I appreciate the authors addressing each comment carefully. I believe the revised manuscript is much improved and will make an important contribution to The Cryosphere. I'd only ask that the reviewers address one issue detailed below. The original comment is in black, their response in blue, and my final comment in red.

Ideally, the authors would address the issue of future projections of GIA by running a fully coupled simulation with a dynamic ice model. This would be the only way to fully understand the impact that their REG_X viscosity models might have on groundline dynamics and GIA. Without coupled simulations, it is hard to interpret their results since these ice-loading models (ICE-FUT) are based on different viscosity structures. At a minimum, it would be helpful to plot the groundline evolution (as calculated by the floatation criterion in the Seakon) in Figure 6 for different models to assess the potential impact this viscosity structure might have on ice stability.

We agree that coupled simulations with a dynamic ice model would be the best way to understand the impact of incorporating regional upper mantle structure on grounding line dynamics and, motivated by the results of this investigation, we foresee pursuing such an investigation in the future. Such simulations are highly computationally expensive and as illustrated in Gomez et al. (2024) with the continental viscosity model, the strength and nature of the feedback is sensitive to the climate forcing. We thus feel that a thorough exploration merits its own study.
As the flotation criterion in Seakon does not accurately capture the feedbacks between GIA and ice sheet dynamics, we feel that it would be misleading to show and challenging to interpret grounding line positions calculated using the floatation criterion for each viscosity model. Thus, we only show grounding line positions predicted using the ICE-FUT model in Figs. 4-5.

I agree that Seakon does not accurately capture GIA-ice sheet feedbacks. However, the purpose of Figure 8 is to demonstrate the potential impact that GIA could have on ice sheet dynamics. This impact is mostly related to where the ice is grounded, so it seems important to show whether the Seakon model predicts large changes in where the ice sheet is floating. This would provide a better understanding of the impact of regional viscosity structure on ice sheet dynamics than simply the amount of uplift along a transect.