

## ***Interactive comment on “Ice volume estimates for the Himalaya–Karakoram region: evaluating different methods” by H. Frey et al.***

**D.B. Bahr (Referee)**

dbahr@regis.edu

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Volume = mass/density. Using gravimetric techniques, for example, this can be measured completely independent of the surface area. Thus, there is no inherent self-correlation between volume and area, and the volume-area scaling relationship has a sound theoretical basis. I agree that existing radio-echo sounding measurements are problematic as a test of the theory and that thickness-area scaling might be an alternative test of the theory if the thickness data covered more orders of magnitude. But this paper is focused on using the theory (not data) to predict volumes, and therefore there is no need to invoke thickness scaling or to incorrectly discuss self-correlation arguments as if applicable to the underlying theory.

Thanks, David Bahr

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Interactive comment on The Cryosphere Discuss., 7, 4813, 2013.

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