



Air quality measurements in city parks

Parks compensate the lack of natural landscape in cities, shape the overall character of the city and create space for various types of recreational activities. Air quality information may help you to plan, develop and maintain these important green spaces in cities.

Environmental pollution is one of the significant risks that negatively affects human health. The most significant factors influencing air quality not only in city parks are emissions of pollutants from transport, industry and household heating. Mixtures containing hundreds of chemical substances are thus released into the air.

We will measure air quality in your city

At the Transport Research Centre, we have devices measuring concentrations of harmful substances in the air. The monitored pollutants are nitrogen monoxide, nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone and aerosol particles PM_{10} , $PM_{2.5}$ and $PM_{1.0}$.

We provide a full service that includes:

- placing measuring devices,
- sampling on filters,
- analyzing the samples in our accredited laboratory and
- visualizing the results into concentration rosettes in the map.

Results application

You can use maps with information about pollutants dispersion as:

- a basis for adjusting planting of greenery to prevent the pollutants dispersion from the adjacent roads,
- an inspiration which types of greenery choose to preserve better air quality in the park,
- resource for planning the location of children's playgrounds and rest zones,
- a motivation for visitors to use parks more often for physical activity,
- an information for the public about air quality in the park, for example in the form of an information board.



The concentration rosettes showing the aerosol particles PM_{10} dispersion in the Schreber's garden in Brno in winter (upper image) and summer. The color legend indicates the concentrations from lowest (dark blue) to highest (dark brown). Hereby we identify from which directions come the highest concentrations of harmful substances.



Measurement devices in the park.

Implemented project

We applied air quality measurements within the project "City parks as a quality social and natural environment for life". We cooperated with other institutions on the project and the result was a complex overview, which included not only information about pollutants dispersion in the air, but also about soil pollution, about the historical development of the park, and a sociological survey among park visitors on its use.

Contact

If you want to know the air quality in your park or another location, contact us for a non-binding offer to measure pollutants at nabidka@cdv.cz.