

To
The Editor,
Computer Methods for Applied Mechanics and Engineering.

1/23/16

Dear Prof Oden,

Please consider the revised version of the paper uploaded now. We have revised the paper as directed by the reviewer. We would like to thank the reviewer for the comments and the time given to the review.

- 1. The paper is not very well-written. There are many typos, grammatical errors, etc. which should have been discovered during proofreading. The presentation and wording in some places is awkward. It needs a good editing.*

We have carefully edited and rewritten the paper. We appreciate the patience of the reviewer and editor in going through the previous draft.

- 2. There are some terms which are not defined in the algorithm, specifically I do not see where Δt_{dry} and Δt_{wet} are computed. How are these determined for an interface?*

Text includes an explanation of the above quantities and their determination.

- 3. The heuristic method for capturing the wet-dry interface uses an AMR approach, which is described in the paper. The Eulerian interface capturing methods are also used in an AMR framework, but I don't see how the AMR is driven in these cases. There should be some explanation in the paper.*

Explanation is now included. After the interface is identified two layers of elements adjacent to the interface are marked for refinement.

- 4. The quality of the figures in Figure 12 needs to be improved. It is difficult to see the purple and black lines overlaid on top of the dark image.*

Figures are redrawn with clearer colors and better resolution.

5. *The level set interface tracking method described here is very similar to work done by Kees, et al in the following reference: Kees et al, Journal of Computational Physics, v. 230, pp. 4536-4558. The authors should acknowledge this work, though Kees et al were focused on a two-phase Navier-Stokes model.*

Citation is added.

Abani Patra