

Interactive comment on “The relation between sea ice thickness and freeboard in the Arctic” by V. Alexandrov et al.

Anonymous Referee #2

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I have three main comments. The first one is that based on the Sever data I think these results regarding relation between sea ice thickness and freeboard in the Arctic are relevant for FYI or Seasonal sea ice but not for MYI.

My second remark concerns hydrostatic versus isostatic assumptions. Both assumptions should not be confused. It should be clear that isostatic is more or less related to snow pay load on top of sea ice in contrast with hydrostatic being more related to sea ice density.

The third important aspect concerns sea ice rheology that might affect freeboard versus sea ice thickness. This might not have a dominant impact for FYI compared to MYI but still need to be considered in this paper.

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Interactive comment on The Cryosphere Discuss., 4, 641, 2010.