

2nd Review for: Version 1 of a sea ice module for the physics based, detailed, multi-layer SNOWPACK model

I thank the authors for their careful consideration of the reviewers comments. Overall, the revised manuscript is a clear improvement and the new figures provide important details that were missing in the first version. I'm satisfied with the authors response to my comments and have only one minor open question:

Specific comments:

- P20L14-17: In this paragraph it is worth to mention the density with which the model initializes new snow.

Minor comments and typos:

- P2L7: The thermal conductivity of snow also varies → remove “also”
- P2L30: Inhomogeneities caused by → Inhomogeneities in the snow caused by
- P2L33: up to a few decimeter for ... → up to a few decimeter thick for...
- P5L11: ...on local temperature would reduce the energy → remove “would”
- P11L12: ...no diffusion of salt with the atmosphere → “with” seems not to be the right word
- P15L8: Please add a citation of the ERA5 data
- P16L12: decrease in snow depth → decrease in measured snow depth
- P23L8: Fig. 9b shows that much of.. → Fig. 9b shows that a substantial amount of
- P23L10: 0^{circ}C → 0°C
- P23L12: winter, the flooding → remove “the”
- P24L3: shown in 9d → shown in figure 9d
- P27L5: To test how our model simulations would → To test how the model would
- P27L21: ,such that that the → remove one “that”
- P32L1: 2 cm of ice, with constant... → 2 cm of ice and constant
-