



Validation of a new soil moisture profile probe operating with Time Domain Transmission Technique

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The objective of the PROFILE TDT project is to develop a robust, low-cost profile probe with high accuracy for longtime observations of soil moisture, salinity and temperature e.g. for the agricultural sector. The probe works with a modified Time Domain Transmission Technique, which was invented by our cooperation partner the Bohdan Dobrzański Institute of Agrophysics. The contribution of the Technical University Berlin to the PROFILE TDT project is the construction of the probe body and the calibration of the measurement system. We will present our laboratory tests with the first prototype and our ongoing material experiments that will ensure a long lifetime of the probe. Furthermore we will give an outlook on upcoming experiments, including measurements under given conditions, calibration for different soil types and finally the in-field test-phase. Information about the sensing technique will be given by our polish cooperation partner, who will also be represented at the EGU.

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