

***Interactive comment on “Application of a two-step approach for mapping ice thickness to various glacier types on Svalbard” by Johannes Jakob Fürst et al.***

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The authors spend some effort on providing formal estimates on the overall accuracy of the method, which is greatly appreciated. I suggest that they also look into the detailed comparison of various radar processing schemes provided by Moran et al. (2000). Those authors compare raw 1D vs. 2D vs 3D array radar data processing and come up with estimates of ice thickness errors which are larger than those often used in other studies. Lapazaran, as the most recent and comprehensive study on this issue, cite it, too, but the original paper might be worth looking into, as your study also includes very mountainous valleys.

Delineation of a complexly dipping temperate glacier bed using short-pulse radar arrays  
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Moran, M. L.; Greenfield, R. J.; Arcone, S. A.; Delaney, A. J. *Journal of Glaciology*, Volume 46, Number 153, March 2000, pp. 274-286(13)

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Interactive comment on The Cryosphere Discuss., doi:10.5194/tc-2017-30, 2017.