

***Interactive comment on “Comparing  
a thermo-mechanical Weichselian ice sheet  
reconstruction to GIA driven reconstructions:  
aspects of earth response and ice configuration”  
by P. Schmidt et al.***

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Received and published: 22 January 2014

Pippa's comments are very careful and focussed. However, on one item I would like to sharpen the argument, and that is eustasy. The comment should really come from Bert Vermeersen, I'm only epigonic. It's about "eustasy". I recommend to remove the mention altogether. There is no such thing even on the most rigid of all conceivable planets. The lost gravity pull of a waned ice sheet will leave its fingerprint on the sea level, maximum at the nearest coast and opposite in sign (a drop!). The surface will yield to the new equipotential, and that has even a global far-field effect. Eustasy

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appeals to a notion of a uniform sea level change. A (visco-) elastic earth may alter the fingerprint, however never up to the level that the Newtonian component establishes.

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Interactive comment on Solid Earth Discuss., 5, 2345, 2013.