Urban flooding modelling

The need for data!

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Flood model calibration and validation

Calibration and validation is part of the modelling!

- *Can we improve these tasks by collecting and curating flood data?*

What data do we need?

- Location (x, y; coordinate system?)
- Flood depth (units? time resolution?)
- Localised flood velocity (units? time resolution?)
- …

Where to store data?

How to store data?

Data-driven flood modelling

Data-driven model results accuracy is influenced by the quantity and quality of data used data for training

- *Can we make our flood data open and usable by "everyone"?*

What data do we need?

- 1D (point) time series? (x, y; coordinate system?)
- 2D time series! (regular (squares or hexagons) grids? Irregular meshes? raster format? Spatial and time resolution resolutions))
- Flood depth or flood level(?); Flood velocity (units?)
- Maximum water depth and velocity?
- …

Where and how to store data?

- Common data repository? Pointers to data repository?

Let’s start sharing flood data to improve our flood modelling!

We can achieve more when agreeing to

have an urban **flood data standard!**

share data in an open **flood data platform**!

Questions, suggestions, … don’t hesitate to get in touch: **joaopaulo.leitao@eawag.ch**