Supplementary material

Table S1: Average soil hydraulic parameters of all soil layers derived from direct measurements. Each value is depicted by its mean ± standard deviation.

Measured SHP		θ_r	Θ_s	α	n
Spruce	10 cm	0.32 ± 0.03	0.70 ± 0.04	0.04 ± 0.01	2.10 ± 0.53
	35–45 cm	0.18 ± 0.04	0.52 ± 0.03	0.04 ± 0.01	1.72 ± 0.15
	50 cm	0.15 ± 0.02	0.48 ± 0.02	0.05 ± 0.01	1.58 ± 0.19
	70–75 cm	0.15 ± 0.04	0.50 ± 0.04	0.07 ± 0.03	1.45 ± 0.13
Beech	10 cm	0.17 ± 0.02	0.53 ± 0.02	0.05 ± 0.01	1.36 ± 0.02
	30 cm	0.18 ± 0.01	0.49 ± 0.04	0.05 ± 0.01	1.55 ± 0.21
	45 cm	0.17 ± 0.01	0.47 ± 0.01	0.05 ± 0.01	1.46 ± 0.01
	60 cm	0.13 ± 0.02	0.42 ± 0.01	0.05 ± 0.02	1.48 ± 0.13

Figure S2: A - Measured and modelled snow water equivalent (upper two panels) and B - soil water content (lower two panels)