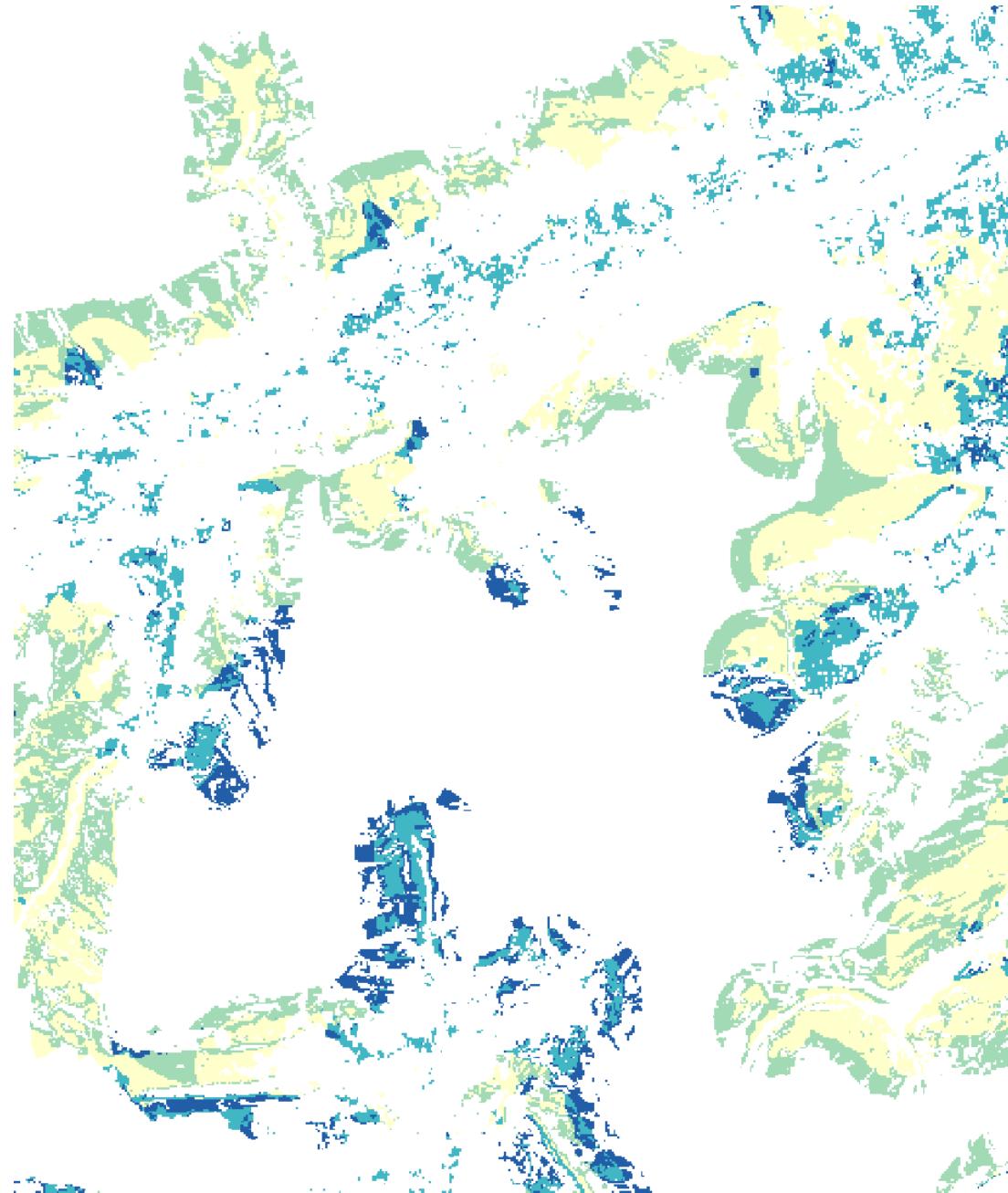


# QGIS Intro

Domain experience – **QGIS** –  
Tableau -map.geo.admin.ch

Yves Maurer Weisbrod

**Master of Science (MSc): Applied Information and Data Science**  
November 14, 2025



**Week 46 (4 lessons), 14.11.2025 (Online)**

<b>Zeit</b>	<b>Lesson</b>	<b>Subject</b>	<b>Lecturer</b>
12.25 - 13.15	1	Introduction QGis II: Thematic maps (points, lines and polygons)	Yves Maurer
13.15 - 14.05	2		
14.05 - 14.55	3	Introduction QGis III: Thematic maps (points, lines and polygons)	Yves Maurer
14.55 - 15.45	4		

**Week 48 (4 lessons), 28.11.2025 (Face-to-Face)**

<b>Zeit</b>	<b>Lesson</b>	<b>Subject</b>	<b>Lecturer</b>
12.25 - 13.15	1	Tableau Introduction	Yves Maurer
13.15 - 14.05	2		
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**Week 50 (4 lessons), 12.12.2025 (Face-to-Face)**

<b>Zeit</b>	<b>Lesson</b>	<b>Subject</b>	<b>Lecturer</b>
12.25 - 13.15	1	Spatial Data for Spatial Development - An insight into the WEBGIS and the Geoinformation at the federal Office for spatial development	Yves Maurer
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14.55 - 15.45	4		

## Short who is who

- Name
- Where you are from (geographically and professionally)
- Your last /actual spatial puzzle you solved (or at least you thought to have solved it)

# About

Professional :

GIS Department @ Federal Office for Spatial Development (ARE)

Part time Lecturer @ HSLU

**Main areas of work:**

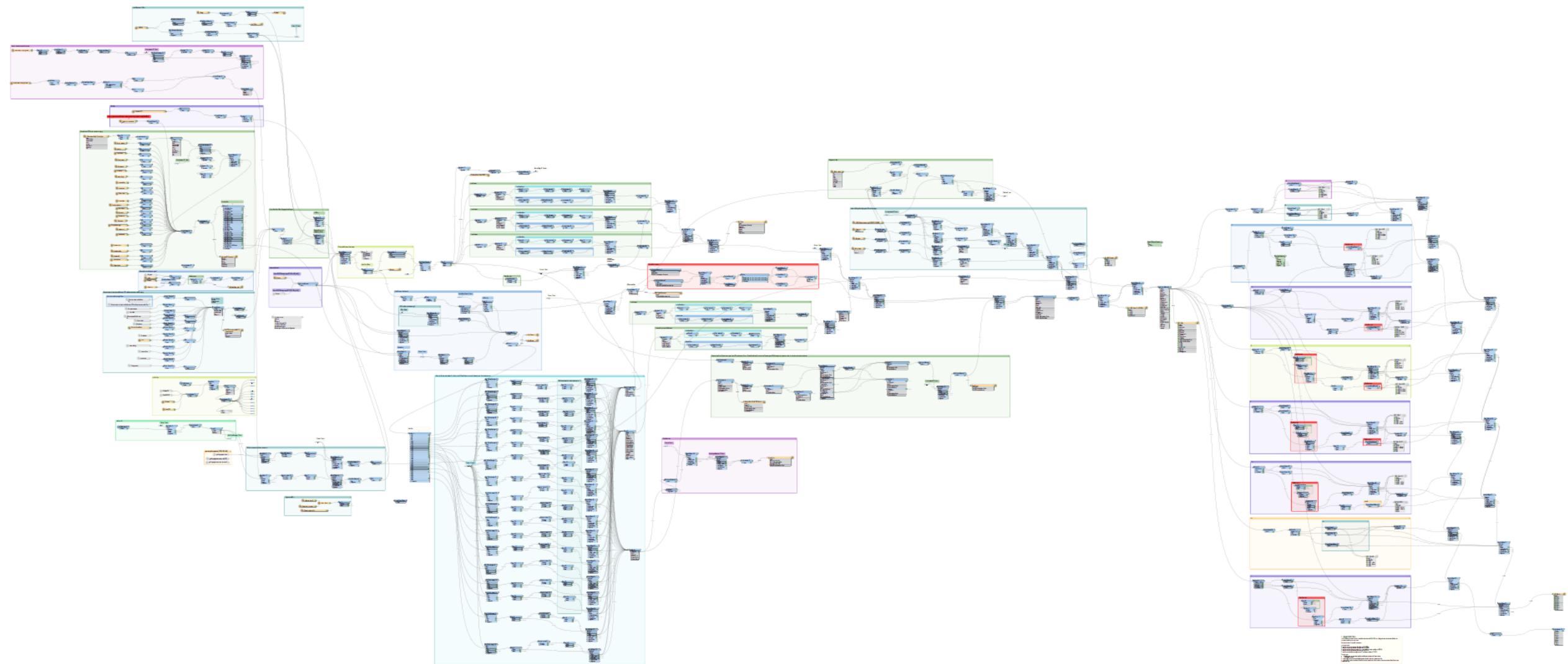
data analysis, process design, knowledge management, friend of data in general

**Professional Origin:**

Forestry, landscape architecture, spatial development, geoinformation

**Private:**

Husband, father, photographer, mushroom picker, lives in Bern.



## Goals to achieve

- Being familiar with QGIS
- Know the most important functions to create nice maps + publish them (Online & as PDF)
- Know the most basic about geodata formats
- Being able to join tables
- Connect to WMS-Services
- (Extra) Know (theoretical), how geoinformation can be joined spatially

# How we are going to work today

- Online (obviously)
- I will (try) record the course and extract and provide the most important parts
- First, I show you how, then you have the necessary amount of time to repeat (well balanced)
- If there are questions or technical issues, pls interrupt

# QGIS

- Were you able to install a QGIS-version? And does QGIS start?
- Do you get the data?
- ! It is possible to install several versions of QGIS and let them run parallel. There is no need to uninstall older versions if there is no need to.

## QGIS project

- QGIS - The Leading Open Source Desktop GIS
- QGIS is a professional GIS application that is built on top of and proud to be itself Free and Open Source Software (FOSS).
- QGIS is a user friendly Open Source Geographic Information System (GIS) licensed under the GNU General Public License. QGIS is an official project of the Open Source Geospatial Foundation (OSGeo). It runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities.
- The latest release is QGIS QGIS 3.44.4 'Solothurn', resp. 3.40.6 LTR (long-term release / stable)

<https://www.qgis.org/en/site/about/index.html>

## QGIS project - How it works

QGIS is a volunteer driven project. We welcome contributions in the form of code contributions, bug fixes, bug reports, contributed documentation, advocacy and supporting other users on our mailing lists and gis.stackexchange.com. If you are interested in actively supporting the project, you can find more information under the development menu and on the QGIS Wiki.

<https://www.qgis.org/en/site/about/index.html>

# Manuals

<https://qgis.org/en/docs/index.html#334>

[https://docs.qgis.org/3.34/en/docs/user\\_manual/](https://docs.qgis.org/3.34/en/docs/user_manual/)

Data we are using today (more to come next week)

### **Spatial divisions (Boundaries)**

<https://www.bfs.admin.ch/bfs/en/home/services/geostat/swiss-federal-statistics-geodata.html> -> Generalized boundaries of local and regional authorities -> Historized boundaries G1 - Situation on 1 January 2025

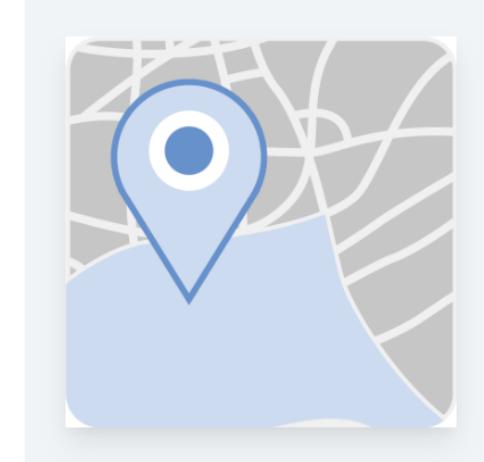
### **Population, buildings, dwellings, persons**

Statistik der Bevölkerung und Haushalte (STATPOP), Geodaten 2024 - 2024 | Data - Table

### **Generalised communal boundaries (Since 1850)**

[https://data.geo.admin.ch/browser/index.html#/collections/ch.bfs.historisierte-administrative\\_grenzen\\_g0?.language=ends-from-2010.assetdetail.27965868.html](https://data.geo.admin.ch/browser/index.html#/collections/ch.bfs.historisierte-administrative_grenzen_g0?.language=ends-from-2010.assetdetail.27965868.html)

**Historized boundaries G1 - Situation on 1 January 2025**



**Download**

 [Historized boundaries G1 - Situation on 1 January 2025](#)

#### **Details**

**Summary** geo.admin.ch - the federal geoportal

**Language** DE/EN/FR/IT

**Type** Data - Table

**Published on** 14.02.2025

## Hands on! (let's achieve today goals)

- Being familiar with QGIS
- Know the most important functions to create nice maps + publish them (Online & as PDF)
- Know the most basic about geodata formats
- Being able to join tables
- Connect to WMS-Services
- Know (theoretical), how geoinformation can be joined spatially

# Getting familiar with QGIS!

- 1<sup>st</sup> what are we working with? (Minimal Intro into Geodata & Coordinate Systems)
- Layout of QGIS – where to find what.
  - Preferences
  - Add Data (GPKG + WMS)
  - Pan / Zoon / Select / Query data
  - Visualize Data & Create a map

## Getting familiar with QGIS! (II)

- Stats / Query / SQL
- Join Data (Table join / Calculate a new field (ratio) / Visualize & export data)
- Export Data (SHP / GPKG)

# Join Data spatially

What if data do not fit ?

Mutationsmeldungen - Resultat								Hilfe 	
Mutationsmeldungen vom 02.01.2022 bis 01.05.2022. (2 Mutationsmeldung(en))								Suchen <input type="text"/>	
10 ▾	Einträge anzeigen								
Hist.-Nummer	Kanton	Bezirksnummer	Bezirksname	BFS-Gde-Nummer	Gemeindename	Grund der Aufhebung	Grund der Aufnahme		
Mutations Nr : 3962, Mutationstyp : Gemeindefusion, Datum des Inkrafttretens : 10.04.2022									
12412	TI	2105	Distretto di Lugano	5197	Melano	Aufhebung			
12762	TI	2105	Distretto di Lugano	5195	Maroggia	Aufhebung			
12848	TI	2105	Distretto di Lugano	5219	Rovio	Aufhebung			
16619	TI	2105	Distretto di Lugano	5240	Val Mara			Neugründung	
Mutations Nr : 3963, Mutationstyp : Gemeindefusion, Datum des Inkrafttretens : 01.05.2022									
14099	AI	1600	Kanton Appenzell Innerrhoden	3103	Rüte	Aufhebung			
14101	AI	1600	Kanton Appenzell Innerrhoden	3105	Schwende	Aufhebung			
16620	AI	1600	Kanton Appenzell Innerrhoden	3112	Schwende-Rüte			Neugründung	
1 bis 7 von 7 Einträgen								Zurück <input type="button" value="1"/> Nächste	
<input type="button" value="Neue Suche"/>		<input type="button" value="Suche anpassen"/>							

Applikation der Schweizer Gemeinden | Applikation der Schweizer Gemeinden

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