Geochronology Discuss., author comment AC1  
<https://doi.org/10.5194/gchron-2022-4-AC1>, 2022  
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## Reply on RC1

Pieter Vermeesch

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Author comment on "An algorithm for U–Pb geochronology by secondary ion mass spectrometry" by Pieter Vermeesch, Geochronology Discuss.,  
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I would like to sincerely thank Dr. Williams for thoroughly testing 'simplex' on Windows, Mac and Linux, using the online, offline and command line interfaces. He even installed simplex in the cloud, using AWS! I have already implemented most of the reviewer's pertinent suggestions in the latest version of the software (which is available on <http://isoplotr.es.ucl.ac.uk/simplex/>). For example, I have:

1. enabled comma-separated lists of sample prefixes
2. added a CSV download option
3. auto refreshing for drift and logratio plots
4. fixed the issue with duplicate column names
5. added a copy of the GPL license to the GitHub repo
6. added installation instructions for hosting online simplex mirrors

I have also made some other improvements, such as the addition of sample names as row names in the output tables.

I am in two minds about the reviewer's request to include all the local files in the selenium tests. On the one hand, I agree that this would make it easier to collaborate with other developers. But on the other hand, it would inflate the GitHub repository and expose proprietary data online. I honestly do not expect many others to join the simplex development team. However, I would be more than happy to add more test files to the GitHub repository should this change.

With regards to unit tests for the R functions, these actually already exist. The simplex package passes all CRAN checks, which means that all public functions are fully document, with examples. Building the simplex package with CRAN checks turned on runs all these tests on the user's computer and save their output in a folder called simplex.Rcheck.

I was not able to reproduce the Cairo-SVG error in Windows. Perhaps this problem expressed itself in an earlier version of the program and has since gone away?

Version 1.0 of the software will be released on GitHub as soon as the GChron manuscript is accepted for publication.

Dr. Williams also makes some useful suggestions to improve the paper itself. These suggested are all minor and will be implemented in the revised manuscript. I will document them in its cover letter.