Editor: Thank you to both reviewers and the authors for the reviews + response. Both reviewers suggest major revisions but an interesting modeling development, and I will invite the authors to resubmit their manuscript following the changes they have outlined for a second review. For consistency as well - could the authors please indicate in their abstract the version numbers of icepack/Schism they are updating.

Response: Hello editor, thanks for your review and help! In response to your suggestion, we have revised the abstract and added the version number as 'In this study, we couple the Semi-implicit Cross-scale Hydro-science Integrated System Model (SCHISM, v5.11) with Icepack (v1.3.4), the column physics package of the sea ice model CICE;' in line 16 of the track-changes file.