



# The Terroir of Carnuntum - Investigation of the physiogeographic characteristics and interdisciplinary study of viticultural functions of the Carnuntum wine growing area, Austria.

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Institute for Land and  
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Research  
Federal Agency for Water  
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**GeoÖko**

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University of Natural  
Resources and Life  
Sciences

- During a three-year study the vineyards of Carnuntum have been investigated for their terroir characteristics and major viticulture functions.
- Various thematic layers and geodata analyses describe the geo-environmental properties and variability of the wine growing region and delimit homogenous multilayer mapping units by using a Geographic Information System.
- The results were made easily accessible to winemakers and the general public in a Web Map Application.



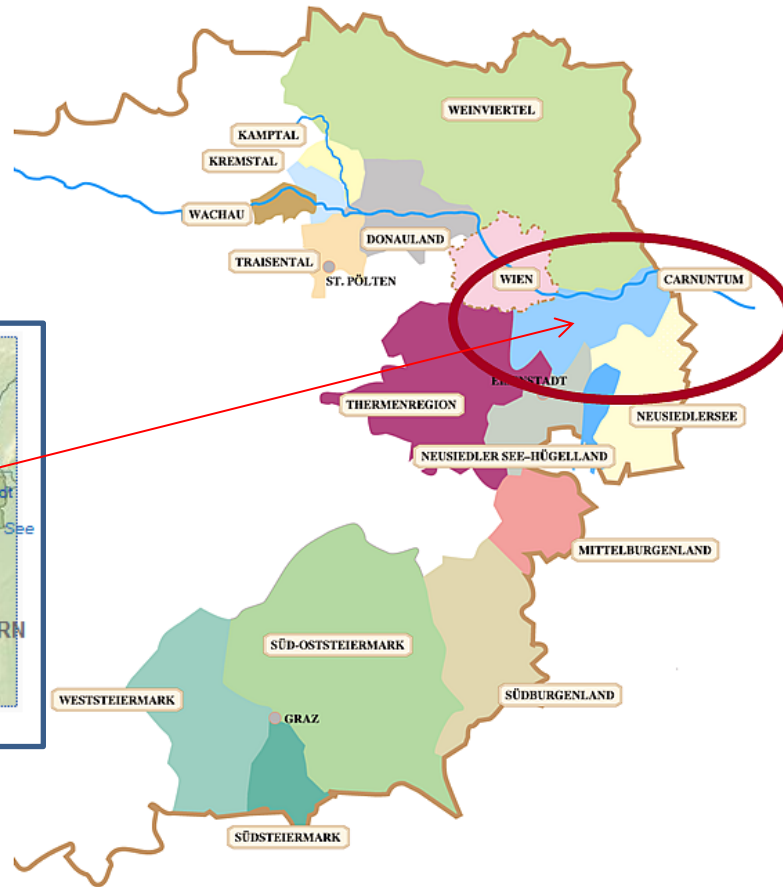






Photo: GBA

## Thematic layers and geodata analyses:

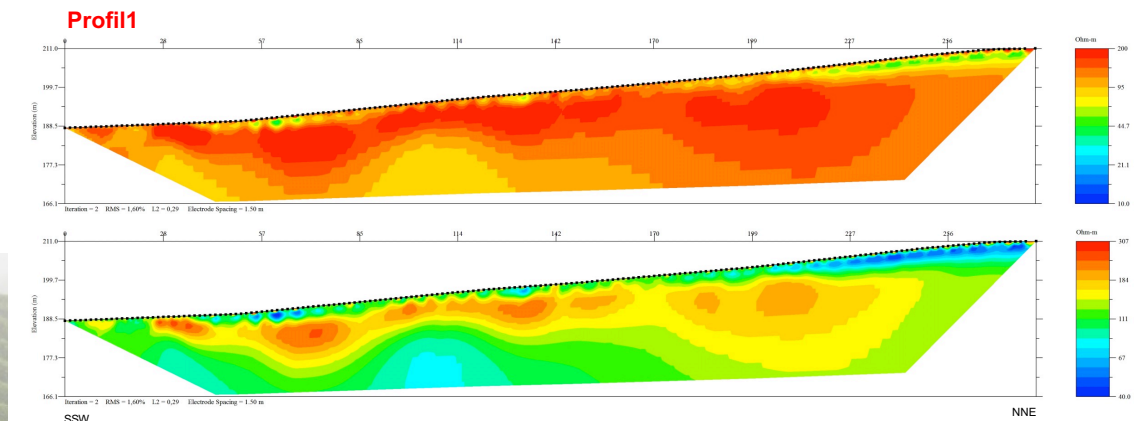
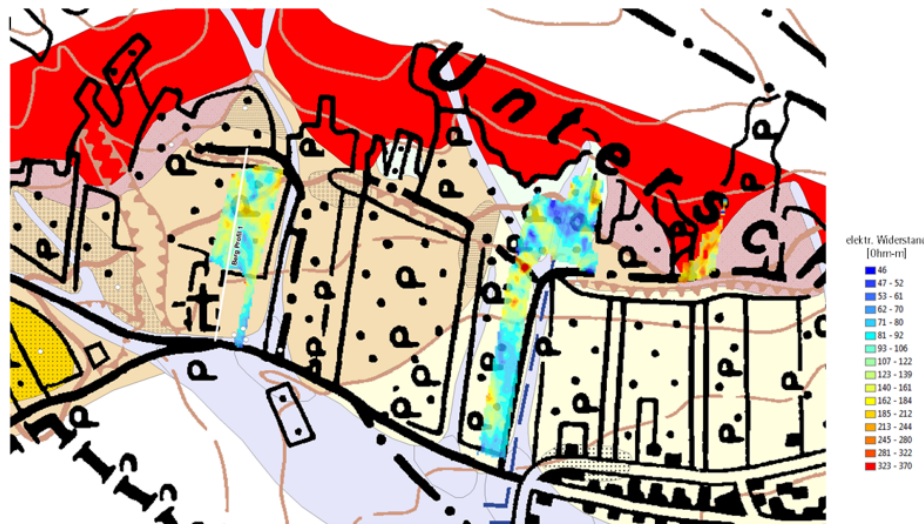
- **Climate:** Microclimatic observations, i.e. evapotranspiration, precipitation, air temperature, air humidity, solar radiation, soil moisture, soil temperature
- **Soil:** i.e. soil type, parent rock, texture, soil depth, available water capacity, hydraulic permeability, lime content
- **Geology:** Detailed geological and lithological mapping by field work with hand augers and rock sampling, grainsize analysis, mineralogy and clay mineralogy analysis
- **Geochemistry and Soil chemistry:** Analysis of main and trace elements
- **Geophysics:** Apparent resistivity maps and geoelectric profiles



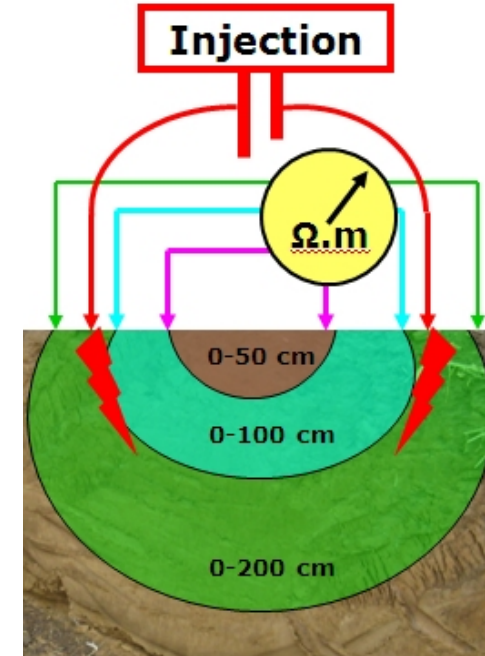
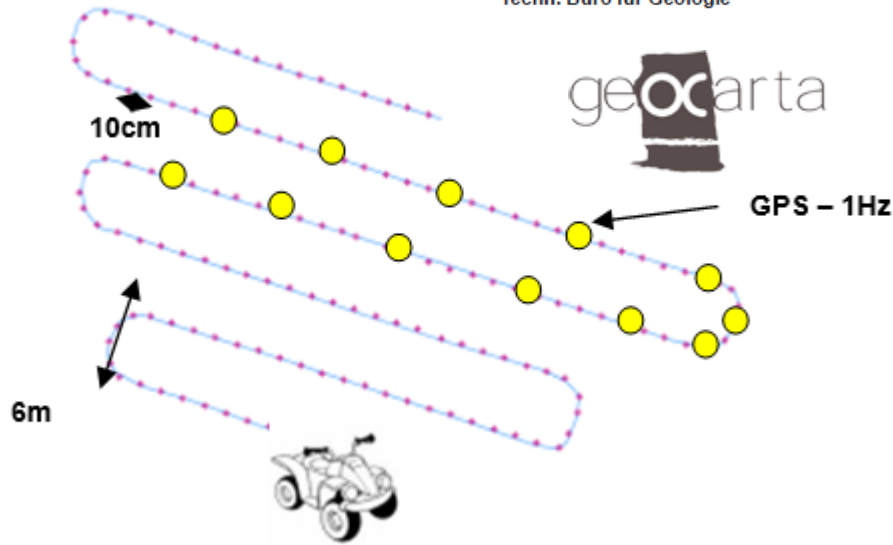


## Geophysics:

- Apparent resistivity maps (geocarta, France)
- Apparent resistivity profiles (Geological Survey of Austria, Dept. of Geophysics)

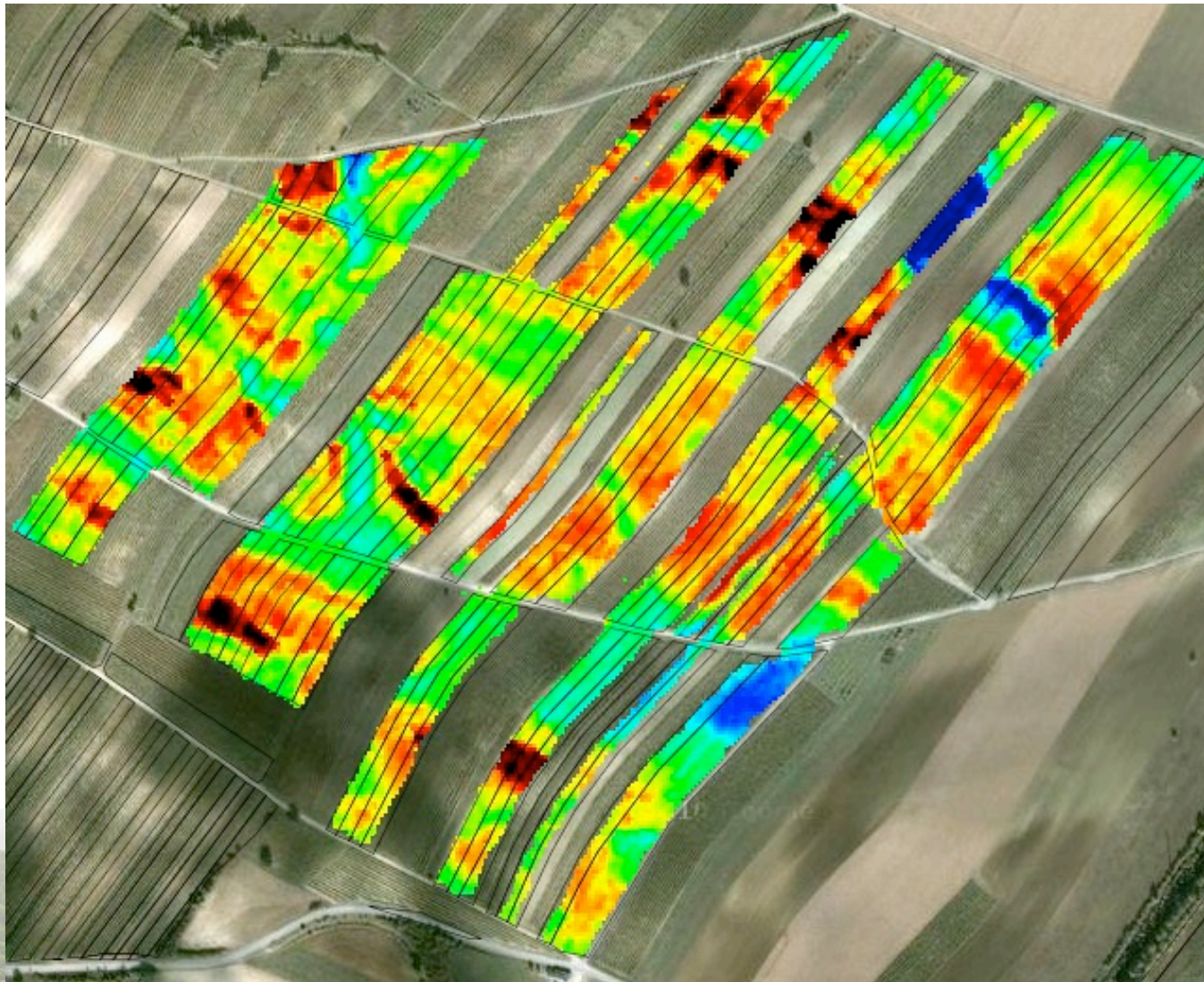


(RÖMER, A. & BIEBER, G., 2011)



**Automatic Resistivity Profiling**  
(CASSASSOLLES, 2011)









## Web Map Carnuntum

The web map gives access to grouped thematic layers which represent

- climate,
- soil physics and water status,
- geology,
- geochemistry and soil chemistry
- geophysics (apparent resistivity).

Using a web map interface with on screen navigation to areas of interest and selection of layers for display in any desired combination, the study results are made available to winemakers of the region and to the general public as an interactive system.





Inhalt

- Projektgebiet
- Klima
- Bodenphysik und Wasserhaushalt
- Bodenchemie
- Geochemie
- Geologie
- Geophysik

Zoomen auf

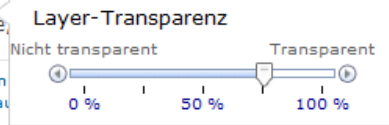
Transparenz

Beschreibung

Layer-Transparenz

Nicht transparent      Transparent

0%      50%      100%





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