

## ***Interactive comment on “Verification of the multi-layer SNOWPACK model with different water transport schemes” by N. Wever et al.***

**R. L. H. Essery (Referee)**

richard.essery@ed.ac.uk

Received and published: 17 August 2015

This is a very good piece of work and I have only minor comments (I have also sent a list of editorial suggestions that are not of interest for the open discussion directly to the authors).

The site is sometimes abbreviated as “WFJ” and sometimes “the WFJ” – pick one.

page 2660

Not much space would be required to quote the Richards Equation and the van Genuchten water retention curve here for the benefit of the general reader.

page 2665

C1431

If the cylinder is inserted horizontally into the snow, “60 cm long” would be a better description than “high”.

page 2675

Is “dependence of thermal conductivity on density” intended?

Figures 6 and 8

The captions should note that the temperature axes are staggered to avoid overlap. Some of the broken line styles are impossible to distinguish; longer dashes might help.

Figure 12

The bucket and RE results look surprisingly similar, with little response to the spring wetting apparent. Is this just due to the colour scale?

---

Interactive comment on The Cryosphere Discuss., 9, 2655, 2015.

C1432