

## Management of meteorological information in urban hydrology and hydraulics

### Summary

Confidence in measurement is of paramount importance in the growth of scientific and technological knowledge due to its impact on economic, environmental, and social contexts, and the relevance associated with the decision on the management of services and infrastructures. In hydrology and urban hydraulics, although with robust knowledge about the phenomena, of measurement activities, there's still a shortage of knowledge about the metrological performance of instrumentation and data interpretation.

The proposed research work aims to create new skills in the context of metrological management of experimental data, developing innovative approaches that ensure the quality and integrity of measurable quantities, considering the complexity of their temporal and spatial representation, essential for an advanced interpretation of the behavior of hydrological networks and applications dependent on these data. Numerical analysis and Bayesian methods will be used to support instrumentation traceability and uncertainty assessment to quantify and ensure measurement quality.

### Keywords

Measurement, measurement uncertainty, rainfall, water management.



Static calibration of the weighing udometer.



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