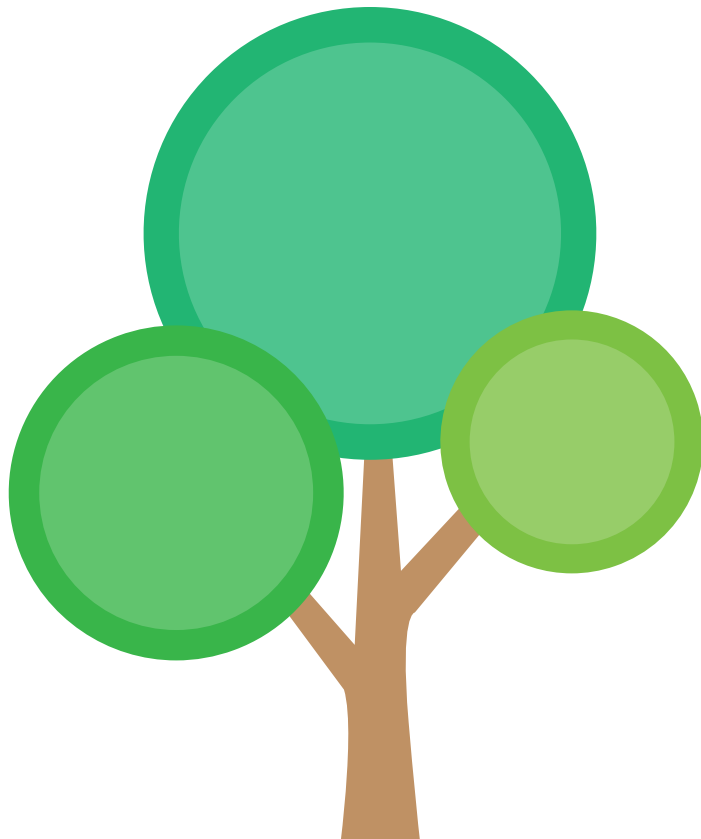# Trees, Trees, Trees

Elisabeth Freimann, Simon Kohler, Fabian Lüthard,

Impact of trees on climate in Zürich

"Planting of trees positively impacts air quality and has some cooling effect"

1

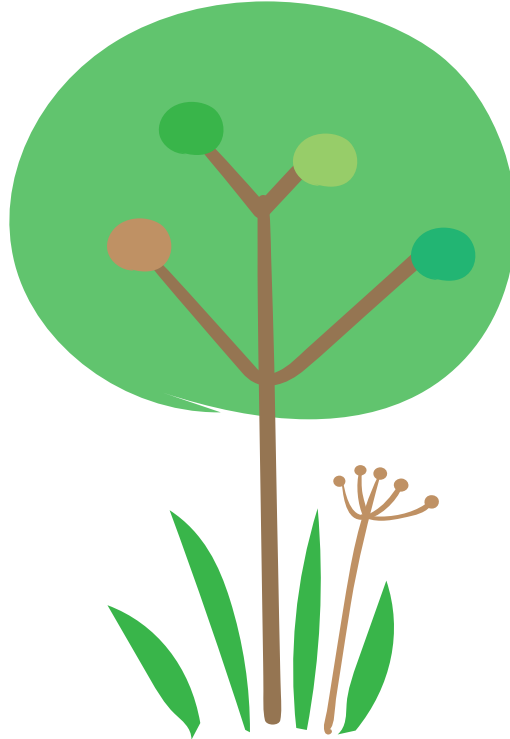Several studies verify this – is there an effect in local areas

2

Development of tree planting, air quality and temperature in Zürich

3

Data

Trees
Amount of trees planted in Zürich each year

Temperature
Temperature across measuring stations in Zürich per day

Air Quality
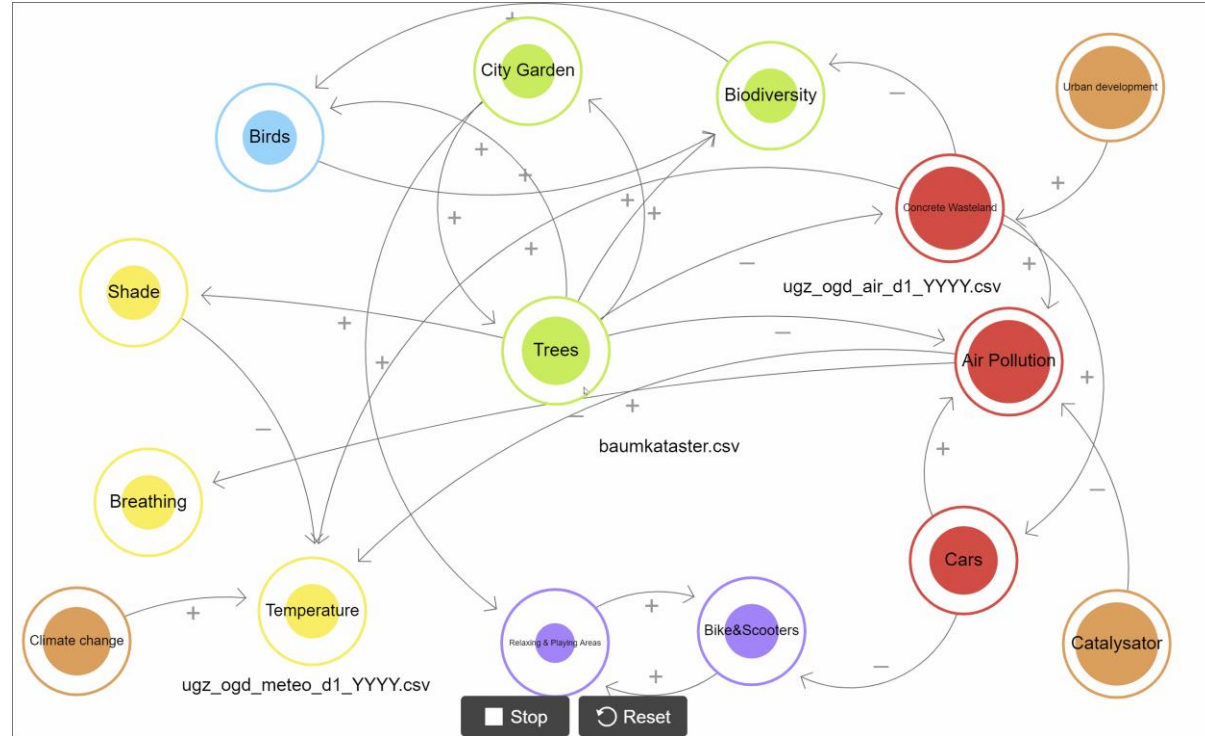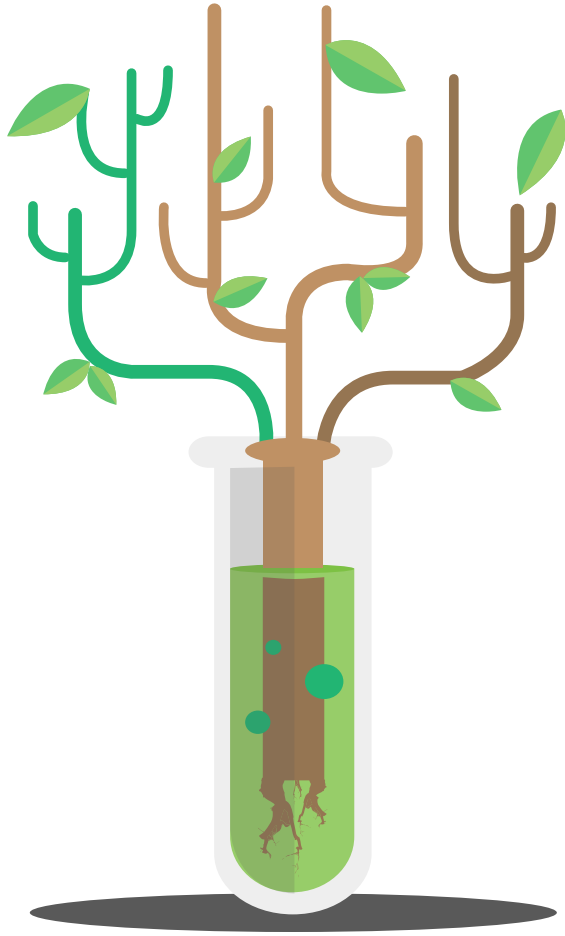Air Quality across measuring stations in Zürich per day

Sustainable Development Goals

System Model

Results

R Markdown

- Graphical analysis
- Decomposition
- Timeseries analysis
- Correlation

Tableau

- Dashboard
- District Comparisons
- Map-based analysis

Graphical Analysis

CO in Zürich (Stampfenbachstrasse) per Year [mg/m3]

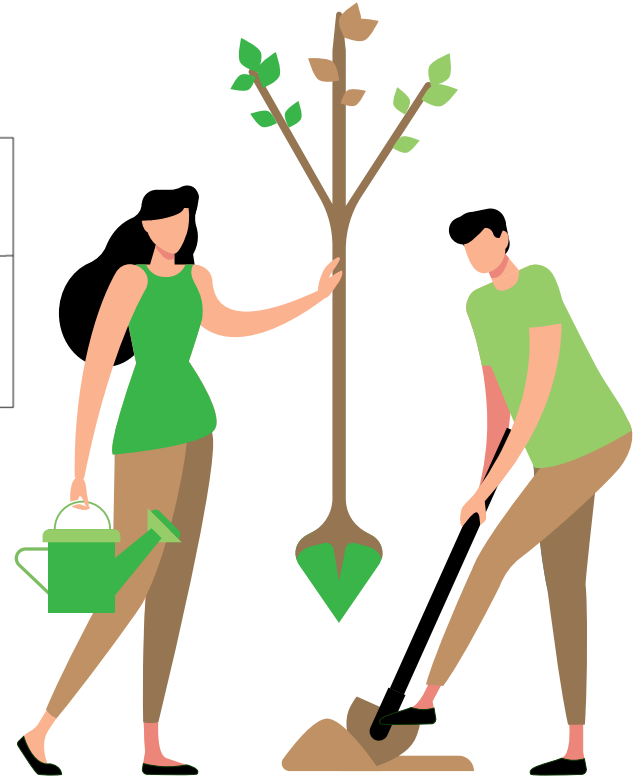Temperature trend per year

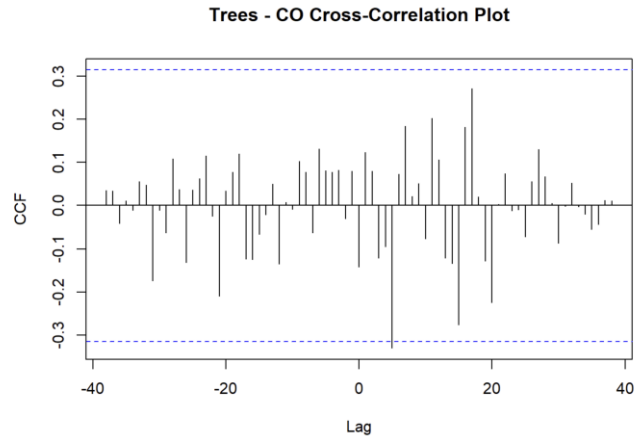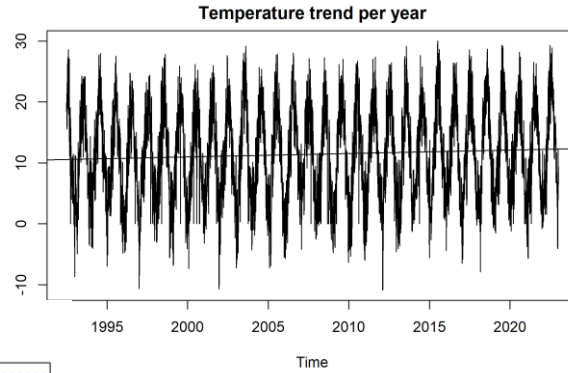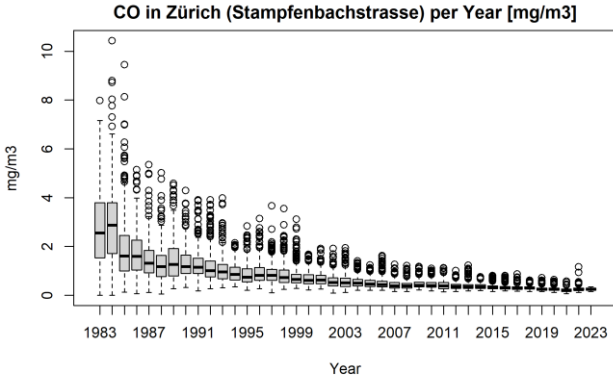Trees - CO Cross-Correlation Plot

Tableau - Dashboard

Key findings

Effects of trees only seem to be visible very locally

No clear correlation between amount of trees and temperature or air quality visible over time

Additional and more detailed data might lead to new observations

Temperature rise is visible as a trend in Zürich

Air quality has massively improved since the 1980s

Q&A