

The Canton of Zurich

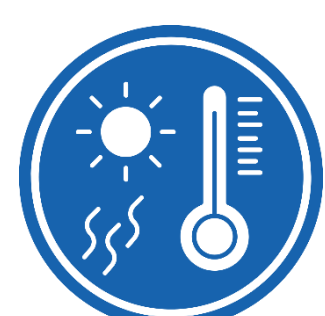
- **Densely populated** (1.6M)
- **Flat terrain, urban environment**
- **Largest city of Switzerland** (Zurich - 450K inhabitants)



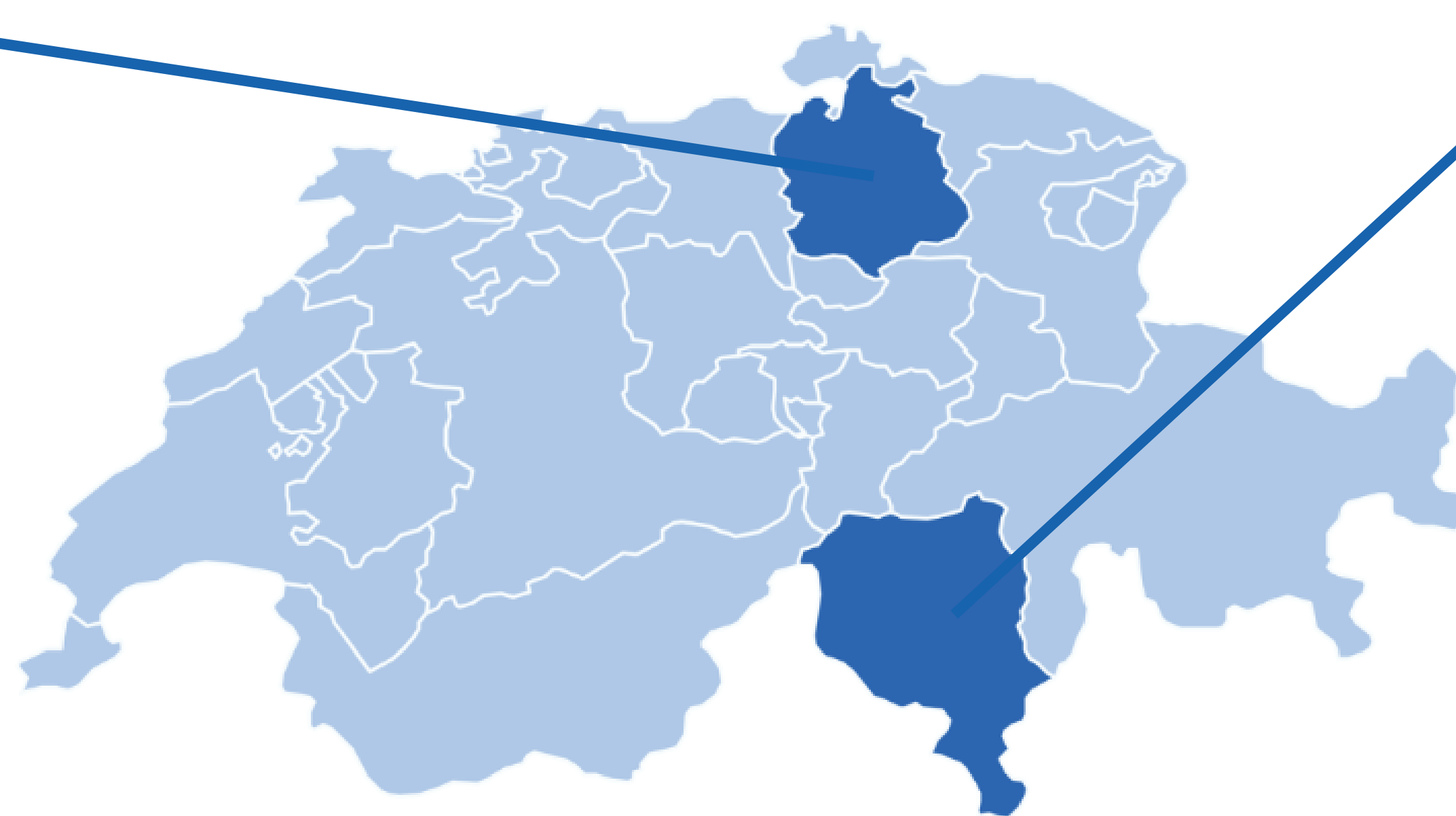
Storms



Floodings



Heatwaves



The Canton of Ticino

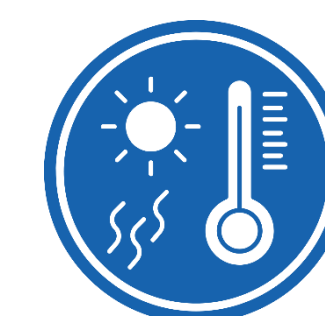
- **Sparsely populated** (350K)
- **Mountainous terrain**



Storms



Floodings



Heatwaves



Wildfires



Landslides



Avalanches

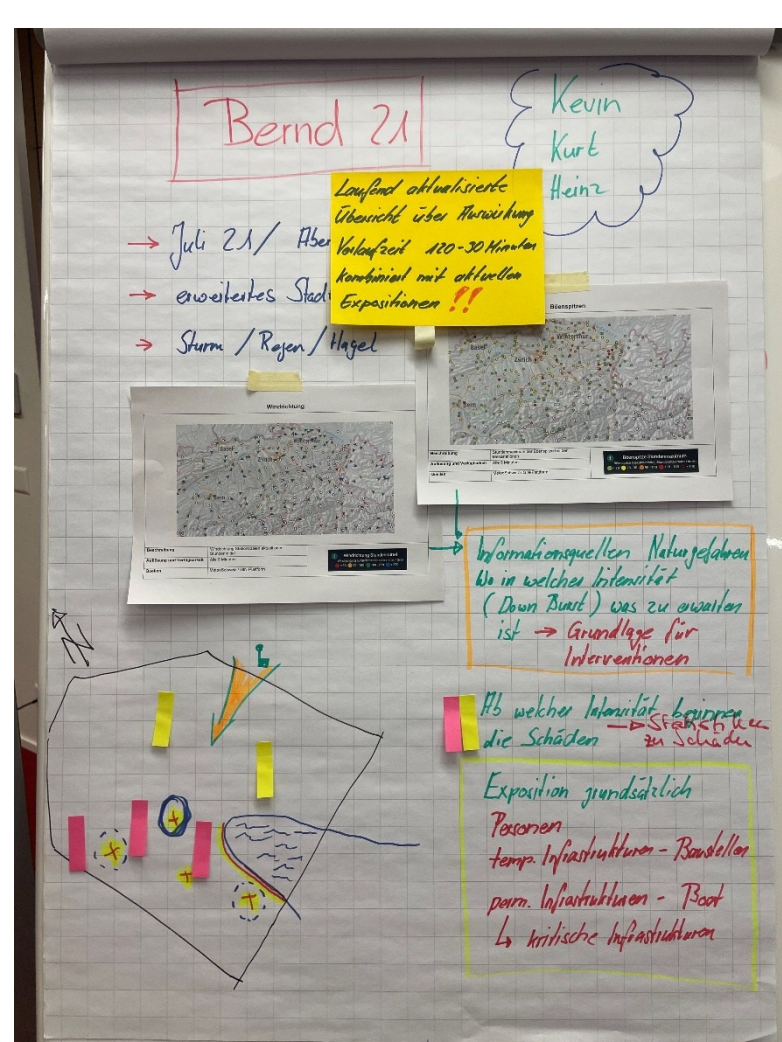
Challenges

- Checking **multiple information sources** is time-consuming
- **Flash floods** are among the most challenging hazards, particularly in the Canton of Ticino
- **Fluctuating response volumes** in dispatch centers create challenges for personnel planning and call prioritization

GOBEYOND solution

- Prototype platform providing **consolidated visualizations** of hazard and exposure information
- Evaluating the **potential of different modelling approaches** for flash floods from a stakeholder perspective
- Analyzing **emergency response data** to identify potential for predictive models

Stakeholder Workshops

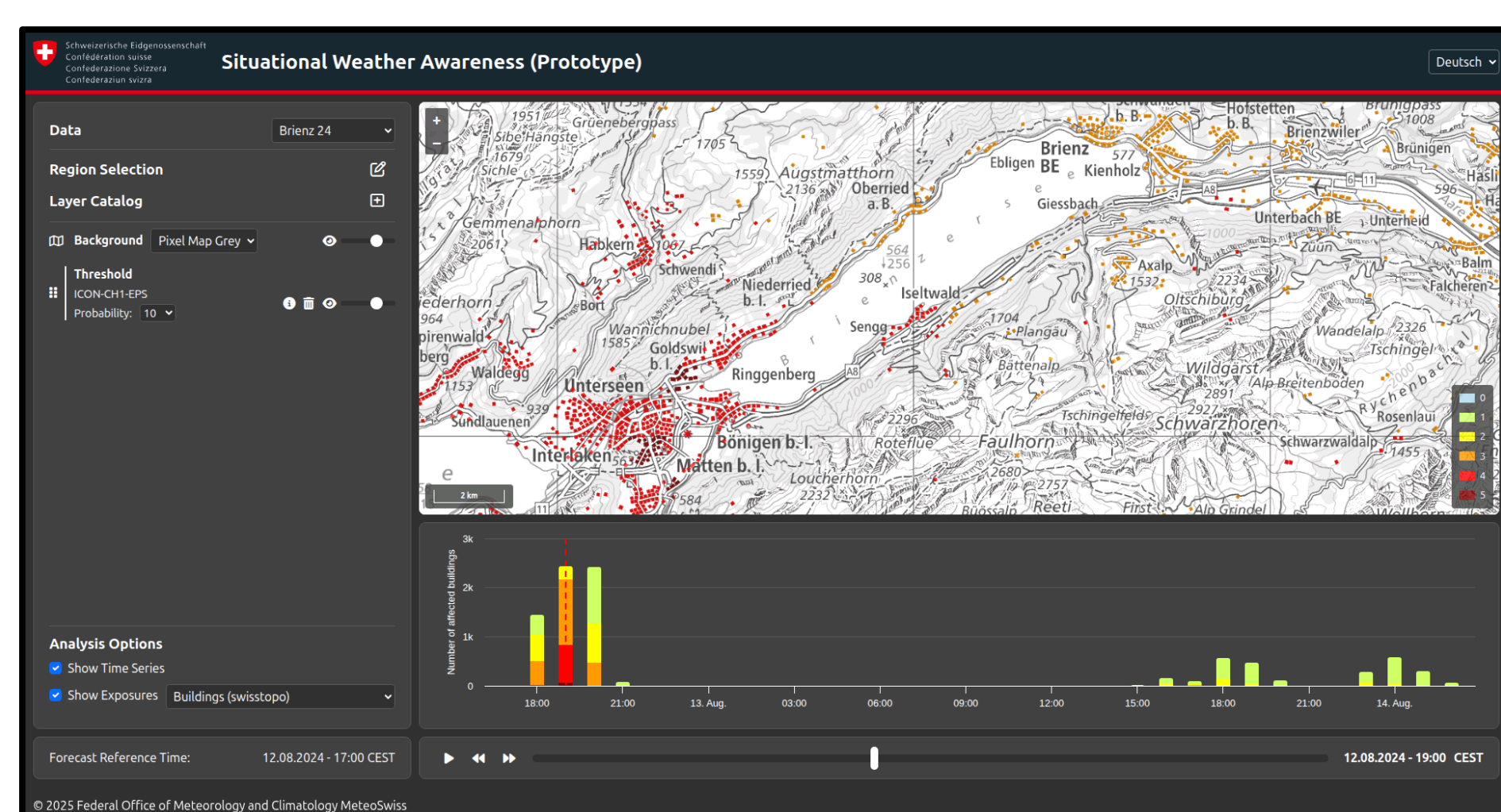


Use case & results

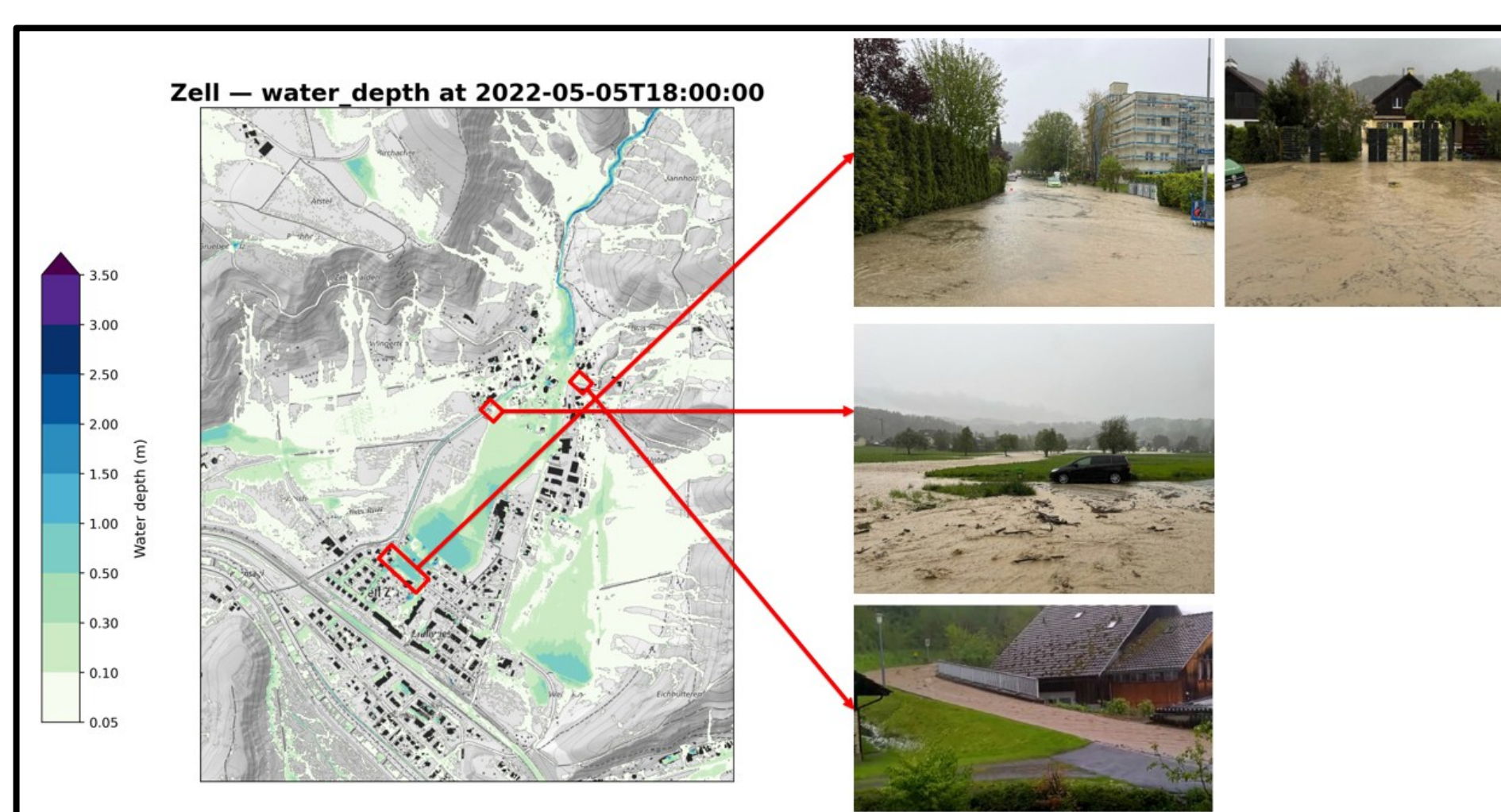
- The prototype platform enables **rapid stakeholder engagement** and helps identify the most decision-relevant features.
- Comparing flash flood event documentation with model outputs improves understanding of relevant **spatial scales** and **potential for predictive simulations**.
- Emergency response data reveals **key processes and areas** prone to high call volumes.

Lessons learned

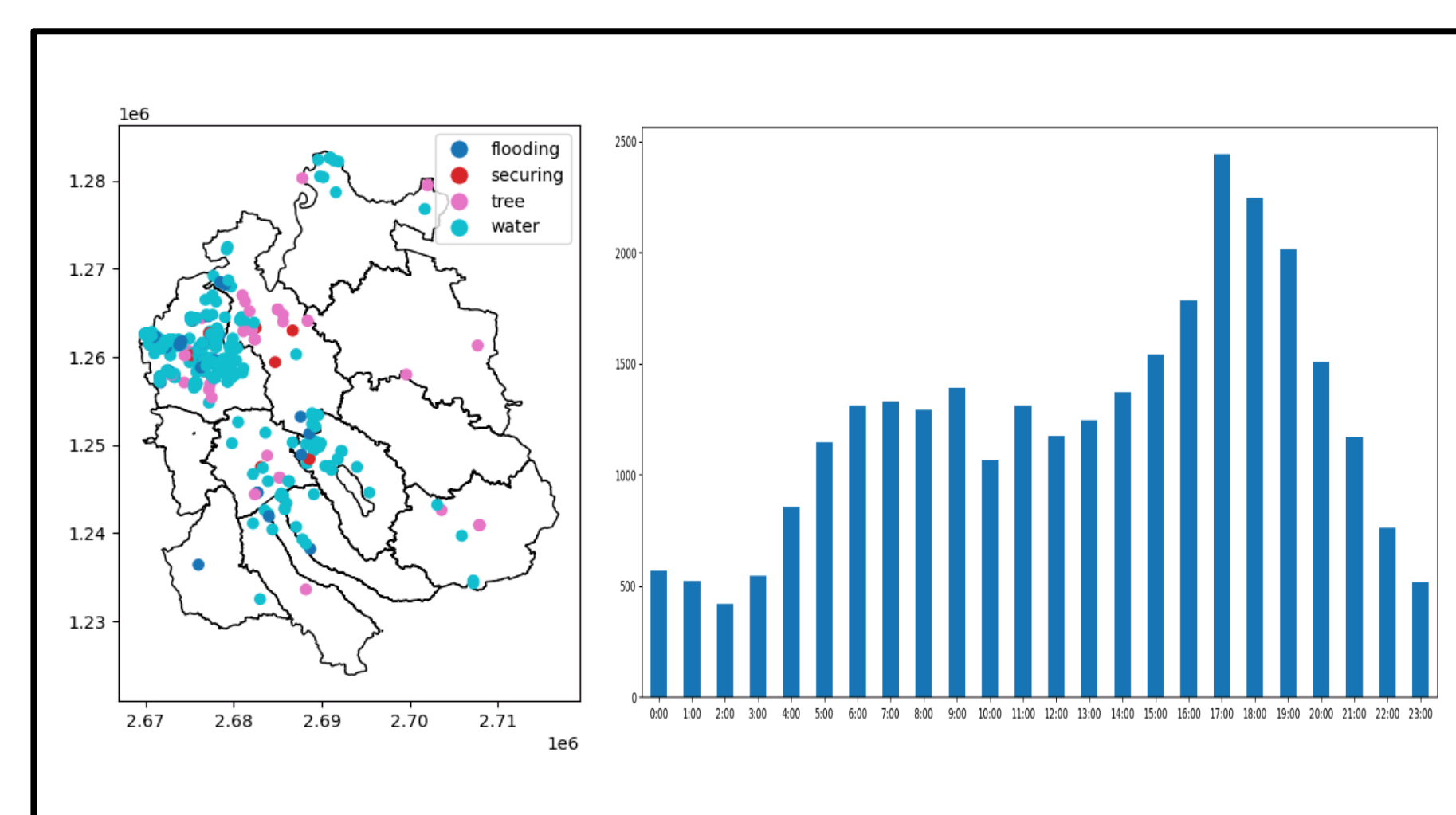
- Stakeholders engage with data differently: **from independent interpretation to reliance on expert guidance**.
- Information is most effective when integrated into **existing, trusted tools** already used by stakeholders.
- **Risk of misinterpretation** from visualizations suggesting a precision not supported by the data.



Prototype Platform



Flash Flood Simulations



Emergency Responses