

Update EVN Austria roll-out and experience voltage quality data

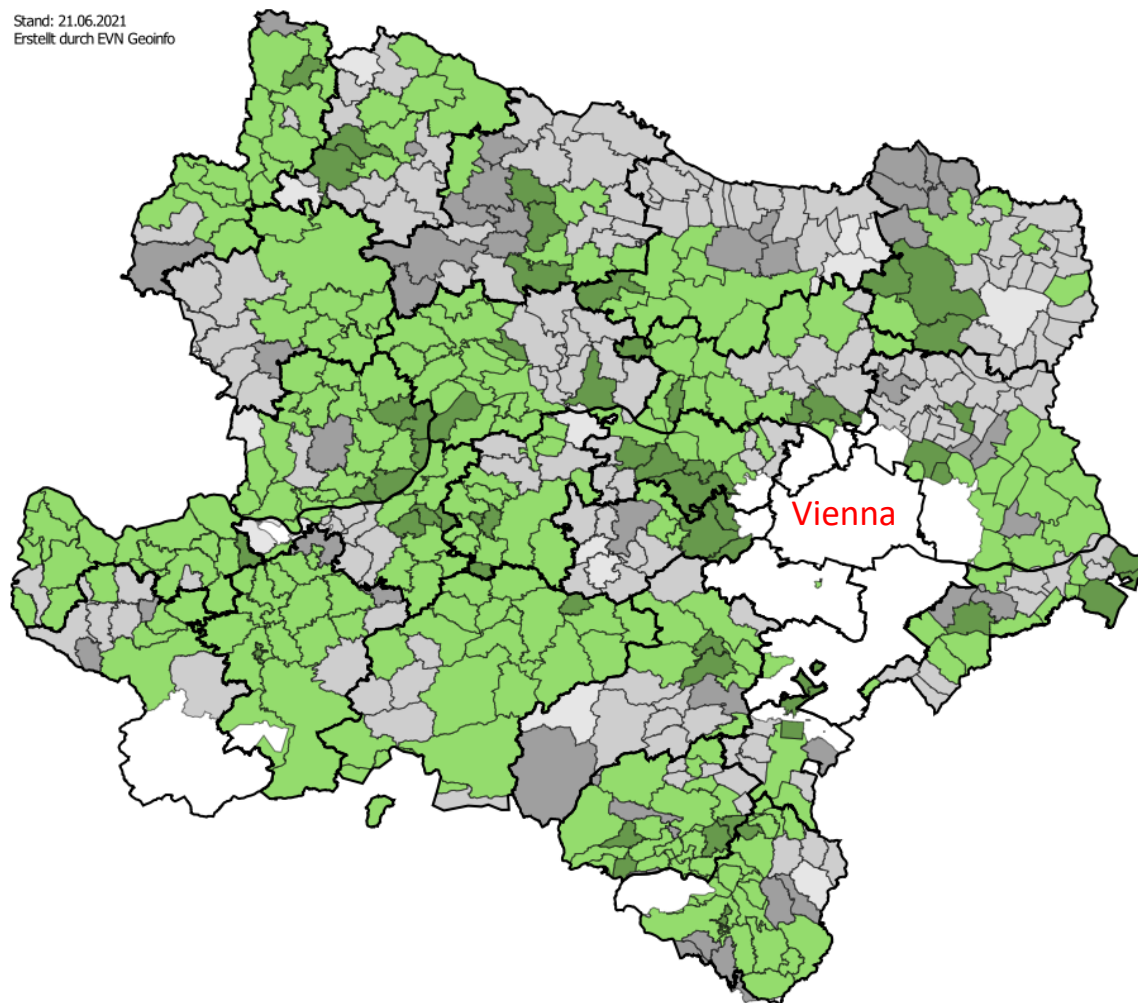
24.6.2021

Status Smart Meter rollout



- ? Start of the roll out 1.9.2020
- ? Installation of 10.000 meters per week
- ? Installed meter: 300.000 (36 %)
- ? Installed DC > 8.000 (> 90%)
- ? Reading success rate of all installed meter:
- ? Calculation basis: All installed meters included also those in the areas without finished clean up
- ? Daily reading success rate > 94 %
- ? Reading success rate 1x 7 days > 99,1 %
- ? Netz NÖ uses only the FCC Band
- ? Installed PLC filters during the clean up: 21

Stand: 21.06.2021
Erstellt durch EVN Geoinfo



- Start 2020
- Start 2021
- Start 2022
- Start 2023
- Rollout has started
- Rollout has finished
- Netz Netz NÖ Area

Rollout has finished when >95 % meters are installed

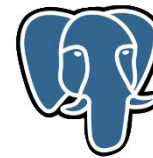
- ❓ Netz NÖ uses the power quality data of the smart meter
- ❓ Registration of
 - 10 min average RMS value of the supply voltage variations (storage capacity of the smart meter 8 days) of each phase
 - Supply voltage dips: 90% of nominal voltage or < 207V
 - Overvoltage > 247 V
 - Voltage interruptions < 5 V (timestamp and duration)
- ❓ In the moment we daily read all data from all 300k meters.
- ❓ We get approximately 100 million new data sets per day




SICONIA®
Smart Meter
Head-End-System



Data Lab



data base
PostgreSQL

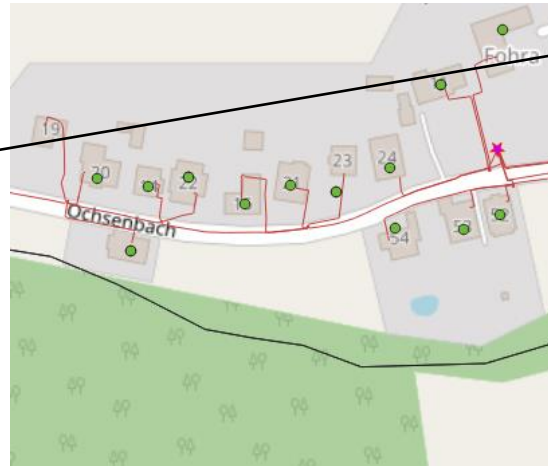
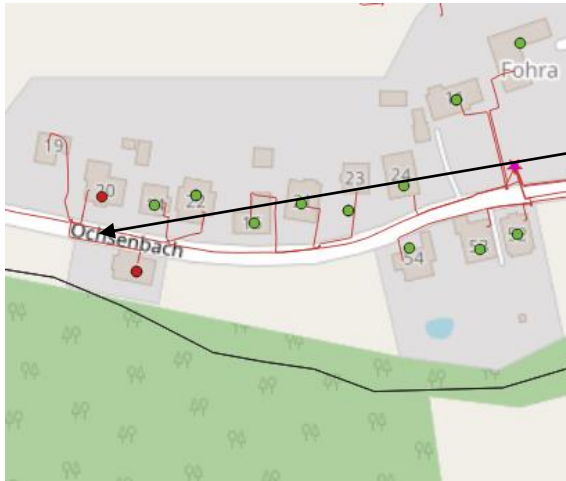


programming
Python

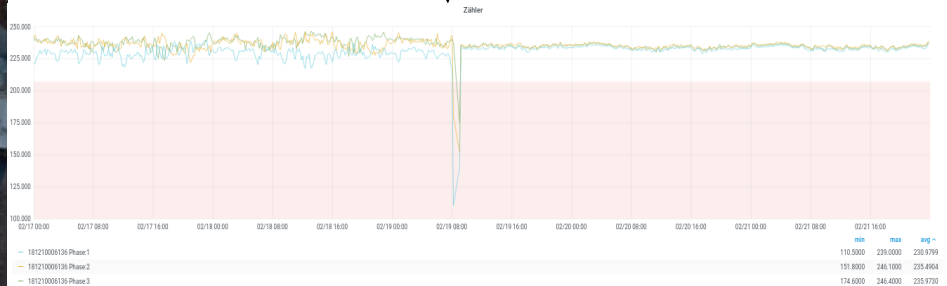


visualization
Grafana
Quantum GIS

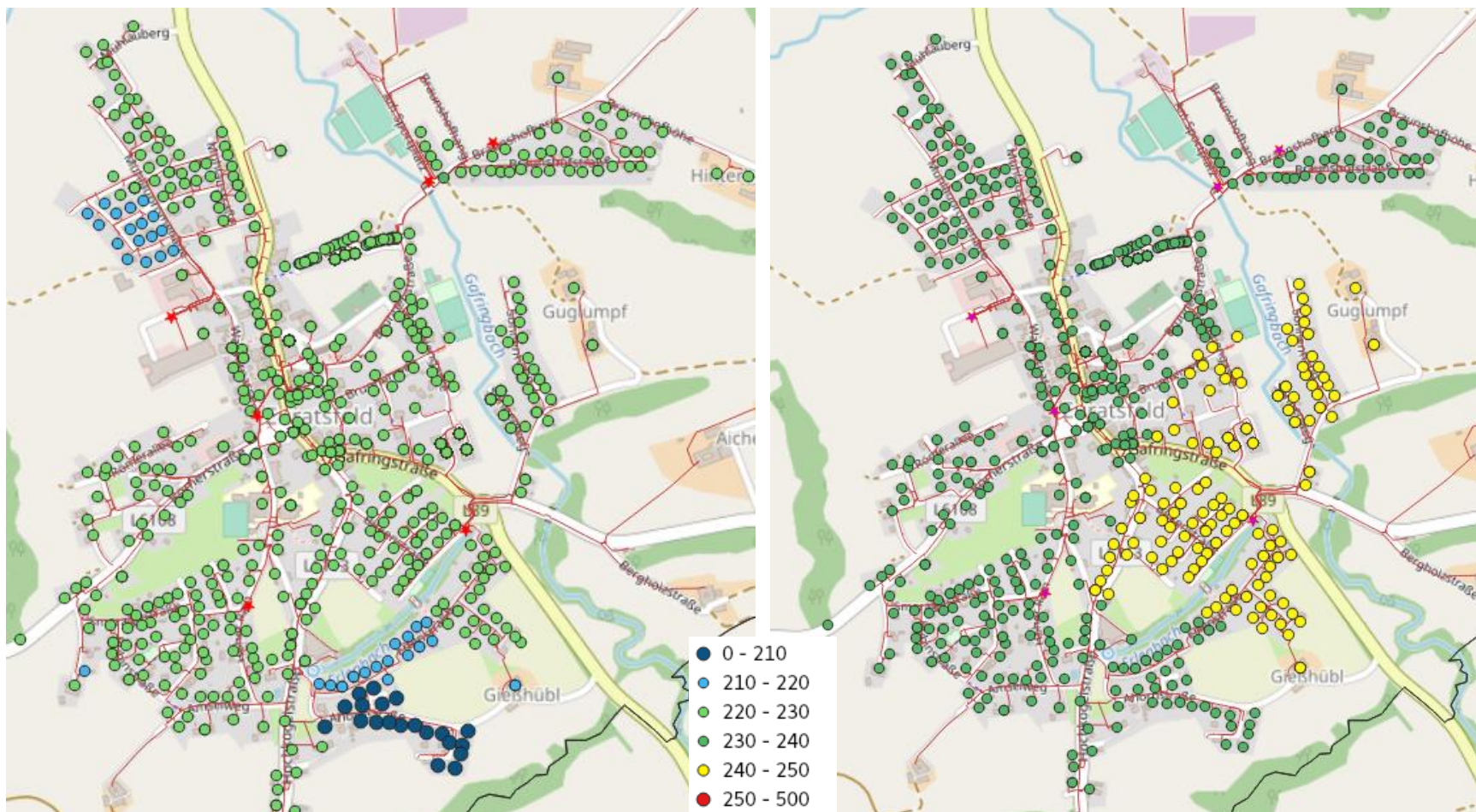
Problem with the neutral conductor



Neutral conductor problem in a
cable cabinet
After repairing



Voltage switch of the transformer

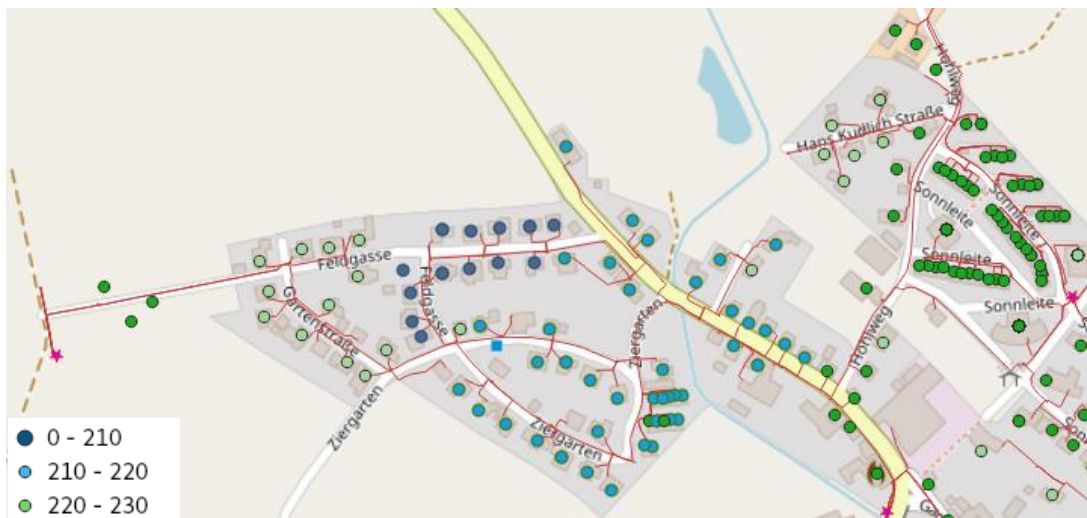


before

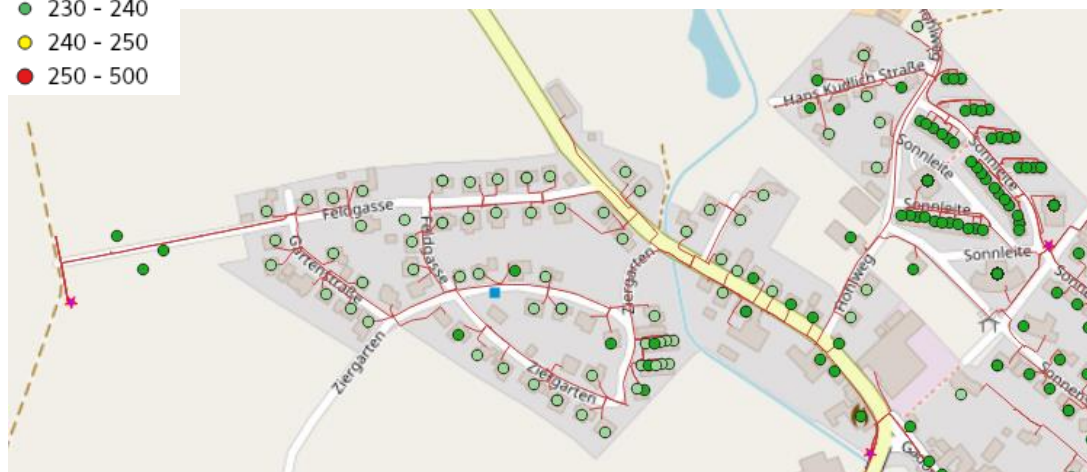
after

The level of the voltage switch of the transformer has been changed

Incorrect switching state in the low-voltage network



Low voltage in a part of the grid



After optimizing the switching state

Thank you for your attention

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