Interactive comment on “Finite difference modelling to evaluate seismic $P$ wave and shear wave field data” by T. Burschil et al.

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This paper gives a nice example of FD modeling of a near surface structure. My comments: 1) I find the two models confusing. Why not rejecting model one? You write “the most prominent difference is a discontinuous till layer in the centre of the image at about 80 m depth” or “missing of a strong reflector at about 260 m depth”. But you have a discontinuous till layer in your model and you have no layer at 260 m depth in your model. So, why are you astonished to have it or not have it in your modeled seismic section? The modeling is fine, but you start with a too simple model. It is simplified for hydraulic modeling but this makes no sense for seismic modeling. So my proposal: skip this model! Don’t bother us with this insufficient model. 2) Why don’t you show an example with weathering layer? Is it because of computing time? An information on
computing time would be nice.

Interactive comment on Solid Earth Discuss., 6, 2169, 2014.