

Die eigene Karte mit OpenSource & OpenData

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Inhalte

- GIS ???
- OpenData bei Geodaten ?
- ... wir bauen eine Brauerei-Karte in QGIS



GIS ???

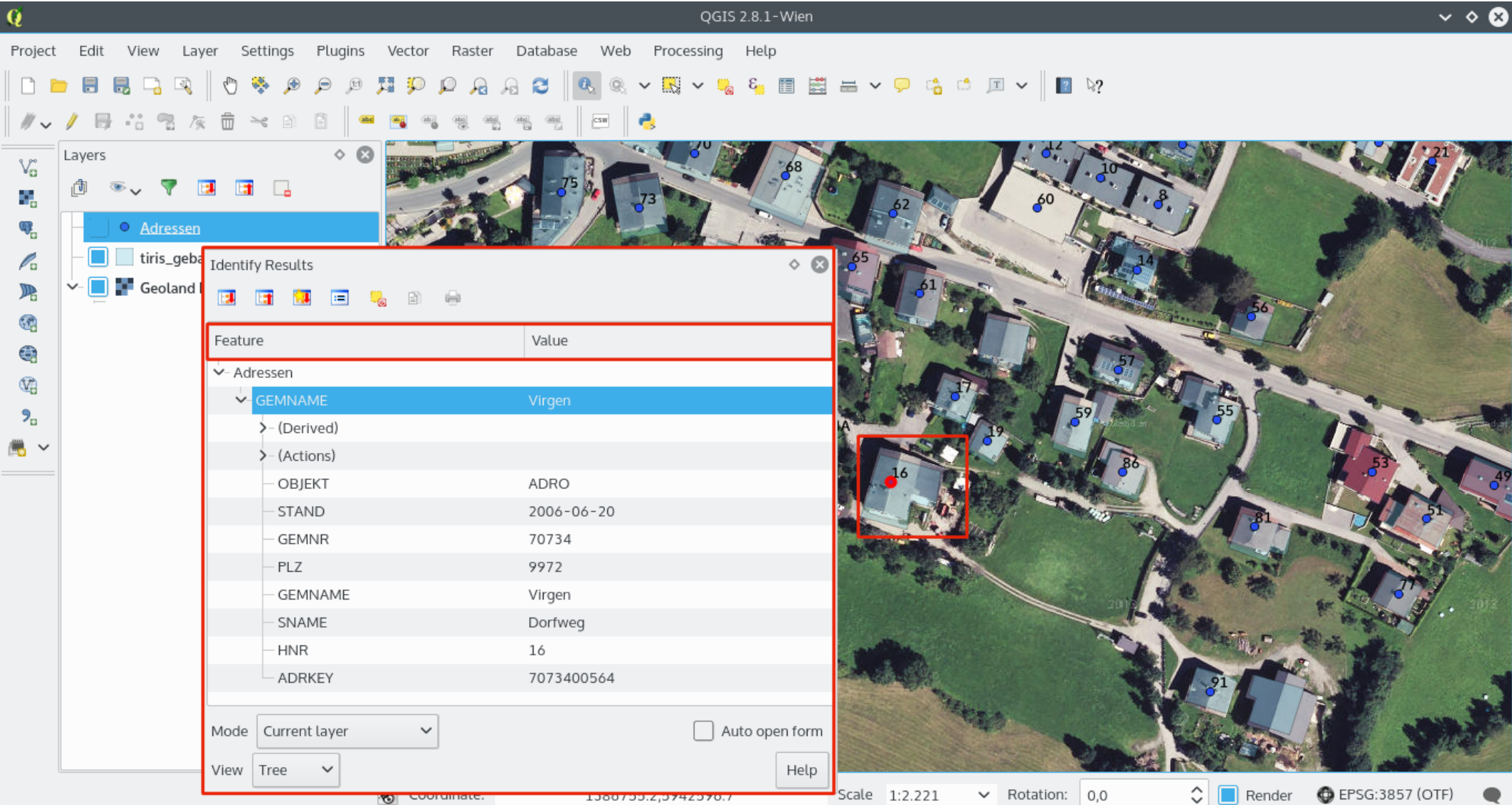
Geografisches Informations System

... Erfassung, Darstellung, Speicherung,
Analyse u.v.m von räumlichen Daten

“Verortung von Objekten auf der
Erde.”



Objekte mit Eigenschaften



QGIS 2.8.1-Wien

Project Edit View Layer Settings Plugins Vector Raster Database Web Processing Help

Layers

- Adressen
- tiris_geba
- Geoland

Identify Results

Feature	Value
Adressen	
GEMNAME	Virgen
(Derived)	
(Actions)	
OBJEKT	ADRO
STAND	2006-06-20
GEMNR	70734
PLZ	9972
GEMNAME	Virgen
SNAME	Dorfweg
HNR	16
ADRKEY	7073400564

Mode: Current layer Auto open form

View: Tree [Help](#)

Scale: 1:2.221 Rotation: 0,0 Render EPSG:3857 (OTF)

Die Welt als Stapel

The image shows a screenshot of a GIS application interface. On the left, a 'Layers' panel lists several layers: 'Adressen' (Addresses), 'tiris_gebaeude_OTirol' (tiris buildings in Tyrol), and 'Geoland Basemap Orthofoto' (Geoland Basemap Orthophoto). The main map area displays an aerial orthophoto of a residential area with numerous red star markers and text labels for addresses such as 'Virgental Straße 75', 'Dorfweg 11', and 'Wiesenweg 9'. In the bottom-left corner, a diagram illustrates the 'World as a Stack' concept, showing a vertical stack of layers. The top layer is labeled 'Vektor' (Vector) and includes 'Roads', 'Land use', and 'Boundaries'. The bottom layer is labeled 'Raster' (Raster) and includes 'Hydrography', 'Elevation', and 'Image base'.

Von der “Kugel” aufs Blatt

Erde = “Kugel” (Geoid)

Bildschirm/Karte = flach/2D --> **Projektionen** -->
Vielfalt!

LAT	12°00.018	N
LON	69°00.001	W

Mehr zu AT: <http://isticktoid.net/?p=339>

Literatur: Modelling our world (Zeiler, 1999)

GIS und OpenSource

- **Client/Desktop:** QGIS, GRASS, gvSIG, ...



- **Server** (Mapserver, (Geo)DB-Server): UMN, PostgreSQL (PostGIS),...

<http://www.osgeo.org> & <http://www.fossgis.de/>

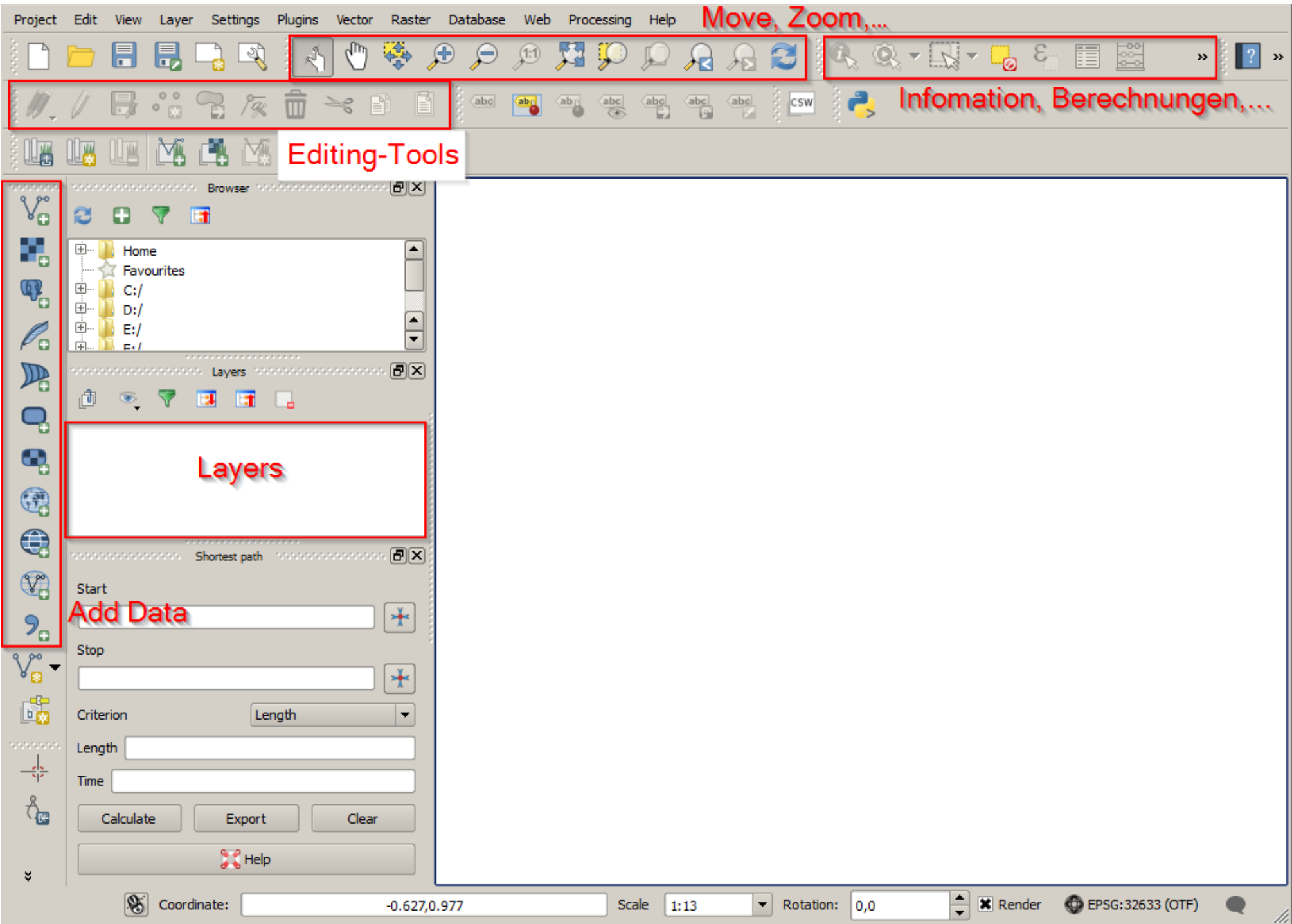
Alles selbst erfassen ?

- Geodaten als OpenData
- Wo findet man welche ?
 - Speziell AT (Aktuell 236 Datensätze)
- File & Database vs. Services
- <http://isticktoit.net/?p=268>



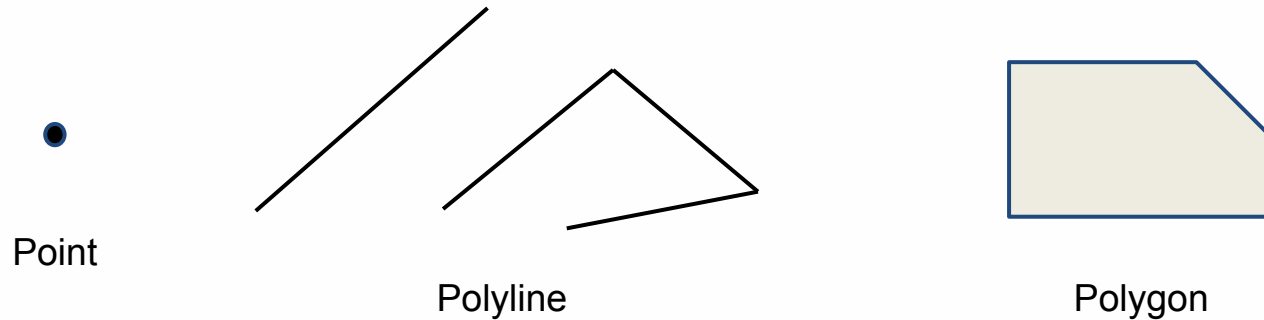
Our own geodata and map

- QGIS: Basics Interface
- Add WMS/WMTS (OpenData)
- New Vector Layer / Attribute
- Digitize & Symbology
- Labeling mit Attributen
- Geoprocessing (Umkreissuche o.ä.)
- Layout



Datenspeicher & Daten erfassen

Shape-File:



1. Datenspeicher erstellen || laden
 - 1 Beim erstellen -> Attribute festlegen
2. Edit-Session starten
3. Datenerfassen
4. Erfasste Daten speichern

2. 1.

Name	Type	Width	Precision
id	Integer	10	

Symbology

General

Style

Labels

Fields

Display

Actions

Joins

Diagrams

Metadata

Single Symbol

Unit: Millimeter

Size: 5,00000

Transparency: 0%

Color: [Orange]

Rotation: 0,00 °

Symbols in group: [Empty]

Open Library

Marker

Simple marker

airport arrow beer capital circle city diamond

ellipse pentagon square star star2 star3 triangle

triangle2

Save

Advanced

Layer rendering

Layer transparency: 0

Layer blending mode: Normal

Feature blending mode: Normal

Style

OK Cancel Apply Help

Labeling

- Attribute als Labels

The screenshot displays the QGIS interface with the 'Layer Properties' dialog box open for a layer named 'PointTest | Labels'. The 'Labels' tab is selected in the left sidebar. The 'Label this layer with' section is set to 'Name', and the attribute 'Attribut im Geodatensatz' is selected. A red box highlights this attribute name. The 'Text/Buffer sample' section shows a preview of the text 'Lorem Ipsum' in yellow. The 'Text style' section is expanded, showing options for Font (Oxygen-Sans), Style (Sans-Bold), Size (12,000 points), Color (black), and Transparency (0%). A red box highlights the 'Text style' options. The 'Map' preview on the right shows a map with a red box around the text 'Freistädter Bier'.

Layer Properties - PointTest | Labels

Label this layer with Name **Attribut im Geodatensatz**

Text/Buffer sample

Lorem Ipsum

Text style

Font Oxygen-Sans

Style Sans-Bold

Size 12,000 points

Color [Black]

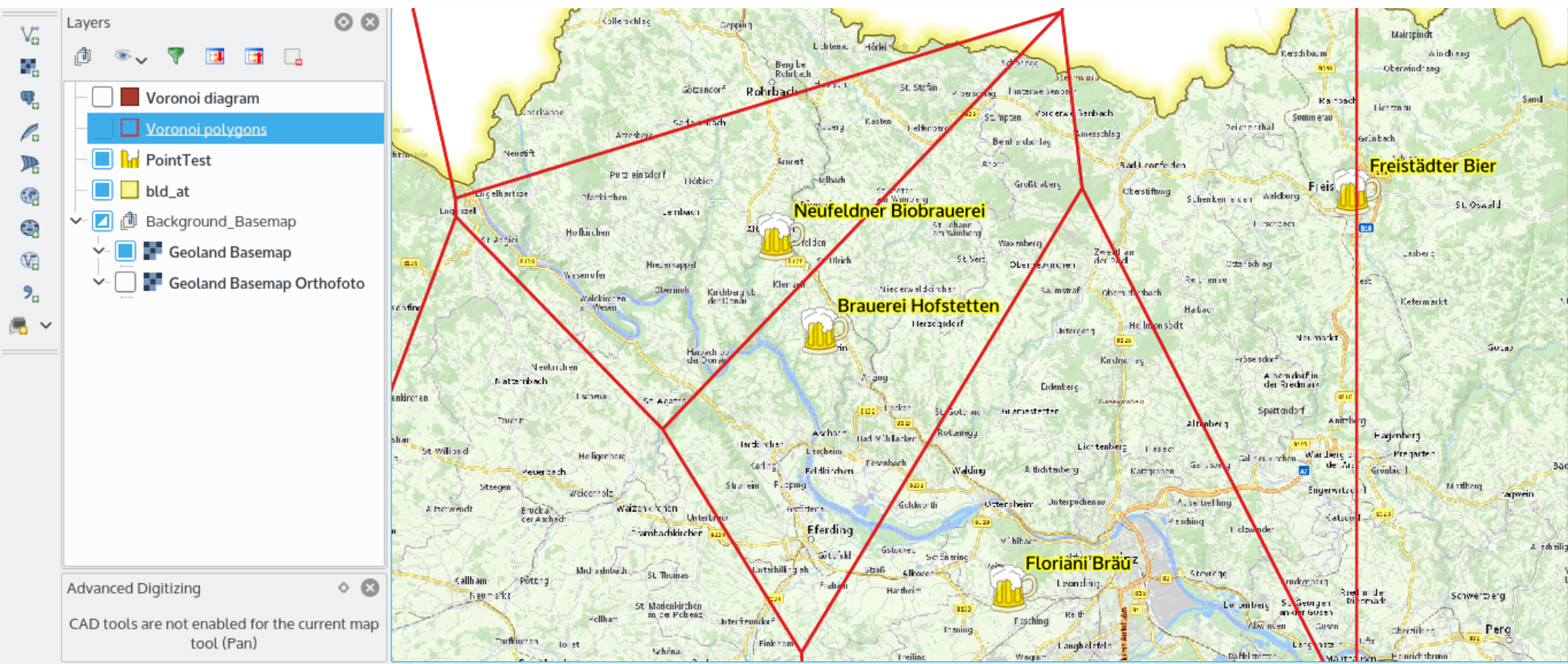
Transparency 0%

Type case No change

Freistädter Bier

Analyse / Geoprocessing

- GIS = mehr als “Karten & Informationen”
- Beispiel “Brauerei-Einzugsgebiete” - Voronoi



VIELEN DANK!
Fragen ?