



**Supervisor:**

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## MASTER'S THESIS

**TITLE:** VALIDATION ALGORITHMS FOR HYDRO-METEOROLOGICAL DATA

**TIME PERIOD:** DO BE DISCUSSED

**LANGUAGE:** ENGLISH OR GERMAN

### MOTIVATION AND AIMS OF THE STUDY

The Hydrographic Service of the Federal State of Styria operates a large number of measurement stations with respect to streamflow and precipitation. As precipitation measurements are prone to malfunctions for multiple reasons, recorded data are usually validated before publication.

The automated validation of precipitation data is challenging due to its stochastic character. Therefore, to date, most of the validation processes are based on expert judgement and conducted manually. The aim of this work is to identify suitable validation algorithms based for automated application. For this purpose, both the validated data and the raw data sets are available. The selection of processes and process steps shall be based on statistical analysis as well as climatological and topological influence factors.