Bachelorarbeit

TEM at Martenhofer lake (filler title)

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Abstract

Die Kurzfassung soll den Inhalt der Arbeit kurz zusammenfassen. Sie sollte zumindest 70 und maximal 150 Wörter beinhalten. Der Schriftgrad sollte 10-Punkt sein. Der Einzug links und rechts soll 1,0 cm betragen. Der Text in der Kurzfassung wird innerhalb der Umgebung `\begin{abstract}` und `\end{abstract}` geschrieben.

Contents

1 Introduction

This document forms deliverable D2-2 of the Contract Change Notice No.1 (CCN-1) of the Fiducial Reference Measurements for Soil Moisture (FRM4SM) project Contract No. 4000135204/21/I-BG. Its purpose is to describe the outcomes of FRM4SM CCN-1 Work Package 2: "Evolution of FRM Methodologies". The tasks of this WP are to:

- test potential new quality indicators (QIs) that are related to spatial land surface features;
- test potential new QIs that are related to temporal soil moisture product characteristics;
- further improve the "Fiducial Protocols and Procedures for Soil Moisture (FPP_SM; RD-2)";
- test intra-annual validation metrics that shall be included in the Quality Assurance for Soil Moisture (QA4SM) service; and
- investigate strategies to assess temporal product stability.

The FPP_SM document forms a separate deliverable that will be updated accordingly. The results of all other tasks are described in detail in the following sections. All analyses will be based on the FRM subset of the ISMN that has been identified in an earlier stage of the project (RD-2). That is, all ISMN stations that are considered “representative” or “very representative” according to the representativeness Quality Indicator (QI), and only measurements that are marked “good” by the automated ISMN [1] quality control (RD-1). This subset will, hereinafter, be referred to as ISMN FRMs.

References

[1] W. Dorigo, I. Himmelbauer, D. Aberer, L. Schremmer, I. Petrakovic, L. Zappa, W. Preimesberger, A. Xaver, F. Annor, J. Ardö, et al. "The International Soil Moisture Network: serving Earth system science for over a decade". In: *Hydrology and earth system sciences* 25.11 (2021), pp. 5749–5804.