

## Can we estimate rainfall from lakes-hydrophone records?

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### Project description

The goal is to move from a single point estimation of rainfall, to a more accurate estimation using a surface of integration. A similar strategy exists already to estimate the amount of snowfall.

Water transmits sound waves extremely well. Assuming each rain drop emit a sound wave, it should be possible to estimate the size and number of raindrops.

The goal of this project is to explore 2 weeks of data (recorded in February), and try to identify a relation between the rain (at the weather station), and the audio signature of each rainfall event.

### Job requirements

Experience in programming (e.g., using Python, Matlab) is a prerequisite. Experience with signal processing (e.g., some basic filtering) could be an added value, but not mandatory.