

freitag & berndt

FROM
CAD
TO
GIS

TRAVEL / OUTDOOR / MOUNTAINEERING

freytag & berndt – Field of activity

1 → **Cartography**



4 → **Wholesale**



2 → **Geodata**



5 → **Retail sale**



3 → **App & Hiking guides**



6 → **Bookbindery**

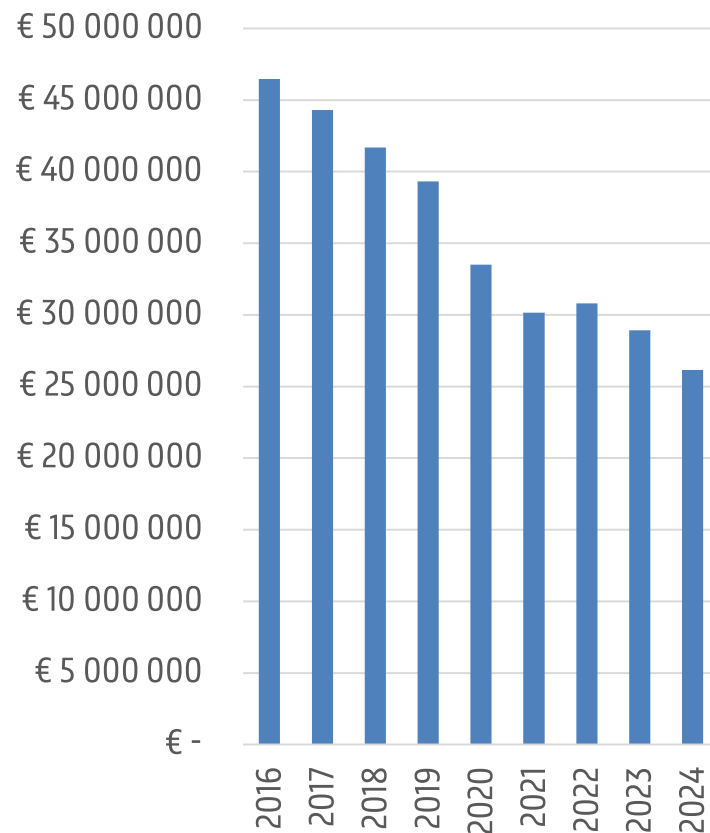


freitag & berndt in numbers ...

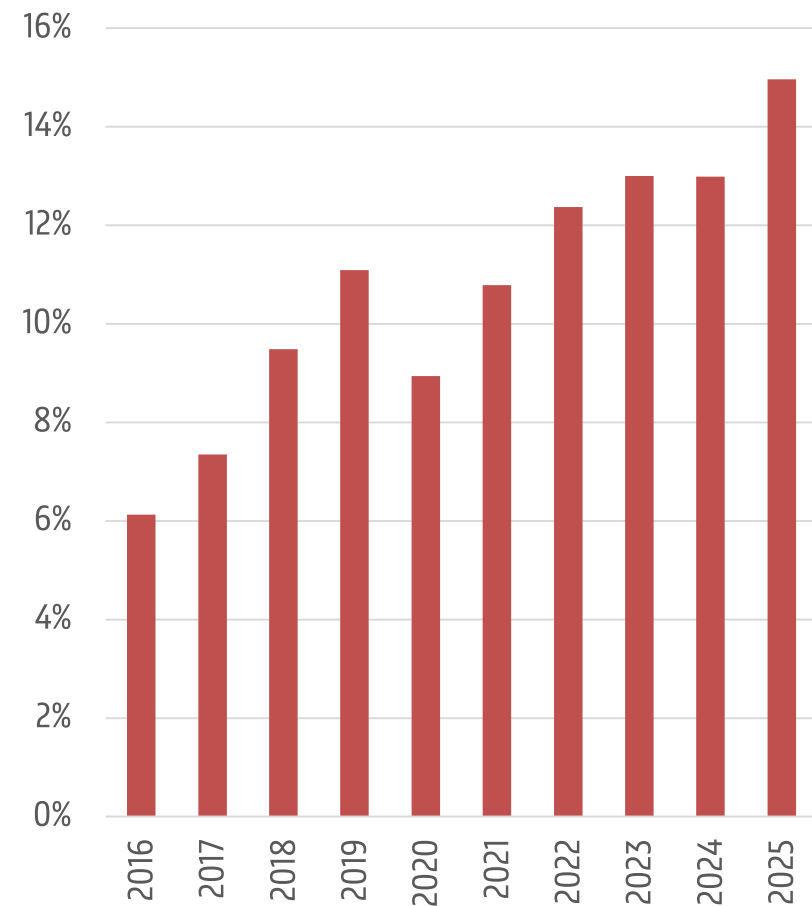
Founded	1770 Artaria, 1885 Freitag & Berndt
Locations across Europe	5 Wien, Wolkersdorf, Munich, Bratislava, Ávila
Brands	6   ROTH  Mapiberia  Nelles Verlag PUBLICPRESS der verlag mit der sonne  HÖFER VERLAG
Joint Venture (in preparation)	1  Imray
Maps	1.600
Books	800
Employees	96
Cartographers & geoinformaticians	39 28 Vienna, 8 Bratislava, 3 Praha
Printed maps per year	700.000 (B2C), 2 Mio. (B2B)
International Distribution Partners	40
Publishers we distribute	70

While the map market is shrinking, we compensate this by increasing our market share

Total revenue of map-sales in Germany, Austria and Switzerland

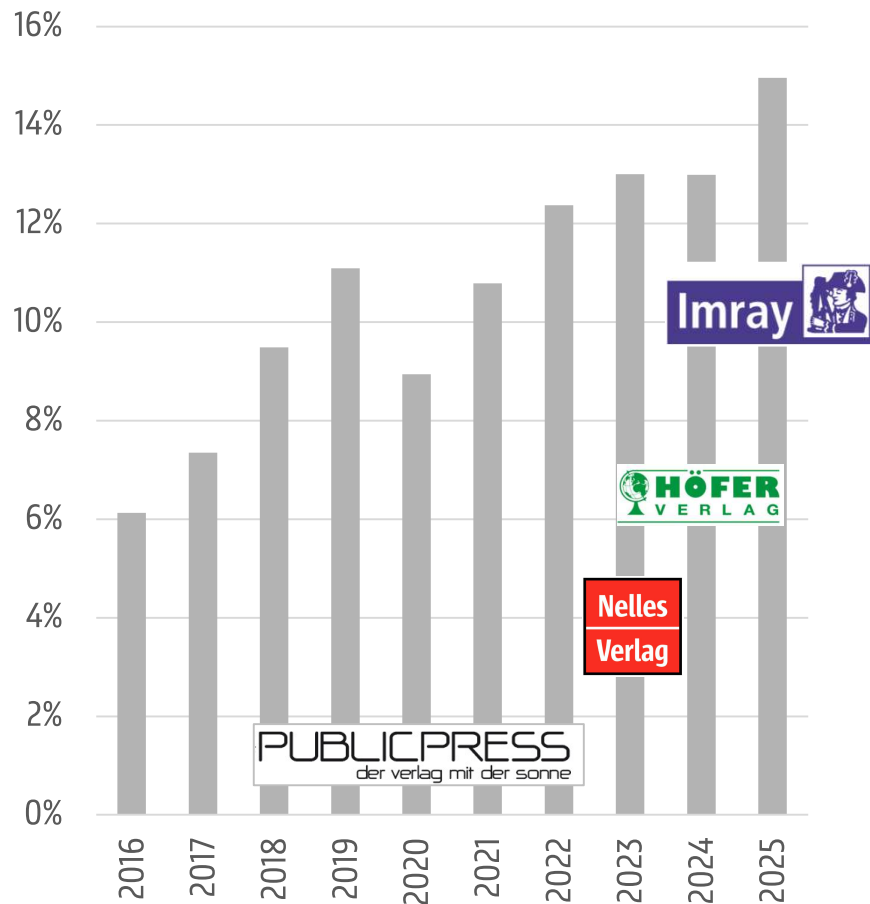


Market share of freytag & berndt



The growth is based on integrating good brands, strong international partnerships and a highly efficient GIS-based cartography

Market share of freytag & berndt



International f&b partners



Cartography

City maps
1:5.000 – 1:25.000

Hiking maps
1:25.000 – 1:35.000

Hiking-, cycling- and leisure maps
1:50.000

Cycling maps
1:65.000 – 1:100.000

Sea charts
various scales

Road- and leisure maps
1:150.000 – 1: 3.000.000

Road- and leisure maps

Road maps

Road atlas

Adventure maps

Motorcycle maps

Continent maps
1: 3.500.000 – 1: 10.000.000

World maps
1: 20.00.000 – 1: 40.000.000

School Cartography
School atlas, maps for school books, regional maps

CAD to GIS

From Static Maps to Data-Driven Mapping

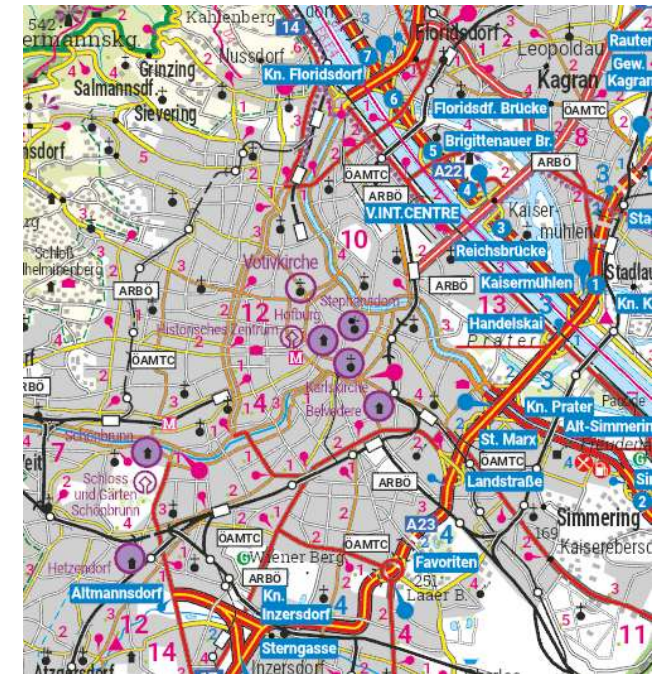
1982 - 1991
Scribing and Film
Techniques

1991 - 2020
CAD - Bentley
MicroStation

Since 2020
GIS - ArcGisPro
Open GIS Software

Advantages with GIS

- ▲ Better Data Integration
- ▲ Efficient Updates
- ▲ Automatic generalization
- ▲ Spatial Analysis
- ▲ Scalable Map Production



Automatic generalization

Automation processes in map production – Example roads



Further automation:

- ▲ Buildings
- ▲ Labels
- ▲ Contour lines
- ▲ Shading & rock paintings
- ▲ Map border (languages)

Typical process for creating a map

- ▲ Enterprise geodatabase (PostgreSQL)
- ▲ Main dataset for every product line
- ▲ Definition of the map frame
 - ▲ Layout creation
 - ▲ Cover creation
 - ▲ Advertisements
- ▲ Correction of the main dataset
- ▲ Legend creation
- ▲ Replica of the main dataset (versions)
- ▲ Project creation
- ▲ Edge cleanup and adding map specific text
- ▲ Finishing
 - ▲ Masks
 - ▲ Terrain
 - ▲ Index

Map layout

The screenshot displays the QGIS Map layout interface. The main map area shows a topographic map of Austria. The interface includes several panels and toolbars:

- Project Panel:** Contains a search bar and a list of drawing order items, including 'AK1_Osterreich_500k', 'Platzhalter Legende', 'Format: 1375 x 880 mm (Falzformat: 12...', 'Sonstiges', 'Cover', 'Map Frame', 'Grids', 'masken', 'Ausfahrtsname', 'layout', 'gespernte Annotations', 'Annotations', 'Features', 'ak1_oesterreich_500k_terrain.tif', 'Inserat', 'Bitly-URL', 'Logo rechts oben', and 'Legende'.
- Map Frames:** Shows a list of map frames, including 'AK1_Osterreich_500k'.
- Map Surrounds:** Includes a scale bar, north arrow, legend, chart frame, table, and additional surrounds.
- Graphics and Text:** Contains a toolbar with icons for adding dynamic text, styles, and favorites.
- Symbology - orte_p:** Displays the symbology settings for the 'orte_p' layer. It shows a primary symbology of 'Unique Values' with a color scheme of red. The 'Classes' tab is active, showing a table with 4 symbol classes.
- Label Class - orte_p:** Displays the label class settings for the 'orte_p' layer. It shows the 'Language' set to 'Arcade' and the 'Title' set to 'Custom'. The 'Fields' and 'Functions' tabs are active, showing a list of fields and functions.

Symbol	Value	Label
●	Ort unter 2k	Ort unter 2k
○	Ort 2k - 5k	Ort 2k - 5k
⊙	Ort 5k - 10k	Ort 5k - 10k
⦿	Ort 10k - 20k	Ort 10k - 20k

```
var fontsize = 5;

var fields = [
  [feature.beifuegung,
    fontsizebeif],

  [feature.doppelname,
    fontsizebeif],

  [feature.beifuegung_doppelname,
    fontsizebeif],

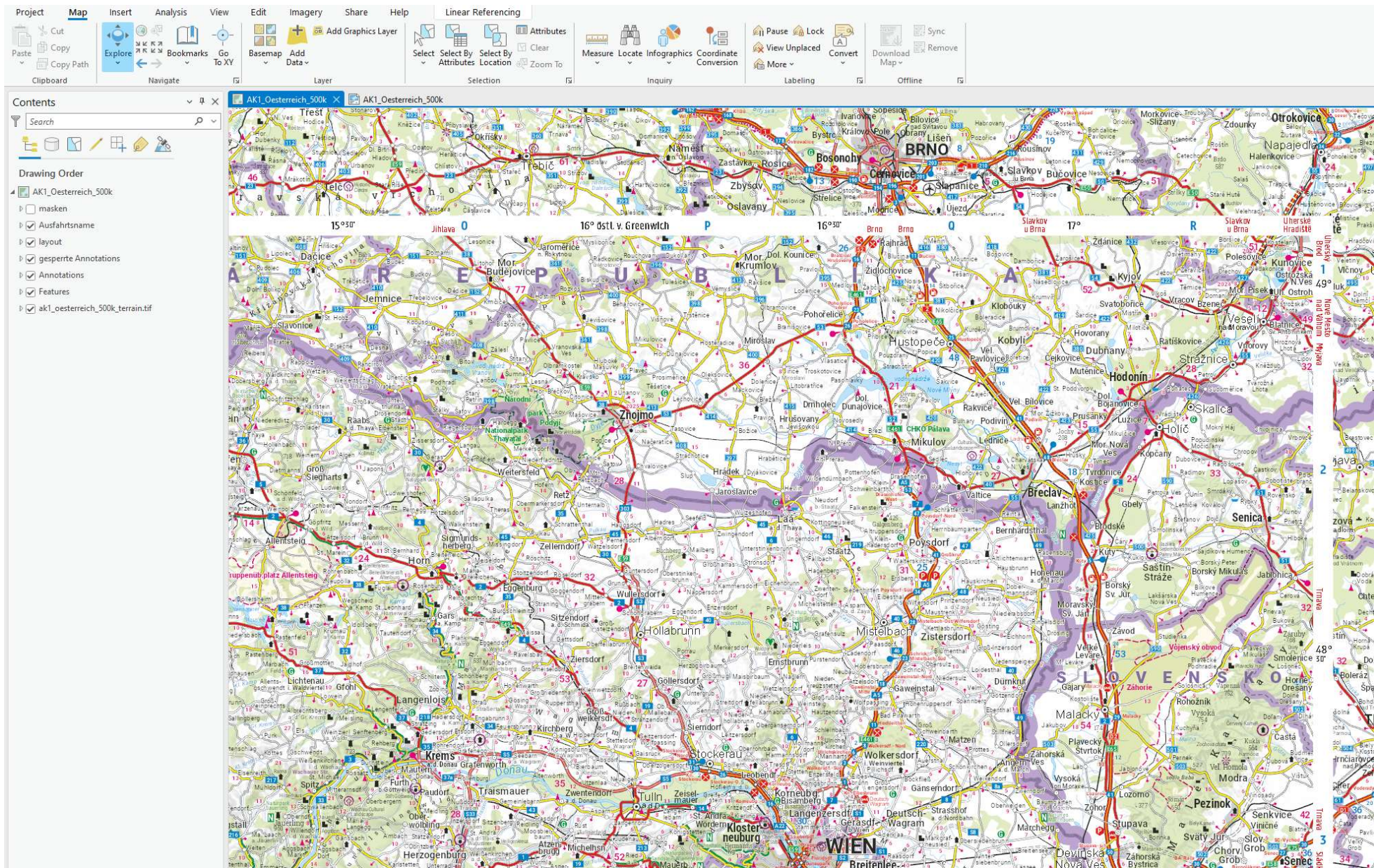
  [feature.dreifachname,
    fontsizebeif],

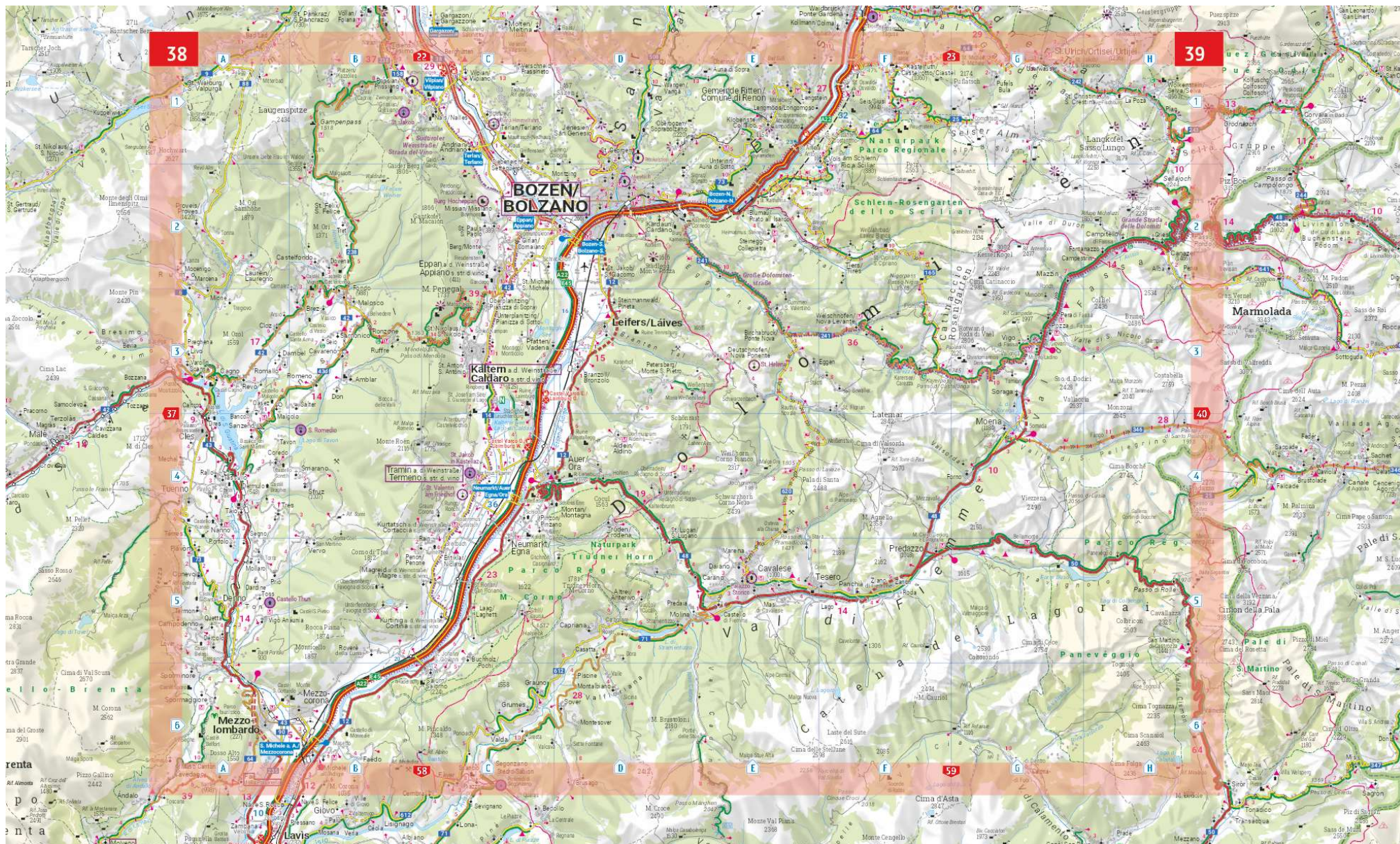
  [feature.beifuegung_dreifachname,
    fontsizebeif];

var labellist = [feature.name];

for(var field in fields){
  if (isEmpty(fields[field]) || fields[field] == false){
    Push(labellist, "<FONT size=" + fields[field] + ">" + fields[field] + "</FONT>");
  }
}
```

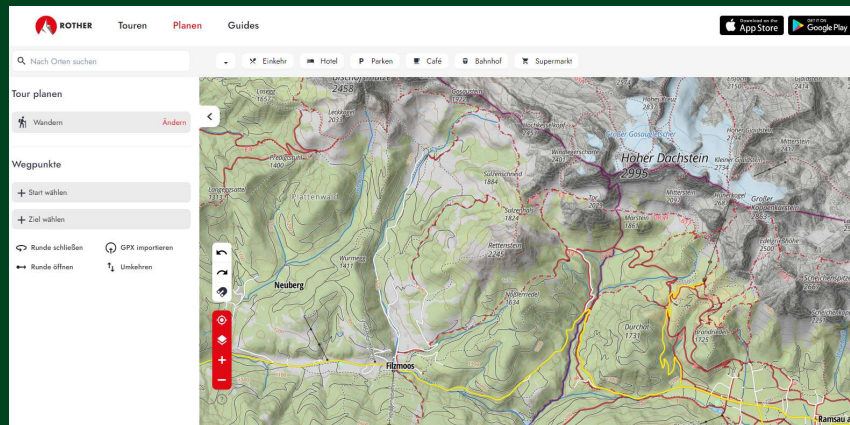
Map layout





Geodata

Webmaps



3D landscape models



Global hiking trails



Projects: Urban Operations and Indoor Cartography



Tour portal & App



Touren

Planen

Guides



Finde deine Tour

Aktivitätstyp

Dauer

Länge

Schwierigkeit

Höhenunterschied

Andere



Gletscherweg Pasterze

↔ 7.2 km ▲ 497 m

🕒 3 h 00 min ▼ 497 m



A00 Alpe-Adria-Trail

↔ 655.3 km ▲ 22764 m

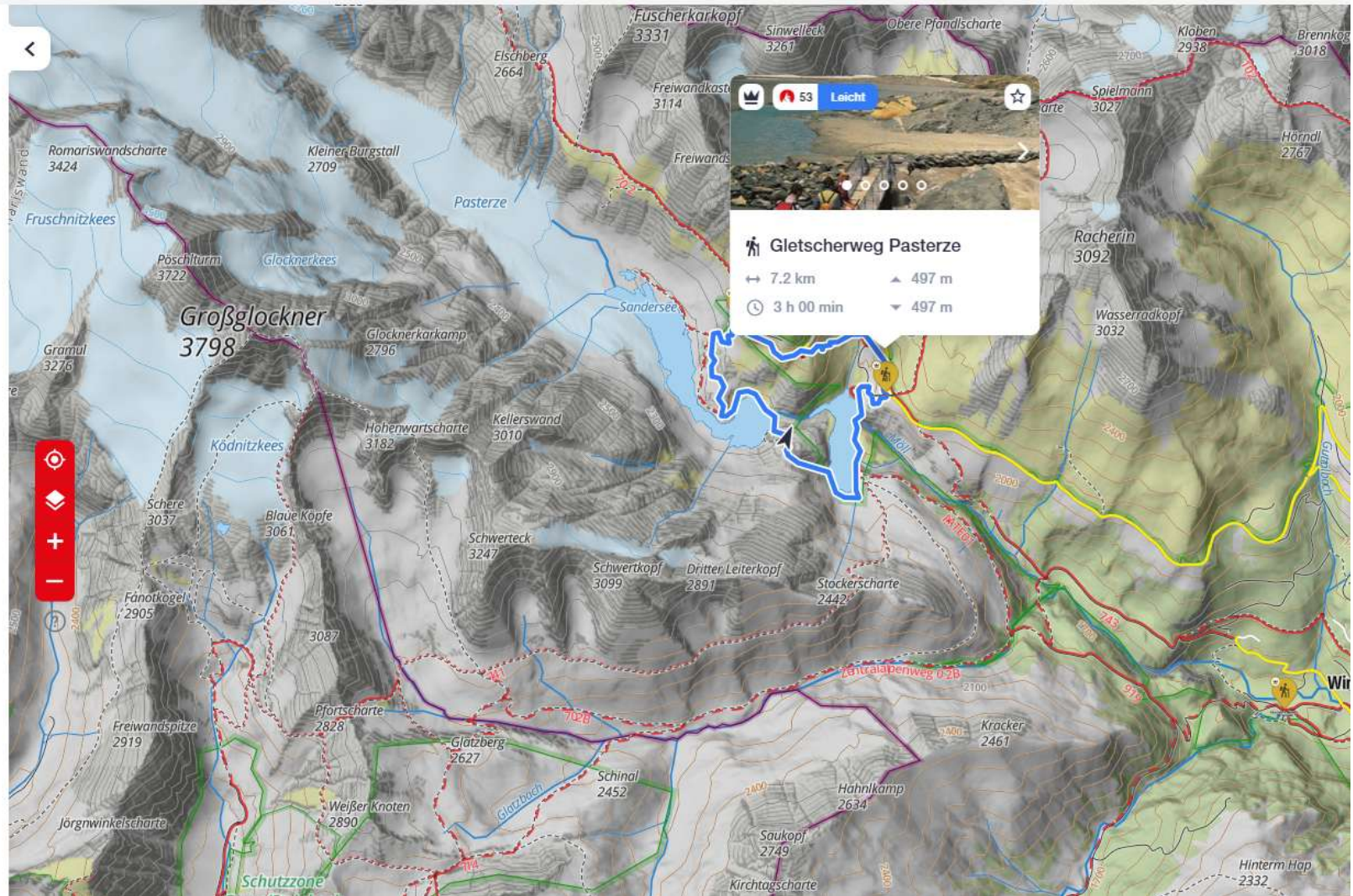
🕒 206 h 39 min ▼ 25133 m



**Salmhütte – Glocknerhaus –
Bricciuskapelle**

↔ 22.8 km ▲ 1696 m

🕒 10 h 00 min ▼ 1696 m



Thank you for your attention !

Carl Rauch

Managing Director

Hannes Mittergeber

Head of Cartography & Geoinformation