

Interactive comment on “GSFLOW-GRASS v1.0.0: GIS-enabled hydrologic modeling of coupled groundwater–surface-water systems” by G.-H. Crystal Ng et al.

Anonymous Referee #1

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I would like to thank the authors for the first round of responses. I provide below some additional clarifications on few issues raised in the authors reply according to my previous comments.

1. I evaluated the paper not suitable for GMD for the lack of novelty and technical advancements. I did not question the utility itself of the proposed toolkit and I did not express any issue concerning the fit of the subject addressed in this work with the scope of the journal.
2. I highlighted some of the grand challenges (e.g., big-data problems) that, in my opinion, modelers are facing when performing large-scale high-resolution surface-

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subsurface coupled simulations. In this context, in-situ visualization (i.e., the use of libraries to dynamically connect running simulations and graphical outputs) is of particular interest in the geoscience community. My concern was that the paper did not even mention/discuss how the methodology they are proposing reconcile with such grand challenge.

3. I questioned the insights gained from the three test cases. Authors reply that each of them demonstrates particular technical challenges solved by the proposed toolkit where ‘other’ approaches would fail. If this is the case, you need to provide evidence, from a simple visual inspection of Figure 5-6-7 I do not see it.

4. I raised the issue of a cited publication, which is currently under review for another journal. Authors’ argumentation is that the work received positive comments and it will be likely out very soon. At this time it is not. Therefore, it is not possible for any reviewer or person eager to comment on the manuscript to have an idea on the content of the cited work. In other words, being aware of these positive comments on the contribution, you should have included in the discussion later in the review process. . . .

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