

Table S1. Relationship real dielectric permittivity and volumetric water content of tested soil: coefficients of regression equation.

	$\theta = a \times \varepsilon^3 + b \times \varepsilon^2 + c \times \varepsilon + d$				
Sensor-installation	a	b	c	d	R^2
CS-insert	1.6E-05	-1.2E-03	3.9E-02	9.2E-02	0.9742
HP-insert	9.9E-06	-9.1E-04	3.5E-02	6.0E-02	0.9857
HP-buried	2.2E-05	-1.7E-03	4.9E-02	5.4E-03	0.9855

θ , volumetric water content ($\text{m}^3 \text{ m}^{-3}$); ε , real dielectric permittivity; R^2 , coefficient of determination.