Answers to referee #2

General Comments

This paper nicely outlines the progression of SAGA from a specialized digital terrain analysis software to a full GIS platform which seems to rival the capabilities of other GIS software. By having the development be guided by current research, SAGA has become very broad in scope and, as described in the paper, is being used and developed in a wide range of fields. Much of the success of the software seems to be due to the creation of an API which has enabled developers to add their own methods. Having an interface to R and Python has no doubt increased the power of the software. While the paper briefly describes some of the features and architecture of SAGA, I found these descriptions to be sparse, i.e., this is a non-technical review. Rather, the main focus of this paper is to highlight the research being done using SAGA and thus demonstrates its usability over a wide variety of subject areas. The paper also makes it clear that it is this research that is driving SAGA's development. This paper is of high quality and upon some minor revisions will make a very useful contribution to the literature and help introduce potential users to the software.

Specific Comments

Introduction Is it possible to provide a breakdown of the various files/research areas these 700 modules occur in? I'm thinking a pie diagram or something that would show which fields are really driving the development.

Yes, we will pick up your suggestion and add a pie chart showing the number of tools falling into categories like terrain analysis, spatial and geostatistics, or image analysis and some subcategories (e.g. terrain analysis related to hydrology or topoclimate).

Further on in the paper a wide variety of references are given and it would be nice to have a visualization of the fields which are currently using the software.

Following a suggestion of referee #1 we will add a page filling table that gives an overview of the references categorized by the addressed research fields.

The System A good overview of the various components of the software is provided and gives the reader an idea of these components fit together and how development of modules works. How do these features compare with other software available, such as QGIS? I do not have a ton of experience using GIS open-source software but am eager to know what sets SAGA apart from the others.

Similar has been suggested by referee #1 too; we will add a short comparison to other GIS software with a focus on FOSS pointing out some strengths and weaknesses of SAGA as well as its role within the *'open source GIS ecosystem'*.

Review of SAGA related studies and applications Again, I think a visualization of the 'broad spectrum of geoscientific analysis and modeling applications . . .' would be insightful.

see above

Minor Details

P2273 L2-3. Remove comma following 'both' and 'up' following 'data,'.

will be done

L9. Remove 'e.g.'.

will be done

L14. Change 'skills' to 'features'.

will be done

L.21. Change 'got' to 'attained' or 'built up'.

will be done

P2274 L.21. Replace 'has been' with 'was'. This occurred at a single point in the past, so it is over and you should use 'was'. There are a few points in this article where this change needs to occur.

will be done; we will also try to find and correct all similar cases

P2277 L10-11. Not sure I understand the meaning of this sentence.

will be done

P2280 L16. Change to 'has remained' a major focus?

will be done

P2281 L8. Remove 'for instance'.

will be done

P2284 L1. 'The integration of new tools,. . .''

will be done

P2292 L18. Please fully spell out 'bio- resp.' I'm not sure what this is.

(resp. = respectively), we will change it to '*...biogeography and particularly vegetation geography.*'

P2294 L11-13. Unclear. This sentence needs rephrasing around the '. . . but likewise the outcome,. . .' part.

we wanted to point out that open source codes are the ideal complement for a scientific publication, because it gives full insight to a method's implementation. Following formulation might make this more clear: '*Indeed, in responding on scientific questions and needs, SAGA is not only a research tool, but likewise the outcome, because the methods used by related scientific publications are ultimately documented in the source code.*'