

# VIRUS Atlas Austria

COVID-19, labour market and demography at a glance

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# Mapping the Corona Crisis

- Entire globe and the scientific community faced significant new problems
- Inform the population
- Utilized as a tool for decision-makers
- Daily adaption of the map material

However, maps with massive cartographic deficits are used and published





# VIRUS atlas

## Demography

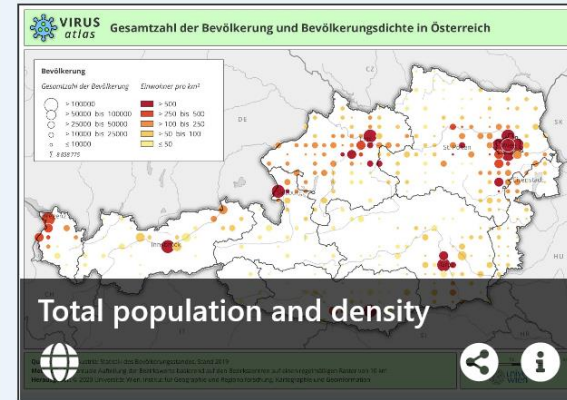
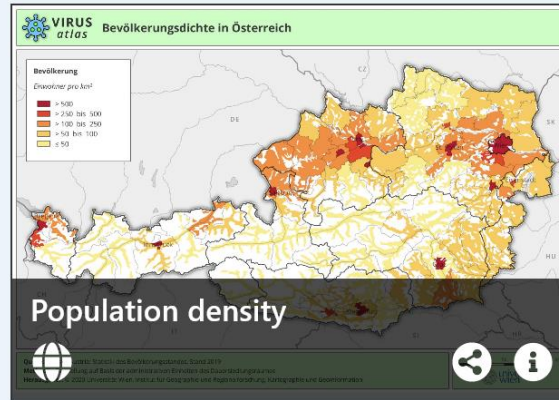
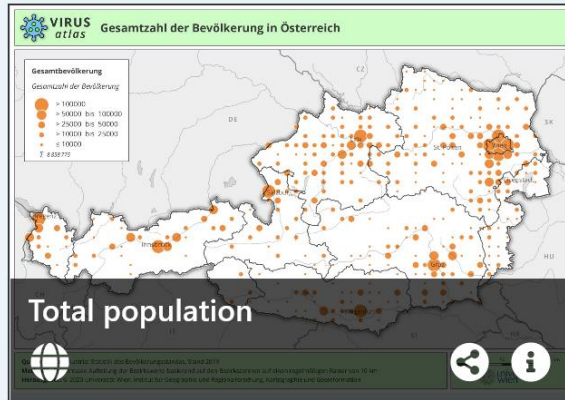


Population structure

Mortality



Home > Demography > Population structure



Population under 15

Further contents [3]



Population 15 to 65

Further contents [3]

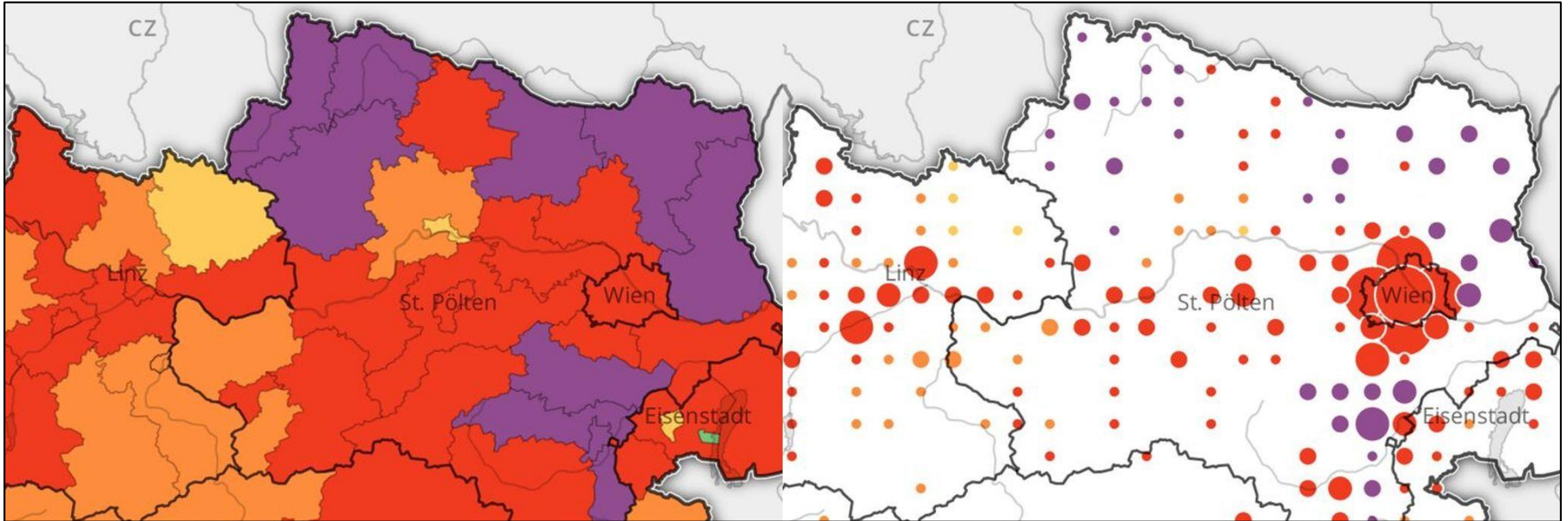


Population over 65

Further contents [3]

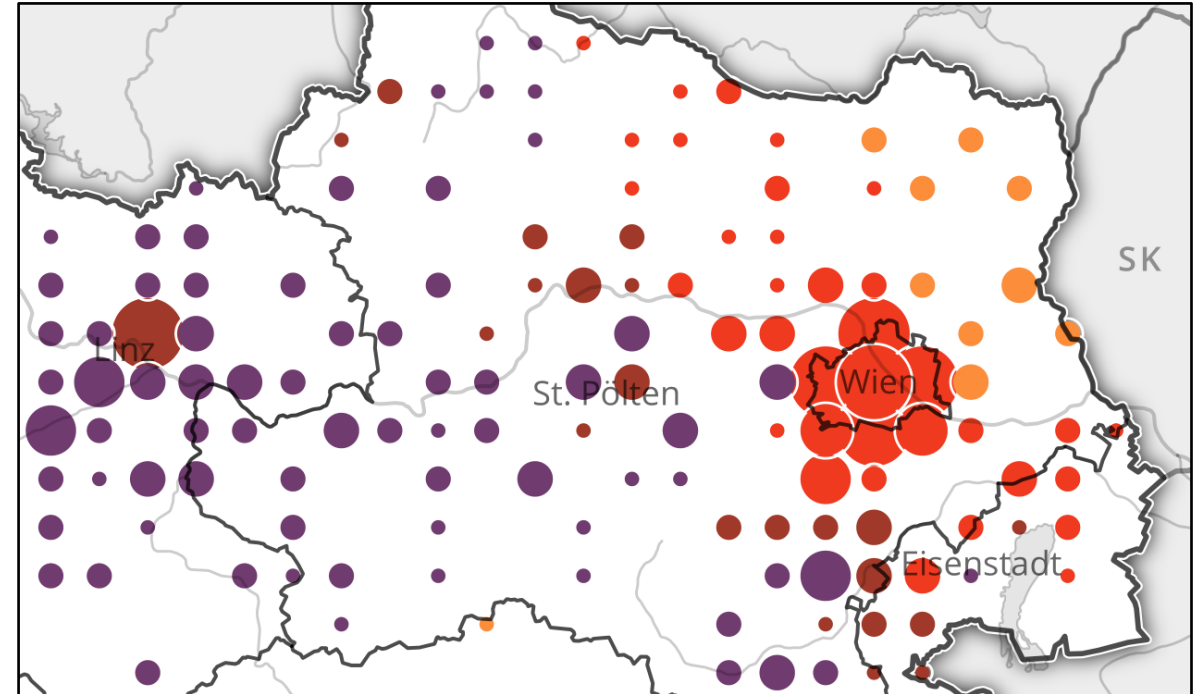


# Alternative cartographic representations



# Grid representation

- Grid-based visualization
- Several thematic levels
- Point signatures



Signatures can have the **classical characteristics** in cartography which **can be combined in any way**



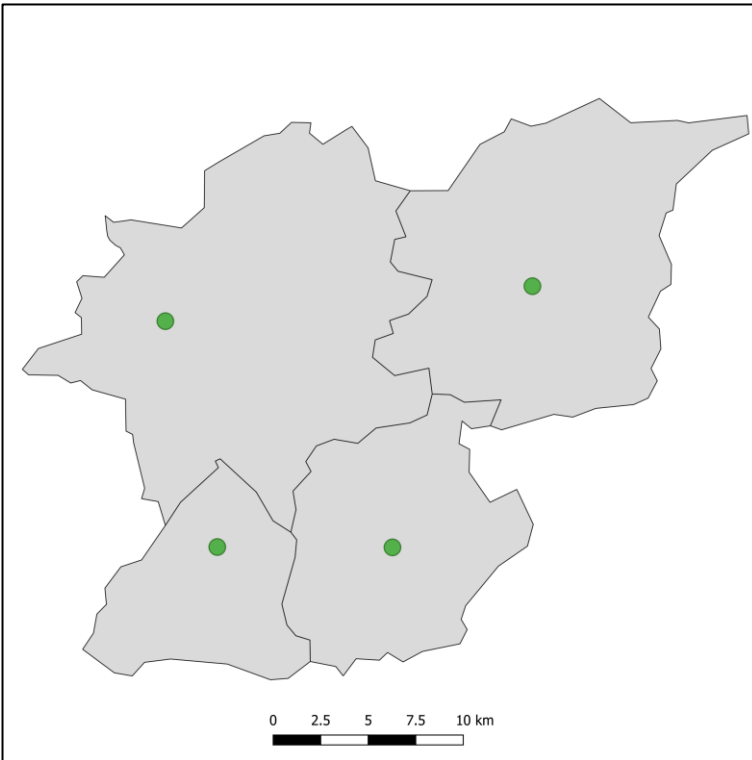
# The regular grid

- Most important characteristic of this map technique
- Alternative to widely used choropleth map
- Data transformation of administrative units by reference points  
→ allows an innovative communication approach
- Chosen grid size is crucial, considering the map scale and administrative level

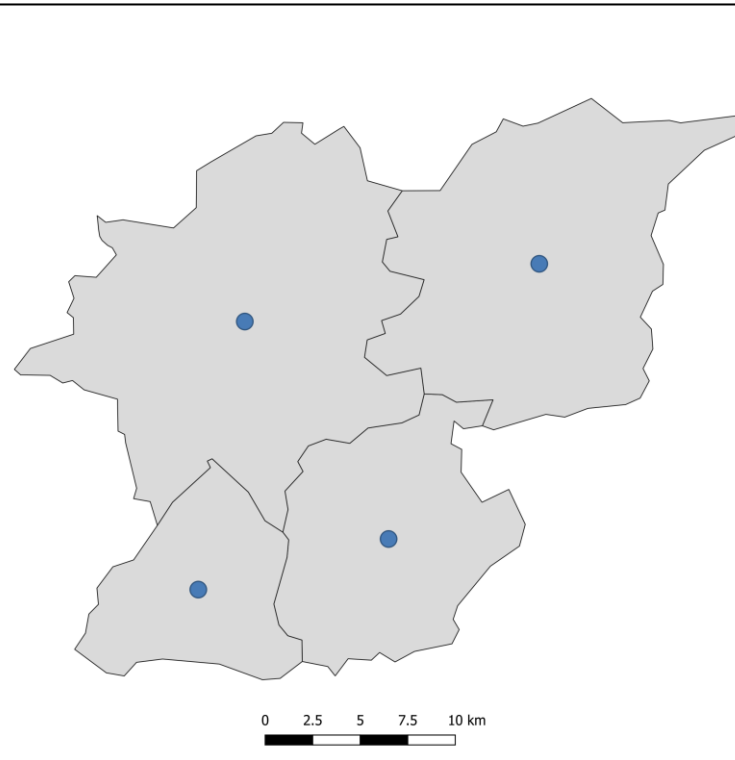


# Reference points – 1 per unit

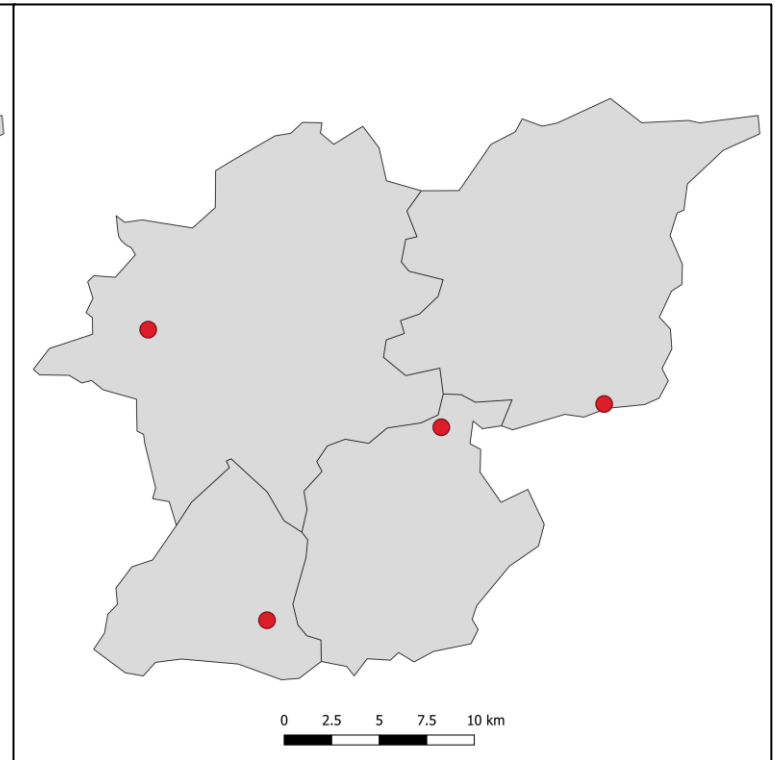
Thematic



Calculated

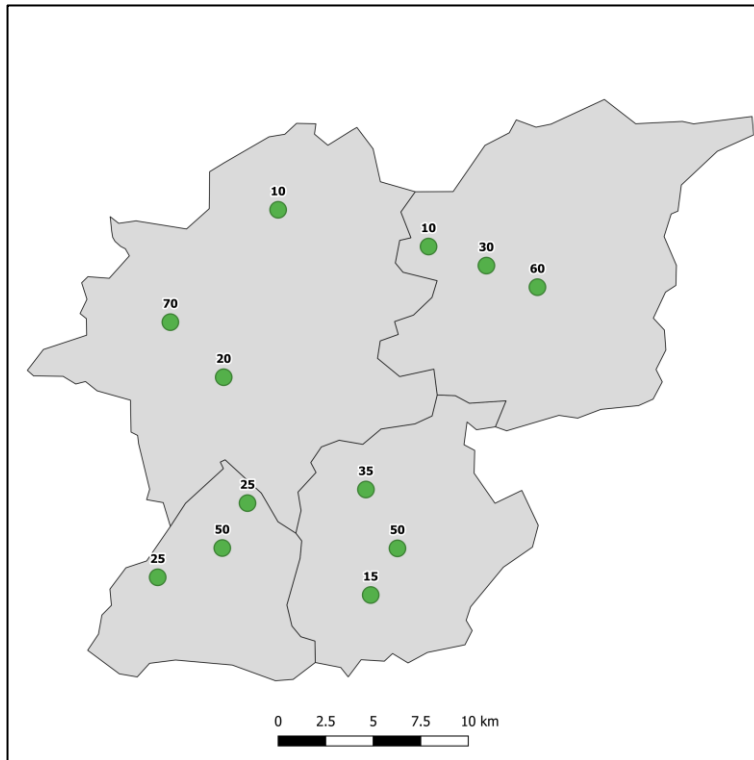


Randomly distributed

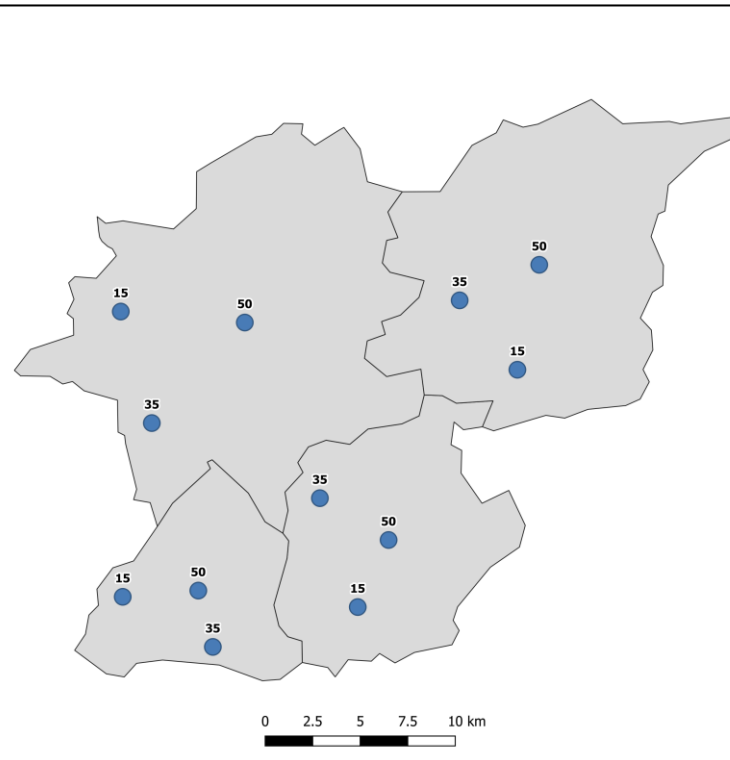


# Reference points – multiple per unit

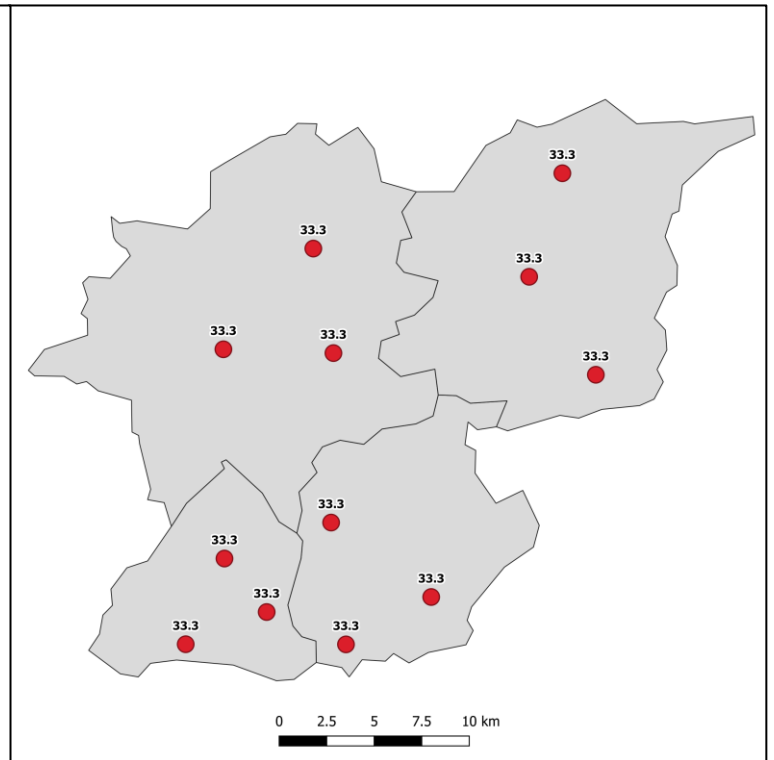
Thematic



Calculated



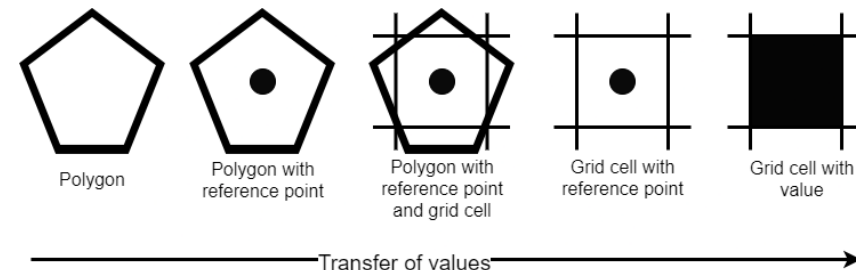
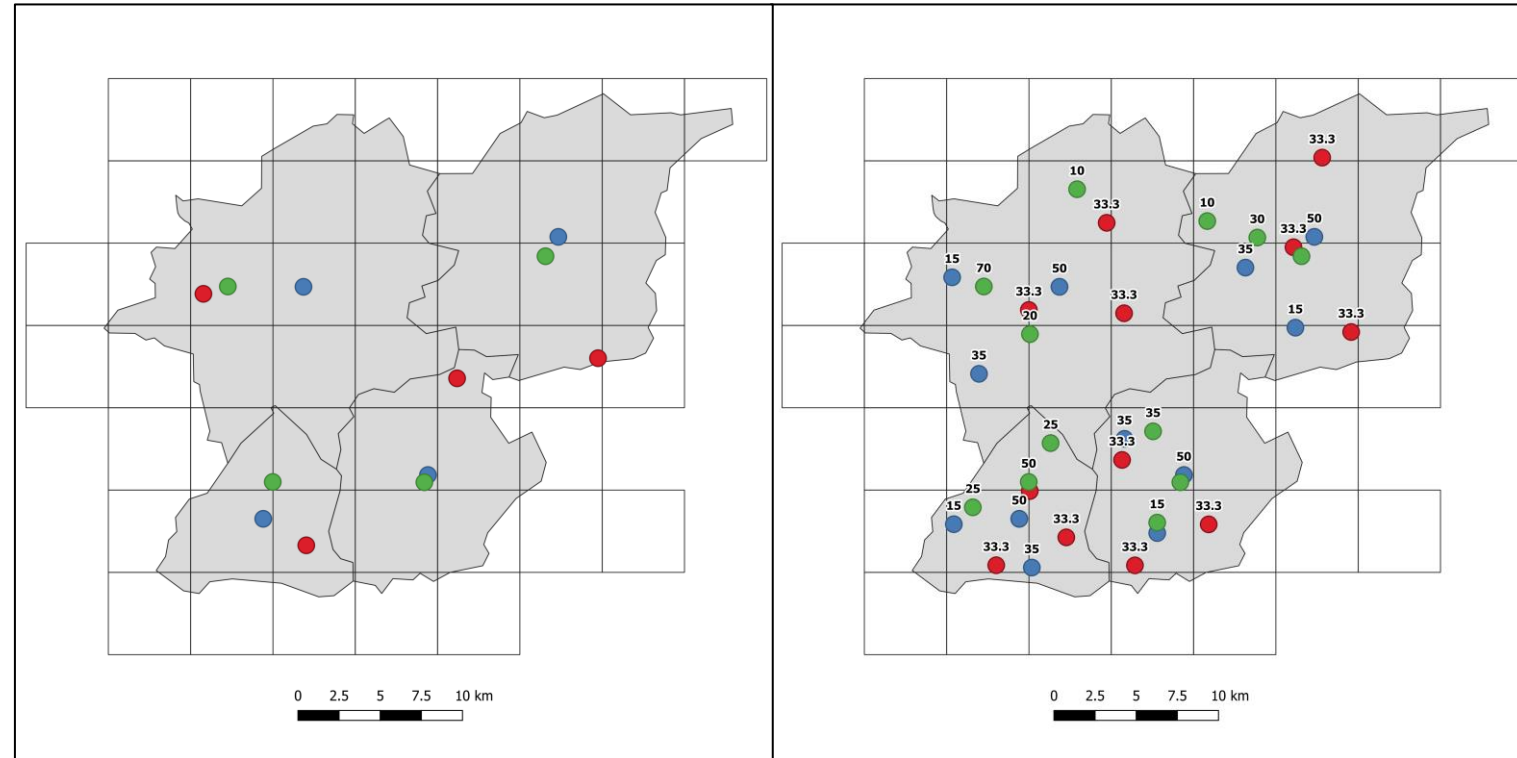
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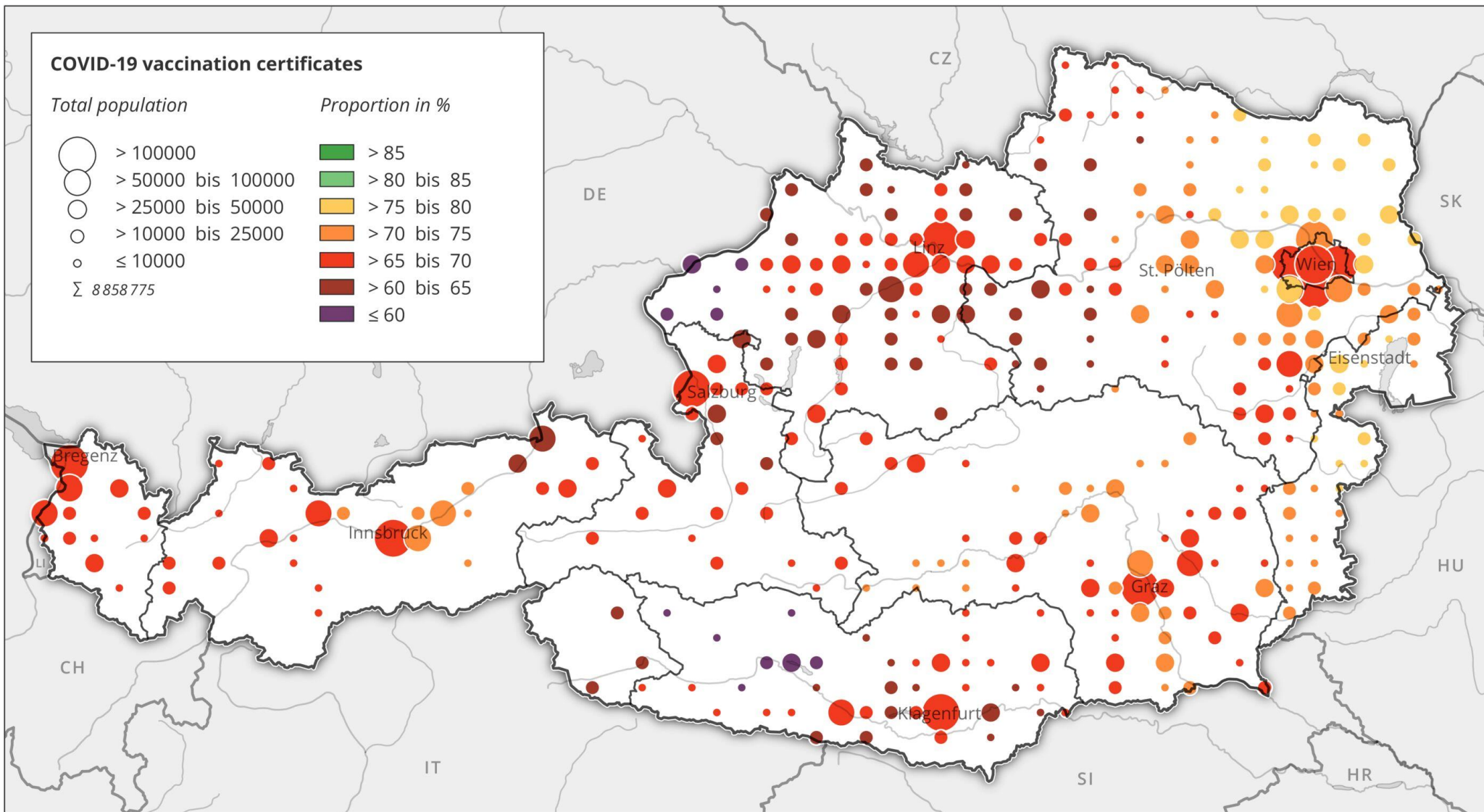




# Data matching

- 1) Connection of areas with reference points
- 2) Matching of area data onto reference points
- 3) Aggregation of all values in the respective grid cells

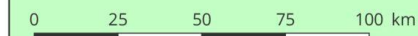


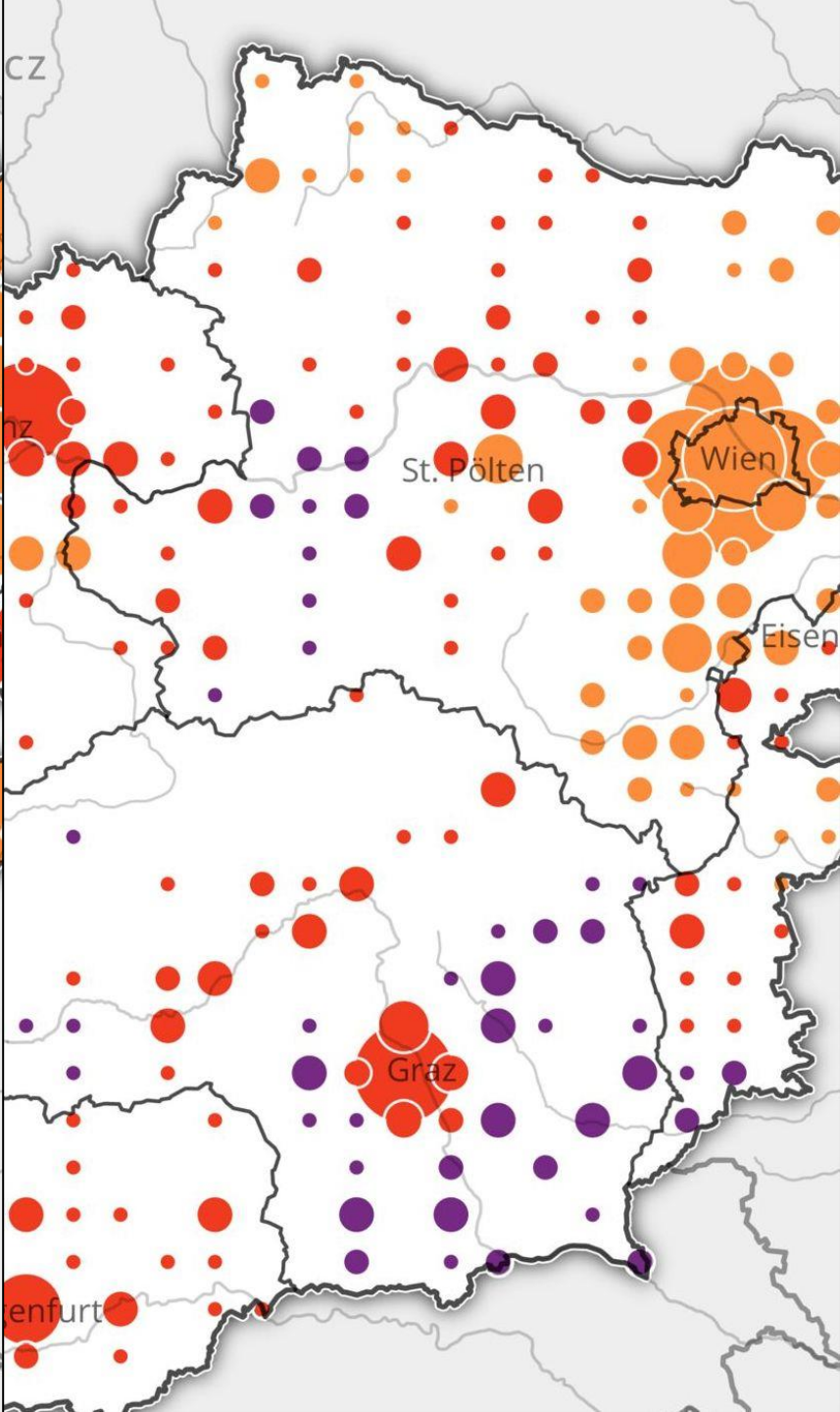
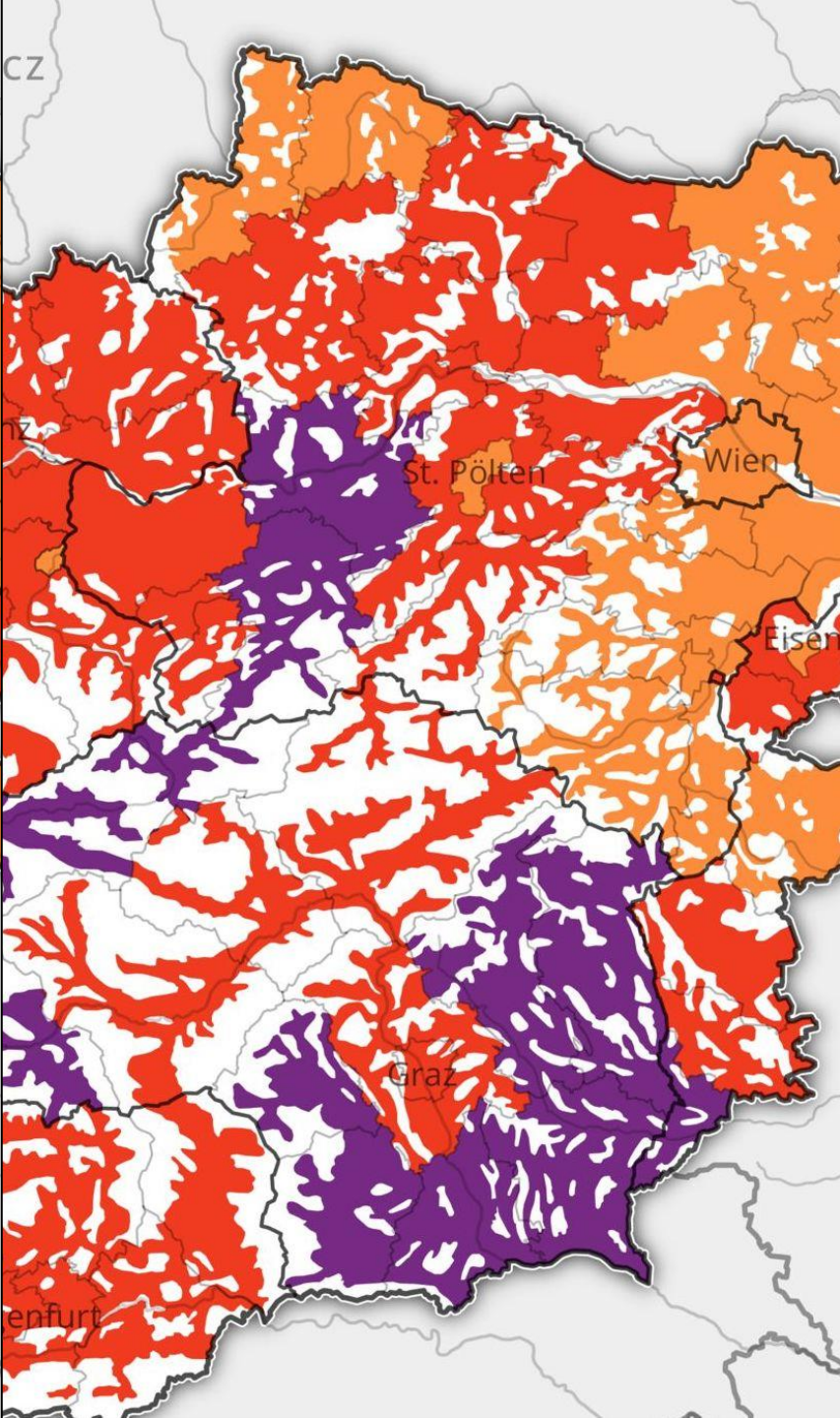
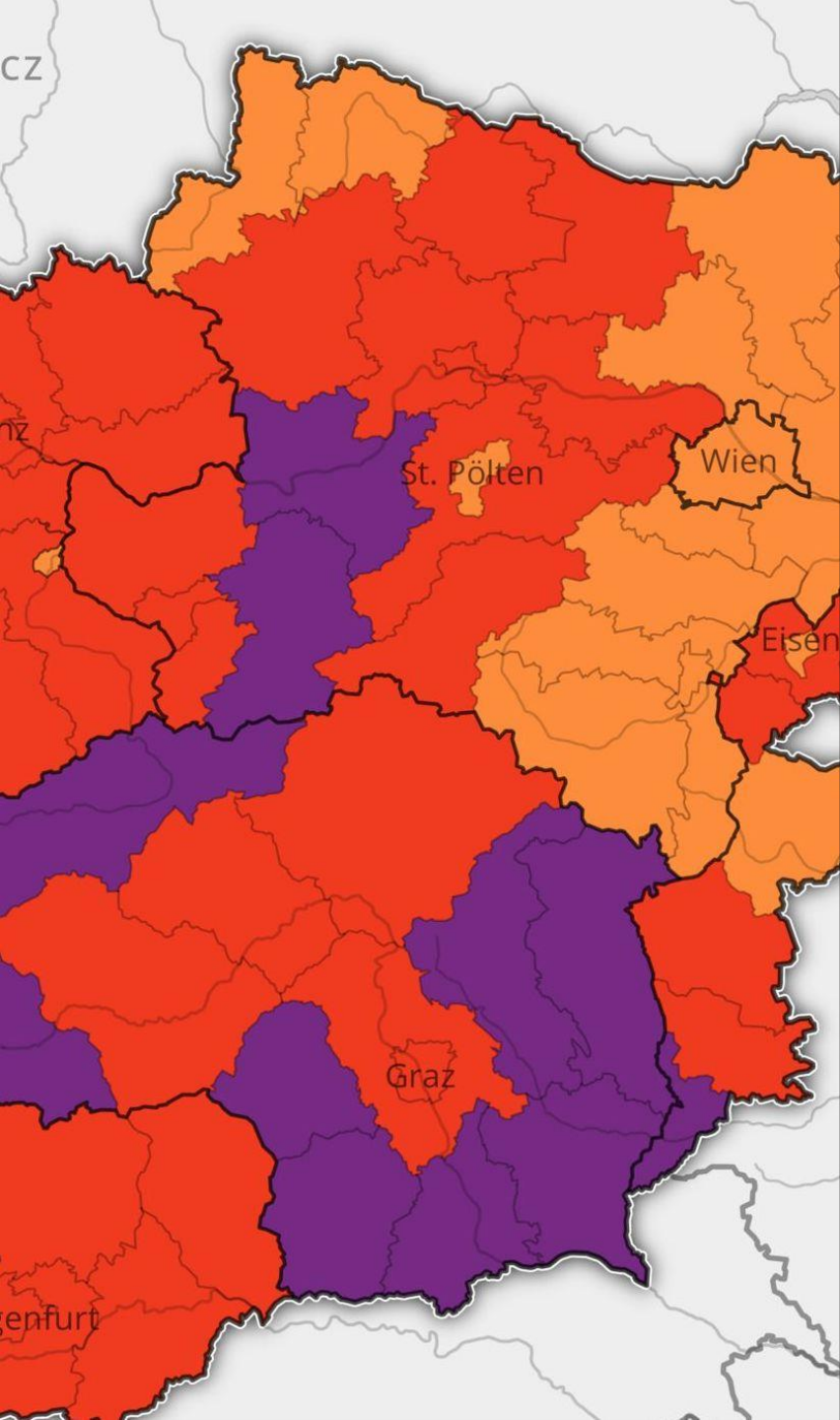


Source: Federal Ministry for Social Affairs, Health, Care and Consumer Protection, <https://www.data.gv.at/covid-19>

Methodik: Percentage distribution of district values based on district centres on a regular grid of 10 km

Publisher: © 2021 University of Vienna, Department of Geography and Regional Research, Cartography and Geoinformation





# Results

- Advantage in terms of the **flexibility of the representation of different data**
  - Grid aggregation
  - Multi-layering
- Since April 2020 numerous maps have been providing **daily information** on COVID-19 related topics

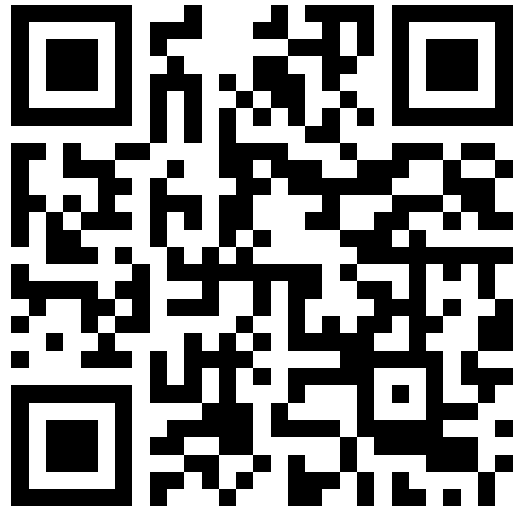


# Outlook

- Integration of **further data and maps** of other health-related topics
- Implementation of an **interactive version**
- **Prove of concept:**
  - geo-communicative basic principle
  - methodical-conceptual implementation



# Thank you for your attention



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