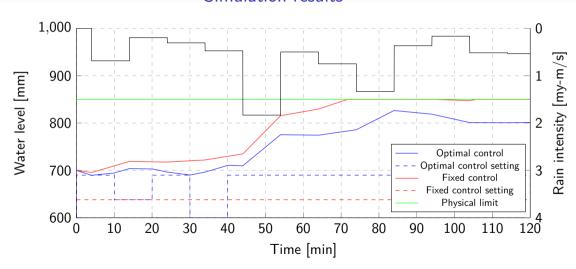
## Offline control of lab pond setup - recalibrate Experiment design and results

September 17, 2023

## Experiment design

- Offline control: i.e., a strategy is synthesized for a fixed period and then followed for the full period.
- Experiment duration: 120 minutes.
- Rainfall data: first 120 minutes of the data.
- Initial water level: 700 mm.
- Physical water limit of setup: 850 mm.
- Duration single control period: 10 minutes.
- Optimization cost function: min  $\mathbb{E}(o)$ , where o is the accumulated overflow duration.
- Fixed outflow is setting 2 (approx. 50% of pump capacity).

## Simulation results



## Experimental results

