

Review for "Assessment of Snow Depth Retrieval from Passive Microwave Observations over Arctic Sea Ice: A Global Sensitivity Analysis" in The Cryosphere

I am pleased to see that the authors have made substantial improvements to the paper by thoroughly addressing several of the reviewer comments and provide detailed analysis in their supplementary material.

I don't see any major concern for publication in the Cryosphere.

That said I would maybe incorporate Supplementary Material sections 2 and 4 (including figures SFig1 and SFig3) in the manuscript. The comparison with observational AMSR2 TBs was asked by all reviewer so does the sensitivity to a different microstructure model. Given these results are in good agreements with what the authors state, I think this would be valuable to the manuscript and future readers.