

## ***Interactive comment on “A thermodynamic formulation of root water uptake” by A. Hildebrandt et al.***

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Received and published: 25 January 2016

Correction:

The following paragraph in the review is targeting the wrong arrow in Figure 2:

‘Thus, root water uptake itself is a major factor in making the soil water distribution more uniform, while simultaneously reducing the overall water content. Thus, the blue arrow in Fig. 2b should not point downwards, but has a trajectory that moves downward and to the left simultaneously in vegetated soils in dry periods.’

It should read:

‘Thus, root water uptake itself is a major factor in making the soil water distribution

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more uniform, while simultaneously reducing the overall water content. Since the root water uptake preferentially targets water with higher potential energy, the red arrow in Fig. 2b is the conglomerate of many local water extractions that, on average, start at a point above the lines in Figure 2. Only in the case of a perfectly uniform soil will the red arrow appear as indicated, but this is a case that is purely hypothetical and can only be realistically produced in the laboratory when the soil is saturated (which presents its own problems for root water uptake). For the other lines, the red arrow will start somewhere above the line, and as the soil dries out and the roots homogenize the water distribution by extracting mainly from the wettest spots, the arrow will come closer towards the line as it moves to the left.’

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 13383, 2015.