

The authors' responses to my previous comments are acceptable. I believe the current manuscript could be published in The Cryosphere journal after addressing the following technical question.

- In table 1, material properties, I noticed a critical discrepancy that had caused some confusion in my first review. Material parameters used in the mathematical model seem inconsistent. The Young's modulus is for ice+permafrost+forzen roc, whereas the thermal expansion ratio is for ice/water. How do you explain this discrepancy in the material parameters? What about Poisson's ratio?

Thanks,