

Interactive comment on “Short communication: Landlab v2.0: A software package for Earth surface dynamics” by Katherine R. Barnhart et al.

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1 General updates made independent of reviewer comments

The manuscript was updated to reflect the addition of one new component.

2 Response to reviewer Tristan Salles

We thank reviewer Salles for his review. As he recommended no changes be made, we have made no changes in response to his review.

C1

3 Response to reviewer Wolfgang Schwanghart

Reviewer Schwanghart's review recommended that we revise the text to address the following issues:

1. Reduce the use of syntax and bulleted lists, and use more plain language in Section 4 in order to make it more accessible.
2. Add one or more figures that illustrate example output of Landlab.
3. Change the subsection on citing Landlab to its own section.

We agree with all of reviewer Schwanghart's recommendations and have revised the text accordingly. A new Figure 1 provides six example applications from the literature and the subsection on citations is now its own section.

Our revision in response to Point 1 aims to balance our efforts to increase readability and understandability with the value of the technical aspects of the manuscript. We think there is value in providing the technical detail, and in exposing some of the thinking that underlies technical choices. We agree, however, that is not useful or valuable if it is not understandable.

In our revision of this section, we have focused on improving accessibility wherever possible, and adding context for why such technical text is present. Where possible we worked to connect why technical details or changes matter for an end user. For example, we added background and context on what an interface standard is and how it is useful to an end user to the start of Section 4.2 (Updates to the Component Standard Interface). While we have not excised all use of inline syntax and bulleted lists in the text we have removed much of it. We think our revision of Section 4 has made it more readable and accessible.

C2

We note that we have intentionally not made substantial changes to Section 4.3 (Removed or Modified Components and Utilities). One might argue that this section is reminiscent of a change log, yet in many ways that is its intent. This section is designed to highlight major changes and removals *and provide a description of why they were removed*.

In his review Reviewer Schwanghart states "My only concern is that the paper mixes quite generic issues in software development in the geosciences with very technical issues specific to Landlab." This comment is perceptive and clearly identifies two (potentially competing) goals that we had in drafting this manuscript: to document and describe technical details of Landlab *and* to share general lessons learned in the development of Landlab. Yet as the Reviewer Schwanghart points out, these joint goals yield a varying technical manuscript. We think that through revisions in response to reviewer comments we have come closer to accomplishing these joint goals.

Note: As per journal instruction we have not submitted the revised manuscript or a tracked changes manuscript as part of this comment.

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