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
Demography

Total population
Population density
Total population and density
Population under 15
Population 15 to 65
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

Randomly distributed
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
Active COVID-19 vaccination certificates in relation to the total population

COVID-19 vaccination certificates

| Total population | Proportion in % |
|------------------|----------------|
| > 100000         | > 85           |
| > 50000 bis 100000 | > 80 bis 85    |
| > 25000 bis 50000 | > 75 bis 80    |
| > 10000 bis 25000  | > 70 bis 75    |
| ≤ 10000          | > 65 bis 70    |
| ≤ 8858775        | > 60 bis 65    |
|                  | ≤ 60           |

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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