

Interactive comment on “Landfast ice thickness in the Canadian Arctic Archipelago from Observations and Models” by S. E. L. Howell et al.

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This manuscript describes an analysis of ice thickness and snow depth from a combination of local observations and from CMIP models. Overall, I believe this article was well written and would be of interest to readers of the Cryosphere journal. I do have one minor suggestion for the authors. Instead of trying to pick model points closest to the observed sites, perhaps a better approach is to average over the whole Canadian Arctic Archipelago. As the authors point out, the CMIP models do not have the resolution to properly represent the channels in this area. So, a larger area average might be more meaningful. This could be compared to the average of the four observed locations. Also, perhaps some thoughts on how the relationships between land fast ice and snow depth could be better represented in the models would be helpful.

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