

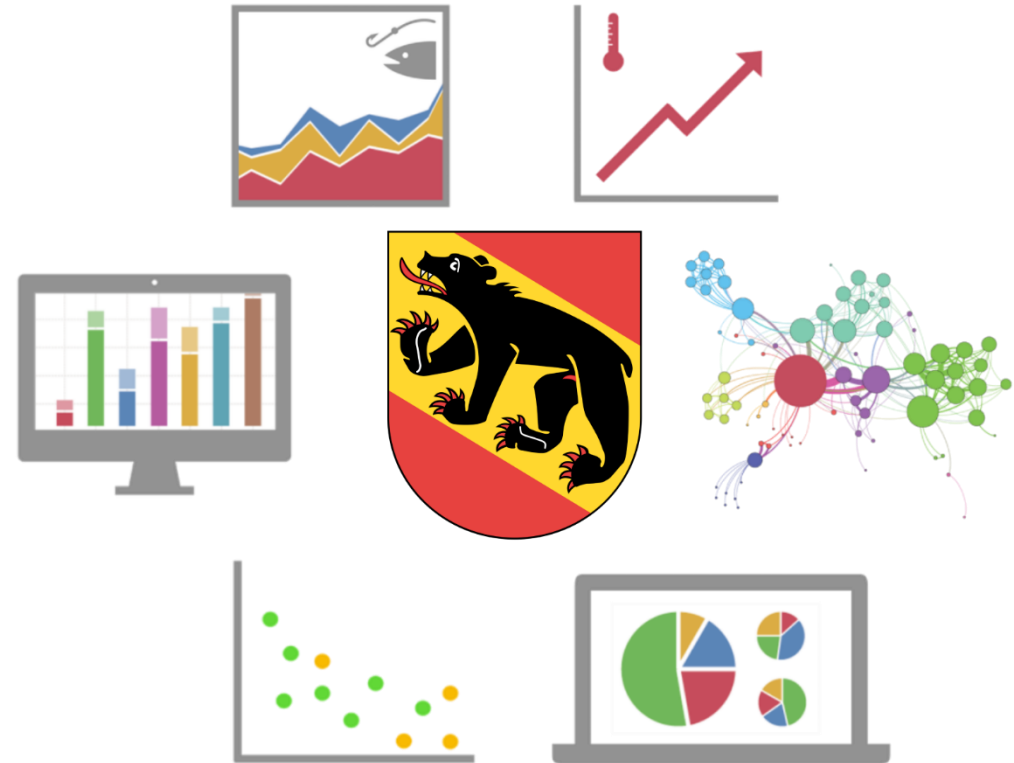


Kanton Bern
Canton de Berne

Energy Infrastructure Detection with Remote Sensing

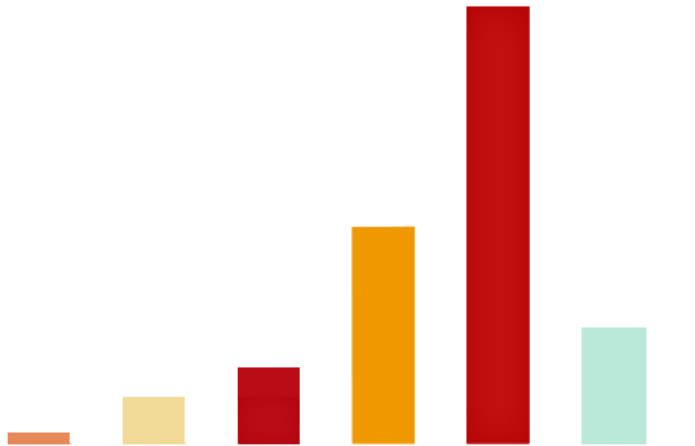
Swiss {ai} Weeks 2025
Hackathon Bern

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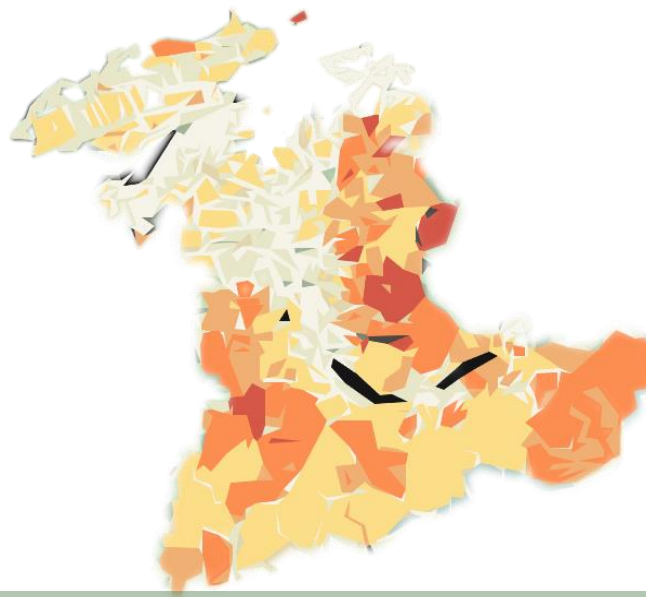


Motivation

Where do we come from?



Net Zero 2050



Monitoring BE

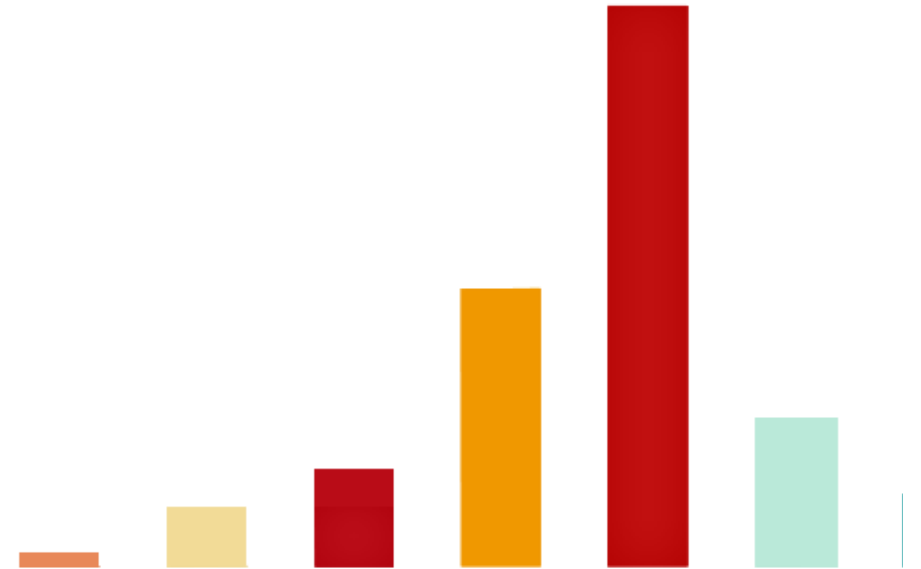


Private Initiative

Challenge Purpose

Why do we start the journey?

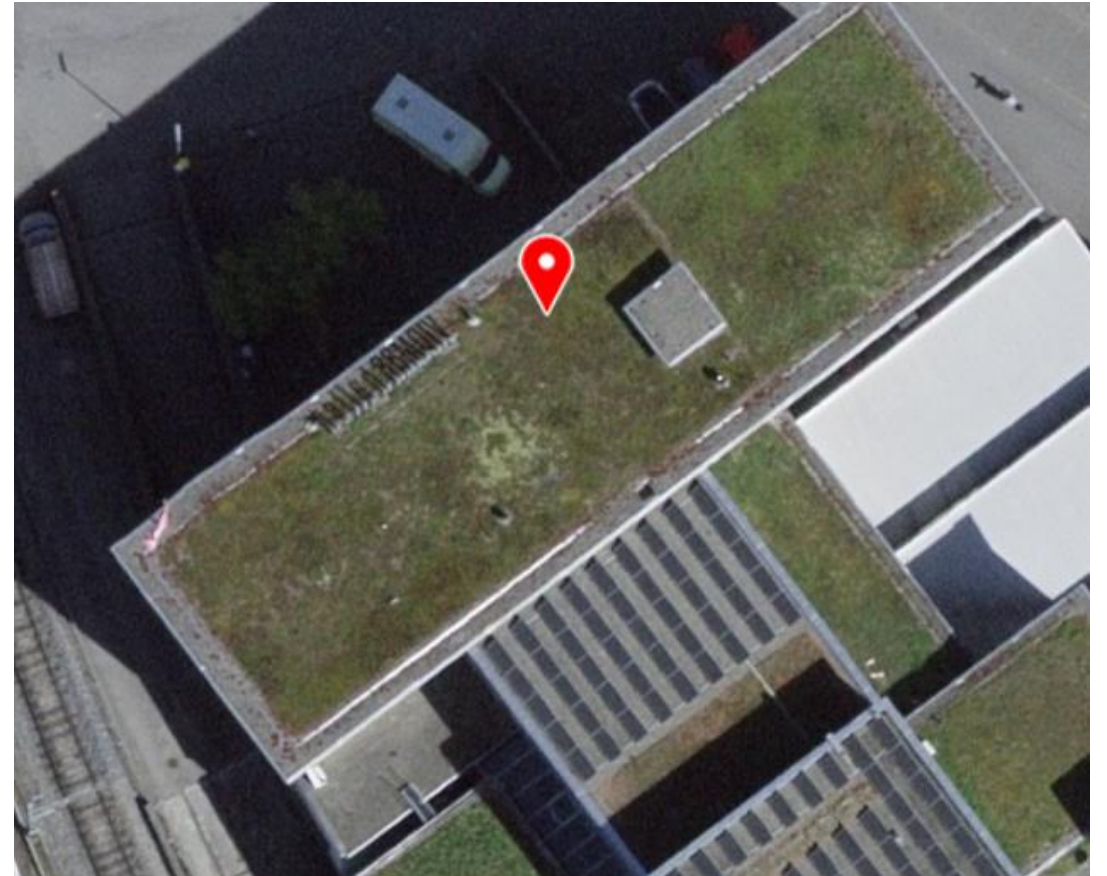
- Comprehensive Overview
- Planning Tool
- Facilitates Monitoring



Goal

Where do we want to go?

- Detect household energy installations
- Assess installed area
- Derive production metrics

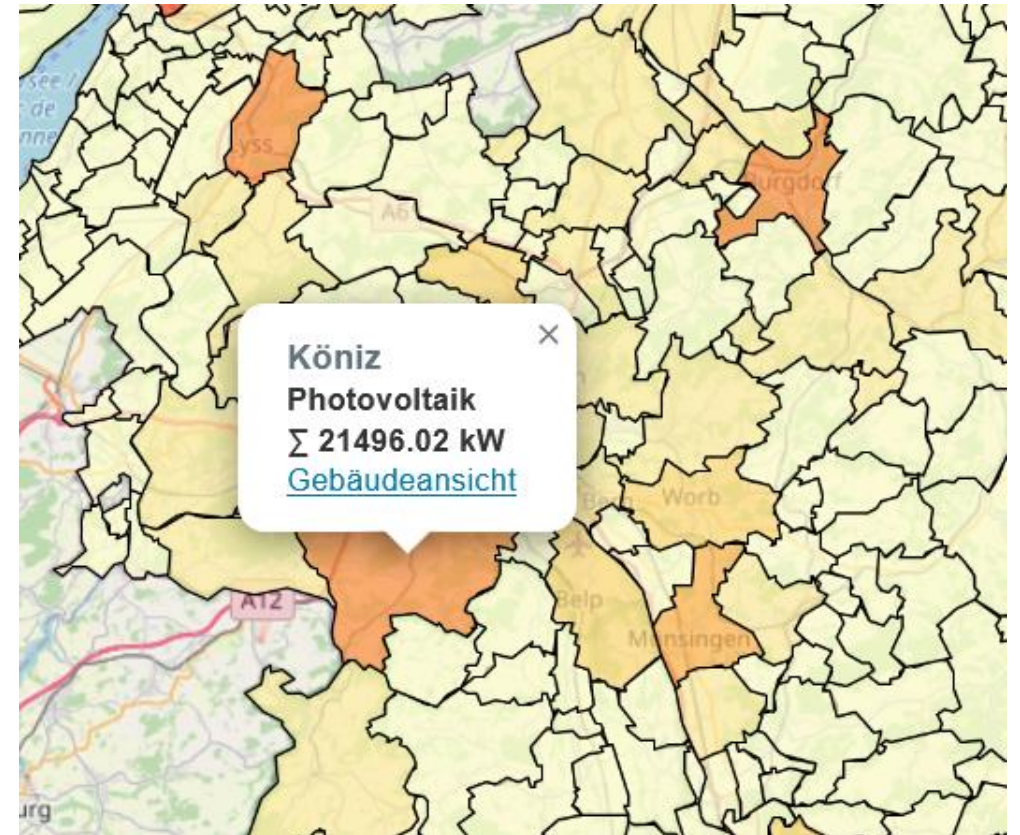


Source: map.geo.admin.ch, Basemap 'Luftbilder',
<https://map.geo.admin.ch/>, acc. 17.09.2025

Expectations

What should the journey teach us?

- Georeferenced Dataset
- Optional: A map
- Quality Assessment
- Well-Documented Code



Source: Energy & Climate Data Platform Bern,
<https://www.ekdp.apps.be.ch/energiespiegel>, acc. 17.09.2025

Resources

What tools are available?

Data:

- Remote Sensing (Orthophoto, satellite, LIDAR)
- Federal Building Registry
- Energy Production Plants
- Production Subsidy Information
- Sonnendach.ch
- Any other useful OGD
 - See e.g. opendata.swiss or [Geodata Kanton Bern](https://geodata.kanton-bern.ch)

Literature:

- Public [Zotero Collection](#) for Challenge



Outlook

How do we process the experience?

- Publication with Open Source License
- Implementation into internal planning workflow
- Basis for further scientific tools development



Challenge Owner

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